



SSHRA Conference Proceedings 2023

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Online Live International Conference

21st February 2023



To continue - We changed gears

Eurasia Research Online Live International Conference
21st February 2023

SSHRA – Social Science and Humanities Research Association



Upcoming online conference

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Social Science and Humanities Research Association (SSHRA) is an international community of researchers, practitioners, students, and educationists for the development and spread of ideas in the field of social sciences and humanities.

SSHRA is promoted by Eurasia Research. SSHRA aims to bring together worldwide researchers and professionals, encourage intellectual development and to create opportunities for networking and collaboration. These objectives are achieved through academic networking, meetings, conferences, workshops, projects, research publications, academic awards and scholarships.

The driving force behind this association is its diverse members and advisory board, who provide inspiration, ideas, efforts and drive collaborations. Scholars, Researchers, Professionals are invited to become a member of SSHRA and join this ever-growing network, working for benefit of society and research with the spirit of sharing and mutual growth.

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Preface

Social Science and Humanities Research Association (SSHRA) is a global group of scholars, academicians and professionals from the field of Humanities and Social Sciences for encouraging intellectual development and providing opportunities for networking and collaboration. This association achieves its objective through academic networking, meetings, conferences, workshops, projects, research publications, academic awards and scholarships. The association is driven by the guidance of the advisory board members. Scholars, Academicians, Professionals are encouraged to freely join SSHRA and become a part of this association, working for benefit of academia and society through research and innovation.

For this conference around 40 Participants from around 9 different countries have submitted their entries for review and presentation.

SSHRA has now grown to 17000 followers and 10000 members from 80 countries. Membership in our scholarly association SSHRA is chargeable.

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Proceedings is a book of abstracts, all the abstracts are published in our conference proceeding a day prior to the conference.

You can get our conference proceedings at: <https://sshraweb.org/conference/proceedings/>

We hope to have an everlasting and long-term friendly relationship with you in the future.

In this context we would like to share our social media weblinks:

<https://www.facebook.com/eurasiaresearch/>

You will be able to freely communicate your queries with us, collaborate and interact with our previous participants, and share and browse the conference pictures on the above link.

Our mission is to make continuous efforts in transforming the lives of people around the world through education, application of research & innovative ideas.

Editor: Dr. Davis Lazarus

Publication Process

All accepted original research papers in the English Language will be published in selected journals as per the publication policy, as available on the conference website. Once you receive the Invitation/Acceptance letter that means your full paper is also accepted for publication in an International Journal, if you follow the communicated editorial instructions/ guidelines.

The journal publication will be peer-reviewed, checked for plagiarism, indexed, archived, open access, referenced by CrossRef and will carry ISSN number and DOI.

Even if your full paper is not yet ready, you may participate in the desired conference with your abstract. The abstract must contain the following:

- Article Title
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You may submit your full original paper for publication in the conference journal, when it is complete, till the conference date. The last date of submission is the conference day itself. While submitting the full paper, please provide the following in the email:

Full paper in MS Word format. (Ideally, a research paper should be 2500-3000 words).

Details of 2 reviewers with their names, affiliations, contact numbers and email IDs (If possible, send two emails for each reviewer).

Duly filled and scanned the 'Consent to Publish' form with a handwritten signature.

We follow the following steps for publication in our associated International Journals. The publication process takes around 70 days, starting from the end of the conference.

A list of registered papers is sent to all the participants of the conference within a week's time after the conference. Please see, if your paper is included in the list. If not, please write back to us for inclusion. This list would also mention for any deficiency/incompleteness found in the submitted paper. You would be given 10 days to return your complete papers/ required information.

After this, the editorial team would send all complete papers for review (usually 5-7 reviewers). The review process takes around 30 days.

Following this, our editor would send the editorial comments/ suggestions to the corresponding author. Please improve the paper as indicated in the review and send it back to us within 10 days.

If the paper received is complete in all regards as per the comments/ suggestions, it would be sent for final publication, else we would send it again to you and finally, 5 days would be given to you for its improvement.

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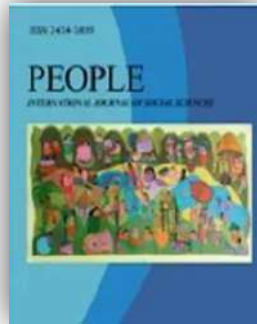
Authors may request the conference secretariat for withdrawing their paper, for publishing it elsewhere (in the journal of their choice). In such cases, the requested papers are removed from the publication process. The withdrawal requests may be given to the conference secretariat before the

commencement of the publication process (7 days after the conference).

Acknowledgments

Our sincere thanks go to our outstanding supporters who made this great and interesting conference possible.

Publishing



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Some special thanks go to our outstanding Key-Note speakers, not only for their inspiring and highly interesting presentations but also for their input and contributions in the discussions and Q&A sessions during the conference:

KEYNOTE SPEAKERS 2023

Topic: Public Health, Society and Policy



Dr Vincent La Placa is Associate Professor of Public Health and Policy at the University of Greenwich and Senior Fellow of the Higher Education Academy (HEA). Previously, he was a Senior Research Consultant at the Department of Health (now DHSC), where he managed the qualitative strand of the Healthy Foundations Life-stage Segmentation Model, one of the largest pieces of qualitative research conducted across UK government. He has recently co-edited the book, *Social Science Perspectives on Global Public Health*, with Dr Julia Morgan, published by Routledge. He also co-edited the book *Wellbeing: Policy and Practice* with Anneyce Knight and Allan McNaught, published in 2014. Dr La Placa was recently appointed an Honorary Fellow of Eurasia Research's Teaching, Education and Research Association (TERA).

Dr Vincent La Placa
Faculty of Education, Health and Human Sciences,
University of Greenwich, 113 Dreadnought Building Royal Naval College, Park Row, London

Topic: A Case Study of Female Academic Managers in London



Rebecca Natrajan is a passionate lecturer and believes in continuous learning. Currently works as Senior Lecturer in the department of Entrepreneurship, Module leader, Research supervisor, Personal tutor and SFHEA mentor at QAHE London for the University of Roehampton and University of Ulster Partnership programmes. She coordinates projects such as the student magazine at QAHE, the Global business club for students, and Research team organisers for Staff. Modules delivered by Rebecca include International Entrepreneurship, Business Planning, Entrepreneurial development, Entrepreneurial opportunity, Career Entrepreneurship, Organisational Behaviour, Innovation and Entrepreneurship, Graduate Enterprise and Managing innovation. Personal Branding is one of her recent interests as her Personal branding workshops delivered by her at the British Academy of Management 2019 conference at Aston University was highly appreciated by the PDW participants. She uses different teaching methods such as case studies, EDP games, videos and other techniques to engage the learners and enhance their learning experience. Rebecca Natrajan presented a paper in conferences and delivers Master Classes, Personal development workshops for students and staff. She is appointed as a Chair for Special Panels, Symposiums and Seminar for GBATA 2020 conference to be held in Istanbul Turkey.

Dr. Rebecca Natrajan
Programme Leader MSC business, Northumbria University London Campus, London, UK

Topic: The Ideal Life Approach - Promoting a Life of Balance and Stability



Seetha Sagarán is a Personal Development Trainer, Lifestyle Consultant and Motivational Speaker with a background in English, Psychology, Counselling (including Crisis & Trauma Counselling, (U.K), Hypnotherapy, Metaphor Therapy and Teaching Children with Special Needs (U.K). She is also a Licensed Practitioner of Neuro-linguistic Programming (N.L.P) from The Society of Neuro-Linguistic Programming (U.S.A). A Toastmasters International (U.S.A) member for the last 17 years, she is also a Distinguished Toastmaster (D.T.M.). In 2020, she launched her customized online personal and professional mentoring program, "The Nankurunaia Mentoring Program". Seetha is a co-author of the motivational book "Your Dose of Motivation". Published in 2020, she has shared some lessons from her life and attempted to simplify the concept of self-motivation in the book. As a co-author of the motivational book "Women Who Inspire", published in 2021, she has elaborated on the importance of mentors in life and the positive impact that mentors can make in our lives. She also co-authored the 2021 published book of short stories, "Sagas of Destiny", and the same year, co-authored an anthology of poems, "Reverie". She is also a co-author of a recently published book on leadership, "We are Leaders – Expressions & Experiences". A recipient of Global Training & Development Leadership Award - 2017, Exceptional Women of Excellence Award – 2020, and Iconic Women Creating a Better World for All Award – 2020. She was also a recipient of Exceptional Leader of Excellence Award – 2021 and Outstanding International Guest Speaker of the Year 2021. Seetha was included in "The World Book of Hoinser Queens 2021" as one of the top hundred influential women of 2021. Her training/motivational workshops, programs, and keynote sessions focus on individual development through interactive learning and mutual empowerment. Seetha's training programs and motivational sessions also emphasize inner peace, well-being, and participants' confidence. She has conducted Corporate, Educational, and Social Service & Welfare Training Workshops/Motivational Sessions in U.A.E, India, Seychelles, Canada and the U.K. She has also attended conferences in the U.A.E, India, Sri Lanka, Singapore and Italy as a Keynote/Motivational Speaker. Seetha has also presented virtual keynote and motivational sessions in conferences conducted in the Netherlands, U.K, Australia, Turkey, Thailand, Malaysia, Spain and France.

Seetha Sagarán
Personal Development Trainer, Lifestyle Consultant, Motivational Speaker, Mentor, UAE

Topic: Burnout of Academic Professionals and its impact on work performance



Dr. Smitha Dev has been with ADU for the last 12 years and has been working in the position of Asst. Professor of Psychology and the Chair of Humanities & Social Science for the College of Arts & Science. She has a Ph.D. in Psychology, and a fellowship in Higher Education (FHEA). Dr. Smitha has expertise in counseling and psychometric testing. She has competence and expertise in areas such as Teaching, Research, Diagnosis and treatment of Learning Disability children, Developing intervention programs for learning-disabled children, Psychometric testing, and Counselling. Dr. Smitha's Research focuses on Educational Psychology, Learning Disabilities, Emotional Intelligence, and various topics in special education. She has delivered several oral presentations at National and International conferences. She is the author and co-author of numerous peer-reviewed journal articles. She is a recipient of the "Best Faculty Researcher Award" from Abu Dhabi University for the periods 2014-2015 & 2017-2018 academic years. Prior to joining ADU, she was engaged in teaching, Counselling, and Research in UAE, Oman & India.

Dr. Smitha Dev
Assistant Professor of Psychology, Psychology Course Coordinator
University College, Abu Dhabi University, UAE

Topic: The Nature of Special Education Teachers Post Covid 19 Pandemic: A Brief Study from The Field



Dr. Mohd Norazmi bin Nordin
Pusat Kajian Pendidikan dan Kesejahteraan Komuniti, Fakulti Pendidikan, Universiti Kebangsaan Malaysia

Dr. Mohd Norazmi bin Nordin holds a doctor of philosophy (PhD) degree in special education leadership. Former academic teacher at Batu Pahat Special Education School, Johor, Malaysia. Successfully completed PhD studies within two years. Currently working as a special education lecturer at the Center for the Study of Education and Community Wellbeing, Faculty of Education, Universiti Kebangsaan Malaysia (The National University of Malaysia). He is also the founder of SKAF-Style Quick Thesis Writing Techniques which has greatly helped undergraduate and doctoral students in completing their theses. Receive invitations from various universities in and outside Malaysia as speakers and keynote speakers for international conferences and seminars. He is also Editor in Chief of a special education journal and as an editorial board in five international journals.

Topic: Criminal Procedure (Plea Bargaining, Evidence, Abbreviated Procedure, Comparative Studies), Brazilian System of Criminal Justice, Criminal Law



Rodrigo da Silva Brandalise
Professor of Criminal Procedure and Criminal Law at Fundação Escola Superior do Ministério Público School of Law, State Prosecutor in Rio Grande do Sul, Brazil

Rodrigo da Silva Brandalise is a Ph.D. student in Criminal Sciences at Lisbon University School of Law; a Master in Criminal Sciences at Lisbon University School of Law; Visiting Researcher at the University of California (Los Angeles) and teaches Short-term courses at Georg-August-Universität Göttingen, Germany); Author of the book *Justiça Penal Negociada* and many other articles in books and reviews. Currently, in addition to being a professor as previously indicated, he has been the Coordinator of the Operational Center of Criminal and Public Security areas at the Attorney General's Office in Rio Grande do Sul, Brazil, since 2021.

Topic: Best Practices for Community-building - Investigating Micro-Events



Reese Wong
Founder of MicroMeetup, Community Coordinator at AmCham HK,
Content Manager at Ashoka, Public Speaker (WHF London & AISC 2021), UNESCO HK Youth Ambassador, Hong Kong

Reese Wong is a young changemaker and Founder of ISSIA HK (issiahk.org), a youth-led non-profit that champions global citizenship education, empowering young changemakers through peer-to-peer and project-based learning. Since 2019, ISSIA has involved over 300+ students from 80+ schools in Hong Kong and beyond, launching 30+ projects surrounding SDG 4 and 17. Reese's work has been featured on the World Economic Forum, Nasdaq, SCMP, RTHK, and more. Reese is currently a UNESCO HK Youth Ambassador and was a Youth Delegate at UNITE 2030 and YOUNGA 2021. As a speaker, he has spoken at 30+ engagements, including the World Humanitarian Forum and the Asia Pacific International Schools Conference. As a passionate advocate for youth empowerment and Sustainable Development Goals, he aims to lead, innovate and catalyze long-term social impact. He currently works at Ashoka, the world's largest community of social entrepreneurs, and is an Enlight China Fellow at the Watson Institute.

Topic: Social Entrepreneurship in The Post-Socialist Countries



Katalin graduated in Economist at the University of Miskolc, Faculty of Economics in 2008 and she graduated in Law at the University of Miskolc, Faculty of Law in 2015. Her research topic is the labour market, especially in the Central-Eastern-European region. She defended her Ph.D. dissertation in 2013, the title was: "Impact of the globalization on regional labour markets – convergence or divergence". Katalin is an associate professor, vice-dean of University of Miskolc, Faculty of Economics and head of department of Labour Market and Employment Policy. The essence of her professional interest is how changed the labour market and the expectations of employees. She is the member of the Hungarian Regional Science Association till 2008. She is editor-in-chief of Socialis Series in Social Science journal and the member of the editorial board of Tér és Társadalom journal.

Prof. Katalin Lipták
Ph.D. in economics, dr.iur Associate professor, head of the department, vice-dean
University of Miskolc, Faculty of Economics, Department of Labour Market and Employment
Policy, Miskolc, Hungary

Developing Future Environment, Social, and Governance (ESG) Leaders: The Role of Higher-Edge and Industry"



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Corporate Reputation in the Metaverse



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Presenters

Measuring the Maturity of Digitalization Transformation from Operational Excellence's Perspective

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Abstract: Operational Excellence (OE) means the development of innovative sustainable production science and technologies that cover the entire life cycle of products but also of services. The food-packaging industry examined in this paper so far lacks a comprehensive yet consensual framework that encompasses all aspects of measuring the maturity of digitalization transformation from Operational Excellence's perspective. Consequently, this paper aims to show the significance of the application of Industry 4.0 technologies in a lean environment - in the food-packaging sector in Central Europe. When looking at OE-initiatives, the main question is the inefficiencies that occur at different stages of production. The goal is to enable the actual analysis of OE-initiatives so that their digital maturity can be determined. The basis for the development is a systematic literature analysis to identify existing maturity models in the context of the research fields of digitization, Industry 4.0 and in particular the process digitization. Based on this, a maturity model will be designed and evaluated in a company-related application context. With certain modifications, Industry 4.0 concepts and technologies can be applied to the observed case-plants. Combining these advanced technologies with lean principles can lead to better OE-initiatives than applying these concepts alone. As a result, the integration of Industry 4.0 technologies into a lean environment can be proposed as a viable solution to improve OE-performance. This paper presents the results of a comprehensive and systematic literature review in the areas of OE-performance improvement, Industry 4.0, lean management, and food-packaging. The paper provides insight into the current state of knowledge in the respective areas and suggests the way forward for future research.

Keywords: Maturity Model, Digitalisation, Operational Excellence, Food-Packaging

1. Introduction: It is of enormous importance for companies in the food-packaging industry to know both the structures of the market and the competition, as well as the forces and influencing factors that affect them. A company in the food-packaging industry must have an idea of which factors affect the competition in order to formulate strategies and be successful. In terms of successfully establishing and asserting oneself in the market, it is of enormous importance to know both the position of one's own company and that of the competitors (Paulin & Suneson, 2012, Trautman, 2022). To do this, the company must know its own strengths and weaknesses and those of its competitors. The same applies in this context to the opportunities and risks. Knowledge of the strategies of the market participants, possible changes in the strategy or the reaction of the competitors to possible strategic changes of their own company or to changes in the environment are also of enormous importance (Al-Qahtani & Aksoy, 2022). The dynamisation of the markets intensifies the competitive situation. In addition, the homogenisation of products and the ever-increasing variety of brands and products make it more difficult to differentiate oneself from the competition and to establish one's own brand. It is becoming increasingly difficult for companies to plan for the long term. Nevertheless, companies are striving to minimise uncertainties, dangers and risks as well as to identify opportunities and competitive advantages. This is where Industry 4.0 comes in (Schuh et al., 2017). Industry 4.0 promises a new future that should bring a breath of fresh air to the company under study with innovative technologies, networking and new business models. The Industry 4.0 maturity model contributes to the dissemination of Industry 4.0 and provides companies with a broader understanding and implementation proposals for Industry 4.0. (Aboelmaged, 2018, Malik & Kanwal, 2018). This paper aims to show the significance of Industry 4.0 of the case-plant in the observed mass-production industry and the influence of Industry 4.0 on strategic decisions, especially on positioning decisions, and the extent to which this process is influenced by the development of external influences and framework conditions (Tuan, 2020, Ganguly et al., 2020). The term digitalisation is currently a very big buzzword that is used in many different ways and frequently in industry. Digitalisation is a basic prerequisite for linking the real world with the virtual world of products or production processes in Industry 4.0. Without digitization, the introduction and application of Industry 4.0 is not possible. Consequently, the

importance of digitalization will be examined in more detail. In the literature, the term "digitalization" is also not clearly defined and differs with regard to the area of application and the user's perspective (Steven, 2019, Mertens et al., 2018). **2. Environment of observed food-packaging plant:** The observed plants are medium-sized plants within the same group in the food-packaging industry. The one case-plant out of the company-group used for illustration are taken from the real context of the plant but formulated in such a way that it is not possible to draw conclusions about the company from the facts. It is not the intention here to reproduce the entire competitive analysis carried out earlier by the case-company, which served to identify competitors. Only some basic characterizations of the competitive environment should be taken up. Against the background of increased cost-cutting, the focus of market cultivation has been increasingly extended to large companies since the 2000s. A stronger orientation towards the production of regularly updated standard products is also noticeable. In the area of strategy, the plant can claim certain unique selling points due to its elaborate, research-based production approach. Tough competitors here, however, are the plants directly linked with the plant and therefore not completely independent, which by their very nature can compete primarily on pricing. The observed case-plant with a rather European orientation is thus predominantly confronted with competitors who are internationally or globally active.

3. Literature-research, -analysis: The literature review includes a comparison of existing maturity models in the research area of digitalization of business processes and thus provides the conceptual basis for their further development. In order to understand maturity models in the context of digitalisation, it is necessary to record how they were developed in previous research. The aim of the literature analysis is to create the basis for the development of the new maturity model by identifying and documenting the central characteristics of existing maturity models in relation to the digitalization of business processes. Before the identification and analysis of the existing maturity models can be carried out, the focus of the literature analysis is determined according to the characteristics defined by Cooper (1988) in order to achieve the goal. Accordingly, the focus is placed on the results and the methods applied. The goals are the integration of the results and the critique of existing models. A neutral presentation for application in science and practice is aimed at. The literature analysis is realized completely selectively based on defined selection criteria; it is oriented towards the conceptual frame of reference of digitalization.

3.1 Literature screening: The literature screening phase involves identifying adequate literature for the defined research (Becker, 2012). Accordingly, those literature sources are to be identified that refer to maturity models and are related to digital business process management, the digitalization of companies or business models or to Industry 4.0. Furthermore, process models and reference models for digitalization as well as other publications on the topic of digital business processes are to be integrated into the synthesis in order to be able to identify relevant findings across models. To ensure objectivity and reproducibility in the research process, the predefined criteria for literature selection must be documented (Schuhmacher et al., 2016). The literature search is limited to the most important databases in business administration and information systems. The databases ProQuest, EBSCOhost and Springer Link were selected. In addition, Google Scholar was used for the scientific literature search. Due to the high relevance for practice and the strong dynamics as well as topicality within the research field under consideration, a Google search is also conducted. This ensures that additional practice-oriented sources and information on trends are taken into account in the search.

3.2 Methodological analysis: The analysis is based on Mettler et al. (2010) and classifies the identified maturity models according to the criteria of architecture, application, origin and reliability. The methodological analysis revealed that the majority of the maturity models originate from science. In approx. 89 % of the selected contributions, the models are textual descriptions and only few cases are a questionnaire. In few other cases a combination of a text description and a

questionnaire has been identified. None of the maturity models has a formal architecture with comprehensively defined criteria for maturity assessment. Self-assessment is used for assessment purposes in the majority of the papers and only a few models use third party assessment. These are primarily consulting firms that also use the models for new client acquisition. An indication of the low level of standardisation in this research field is that none of the identified maturity models serves as a basis for certification. Furthermore, the lack of evaluation of several models suggests that they are not sufficiently methodologically sound. Therefore, the need for an evaluated model with an evaluated development process becomes apparent.

4. Development of the maturity model: The goal in this context was to develop an analysis tool in the form of a maturity model for the topic "Measuring the maturity of digitalisation transformation from Operational Excellence's perspective". This topic refers to sustainable and modern production in the food-packaging industry. Thus, the focus here is on manufacturing companies that process intermediate products and produce end products (Becker et al., 2009, De Bruin, 2005).

4.1 The need for a maturity model: At the beginning of the design of a maturity model, it must be assessed whether the maturity assessment and analysis can and should be applied as an appropriate control instrument. Particularly, if the intended development or change project has a large temporal extension or the characteristics of the development status are difficult to quantify due to the high complexity of the project, e.g., in research projects or continuous improvement processes in the sense of organisational development, the use of maturity models makes sense. It should be noted that the determination of the maturity level requires the analysis and evaluation of existing processes practised by employees in order to increase the transparency of the object under consideration.

4.2 The specification, analyses of existing maturity models: With the delimitation of the object of observation for the maturity model to be designed, it must be defined which structures and processes are to be part of the maturity assessment and which are not to be included in the observation. For this purpose, a simple structure diagram can be used, which captures and links the elements of the object under consideration and its relevant characteristics. Based on this, the objectives can be defined by selecting the characteristics of the object under consideration that are to be captured and quantified by the maturity model to be designed.

4.3 The structure of the maturity model: Due to the large number of current maturity models, the first step was to observe the extent to which understandings can be gained from the known models for the design of digital transformation activities. In this context, the dimensions and maturity criteria in specific were analysed and evaluated in terms of their suitability for digital transformation. The basis for this was a systematic literature analysis of mainly English-language publications. As a result of the analysis, 88 models were identified that focus on the digital transformation or digitisation of companies. With regard to the dimensions found, the evaluation of the systematic literature analysis revealed a large degree of agreement in the publications. Thus, on the one hand literature, the dimensions strategy, culture, customer and governance, as well as employees and customer experience are mentioned most frequently. On the other, strategy is the most frequently mentioned dimension. The dimensions digitalization and sustainability, as well as operational excellence and processes are listed most frequently in order. According to the manual analysis, the dimension technology only plays a subordinate role. Maturity can be captured qualitatively or quantitatively in a discrete or continuous manner (Kohlegger et al., 2009). Following the systematic literature analysis, the results in this paper were verified with the help of a qualitative data analysis.

4.4 The maturity models: Maturity models are described in the literature as "describing a sequence of maturity levels for a class of objects thereby showing an anticipated, desired or typical development path of these objects in successive, discrete rank stages, starting at an initial stage and ending with complete maturity" (Becker et al., 2009). Maturity models are thus a suitable instrument for the systematic development as well as stepwise improvement of capabilities,

processes, structures or framework conditions of organisations. An important prerequisite is that the features and characteristics of the individual development levels are clearly defined beforehand, so that the user has an indication of what is actually necessary to reach the next maturity level. This is exactly why maturity models are a suitable instrument that enables management to recognise the necessary changes in the company and to approach the transformation process in a structured way (Schuhmacher et al., 2016). Maturity models have proven themselves as instruments for the management of information technologies, particularly in computer science and information science. They are therefore not a new set of tools. However, the existing models cannot simply be transferred to the digital transformation, as they are only focused on one or a few company areas. This means they are not suitable for capturing the overall picture of a company. It follows that a specific model is needed for the systematic development of capabilities as well as for managing the digital transformation process (Becker et al., 2009).

4.5 The levels of maturity model: Each maturity indicator has five development levels. These are conceptually based on the Industry 4.0 readiness study (Lichtblau et al., 2015, Ritzrau, 2017).

Level 1: Initial: The business process and systems are not standardised or are poorly documented. Process management is reactive and does not have the right organisational and technical concepts or tools for building a digital infrastructure that enables process agility. External digital expertise is used in the company because there is no internal expertise.

Level 2: Managed: The business process is partially digitised and standardised. Due to deficiencies in the organisation and/or the basic technologies, process management is weak. In individual departments or process steps, there is a discernible engagement with digital solutions and their introduction. However, there is little acceptance for the isolated solutions that have been developed.

Level 3: Defined: Increasing competences in the company are developing more comprehensive solutions for process execution. However, there are still some constraints of organisational responsibilities and/or enabling technologies that limit the digital implementation of process management. Therefore, there are still deficiencies in the planning and execution of processes, as well as in the integration and interoperability between applications and in the exchange of information.

Level 4: Integrated and interoperable: The processes are now designed endwise with a high degree of standardisation within the company. The processes rely on the integration and interconnection of systems and data so that they can run in an automated way. As the competencies of those involved in the processes increase, so does the acceptance of the digitised processes and the digital working culture supports the company in achieving its goals. The digitalisation of business processes is perceived as strategically important.

Level 5: Digital-oriented: The business processes are comprehensively digitally oriented and based on a resilient technology infrastructure and comprehensive integration of all systems and data. Both the exchange of information and the system landscape are highly standardised and secured by comprehensive security concepts across company boundaries. All data analyses are automated and flow autonomously into the process optimisation of the linked systems and machines. The high level of digital competence of all process participants is maintained through an optimal flow of information and explicit knowledge management.

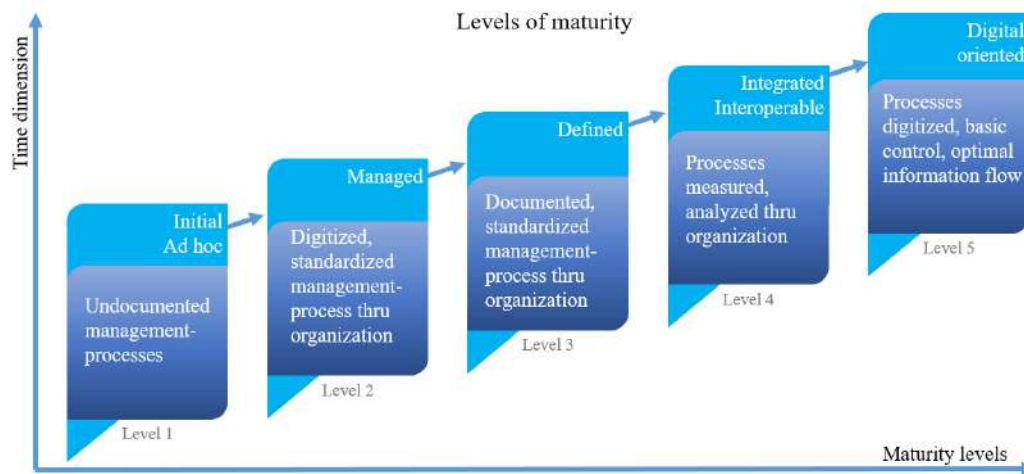


Figure 1: Level Maturity Model (adapted from Janse, 2018)

4.6 The maturity model for digital transformation: Characteristics of the maturity model for digital transformation for the case-plant are the dimensions with which the criteria of the transformation process are defined and characterised in more detail by further categories (see Figure 2). The following is a more detailed description of the dimensions. Specific questions are formulated for each category in order to assess and evaluate the individual specific questions are formulated for each category. In this context, five maturity levels were defined as development stages. A maturity level is determined for each category. Subsequently, an average value is formed, which results in the total value for the respective dimension. The average of the values of the dimensions results in the overall maturity level of the case company. The higher the value, the higher the maturity level achieved.

Dimension 1: Change-mgmt.: In order to assess the digital maturity of the business processes, it is also necessary to evaluate the extent to which the digital transformation is also implemented within the framework of the culture and among the people. Therefore, change management that promotes the measures for adapting to the digital processes is to be expected. Employees in the company are involved in the digital transformation and have a central role in the change processes (Spath et al., 2013).

Dimension 2: Data-mgmt.: In a digital context, business processes are based on data and information that enable processes to be linked, automated or executed autonomously. Therefore, data is essential for the optimal execution of processes. Accordingly, essential requirements must be placed on the data, which thus represent an important assessment basis for the digitalisation of business processes. The real-time use of data by the business processes is also an indication of the extent of digitalisation, as the effective use of data is what makes the advantages of digital technologies possible in the first place. In the process, the flexibility of the entire company is increased through timely response options.

Dimension 3: Digitalization-mgmt.: This dimension assesses whether there is a digitisation strategy and whether the business processes are already compatible with the digitisation strategy. The strategy compatibility of the processes must be assessed, i.e., to what extent the objectives of the strategy can be supported with the execution of the processes. Digital management includes the elements that must be in place for the decision-making process to be carried out accurately, objectively and efficiently. It assesses the extent to which management makes strategic decisions for process design and for possible process technologies using process simulations and all available information. This in turn promotes the development of an information-based culture and appropriate management.

Dimension 4: IT-integration-mgmt.: The IT-systems and their degree of integration into the business processes are essential for assessing the digital business process maturity. The horizontal integration across different IT-systems is assessed so that the internal and especially also cross-

company links of the individual process steps can be improved. The aim of integrating different IT-systems at the same hierarchical level is to create value more efficiently. The aim is to achieve end-to-end automated value creation by directing all internal as well as cross-company resources. Vertical integration is also an important aspect of business process digitalisation. A large volume of collected data is created throughout the entire business process. In this context, vertical integration involves linking different IT-systems across hierarchical levels so that the machine level and the planning level IT-systems can exchange data with each other.

Dimension 5: Lean-mgmt.: In order to assess the digital maturity of the business processes, it is also necessary to evaluate the extent to which the digital transformation is also implemented within the framework of the culture and among the people. Therefore, lean management is to be expected, which promotes the measures for adapting to the digital processes. Employees in the company carry the digital transformation with them and have a central role in the change processes (Spath et al., 2013). In order to avoid frustration and excessive demands on employees and to increase the acceptance of the digitalised processes, those involved in the process should be involved at an early stage and their know-how should be taken into account for the design and procedure.

Dimension 6: Process-mgmt.: The assessment of digital process management records the extent to which digitisation has already been implemented and, accordingly, new measures are applied to optimise the processes. An additional goal in the context of digitalisation is that the process steps meet the requirements of all technologies and digitalisation tools so that these can be integrated into the processes in an agile and quick manner. A high level of transparency of the processes is essential for this. This is created by process descriptions according to the principles of proper modelling or by process mapping, so that all processes are documented in detail. For better application and optimisation, the documentation must also be digitalised.

Dimension 7: Quality-mgmt.: In essence, it is not only about acceptance of digitalization, but also about the quality of the process as well as the results. In addition to timely involvement, the development of digital competences of those involved in the process enables them to actively support the quality process for digitalisation. This involves adjustments to the required competences and the extent to which companies can provide them. Therefore, when recruiting new employees, it is important to ensure that they have a digital affinity and that the existing quality stakeholders receive further training and are constantly informed about the current status. In addition, internal expertise on the topic of quality in digitalisation must be built up so that there is no dependence on external consultants.

Dimension 8: Supply chain-mgmt.: Digital transformation is based on the development and transfer of knowledge within a company (Margherita & Petti, 2010). Therefore, supply change management must be considered in order to be able to promote both the digital culture and expertise. In addition, the alignment of business processes with an overarching digitalisation strategy is an essential factor in assessing digitalisation maturity. The organisational dimension also includes process management, which is subject to digital transformation. It is not helpful to digitise complex and wasteful supply chain processes, as this results in a poorly digitised process (Wiegand, 2018).

Dimension 9: Sustainability-mgmt.: Sustainability has been very present in all areas of business, politics, science and the media for years. However, the term has undergone a change in meaning. In the past, it was first an everyday term and then a forestry term (Meffert et al., 2015). In contrast, sustainability is now used in many different contexts for environmental and climate protection, energy, innovation and mobility, as well as for areas of development, design, education and marketing (Tremblay, 2010). In connection with the change in meaning, the term "sustainability" is currently divided into the areas of social, ecological and economic sustainability (Akkasoglu, 2014). In the further course of the research, only ecological sustainability will be considered in studies and applications. This focuses on the responsible use and protection of natural resources. In addition, impacts on the environment should be reduced and biodiversity should be preserved (Cai, 2009,

Deland, 2009).

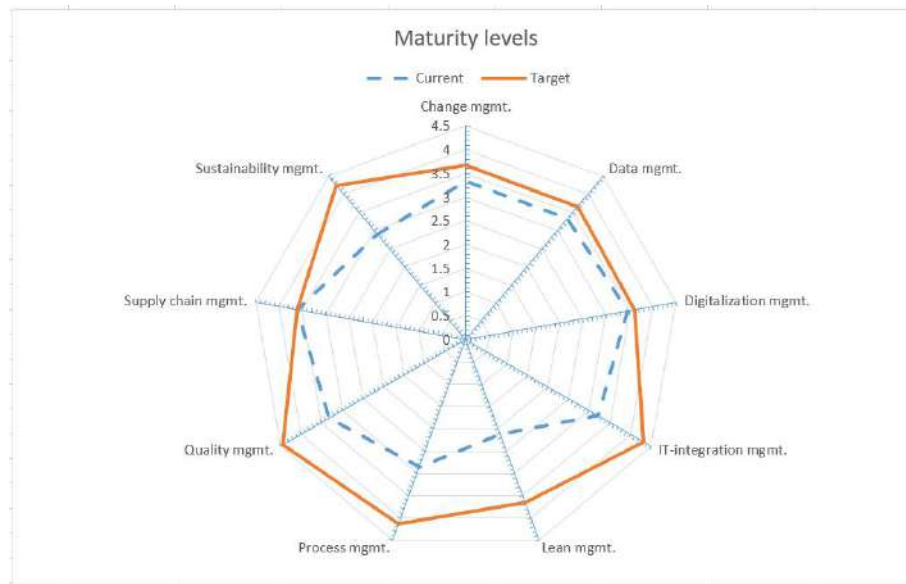


Figure 2: Maturity levels of mgmt.-dimensions

5. Conclusion and Future Research: The presented Industry 4.0 maturity model supports companies in determining the actual maturity level and the target maturity level. The resulting improvement measures enable the company to develop towards the target maturity level in a strategy-led manner. The 9 dimensions are used to determine the maturity level. A comparison with other maturity assessments shows that the Industry 4.0 maturity model presented does not specialise in specific industries or application areas. The results achieved within the framework of this paper serve as a basis for evaluating the degree of implementation of the main topics in OE-initiatives. In this context, the maturity model developed is an important analytical tool to highlight strengths and weaknesses of food-packaging plants. Nevertheless, more different companies need to participate in the validation of the maturity model in order to adapt possible maturity dimensions and indicators or to introduce additional indicators. Furthermore, industry-specific aspects should be included, which can change the weighting of the dimensions. Overall, the model presented here provides a methodologically sound reference framework for assessing the digital maturity of OE-initiatives and can be further developed to meet the identified research needs.

REFERENCES: Aboelmaged, M.G. (2018). Knowledge sharing through enterprise social network (ESN) systems: motivational drivers and their impact on employees' productivity, *Journal of Knowledge Management*, 22(2), pp. 362-383. doi: 10.1108/JKM-05-2017-0188. Akkasoglu, G. (2014). Methodik zur Konzeption und Applikation anwendungsspezifischer Reifegradmodelle unter Berücksichtigung der Informationssicherheit, Dissertation, Erlangen-Nürnberg. Al-Qahtani, M.A., & Aksoy, M.S. (2022). Collaborative Tools and Techniques of Knowledge Sharing: A Literature Review, *Journal of Computer and Communications*, 10(5), pp. 45-54, doi: 10.4236/jcc.2022.105003. Becker, J., Knackstedt, R., & Pöppelbuß, J. (2009). Entwicklung von Reifegradmodellen für das IT-Management. *Wirtschaftsinformatik Springer*, 51(3), pp. 249-260, doi: 10.1007 /s11576-009-0167-9. Cai, N., Zhang, S.-J., & Li, L. (2009). Sustainable project management: A balance analysis model of effect. 2009 International Conference on Management and Service Science, Beijing, China, pp. 1-4, doi: 10.1109/ICMSS. 2009.5302357. Cooper, H.M. (1988). Organizing knowledge syntheses: A taxonomy of literature reviews. *Knowledge in Society*, 1(1), pp. 104-126. De Bruin, T., Freeze, R., Kulkarni, U., & Rosemann, M. (2005): Understanding the Main Phases Developing a Maturity

Assessment Model. 16th Australasian Conference on Information Systems. Sydney, 29. November 2005. Deland, D. (2009). Sustainability through project management and net impact. PMI® Global Congress 2009 North America, Orlando, FL, USA. Ganguly, A., Talukdar, A., & Chatterjee, D. (2019). Social capital, knowledge quality, knowledge sharing, and innovation capability of an Organization, *Journal of Knowledge Management*, 27(1), pp. 25-42, doi: 10.1108/JKM-03-2018-0190. Janse, B. (2018). Capability Maturity Model (CMM). Retrieved from Toolshero: <https://www.toolshero.com/information-technology/capability-maturity-model-integration/>. Lichblau, K., Stich, V., Bertenrath, R., Blum, M., Bleider, M., Millack, A., Schmitt, K., Schmitz, E., & Schröter, M. (2015). Industrie 4.0 Readiness. Impuls-Stiftung des Maschinen- und Anlagenbau (VDMA), p. 23. Kohlegger, M., Maier, R., & Thalmann, S. (2009). Understanding Maturity Models Results of a structured Content Analysis, I-KNOW '09 and I-SEMANTICS '09, Graz, Austria, 2009. pp. 51-61. Malik, M.S., & Kanwal, M. (2018). Impacts of organizational knowledge sharing practices on employees' job satisfaction: Mediating roles of learning commitment and interpersonal adaptability, *Journal of Workplace Learning*, 30(1). doi: 10.1108/JWL-05-2016-0044. Meffert, H., Kenning, P., & Kirchgeorg, M. (2015). Sustainable Marketing Management: Grundlagen und Cases. Springer-Gabler Verlag, Wiesbaden 2015. p. 8. Mertens, P., & Barbian, D. (2018). Digitalisierung und Industrie 4.0 - eine Relativierung, Springer Vieweg, p. 35, doi: 10.1007/978-3-658-19635-5. Mettler, T., Rohner, P., & Winter, R. (2010). Towards a classification of maturity models in information systems. 6th Conference of the Italian Chapter of AIS, pp. 333-340, doi: 10.1007/978-3-7908-2404-9_39. Paulin, D., & Suneson, K. (2012). Knowledge Transfer, Knowledge Sharing and Knowledge Barriers—Three blurry terms in KM. *Electronic Journal of Knowledge Management (EJKM)*, 10(1), pp. 81-91. Ritzrau, W. (2017). Eine nachhaltige Strategie bei SAP. CSR und Strategisches Management. Springer Gabler, Berlin, Heidelberg, pp. 219-237. Schuh, G., Anderl, R., Gausemeier, J., Hompel, T.M., & Wahlster, W. (2017). Industrie 4.0 Maturity Index: Die digitale Transformation von Unternehmen gestalten (acatech STUDIE). Utzverlag, München 2017, p. 10. Schumacher, A., Erol, S., & Sihn, W. (2016). A maturity model for assessing Industry 4.0 readiness and maturity of manufacturing enterprises. The 6th International Conference on Changeable, Agile, Reconfigurable & Virtual Production, 52, pp. 161-166, doi: 10.1016/j.proc.ir.2016.07.040. Steven, M. (2019). Industrie 4.0: Grundlagen - Teilbereiche - Perspektiven. Verlag W. Kohlhammer, Stuttgart 2018, p. 38. Trautman, S. (2022). 4 Practices to Embed Knowledge Transfer into Your Business Culture. The Steve Trautman Co. Tremblay, M.C., Hevner, A.R., & Berndt, D.J. (2010). Focus groups for artifact refinement and evaluation in design research, *Communications of the Association for Information Systems*. 26(27), pp. 599-618. doi: 10.17705/1cais.02627. Tuan, L.T. (2020). Coach humility and player creativity: The roles of knowledge sharing and group diversity, *Sport Management Review*, 23(2), pp. 284-301. doi: 10.1016/j.smr.2019.02.004.

The Impact of Foreign Direct Investment on Multinational Corporation's Innovation Performance: The Case of Construction Industry in OECD Member Countries



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Abstract: While the past literatures have justified the impact, the rate, and the nature of innovation in construction industry, there are limited information for the normative spectrum on how FDI impacts the firm's innovation performance in this industry. In doing so, this research is formed to address this informational gap by conducting a firm-level analysis towards 170 construction companies from 14 OECD countries with R&D expenditure as the dependent variable that proxy's innovation performance and inward FDI stock in construction industry of the firm's operating country. From the 4 countries- and 2 firm-level control variables in this study, only economic growth that is statistically significant towards the dependent variable, which represents that economic condition of country is still relevant in the dimension of innovation performance. The independent and moderating variable has a low, nevertheless positive and statistically significant magnitude that is explainable by the "backward linkage" features of the construction industry.

Keyword: Foreign Direct Investment, Innovation, Construction Industry, OECD

Introduction: Due to the prediction meet the predicted demand that 7 billion people will live in cities by 2050, 13,000 buildings are expected to be constructed per day just to fulfil this demand (Bertollini, 2019). This is undoubtedly one figure that appears to be impossible to be carried out given the current productivity level of the construction industry, where over the past 20 years, global labor productivity growth in the sector has averaged just 1% annually, compared to 2.8% growth in the global economy overall and 3.6% growth in manufacturing. (Barbosa, Mischke & Parsons, 2017). Given that peer-pressure is present in this industry and stems from technical information and competitive conditions of the players in the market, including the possession of the necessary innovations, innovation may be the answer used to increase the level of productivity of the industry (Arai & Morimoto, 2021). This is evident as in terms of their equipment, the rate of innovation in this aspect has changed over the past 30 years because of client pressure and technological advancement in related fields. (Arditi, Kale & Tangkar, 1997). While it is intuitive that the amount of invested capital would enable innovative practices, there is currently a limited explanation in the literature when it comes to the relationship of FDI towards firm's innovativeness in the construction industry. The research on investment towards innovation in construction industry tend to be concentrated on the socio-economic impact within the national-level analysis. The investment made by the Chinese government under the innovation scheme under Belt-Road Initiatives contributes to the country's economy and improved well-being through the increase in physical connectivity in Cambodia, this is in addition to the number of jobs created during the project itself (Ly, 2021). One acknowledges the broader impact of the innovation, however one further question the sole impact of FDI towards innovativeness itself. Furthermore, FDI is argued to have an impact on innovativeness, but it is underlined by the government intervention and the notion of sustainability. Investment in green innovations (i.e., construction projects that is focused on sustainability through pollution control in China) is proven to have been negatively moderated by command-and-control regulations while informal regulations positively moderate it (Luo, Salman & Lu, 2021). Here, one questions the sole impact of FDI towards innovativeness in construction industry solely without any intervention from the government nor other unrelated parties that may influence this relationship. While it is possible to infer the theoretical findings from manufacturing industry as construction is a branch of this industry (Hussain, Paulraj & Nuzhat, 2022), there is a mixed polarity between these two in terms of the relationship between FDI and innovativeness (Garcia, Jin & Salomon, 2013; Chen, Jiang, Liang & Pan, 2022). This paper is formulated to address this informational gap, which will be

based upon the following logics. First, firm-level panel analysis will be conducted as the explanation of FDI towards innovativeness is lacking in terms of explanation in this level and panel would allow the research to capture time variations. Second, the moderation within firm-level aspects will be incorporated to make a coherence with the level of analysis mentioned by the first logic. In this case, firm size will be appropriately applied as there is a uniform argument that bigger firms are able to attract FDI better than smaller firms (Bronzini, 2007) and these firms bear the cost-effective capabilities during innovation process (Choi & Lee, 2017). Third, Organization for Economic Co-operation and Development (OECD) countries will be the sample country of this research for data availability and enhancing the research's generalization in other contexts as utilizing larger country samples is suitable in enhancing theoretical generalizations that data do not support due to standard sample and effect sizes (Franke & Richey, 2010). While this research's interest is aligned to the firm-level, nevertheless one still applies both firm- and national-level characteristics in this research as the control variables. Thus, this research will appropriately have formed within the following research question: "To what extent does an economy's inward foreign direct investment affect the firm's innovation performance in the construction industry?" "How does the firm size may affect the relationship of inward foreign direct investment towards the firm's innovation performance in the construction industry?" This study utilizes the Orbis (Bureau van Dijk) database to sample 170 construction-related businesses from 14 OECD nations, in addition for the collection of information about innovativeness (as measured by R&D spending) and firm size (i.e., measured by total assets) within the same database. The OECD website is used to collect inward FDI (measured by inward FDI stock). The study will cover the years 2016 through 2020 in accordance with panel analysis. Furthermore, one will control several firm- and country-level variables in this research (i.e., economic freedom, economic growth, tax burden, inflation firm's liquidity and firm age), which are gathered from various secondary databases. The result shows a very low but significant and positive magnitude for both the independent and moderating variable towards the dependent variable of R&D expenditure, which is explainable through the "backward industry" nature of the construction industry. This research will be structured as follows. The following section will include the literature review, hypotheses, and conceptual framework, where prior research will be discussed and used in conjunction with other research to create hypotheses and the underlying conceptual framework of this research. From there on, the data and methodology section will follow as it includes the description for the data sources that will be used and the methodology in addition to its corresponding steps. The next follows the results section, in which it includes, the interpretation of the findings, the comment on the significance, direction, and the magnitude of the effects. Finally, the research will conclude with the conclusion, limitations, and further research recommendations to generate a continuity of business & management literatures.

Literature Review & Conceptual Framework: Foreign Direct Investment (FDI): The research of foreign direct investment has been nothing new in the field of economics & business literature, as such that existing literature measures foreign direct investment and its impact by using flow and stock rate. Wacker (2013) presented a well-delivered clarification of the contrast between FDI stocks & FDI flows, as such FDI stocks can be defined as the (revalued) cumulation of past flows, as it includes equity capital and reinvested earnings that are combined into a single category, while FDI flows are the current transactions taking place in a certain period (Wacker, 2013). Since equity capital influences innovation because it influences CEO decision-making through incentive-based compensation (Lui, Ngai & Lo, 2021) and internal funding from reinvested earnings would allow businesses to achieve Firm-Specific Advantages (FSAs) through innovation (Nguyen & Rugman, 2014), one will use FDI stocks as it illustrates a more comprehensive component of FDI in the context of innovation-related topics. Vast amount of research in FDI is concentrated on economic performance of the host country, where it promotes the national absorptive capacity of attracting and utilizing foreign capital, in addition to the enhancement of a country's exports and

industrialization (Zhang, 2021). Furthermore, the most fundamental research on FDI in terms of its determinants is still an ongoing discussion between scholars due to the subject's complexity, where a particular factor's significance depends on the different circumstances and context (Ho, Wang & Alba, 2009). In relation to the previous finding, a literature review on FDI determinants by Blonigen concludes that papers that incorporate FDI as a research subject should incorporate micro-level data to have a more comprehensive result (Blonigen, 2005). In this sense, the following research will be formulated by utilizing firm-level analysis and other micro-economic indicators to further improve the comprehensiveness of the research's result.

Innovation Performance in Construction Industry: Although there has been a growing critique that the construction industry lacks innovation, it is asserted that this industry exhibits incremental innovation, where each innovation is interdependent with the others that result in a very significant change later (Brockmann, Brezinski & Erbe, 2016). This claim is further supported by the fact that sustainability has been the main driver of today's incremental innovation in construction industry as this aspect has been recognized as a tool to achieve competitive advantage in the long-term (Duong, Wang, Wood, Reiners & Koushan, 2021). According to other arguments, there are three other drivers of innovation in the construction industry in addition to sustainability through environmental pressure: technological capability, knowledge exchange, and boundary spanning (Bossink, 2004). Additionally, company- and industry-level narratives (e.g., innovations in productivity, health and safety, project completion, etc.) have been significant drivers of innovation in this sector (Ninan, Sergeeva & Winch, 2022). From these findings, one could assume several facts when studying innovation performance in construction industry. First, due to its incremental nature of innovation, the magnitude of the influence between independent variable towards dependent variable will be peculiarly small. Second, this research would be better to be carried out by using panel analysis as it captures the effect of time that reflects a possible interdependency between one innovation to another. Third, the independent variable should appropriately relate to the four drivers of innovation in construction industry, in which FDI appears to be connected towards these aspects. In accordance with the findings by Blonigen et al., one should determine an appropriate firm-level proxy that measures the innovation performance. There are various possibilities for the choice regarding this matter. One proxy that is prominently used in the existing literatures is patents (e.g., Atun, Harvey & Wild, 2017; Yang, 2006; Adak, 2015); as such, it has been argued that patents are effectively an incentive for firms to innovate because of the embeddedness of scientific value is reflected in a firm's private economic value, which may lead to other financial benefits of a firm particularly in terms of stock price (Kogan, Papanikolaou, Seru & Stoffman, 2017). Other vast majority of existing literatures proxies R&D expenditure (i.e., sometimes referred as R&D investment) to measure innovation (e.g., Wu, 2011; Bernier & Plouffe, 2019) as the performance of a firm in conduction innovation relies on the amount of capital invested for R&D purposes, with higher amount of R&D expenditure the higher innovation performance may breed within a firm (Kučera & Fil'a, 2022). Furthermore, the use of this proxy is appropriate when the incremental nature of the industry's innovation is accounted, as it is argued that innovation with this nature is characterized by contracted R&D (i.e., R&D that is done with external parties other than the firm itself) that does not produce a significant innovation as measured by patents (Beneito, 2006). To prevent such insignificance, one will use R&D expenditure as the proxy for innovation performance in construction industry.

FDI and Innovation Performance in Construction Industry: FDI is presumably a component that represents the drivers of innovation performance in construction industry according to Bossink. Due to the environmental pressure, the level of FDI has proven to have a significant positive effect on the China's ability to enhance scientific and technological capability in reducing the amount of pollution (Wang & Luo, 2020). Knowledge spillover has been recognized as the form of exchange of new information in FDI, where it is proven that higher FDI leads to spillovers, and it leads to higher productivity gains for firms (Bournakis & Tsionas, 2022). While there is limited evidence on FDI and boundary spanning other than the fact that FDI is used

as an entry mode for firms that are characterized with high communication with the customers (Oldenski, 2012), these findings are effectively solid evidence to claim that FDI can represent the four drivers of innovation performance according to Bossink, in which will be represented in this research as an independent variable. Evidence from China claims that there is a positive relationship between FDI and innovation performance, this is primarily due to the increase of competition in the national business landscape. Instead of knowledge spillovers, firms increase their productivity and compete by using innovation to stay ahead of rivals in the market, regardless of the type of innovation they made. (Chen et al., 2022). Other evidence from Spain claims that FDI did increase the productivity through the mix of both knowledge spillovers and competition. This can be explained by the phenomenon that local competition breeds the tendency for firms to be more efficient, yet this can be capitalized by investing entities to attain superior capabilities of the local firms (Garcia et al., 2013). Garcia extends his argument that FDI may negatively impact the innovativeness itself as the tendency of manufacturing industry to decrease their dependency on the local firms after patent have been filed. However, one focuses on the half part of it, since the increase of competition in the business landscape is crucial in the case of construction industry, where they are characterized by backward linkages, or in other words not only the efficiency and knowledge spillovers of its own industry is important, but also others. While these theories are coming from manufacturing industries, it is applicable to construction industry as this industry is a branch of manufacturing industry that is responsible with constructing, repairing, renovating, and maintaining infrastructures (Hussain et al., 2022). From these theories, one can therefore have hypothesized that:

Hypothesis 1. There is a positive relationship between inward FDI stock towards MNCs innovation performance in the construction industry. Firm Size as the Moderation for both FDI and Innovativeness: It should be considered that the size of the firm will affect the relationship of inward FDI stock towards R&D expenditure. Both versatility and effectiveness of the cost-spreading technique during the innovation process is influenced by the size of the firm, particularly in the case of incremental innovation where the return may not be as great vis-à-vis the radical one. However, this creates an incentive to innovate that effectively gives larger firms an innovative advantage over smaller ones (Choi & Lee, 2017). Strong evidence exists that the size of the company affects investment decisions, as it is alleged that smaller companies tend to discourage investors while medium- to large-sized companies are able to persuade investors to invest in the company because of its profitability, possession of technology, and high level of productivity (Bronzini, 2007). Additionally, evidence from Japanese firms claims that firm size determines the way in which they conduct FDI, and firm size may affect the total number of FDI to the point where the change of size would impact the valuation of FDI (Wang, Alba & Park, 2012). From these theories, it can be inferred that large sized firms are able to affect the total number of FDI, yet it may also affect their R&D spending. The dimension of firm size will be suitably assigned in this research as the moderating variable for the relationship between inward FDI stock and MNCs innovation performance, which will be hypothesized as follows:

Hypothesis 2. The positive relationship of inward FDI stock on MNCs innovation performance will be stronger following an increase in the firm size. Controlling Firm- and Country-level Characteristics: Vast majority of the existing literature incorporates the notion of both firm- and country-level control variable in the research process and accordingly, this research will assign several control variables in these levels. Previous study (i.e., Dang & Nguyen, 2021) highlights strong evidence to support the hypothesis that macroeconomic factors (i.e., economic growth, tax burden, economic freedom, and inflation) are key drivers to attract foreign direct investment towards a certain economy. Dang & Nguyen (2021) conclude that these macroeconomic variables have a significant positive effect on foreign direct investment. As these are clarified as the determinants of FDI, one can infer that there should be a relationship between these determinants towards the dependent variable of this research (i.e., MNC's innovation performance, measured in R&D

expenditure). Acknowledging the finding by Dang & Ngunyen and several existing empirical literatures (i.e., Crescenzi, Gagliardi & Iammarino, 2015; Yue, 2022) that emphasize the effect of macroeconomic indicators towards FDI & innovation, one will incorporate the macroeconomic factors as the country-level control variables of this research. Among different firm-level control variables that are normatively applied in a business & economics research, this study will focus on both liquidity & firm age. Firms, normally the one that inhibit a significant degree of financial strength (i.e., liquidity) and/or having more financial options, able to adjust their R&D spending without any significant financial problems (Hao & Jaffe, 1993). Empirical studies have shown that there is a bell-shaped relationship between firm age and R&D investment because young firms are more susceptible to learning effects and, as a result, tend to increase their R&D spending, whereas older firms are more susceptible to inertia, which can impede learning and result in lower R&D spending (Fan & Wang, 2021). **Conceptual Framework:** By considering these theories & its corresponding hypotheses, this research will be constructed based on the conceptual framework illustrated in the following Figure 1.

Data & Method: **Data & Sampling:** The subject company of this research will be sampled from Orbis with the following criteria applied: their status must be “active”, based in OECD countries, and operating in the construction industry (i.e., based on US EPA’s NAICS Code 23). There were 10,251,885 companies that met these criteria, and 170 of them reported R&D expenditure during the study period (2016-2020), which will be declared as the final sample for this study. Demographically, these companies are coming from several OECD countries (i.e., Austria, Australia, Germany, Spain, Finland, France, United Kingdom, Japan, South Korea, the Netherlands, New Zealand, Sweden, Turkey, and the United States of America). Table 1 presents the distribution of the companies according to its location. From 38 members of OECD countries, this dataset able to represent 14 of them. Furthermore, most of the samples are coming from Japan, followed by Great Britain and South Korea in the second and third. Despite of the unbalanced demography of the operating countries, slight variations can still be observed.

This research will account the aspect of the firm size towards the relationship between the dependent and independent variable by assigning it as moderating variable. There are several common measurements of firm size in the existing literature, namely: total assets, total sales, and market capitalization (Dang & Li, 2013). For this research, one will opt on the total assets of the sampled 170 companies and sourced from Orbis as well. The Independent variable of Inward FDI stock will be gathered from the OECD website for the year of 2016-2020. OECD website allows the valuation of FDI stock to be filtered based on the industry, in which construction industry will be selected. However, there are several missing values for the United Kingdom in 2020, 2018, and 2017, as well as Australia, Germany, and Spain in 2020. One will substitute these missing values with the values for other years that are available on the OECD website as the solution because this regression is unbalanced. The same problem and solution also applied for tax on corporate profit for Australia in 2020. As mentioned in the previous section, this research will be considering several macroeconomic aspects that are empirically classified to be the main determinants of foreign direct investment (i.e., Economic Freedom, Economic Growth, Tax, Inflation) as the country-level control variables of this research. The data for these variables are gathered from several secondary databases (i.e., The World Bank, Heritage.org & OECD), following the sources used by the research of Dang & Nguyen. Furthermore, two firm-level control variables (i.e., firm’s liquidity & firm’s age) will be included in this research, as such the data for these variables are coming directly from Orbis alongside other relevant data for other variables that are similarly sourced from this website.

Methodology: To answer the research questions by testing the aforementioned hypotheses, panel data regression will be utilized as the methodology of this research. Panel data have several advantages that are essential for this research, namely: accurate inferences of model parameters as there are more degrees of freedom and sample variability, controlling the impact of omitted

variables and finally uncovering dynamic relationships. The time frame of the study will be within the period range of 2016-2020, as it allows the illustration of economic activity up until the major shock of COVID-19 in 2020. Both fixed and random effect panel regression analysis will be operated in this research with the equation as follows: $RND_{i,t} = \beta_0 + \beta_1 FDIS_{i,t} + \beta_2 ASSET_{i,t} + \beta_3 FDIS_{i,t} * ASSET_{i,t} + \gamma Z_{i,t} + \varepsilon_{i,t}$ where i represents firm and t represents time. The dependent variable of R&D expenditure is represented by the term $RND_{i,t}$, whereas the independent variable of inward FDI stock is represented by the variable $FDIS_{i,t}$. This relationship is moderated by firm size (measured by the total asset of the firm) which constituted by the term $ASSET_{i,t}$. Furthermore, the interaction term of the independent variable with the moderating variable is represented with $FDIS_{i,t} * ASSET_{i,t}$. Finally, $Z_{i,t}$ contains a range of control variable (i.e., economic freedom, economic growth, tax on corporate profit, inflation, MNC's liquidity and MNC's size) in both country- and firm-level. The Hausman test will be used to determine which model is statistically evident and should be used for further inferences after running both the fixed effect and random effect models of panel regression analysis.

Descriptive Statistics & Correlation Matrix: Table 2 presents the descriptive statistics of the dataset. The corresponding table records the observation (N) as 850 since this research studied 170 companies within 5 periods of study (2016-2020). As it can be seen, the standard deviations of some of these variables are very high, especially for "FDIS", "ASSET", "AGE", "GDPpc". This is mainly due to the country characteristic where the sampled companies are operated within both developing and developed countries, thereby the rate of inward FDI stock and the level of Gross Domestic Product (GDP) may vary significantly for each country. This same reasoning may also be applied for the variable "ASSET" and "AGE", where high standard deviation may represent high size & age variation within the sampled companies. Furthermore, there is a negative value in the variable "INF", yet this should not a problem as it represents deflation that occurs within a country. Another unique finding that could be inferred in this table is the minimum value for the variable "AGE". This might signal an error in the dataset, but this should not be a problem as one of the companies, HSUNG CNI CO. LTD., was incorporated in 2016, in which it falls under the first period of this panel study. This should not be a problem, as there is no negative value within this study, rather this shows a variation in the aspect of the earliest firm year. Other than these variables and its corresponding values, there are no specific problems that can be inferred from this table, which signals that this dataset can be used for further analysis & inferences.

Table 3 in the presents the correlation matrix of the variables in this research. As it can be seen from the table, there are no specific problems that could be detected regarding the correlation of one variable with another. Furthermore, each of these variables tend to have a relatively normal correlation with another variable, with the highest correlation in "ASSET" and "RND" scored the highest (0.506). Additionally, the correlation between the dependent variable "RND" and the independent variable "FDIS" is 0,203. However, this does not infer to the fact that hypothesis 1 is confirmed. To do so, one will be required to perform panel regression with both fixed and random effect model applied, then proceed to the Hausman test to statistically justify which model among these two that will be used to make statistical inferences and to confirm whether the hypothesis of this research is accepted or rejected.

Results & Discussion: Regression Results: As this research involves multiple subjects within different points of time, thus panel regression will be applicable towards the data analysis of this research. As mentioned in the previous section, both fixed- and random-effect model of panel regression will be implemented in the analysis for the control, independent and moderating variable, in which can be presented in the table 4. Furthermore, the regression of each of these variables are done separately under the two effect models to isolate the individual impact on each of these variables towards the dependent variable, thereby resulting in 6 regression models in table 4 (i.e., refer to the notes in the table for the detailed legends of each model). However, before any

inferences should be made, one should account the result of the Hausman test to statistically justify which model should be utilized as the basis for the reasoning of this research.

Hausman Test Results: The Hausman test is used as a robustness test to determine which of these two models will be used for the research's final interpretation; the test's results for the research's variables are shown in table 5. In panel data analysis, the Hausman test assumes that the unique error is correlated with the regressor, leading to the selection of fixed effect. If this is untrue, the null hypothesis claimed that each individual error could be declared to be uncorrelated with the regressor, which ultimately suggests that the random effect model will be chosen. Table 5 shows that these regression models have p-values greater than 0.05, indicating that the results are not statistically significant and further inferences should be based on the random effect models (i.e., model 4, model 5 and model 6 for control, independent and moderating variable consecutively).

Discussions: It is observable that among 6 control variables deployed in this research, there is only one control variable that is statistically significant, which is the economic growth "GDPpc". It can be inferred from model 4 of table 4 that there is a statistically significant relationship between this variable towards the R&D expenditure "RNDEX" with the magnitude of 0.001, *ceteris paribus*. While the magnitude is not enormous, this interpretation corresponds to the findings that states higher economic growth can stimulate higher innovation performance in an economy (Maradana, Pradhan, Dash, Gaurav & Jayakumar, 2017), and GDP per Capita measures the level of economic growth of the economy, which is a positive determinant towards FDI (Dang and Nguyen, 2021). Although the sign itself can be explained by current business and economic theories, other controls are not statistically significant, so it is necessary to reject the idea that they are correlated with the dependent variable "RNDEX". Referring to the regression result in model 5 of table 4, it could be interpreted that the inward foreign direct investment stock on construction industry "FDIS" have a statistically significant relationship towards the research & development expenditure "RNDEX", with one unit of increase in the FDI stock leads to the 0.000155 increase in R&D expenditure, *ceteris paribus*. While the magnitude is not enormous, this model indicates that hypothesis 1 is fully accepted, yet it could be explained by the nature of the construction industry itself. Empirical evidence highlights the fact that construction industry can be characterized as "backward (linkage) industry" (Winch, 2003), which can be defined an industry whose output production necessitates significant intermediate inputs from numerous other industries operating in the same field of operation. In this sense, it could be argued that MNCs in the construction industry relies more on its partnerships with related industries rather than solely on its own R&D to innovate. As a result, instead of being designated exclusively towards R&D expenses, the capital flow from inward foreign direct investment for innovation purposes will also be allocated towards the costs of conducting partnerships between MNCs and its affiliated suppliers. The motive behind the partnership with other economic actors can be justified by several existing empirical findings. The diffusion of R&D and innovation, the ad hoc nature of most innovations, their project-based nature, and their short-term focus are just a few of the important characteristics of the construction industry. Due to these traits, there should be a special synergy between this industry and R&D providers (Hampson, Kraatz & Sanchez, 2014). This finding is further supported by an argument that claims the fact that construction industry needs to implement innovation ecosystem perspective, which can be illustrated as the overcoming of challenges involved and foster innovation through to the partnership with actors outside the construction domain, for that reason long-term relation building among independent actors should be created (Vosman, Coenen, Vloker & Visscher, 2021). Evidence from Taiwan suggests that businesses engaged in heavy manufacturing tend to view FDI as a networking activity, in the sense that money is invested to pursue local linkages and build local relationships with suppliers. These linkages take a step-by-step approach from the lowest-risk to the highest-risk, or more precisely, from workers, components and parts, subcontracting, and finally the R&D source (Chen, Chen & Ku, 2004). On the moderating variable regression in model 6 of table 4,

it can be interpreted from the interaction term between the independent and the moderating variable "FDISxASSET" that one unit of increase in firm size (i.e., measured in total assets) will lead to a stronger relationship by 8.76×10^{-8} between the positive relationship between inward FDI stock "FDIS" and R&D expenditure "RNDEX", this effect is statistically significant at 99% confidence interval, *ceteris paribus*. With the positive sign of the interaction term, it is apparent that hypothesis 2 of this research is supported and therefore, in line with the theories that lead to the build-up of the corresponding hypothesis. In the context of the explanation in the previous paragraph, this can be justified by the notion of internalization. Under the eclectic paradigm, internalization occurs when a transaction is handled by the business itself instead of external entities, primarily due to the efficiency benefits that outweigh its cost (Dunning, 1988). In this sense, as MNCs gain experience in the market and their asset size increases, they will start to internalize their projects instead of going through the linkages that they already established. At that point, MNCs will begin allocating their FDI-sourced capital to their R&D costs and will become less reliant on the network they have already built. Similar research applies MNC's size as a moderator towards their R&D performance as the dependent variable shows that the relationship between these variables is described as U-shaped, where performance will be at the high in small and large firms and at the low should the firm is moderate in size. Small firms can capitalize on high R&D performance through the high responsiveness to the market through their external (and internal) resources, whereas bigger firms can exploit their cost advantages through both economies of scale and scope should they have an abundant R&D resource (Tsai & Wang, 2005). Similarly, the positive relationship between firm size and R&D capacity can be accomplished should a firm meet two conditions, namely: high sunk cost per individual project; economies of scale and scope in the innovation (Symeonidis, 1996). Both theories are in line with the Schumpeterian theories of innovation, which states two main arguments: (1) only large firms could induce high performance of innovation through technological change due to the optimization of R&D expenditure; (2) small firms do not have the ability to spend efficiently on their R&D, yet it endangers themselves in a very competitive market (Schumpeter, 1976). **CONCLUSION:** This paper aims to investigate the impact of foreign direct investment on the innovation performance of MNCs operating in the construction industry. As such, this research will be based on the inward FDI stock specifically for this industry and will analyze whether it has an influence on R&D expenditure, with firm size acting as a moderator. The findings in this paper suggest that inward FDI stock has a positive relationship with firm R&D expenditure, and the moderating influence of firm size strengthens this relationship. As a result, both hypotheses in this study are confirmed. An interesting information that could be inferred from this paper is the fact that construction industry is characterized as a "backward linkage", which could be described as a firm that having an extensive backward linkage with relevant suppliers in doing their operations, including R&D purposes. Fundamentally, instead of relying on their own R&D, MNCs rely on these partnerships and linkages with other suppliers should they want to conduct innovative projects. At that moment, the inward foreign capital is invested on conduction partnership instead of being allocated for their R&D expenditure. However, as MNCs increase their size through assets ownership, they started to internalize their R&D activities. As a result, they begin to allocate their capital on R&D expenses as MNCs will innovate with internal resources as compared to do everything in the free market. This explanation justifies the reason on why, despite of having a positive impact, the magnitude of the relationship between the independent and dependent variable is considerably low. The results of this study would be an addition towards the existing published business and economics literature that examines the performance of innovation and foreign direct investment, and to some extent, towards the field of civil engineering as this study concentrated on the construction industry. Additionally, this research serves as an implication for the government on the importance of having an integrative role in supporting the linkages of construction or other industries who rely heavily on partnership with relevant entities should they

opt to conduct innovative activities. This would connote back towards the scholar implication, as the importance of government support in partnerships is proven to enhance the impact of partnership and sustainable performance due to the increase in the level of trust and cooperation (Yue, Ye & Chen, 2022). In addition, the government should acknowledge the importance of this role, as partnership and better innovation process for construction industry is proven to benefit the economy through better technological and sustainability advancements (Hussain et al., 2022), as well as the creation of both direct and indirect jobs, especially in those sectors that provide materials, equipment, and services in its process (Paz, Lafayette & Sobral, 2020). Finally, the importance of having partnerships in innovative activities should resonate back to business practitioners in this industry. Should they seek to innovate in a highly productive manner, strategic partnership should be done and conducted internally by the time enough assets have been accumulated by the companies. Thereby, FDI should not be considered based on macroeconomic conditions of a country (i.e., economic growth as measured by GDP per capita, which is mentioned in this study through the control variable "GDPpc," and whose applicability is demonstrated to be statistically significant.), but also the availability of relevant assets such as potential spillover through the availability of suppliers that are able to catalyze the innovation process of MNC's that are operating in construction industry. This research is not complete without mentioning several limitations as well as its recommendations for future research. First, there are missing values in the independent variables "FDIS" and the control variable "TAXCP". Although this is an unbalanced regression and thereby the missing values can be replaced with values of other year, scoping towards a period of studies with no missing values by itself would increase the reliability and credibility of the research. The second limitation explains why there are only some, but not all, OECD countries presented in this research. Due to the sensitivity of the data, some companies do not disclose their R&D Expenditures in Orbis, leaving only 170 companies that are coming from several OECD countries. This results in a disproportional country variation, where from 170 companies, 108 of them are coming from Japan, followed by Great Britain and South Korea in the second (i.e., 21 companies) and third (i.e., 17 companies). In this regard, the appropriate measure in responding towards this limitation would increase the sample size by opting towards a more comprehensive database or switching to other variables that measure the innovation performance, but with lesser sensitivity. The final piece of recommendation would be to incorporate the dimension of corporate strategic alliances or other forms of partnership in the study of innovation in industries that are heavily reliant on partnerships. Similarly, a comparative study could be generated, where this may investigate the impact of FDI towards innovation performance with and without the presence of partnership in a country in terms of the coefficient sign and magnitude.

REFERENCES: Adak, M. 2015. Technological Progress, Innovation and economic growth; the case of Turkey. *Procedia - Social and Behavioral Sciences*, 195: 776–782. Arai, K., & Morimoto, E. 2021. Productivity and innovation in the Japanese Construction Industry. *Construction Innovation*, 21(4): 917–933. Arditi, D., Kale, S., & Tangkar, M. 1997. Innovation in construction equipment and its flow into the construction industry. *Journal of Construction Engineering and Management*, 123(4): 371–378. Atun, R. A., Harvey, I., & Wild, J. 2007. Innovation, patents and economic growth. *International Journal of Innovation Management*, 11(02): 279–297. Beneito, P. 2006. The innovative performance of in-house and contracted R&D in terms of patents and utility models. *Research Policy*, 35(4): 502–517. Bernier, M., & Plouffe, M. 2019. Financial Innovation, economic growth, and the consequences of macroprudential policies. *Research in Economics*, 73(2): 162–173. Bertolini, V. 2019, May 14. This is what trillions in global-infrastructure investment look like. This Is What Trillions in Global-Infrastructure Investment Look Like. <https://redshift.autodesk.com/infographics/global-infrastructure>. Blonigen, B. A. 2005. A review of the empirical literature on FDI determinants. *Atlantic Economic Journal*, 33(4): 383–403. Bossink, B. A. 2004. Managing drivers of innovation in Construction Networks. *Journal of Construction Engineering and Management*, 130(3): 337–345.

Bournakis, I., & Tsionas, M. 2022. Productivity with endogenous FDI spillovers: A novel estimation approach. *International Journal of Production Economics*, 251: 108546.

Bronzini, R. 2007. FDI inflows, agglomeration and host country firms' size: Evidence from Italy. *Regional Studies*, 41(7): 963–978.

Chen, T.-J., Chen, H., & Ku, Y.-H. 2004. Foreign direct investment and local linkages. *Journal of International Business Studies*, 35(4): 320–333.

Chen, Y., Jiang, H., Liang, Y., & Pan, S. 2022. The impact of foreign direct investment on innovation: Evidence from patent filings and citations in China. *Journal of Comparative Economics*, 50(4): 917–945.

Choi, J., & Lee, J. 2017. Firm size and compositions of R&D expenditures: Evidence from a panel of R&D performing manufacturing firms. *Industry and Innovation*, 25(5): 459–481.

Crescenzi, R., Gagliardi, L., & Iammarino, S. 2015. Foreign multinationals and domestic innovation: Intra-industry effects and firm heterogeneity. *Research Policy*, 44(3): 596–609.

Dang, C., & Li, Z. F. 2013. Measuring firm size in empirical corporate finance. *SSRN Electronic Journal*. <http://doi.org/10.2139/ssrn.2345506>.

Dang, V. C., & Nguyen, Q. K. 2021. Determinants of FDI attractiveness: Evidence from ASEAN-7 countries. *Cogent Social Sciences*, 7(1). <http://doi.org/10.1080/23311886.2021.2004676>.

Dunning, J. H. 1988. The Eclectic Paradigm of international production: A restatement and some possible extensions. *Journal of International Business Studies*, 19(1): 1–31.

Duong, L. N., Wang, J. X., Wood, L. C., Reiners, T., & Koushan, M. 2021. The value of incremental environmental sustainability innovation in the construction industry: An event study. *Construction Management and Economics*, 39(5): 398–418.

Fan, S., & Wang, C. 2021. Firm age, ultimate ownership, and R&D investments. *International Review of Economics & Finance*, 76: 1245–1264.

Franke, G. R., & Richey, R. G. 2010. Improving generalizations from multi-country comparisons in International Business Research. *Journal of International Business Studies*, 41(8): 1275–1293.

García, F., Jin, B., & Salomon, R. 2013. Does inward foreign direct investment improve the innovative performance of local firms? *Research Policy*, 42(1): 231–244.

Hampson, K. D., Kraatz, J., & Sanchez, A. 2014. In R&D investment and impact in the global construction industry: 1–3. Abingdon, Oxfordshire: Routledge.

Hao, K. Y., & Jaffe, A. B. 1993. Effect of liquidity on firms' R&D spending. *Economics of Innovation and New Technology*, 2(4): 275–282.

Ho, W.-Y., Wang, P., & Alba, J. D. 2009. Merger and acquisition FDI, relative wealth and relative access to bank credit: Evidence from a Bivariate Zero-inflated count model. *International Review of Economics & Finance*, 18(1): 26–30.

Hussain, C. M., Paulraj, M. S., & Nuzhat, S. 2022. Source reduction and waste minimization in construction industry. *Source Reduction and Waste Minimization*, 111–126.

Kogan, L., Papanikolaou, D., Seru, A., & Stoffman, N. 2017. Technological Innovation, resource allocation, and growth. *The Quarterly Journal of Economics*, 132(2): 665–712.

Kučera, J., & Fiľa, M. 2022. R&D expenditure, Innovation Performance and economic development of the EU countries. *Entrepreneurship and Sustainability Issues*, 9(3): 227–241.

Lui, A. K. H., Ngai, E. W. T., & Lo, C. K. Y. 2016. Disruptive Information Technology Innovations and the cost of equity capital: The moderating effect of CEO incentives and institutional pressures. *Information & Management*, 53(3): 345–354.

Luo, Y., Salman, M., & Lu, Z. 2021. Heterogeneous impacts of environmental regulations and foreign direct investment on green innovation across different regions in China. *Science of The Total Environment*, 759: 143744.

Ly, B. 2021. The implication of FDI in the construction industry in Cambodia under Bri. *Cogent Business & Management*, 8(1). <http://doi.org/10.1080/23311975.2021.1875542>.

Maradana, R. P., Pradhan, R. P., Dash, S., Gaurav, K., & Jayakumar, M. 2017. Does innovation promote economic growth? evidence from European countries. *Journal of Innovation and Entrepreneurship*, 6(1). <http://doi.org/10.1186/s13731-016-0061-9>.

Nguyen, Q. T., & Rugman, A. M. 2014. Internal equity financing and the performance of multinational subsidiaries in emerging economies. *Journal of International Business Studies*, 46(4): 468–490.

Ninan, J., Sergeeva, N., & Winch, G. 2022. Narrative shapes innovation: A study on multiple innovations in the UK construction industry. *Construction Management and Economics*, 40(11-12): 884–902.

Oldenski, L. 2012. Export versus FDI and the communication of complex information. *Journal of International Economics*, 87(2): 312–322.

Paz, D. H. F., Lafayette, K. P. V., & Sobral, M. C.

M. 2020. Management of construction and demolition waste using GIS Tools. *Advances in Construction and Demolition Waste Recycling*, 121–156.

Schumpeter, J. A. 1976. *Capitalism, socialism and democracy* (1st ed.). London, United Kingdom: Taylor and Francis.

Symeonidis, G. 1996. Innovation, firm size and Market Structure. *OECD Economics Department Working Papers*, 161. <http://doi.org/10.1787/603802238336>.

Tsai, K.-H., & Wang, J.-C. 2005. Does R&D performance decline with firm size? —a re-examination in terms of elasticity. *Research Policy*, 34(6): 966–976.

Vosman, L., Coenen, T., Volker, L., & Visscher, K. 2021. Exploring the Innovation Ecosystem Concept for a Construction Industry in Transition. *Association of Researchers in Construction Management*, 449–458.

Wacker, K. M. 2013. On the measurement of foreign direct investment and its relationship to activities of multinational corporations. *SSRN Electronic Journal*. <http://doi.org/10.2139/ssrn.2354249>.

Wang, P., Alba, J. D., & Park, D. 2012. Determinants of different modes of FDI: Firm-level evidence from Japanese FDI into the US. *Open Economies Review*, 24(3): 425–446.

Wang, X., & Luo, Y. 2020. Has technological innovation capability addressed environmental pollution from the dual perspective of FDI quantity and quality? evidence from China. *Journal of Cleaner Production*, 258: 120941.

Winch, G. M. 2003. How innovative is construction? comparing aggregated data on construction innovation and other sectors – a case of apples and pears. *Construction Management and Economics*, 21(6): 651–654.

Wu, Y. 2011. Innovation and economic growth in China: Evidence at the Provincial Level. *Journal of the Asia Pacific Economy*, 16(2): 129–142.

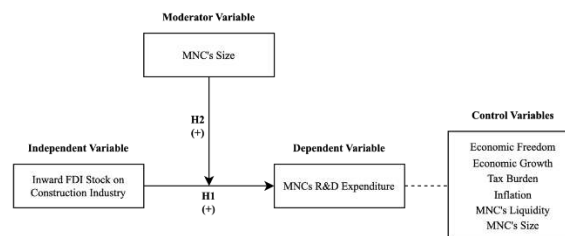
Yang, C.-H. 2006. Is innovation the story of Taiwan's economic growth? *Journal of Asian Economics*, 17(5): 867–878.

Yue, L., Ye, M., & Chen, Q. 2022. The impact of partnerships and information sharing on Corporate Sustainable Performance: A mediation model moderated by government support. *Frontiers in Psychology*, 13. <http://doi.org/10.3389/fpsyg.2022.942279>.

Yue, W. 2022. Foreign Direct Investment and the Innovation Performance of Local Enterprises. *Humanities and Social Sciences Communications*, 9(1). <http://doi.org/10.1057/s41599-022-01274-6>.

Zhang, K. H. 2021. How does south-south FDI affect host economies? evidence from China-Africa in 2003–2018. *International Review of Economics & Finance*, 75: 690–703.

TABLE & APPENDIX: Figure 1: Conceptual Framework of this Research



Tables

Table 1: Country-Company Frequency Table

Country	ISO Code	Number of companies
Austria	AT	2
Australia	AU	3
Germany	DE	1
Spain	ES	1
Finland	FI	1
France	FR	3
United Kingdom	GB	21
Japan	JP	108
South Korea	KR	17
the Netherlands	NL	2
New Zealand	NZ	1
Sweden	SE	3
Türkiye	TR	3
U.S. America	US	4

Total	170
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Table 2: Descriptive Statistics Table

Variables	OBS	Mean	SD	Min	Max	Skew.	Kurt.
RNDEX	850	13.93	44.68	.00	442.80	5.68	41.01
FDIS	850	4293.25	9094.36	161.91	88650.14	4.12	28.63
ASSET	850	2594.74	5947.52	.35	49834.95	4.36	26.28
FRE	850	74.81	7.07	62.10	93.80	1.67	4.90
GDPpc	850	39837.02	6752.79	8536.43	65094.79	-.56	10.95
TAXCP	850	3.37	.69	1.31	5.39	-.74	3.50
INF	850	.93	1.76	-.32	16.33	6.08	46.87
LIQUID	850	1.74	2.16	.01	50.77	15.97	333.48
AGE	850	55.75	30.48	0	151	.33	3.07

Table 3: Pearson Correlation Matrix

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
(1) RNDEX	1.00								
(2) FDIS	0.20	1.00							
(3) ASSET	0.50	0.04	1.00						
(4) FRE	-0.04	0.47	-0.17	1.00					
(5) GDPpc	0.21	0.47	0.04	0.30	1.00				
(6) TAXCP	-0.17	-0.50	-0.09	-0.35	-0.11	1.00			
(7) INF	-0.01	0.16	-0.05	0.05	-0.43	-0.36	1.00		
(8) LIQUID	0.00	0.03	-0.07	0.02	0.12	0.15	-0.06	1.00	
(9) AGE	0.08	-0.23	0.24	-0.33	-0.02	0.25	-0.25	-0.11	1.00

Table 4: Regression Results with Research & Development Expenditure “RNDEX” as the Dependent Variable

Variables ¹	Fixed Effect			Random Effect		
	Model (1)	Model (2)	Model (3)	Model (4)	Model (5)	Model (6)
FDIS		0.00*	-0.00**		0.00**	-0.00*
		(7.50e-05)	(9.33e-05)		(7.35e-05)	(8.99e-05)
ASSET			0.00***			0.00***
			(0.00)			(0.00)
FDISxASSET			1.00e-07***			8.71e-08***
			(1.78e-08)			(1.66e-08)
FRE	-0.17	-0.16	-0.14	-0.35	-0.35	-0.15
	(0.30)	(0.30)	(0.28)	(0.26)	(0.26)	(0.24)
GDPpc	0.00***	0.00**	0.00	0.00***	0.00***	0.00***
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
TAXCP	-0.99	-2.03	-1.29	-2.34	-3.30*	-1.67
	(1.95)	(2.03)	(1.90)	(1.85)	(1.90)	(1.78)
INF	-0.00	-0.39	-0.24	0.40	-0.02	0.01
	(0.79)	(0.81)	(0.76)	(0.75)	(0.77)	(0.72)
LIQUID	-0.36	-0.36	-0.32	-0.33	-0.32	-0.27
	(0.25)	(0.25)	(0.23)	(0.25)	(0.25)	(0.23)
AGE	0.79***	0.76***	0.24	0.12	0.13	-0.06
	(0.29)	(0.29)	(0.28)	(0.10)	(0.10)	(0.09)
Year Fixed Effect	YES	YES	YES	YES	YES	YES

(2017-2020)						
Constant	-61.49*	-47.04	-17.46	-13.92	-1.995	-9.778
	(31.54)	(32.47)	(30.50)	(24.45)	(25.04)	(22.94)
Observations	850	850	850	850	850	850
R-squared	0.05	0.06	0.18	0.05	0.06	0.18
Number of Companies	170	170	170	170	170	170

Table 5: Hausman Specification Test Results

Hausman (1978) specification test

	Coef.
Control Variables (Model 1&4)	
Chi-square test value	11.05
P-value	.19
Independent Variable (Model 2&5)	
Chi-square test value	10.43
P-value	.23
Moderating Variable (Model 3&6)	
Chi-square test value	5.17
P-value	.81

Appendices

Appendix 1: Variable Description Table

Variable Name	Variable Description & Measurement Method	Unit of Measurement
RNDEX	Reporting Company's Research & Development expenditure	Million USD
FDIS	FDI Stock of the reporting company's country	Million USD
ASSET	Reporting company's size, measured by their total assets	Million USD
FRE	Heritage's index of economic freedom of the reporting company's country	Quantitative Score (0-100)
GDPpc	Gross Domestic Product (GDP) per capita of the reporting company's country	USD
TAXCP	Corporate Tax Rate of the reporting company's country	Percentage (%) of GDP
INF	Inflation rate of the reporting company's country	Annual Growth Rate (%)
LIQUID	Reporting company's liquidity ratio	Ratio
AGE	Reporting company's age, measured by subtracting the current period of study with the company's year of establishment	Years

Appendix 2: Alternative Regression Results (i.e., natural logarithm applied for all variables) with natural logarithm of Research & Development Expenditure "ln_RNDEX" as the Dependent Variable

Variables ²	Fixed Effect			Random Effect		
	Model (1)	Model (2)	Model (3)	Model (4)	Model (5)	Model (6)
ln_FDIS		0.17**	0.07		-0.02	-0.17
		(0.08)	(0.18)		(0.06)	(0.13)
ln_ASSET			0.28			0.56***
			(0.24)			(0.14)
ln_FDISxln_ASSET			0.01			0.02
			(0.02)			(0.01)
ln_FRE	3.71*	3.96**	3.92**	0.64	0.69	3.12**

	(1.96)	(1.96)	(1.96)	(1.47)	(1.48)	(1.31)
ln_GDPpc	-1.22	-2.54**	-3.48***	1.04*	1.12*	0.35
	(1.00)	(1.18)	(1.33)	(0.62)	(0.66)	(0.53)
ln_TAXCP	-0.66	-0.72*	-0.72*	-0.48	-0.50	-0.59*
	(0.41)	(0.41)	(0.41)	(0.36)	(0.36)	(0.34)
ln_INF	-0.05	-0.03	-0.04	-0.00	-0.00	-0.06
	(0.10)	(0.09)	(0.09)	(0.09)	(0.09)	(0.09)
ln_LIQUID	-0.00	0.00	-0.04	-0.03	-0.03	-0.16
	(0.11)	(0.11)	(0.11)	(0.10)	(0.10)	(0.10)
ln_AGE	0.93***	0.98***	0.81**	0.85***	0.84***	0.074
	(0.35)	(0.35)	(0.35)	(0.18)	(0.19)	(0.15)
Year Fixed Effect (2017-2018)	YES	YES	YES	YES	YES	YES
Constant	-5.78	5.81	14.74	-16.25*	-17.03**	-19.86***
	(14.27)	(15.24)	(16.41)	(8.32)	(8.64)	(6.72)
Observations	631	631	631	631	631	631
R-squared	0.046	0.056	0.071	0.02	0.02	0.03
Number of Companies	170	170	170	170	170	170

Corporate Social Responsibility Impact on Product Buying Willingness of Firm from A Developing Country in A Developed Country's Market: The Case of Indonesian Product in The Netherlands

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Abstract: An unfavorable perception of products from developing countries has been a problem for firms from developing countries in gaining buying willingness in developed countries' markets. On the other hand, empirical studies state that there is a relationship between corporate social responsibility (CSR), brand image and buying willingness. With brand image acting as the mediator variable, this paper uses the relationship between these three variables to investigate whether it is true that CSR can increase the buying willingness of product from developing countries in the developed countries market, in this case Indonesian product in the Netherlands. This research hypothesizes that CSR can have a direct and indirect positive impact on buying willingness through brand image. The study reveals the data supporting the hypotheses with a total of 228 respondents. The insights of this study can give more options for firms from developing countries on formulating their strategies in internationalizing to developed countries' markets.

Keywords: CSR, Country of Origin, Brand Image, Buying Willingness

Introduction: People can now enjoy international products from anywhere around the world through globalization, foreign and trade investments (Khare & Handa, 2011). Globalization has led to the internationalization of many developing countries products; their products can be found in developed countries. Although globalization can make it easier for developing countries to internationalize, they still confront difficulties. According to Buame and Acheampong (2015), businesses face a number of challenges before they can operate and be accepted in the host country, one of them is due to unfavorable perceptions of products from developing countries (Peterson & Jolibert, 1995). Stereotypical perceptions, according to research (Moeller et al., 2013), have an effect

on the liability of foreignness (LOF) that foreign companies encounter in their host countries. The stereotype of low competence in emerging nations is common (Yu & Liu, 2018). According to Yu & Liu (2018), some foreign companies suffer from stereotypes. Studies demonstrate that consumers care about the country in which products are manufactured and that they consider country of origins as factors when evaluating the quality of products (Parkvithee & Miranda, 2012). It is harder for developing country products to compete in developed countries due to negative perception and stereotypes towards their products. Therefore, a strategy is needed to be able to help developing country businesses gain buying willingness and compete in developed country's market. Corporate Social Responsibility (CSR), which is the idea that companies should make an effort to improve the welfare of the society or societies in which they operate and interact (Planken, 2013), is one way for companies to attract and get consumers buying willingness. The current studies show that CSR initiatives could bring direct effect for companies on getting higher buying willingness, and a positive indirect effect through brand image. For the direct effect, according to Lee and Shin (2010), perceived CSR and buying willingness are positively correlated. While for the indirect effect, CSR can build good brand images and offer a way to improve a company's reputation in general (Fombrun & Shanley 1990; Galbreath 2010). Other researchers, Spreng and Page Jr. (2001) claim that a company's brand image has a significant impact on consumers' brand attitudes, which in turn affects their satisfaction, buying willingness, and perception of a company's performance. Not much prior research has looked at the indirect effect of CSR on buying willingness through brand image as a mediator variable, especially on how it impacts buying willingness of product from developing country's firm in developed country's market. Thus, this study will look at how CSR may help generate a positive brand image and gain consumers buying willingness in developed country's market, in this case how CSR impacts Indonesian products buying willingness in the Netherlands through this research question, what impact has CSR had on the buying willingness of Indonesian product in the Netherlands? To put emphasis on the topic deeper, this research will try to answer the following research sub-questions, which is: does CSR carried out by Indonesian company have an effect on increasing their brand image in the Netherlands? and can CSR conducted by Indonesian company affect the buying willingness of their product in the Netherlands? This research aims to contribute to the literature in five ways. First, the results aimed to contribute to the post international business and CSR literature. Second, this study aims to help businesses see the advantages of CSR rather than just seeing it as a duty or responsibility because many corporate executives are still skeptical about its benefits (Birch, 2002), despite the fact that it is actually a crucial element for business success in the market (Yusof et al., 2015). By examining the impact of CSR on brand image and buying willingness, this study aims to provide a more nuanced understanding of the ways in which CSR can benefit businesses in these contexts. Moreover, this research aimed to assist firms from developing countries like Indonesia in easing the process of their competition in the global market by gaining better brand image and buying willingness in developed countries' markets through CSR. Finally, this research aims to inspire further research on the relationship between CSR and international business, and to encourage the development of more effective strategies for businesses from developing countries seeking to enter developed country markets.

Literature Review: Corporate Social Responsibility (CSR): Over several decades, the concept of social responsibility in business has been (re)defined in the literature, but there is still no single definition that is accepted by all (Planken, 2013). The idea of social responsibility holds that businesses shouldn't act unethically or immorally and should instead make an effort to improve the welfare of the society or societies in which they operate and interact (Planken, 2013). According to Dahlsrud (2008), CSR has five basic components which are social, economic, environmental, philanthropic, and ethical. Despite the fact that CSR is an essential component of a company's ability to succeed in the market (Yusof et al., 2015), many corporate executives are still dubious about its advantages (Birch, 2002). CSR initiatives can aid in building relationships with a variety of

stakeholders, including the consumer, a crucial stakeholder who serves as both the initiative's recipient and its judge when making purchase decisions (Mohr et al., 2001; Aksak et al., 2016). The economic perspective and the duty-aligned perspective are, generally speaking, the two primary viewpoints that have evolved in the discussion surrounding social responsibility in business over time (Swanson, 1995). Earning profit for the company's shareholders is seen as its key social responsibility from an economic perspective (Planken, 2013). On the other hand, from a duty-aligned perspective, Swanson (1995) asserts that if a business feels positively obligated in terms of its social responsibility, this will show in the (selfless) purpose to engage in corporate practices and activities that benefit communities, enhance quality of life, etc. In fact, customers are more likely to identify with companies that engage in CSR activities because doing so raises satisfaction (Chung et al., 2015). Companies that are able to distinguish themselves from rivals and possibly boost their sales as a result of their CSR efforts can differentiate themselves from competitors. Thus, CSR can be considered essential and important for companies to succeed in the market, other than bringing positive impact to the environment, it can bring positive value for companies, better brand image and can increase people's willingness to buy brand's products.

Brand Image: Researchers and business have been paying attention to place branding, place marketing, and place/destination image over the past few decades (Echtner and Ritchie, 1991; Gertner, 2011). According to Aaker (1991), brand image refers to the perceived added value that consumers associate with a particular product that goes beyond the functional or utilitarian value of the item. Customers are more likely to be brand loyal if there is a high level of brand image (Lee et al., 2014). The concept of brand image best captures the idea that people purchase brands not only for their physical qualities and functions but also because of the meanings associated with the brands (Levy & Glick, 1973). Furthermore, Kotler (1988) has added that a brand's image is a collection of consumer perceptions of the brand. Additionally, Dobni and Zinkhan (1990) note that brand image is a crucial concept when discussing consumer behavior because the decisions consumers make regarding brands and products are largely influenced by their perceptions, emotions, and attitudes toward those brands. A company that consistently maintains a positive and ideal public image will profit from a better market and grow its competitive advantage, which will increase its market share, according to literature by Stephen L. et al. (2007). The brand image is thus described as an overview of brand relationships in consumers' mentalities that lead to brand recognition and brand relationship as well as brand state of mind, brand advantages, and brand characteristics (Opata, 2015). Consumer behavior and perceptions of a brand can be affected by a brand's image. In order to foster a favorable perception of their brand in consumers' minds, businesses must carefully manage their brand image. It can be concluded that brand image is how consumers perceive the value of the brand, it is very important for companies to have a good brand image, since a better brand image means it will bring greater market share and competitive advantage for companies.

Buying Willingness: In today's highly competitive global trade market, there are numerous novel ideas available to draw in customers. Customers in this situation have a variety of options for purchasing products, but a variety of factors also affect the success of the product and the willingness of customers to buy the products (Meskaran et al., 2013). According to academic literature, buying willingness refers to a person's propensities for brand-related behavior (Rezvani et al., 2012). Another definition of buying willingness is the willingness of a person to attempt to buy a brand (Shabbir et al., 2009). A decision to act or physiological reaction that shows a person's conduct in line with the product may also be used to define buying willingness (X. Wang & Yang, 2008). In general, a consumer with a high level of buying willingness is more likely to make a purchase than one with a low level of buying willingness. Therefore, buying willingness can be considered as how people decide and are willing to buy a product even with a variety of factors, conditions and options.

Country of Origin and Liability of Foreignness: The country of origin has been extensively researched in today's modern and competitive era, where global marketing is expanding day by day, and it has

been demonstrated that this parameter influences consumer behavior and purchasing (Meskaran et al., 2013). Buame and Acheampong (2015) states that companies must overcome numerous obstacles in order to be accepted and conduct business in the host country. The liability of foreignness (LOF), put forth by Hymer in 1960, is one of these difficulties. The theory contends that there are additional expenses associated with conducting business abroad that go beyond a firm's foreign direct investment (FDI) but develop merely because it is not a national corporation. Additionally, studies demonstrate that consumers care about the country in which products are manufactured and that they consider these factors when evaluating the quality of products (Parkvithee & Miranda, 2012). According to research (Moeller et al., 2013), stereotypical perceptions have an impact on the LOFs that foreign companies encounter in their host nations. The stereotype of low competence in emerging nations is common (Yu & Liu, 2018). For instance, local stereotypes were noted by Eden and Miller (2001) as the root of discrimination. Country image may act as a "halo effect", by which consumers infer product attributes when they are unfamiliar with the product (Han, 1989). The halo effect postulates that country of origin image influences consumer beliefs about product attributes directly and indirectly through these beliefs on their overall evaluations of products (Han, 1989). Other than the halo effect, there are also unfavorable perceptions of products from developing countries (Peterson & Jolibert, 1995). From the literature and previous research, it can be inferred that country of origin and liability of foreignness influence brand image, with brands from developed countries typically having positive associations with their country of origin while brands from developing countries have negative associations with their country of origin.

Theoretical Framework: CSR Impact and Buying Willingness: Consumer perceptions of CSR can have an impact on corporate reputation and buying willingness (Bianchi et al., 2019). Perceived CSR and buying willingness are positively correlated (Lee and Shin, 2010). According to Mohr et al. (2001), the quantity and type of shared CSR information affects how consumers rate goods, businesses, and their buying willingness. Gatti et al. (2012) claim that CSR can give an organization a competitive advantage by influencing buying willingness along with perceived quality. Lee and Lee (2015) also stated that consumer ethics could help beliefs about CSR influence buying willingness. Therefore, this research hypothesized CSR conducted by a firm from a developing country has a direct effect on increasing their product buying willingness in a developed country's market. H1: CSR conducted by firm from a developing country has a positive impact on their product buying willingness in a developed country's market.

CSR Impact and Brand Image: Recent studies have found a connection between CSR and brand image as well as corporate reputation (Lai et al., 2010). According to the current study, CSR is expected to convey to stakeholders a favorable ideal of company behavior, strengthening brand image (Galbreath, 2010). Similarly, past studies also indicate that taking part in CSR helps a business develop its brand image, and the positive overall view of the business that is produced as a result of CSR engagement influences how well customers perceive the company's products and services (Vo et al., 2017). Hsu (2012) looked into the advertising effects of CSR initiatives on corporate reputation and brand image, the findings also indicated that CSR activities have a favorable effect on customers satisfaction, corporate reputation, and brand image. This means that if a company conducts CSR activities, they could increase their reputation and brand image. Thus, this research hypothesized that a CSR initiative by a developing country firm has a positive effect on their brand image in a developed country's market. H2: CSR initiative by a firm from developing country has a positive effect on their brand image.

Brand Image and Buying Willingness: Earlier research suggests that good brand images are an example of an essential intangible asset since they have the ability to create value and because their intangible nature makes their replication by rival companies much more complex (Roberts & Dowling, 2002). According to Spreng and Page Jr. (2001), a company's reputation has a substantial impact on consumers' brand attitudes, which in turn affects their satisfaction, buying willingness, and perception of a company's performance. This implies that consumer willingness to buy would increase with better brand image.

As a result, this research hypothesis considers how developing country firm's brand perceptions affect consumer willingness to buy their product. H3: Higher developing country firm's brand image has a positive impact on their product buying willingness in developed country's market. CSR Impact and Buying Willingness, Mediation by Brand Image: In addition to looking at the direct effect of CSR on buying willingness, CSR impact on brand image, and brand image effect on buying willingness, this research will also look at the indirect effect of CSR conducted by developing countries on their product buying willingness through brand image as a mediator variable. As already known, the current study states that CSR will promote a positive ideal of corporate behavior among stakeholders, enhancing brand image (Galbreath, 2010). Previous research has shown that engaging in CSR helps businesses build their corporate image and that customers' perceptions of the company's goods and services are influenced by this positive overall view of the business (Vo et al., 2017). This implies that if a business engages in CSR initiatives, they may improve their reputation and brand image. The reputation of a company, according to Spreng and Page Jr. (2001), has a significant influence on consumers' brand attitudes, which in turn affects their satisfaction, buying willingness, and perception of a company's performance. This suggests that a stronger brand image would increase consumer willingness to purchase. Therefore, this research also hypothesized CSR will increase brand image that will lead to greater developing country firm's product buying willingness in a developed country's market. Although it is noted that different aspects of perceived CSR have varying degrees of influence, Wu and Wang (2014) confirmed the existence of the relationship. H4: CSR will increase developing country firm's brand image that will lead to greater product buying willingness in a developed country's market.

Conceptual Model:

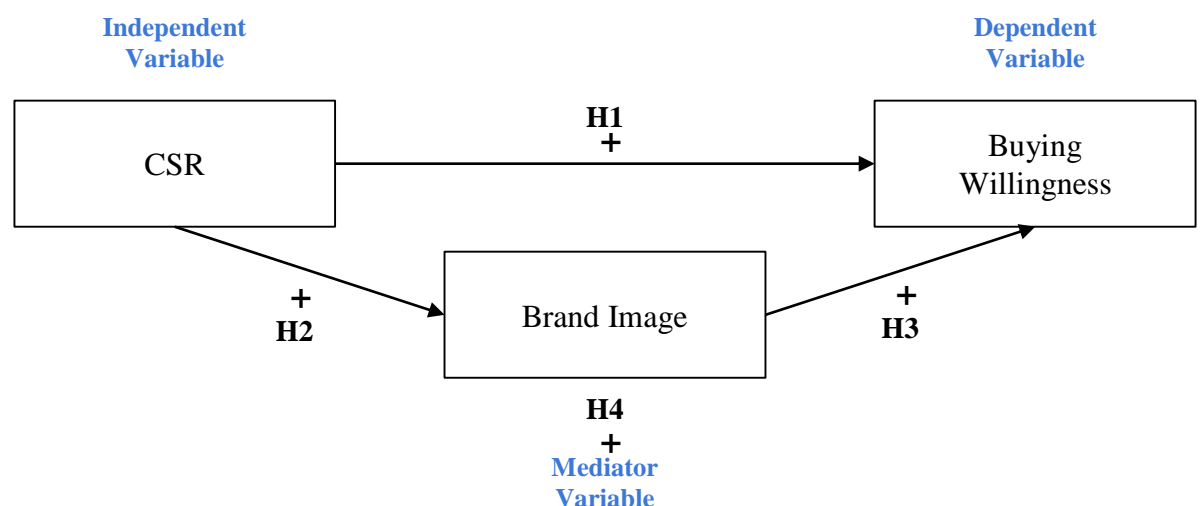


Figure 1: Conceptual Model

Methodology: Participants and Research Methodology: The aim of this research is to find out whether the CSR carried out by a company from a developing country, in this case Indonesia, has an impact on the buying willingness of their product in a developed country's market, particularly in the Netherlands. To obtain the data, an online survey through questionnaire was used in this research. Online survey was used since according to Gay (1987), it is the most practical method for quickly gathering data from a sizable sample. The online questionnaire contains fictitious information about product from Indonesia that are available in the Netherlands (appendix table 12). The survey questionnaires were assigned to two random groups using a randomized feature on Qualtrics to make sure both groups got the same number of respondents. In the survey questionnaire, one group was exposed with fictitious information about CSR activities the brand carries in Indonesia while the

other does not. For each group, there were questions regarding if people got brand's CSR information as an independent variable, how they perceived the brand image as a mediator variable, and questions about people's willingness to buy the product as a dependent variable. Questions about age and gender were asked to be the research control variable. The online survey was distributed to people who live in the Netherlands to represent consumers in developed country, the purpose of the research was not mentioned in the questionnaire to avoid biased results. According to Israel (1991), 222 individuals are required as a minimum sample size to match precision if the level of confidence is 95%, thus this research targeted at least 222 respondents who live in the Netherlands. The questionnaire was distributed via social media targeting people living in the Netherlands, and also distributed directly by asking people to fill out a questionnaire by scanning a QR code.

Measure: Independent Variable: CSR: After receiving and learning more about the brand's information provided, the participants were asked to indicate whether they had been exposed to the CSR of the firm by choosing one of the two options between no (0) and yes (1).

Mediator Variable: Brand image: This research determined brand image as how consumers perceive the value of the brand. This study utilized Villarejo-Ramos' (2002) scale to gauge how consumers perceive brand image due to the fact that it does not apply to any specific product. On a 7-point Likert scale, questions related to how respondents perceived the firm's brand image are answered with high reliability ($\alpha = 0.943$) (appendix table 5). **Dependent Variable:** Buying Willingness: This research identified the primary preference that drives the purchase of a particular product as buying willingness. A three-item scale developed by Putrevu and Lord in 1994 was used; these three-item scales are related with future buying decisions, long-term buying decisions, and buying certainty. This scale has been used by Chen et al. (2015), Bigné & Currás (2008), and Bianchi et al. (2018). These questions about respondents' buying willingness are measured in a 7-point Likert scale with high reliability ($\alpha = 0.940$) (appendix table 5).

Results: Descriptive Statistics: Utilizing Qualtrics online questionnaire, this research received a total of 228 (male 44.7%, female 55.3%) (appendix table 6) respondents who live in the Netherlands that were perfectly randomized for both groups, exposed (50%) and not exposed (50%) by developing country firm's CSR information (appendix table 7). It is also observed that the majority of the respondents are within the 18-21 age group (41.2%), followed by 22-30 (28.1%), 31-40 (14.5%), under 18 (8.8%) and 41 or older (7.5%) (appendix table 8). The Pearson correlation analysis was conducted and the result showed that the correlation between independent variables was below the 0.7 threshold, showing that there was no multicollinearity (table 1). The same test was also conducted to test the correlation between questions, and the result showed that there was a significant correlation between each question on both moderating and dependent variables (appendix table 3&4).

Table 1: Multicollinearity Test Table

Table 1. Multicollinearity Test Table

	DV	IV	MV
DV	1	.679**	.838**
IV	.679**	1	.695**
MV	.838**	.695**	1

**. Correlation is significant at the 0.001 level (2 tailed)

Hypothesis Testing: To test all the hypotheses, this research performed mediation analysis using Hayes' Model 4 Serial Mediation (2018). The test included CSR as the independent variable, brand image as mediator, and willingness to buy as dependent variables. The analysis assigned a code for

the independent variable (CSR) of 1 for the one that is exposed with the brand's CSR information and 0 for one that is not exposed.

Table 2: Hypothesis Testing Result Table

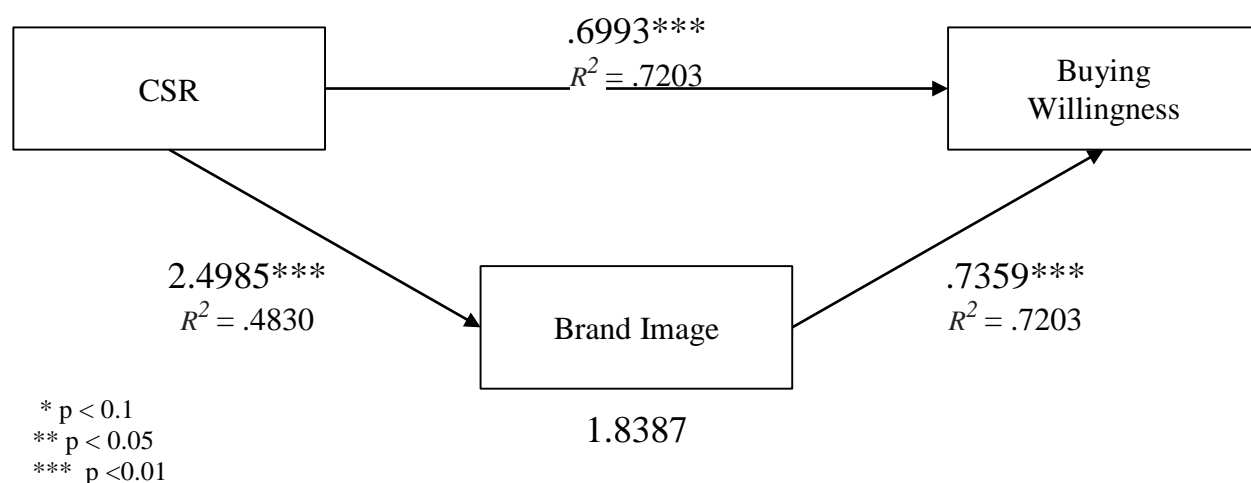
	Hypothesis	Effects	Significant	Supported
H1	CSR on Buying Willingness	0.6993	$p < 0.00$	Yes
H2	CSR on Brand Image	2.4985	$p < 0.00$	Yes
H3	Brand Image on Buying Willingness	0.7359	$p < 0.00$	Yes
H4	CSR on Buying Willingness through Brand Image	1.8387	$p < 0.00$	Yes

Direct Effect of CSR to Buying Willingness: The analysis conducted using Hayes' Model 4 (2018) revealed that hypothesis 1, where this research hypothesized CSR conducted by firm from developing country has a positive effect on their product buying willingness in developed country's market is significantly supported with the statistical evidence ($b = 0.6993$, $SE = 0.1216$, $LLCI = .3382$, $ULCI = 1.0604$, $p < 0.00$) (appendix table 10). The results prove that there is a positive direct effect of CSR conducted by firm from developing country on their product buying willingness in developed country's market.

CSR on Brand Image, Brand Image on Buying Willingness: Same method was used to test hypothesis 2 and 3, using Hayes' Model 4 (2018). The analysis, which was done to test hypothesis 2, showed that CSR has a significantly positive association with brand image ($b = 2.4985$, $SE = .1719$, $LLCI = 2.1597$, $ULCI = -1.2951$, $p < 0.00$) (appendix table 9). Hypothesis 3 is also supported by the evidence that brand image has a significant positive relationship with buying willingness ($b = .7359$, $SE = .0510$, $LLCI = .6355$, $ULCI = .8364$, $p < .00$) (appendix table 10). The data proved that there are positive relationships between CSR and brand image, also positive effects of brand image to buying willingness.

Indirect Effect of CSR on Buying Willingness through Brand Image: To see if there are indirect effects as stated in hypothesis 4, Hayes' Model 4 (2018) was also used. The statistical evidence shows that there is a significant indirect relationship between CSR and brand image through buying willingness as a mediator variable ($b = 1.8387$, $SE = 1.738$, $LLCI = 1.5059$, $ULCI = 2.1815$) (appendix table 11). With indirect and mediator effects proved, shows CSR will increase brand image that will lead to greater product buying willingness.

Figure 2. Serial Mediation Effect



Discussion and Conclusion: Discussion: The current studies show that CSR initiatives

could bring direct effect for companies on getting higher buying willingness, and a positive indirect effect through brand image. As previously stated by Lee and Shin (2010) about the direct effect, as well as CSR effect on brand image by Fombrun & Shanley (1990); Galbreath (2010), and brand image on buying willingness by Spreng and Page Jr. (2001). Therefore, this study wants to add a perspective related to the mediation effect through brand image on buying willingness. Hypothesis 1 emphasizes that a CSR carried out by a firm from a developing country will create a direct positive effect on their buying willingness in a developed country's market. This research proved that there is a direct positive relationship on CSR activity conducted by Indonesian company with increasing buying willingness of Indonesian product in the Netherlands. Furthermore, hypothesis 2 that points out how a CSR initiative by a firm from a developing country has a positive impact on their brand image was also accepted with supporting evidence in this research, it is proven that CSR activity can help Indonesian firm gain a better brand image in the Netherlands. The third hypothesis, which is hypothesis 3, that emphasizing brand image will bring positive effect on product buying willingness was accepted as well, it is validated that with better brand image will have an impact on higher Indonesian product in the Netherlands. Lastly, hypothesis 4 that focuses on the indirect positive effect of CSR on buying willingness through brand image as a mediator variable was also proven. It implies that conducting CSR will lead to greater brand image of the Indonesian firm, which will give a rise to buying willingness of their product in the Netherlands, the mediator effect of brand image is presence.

Managerial Implications: One of the main goals of this research is to help businesses from developing countries find a strategy needed to be able to gain buying willingness and compete in developed countries' market despite the unfavorable perceptions toward their country of origin and liability of foreignness. Based on this study, firms from developing countries can really see that there are real advantages of conducting CSR activity. CSR can really help businesses from developing countries to create higher buying willingness in developed country's market against unfavorable circumstances they need to face. Doing CSR and promoting it could help businesses gain a better brand image which in the end will also lead to greater buying willingness in developed country's market. Based on these research findings, corporate executives from developing countries can have more insight and options on formulating their strategies on entering developed countries' markets. CSR can be an important factor in building relationships with key stakeholders, such as customers, investors, and local communities. By demonstrating a commitment to social and environmental responsibility, businesses can win over these groups' trust and foster long-lasting relationships. Companies might want to think about how their CSR initiatives fit with the goals and values of their target audience. For instance, a company might want to concentrate on eco-friendly initiatives as part of their CSR strategy if their target market values environmental sustainability. Businesses may find it advantageous to communicate their CSR initiatives through a variety of platforms, including social media, press releases, and corporate websites. This may aid in increasing consumer and stakeholder awareness and establishing credibility. Finally, companies should be ready to modify their CSR strategy as necessary to reflect shifting priorities and conditions. The effectiveness and alignment of the company's efforts with its goals can be ensured through regular review and evaluation. Incorporating CSR implementation into the internationalization strategy of companies from developing countries will help companies to make it easier to

enter the target market they want; this research has proven that CSR can improve the brand image of companies and increase buying willingness in developing country markets. Although it is necessary to conduct a more in-depth study to suit each company, country of origin and country of destination, to get maximum results.

Further Research and Limitations: Despite the results of this study, there are a number of limitations that could be addressed in subsequent studies. First, this research was carried out only to focus on one case, Indonesian products in the Netherlands, which did not involve many types of products and countries, both developed and developing countries. This resulted in the outcome that could not be directly representative and could be generalized to all cases of products from developing countries in developed countries. The research was based on self-reported data from a survey, which may be subject to biases and limitations. Moreover, apart from only focusing on one case, the respondents from this research are also very small. The results from 228 may not be sufficient to generalize for people who live in the Netherlands, as the country's population is estimated by the UN to be 17,134,872 at the midpoint of the year (Worldometer, 2020). Although the fact that all of the results are shown to be significant, a small sample size prevents direct extrapolation to the target population. For more reliable results, future research may call for a larger and more significant sample size. To get more insight, future research can do it not only in one country with one product but involve more countries and types of products being studied to find out the effect of CSR conducted by developing countries' firms on brand image and better buying willingness in developed countries' markets. There is a need for more research on the long-term effects of CSR on brand image and buying willingness, as well as the potential for CSR to generate other benefits for businesses, such as financial performance or investor behavior. Finally, it is important to note that this study focused on the indirect effect of CSR on buying willingness through brand image as a mediator. It is possible that CSR may have other direct or indirect effects on buying willingness that were not examined in this study.

Conclusion: This study attempted to know if there is a direct and indirect positive relationship between CSR conducted by a firm from a developing country to buying willingness of their product in a developed country with brand image as a mediator variable. In this case this study focuses on how Indonesian firm can gain a better brand image and buying willingness in the Netherlands market. With a total of 228 respondents, the study provides the evidence for the hypotheses. In conclusion, the result of this study shows that there is statistical evidence of a positive relationship between CSR to brand image and buying willingness which proves and strengthens that all the hypotheses based on prior research are true. The findings demonstrate that a developing country company's CSR effort have a positive direct impact on their product buying willingness in the developed country market. The evidence showed a positive correlation between CSR and brand image as well as positive brand image effects on buying willingness. With indirect and mediator effects demonstrated, CSR increases brand image, which increases the likelihood that consumers will buy a product. All in all, the results of this research can certainly add value to the post international business and CSR literature. Moreover, the results can convince corporate executives that CSR really can bring positive impact and can be a crucial component for business success in the market not only as a duty or responsibility. Lastly and most importantly, this research can help and assist companies from developing countries to compete in the global market particularly in a developed

countries' markets by providing insight about CSR that companies can use in their internationalization strategy.

Reference: sAaker, D. A. (1991). Managing brand equity: Capitalizing on the Value of a Brand Name. Andéhn, Mikael & Gloukhovtsev, Alexei & Schouten, John. (2016). The Country of Origin Effect – Key Issues and Future Direction. 1746-1754. 10.15444/GMC2016.12.02.04. Barr, N. (2004). Problems and definition of measurement. In Economics of the welfare state. New York: Oxford University Press. pp. 121–124 Bianchi, Enrique & Bruno, Juan & Sarabia-Sánchez, Francisco. (2019). The impact of perceived. CSR on corporate reputation and purchase intention. European Journal of Management and Business Economics. 28. 10.1108/EJMBE-12-2017-0068. Birch, D. (2002). "CSR in Australia: some ups, some downs", Journal of Corporate Citizenship, Vol. 5. Boll, Alfred Michael (2007). Multiple Nationality and International Law. Martinus Nijhoff Publishers. p. 114. ISBN 978-90-04-14838-3. Currás-Pérez, R., Bigné-Alcañiz, E. & Alvarado-Herrera, A. The Role of Self-Definitional Principles in Consumer Identification with a Socially Responsible Company. J Bus Ethics 89, 547 (2009). <https://doi.org/10.1007/s10551-008-0016-6>. Chung, K.H., Yu, J.E., Choi, M.G. and Shin, J.I. (2015). The effects of CSR on customer satisfaction and loyalty in China: the moderating role of corporate image. Journal of Economic Business Management, Vol. 3 No. 5, pp. 542-547. Dahlsrud, A. (2008). How corporate social responsibility is defined: an analysis of 37 definitions. Corporate Social Responsibility & Environmental Management, Vol. 15 No. 1, pp. 1-13. Dobni, D. and Zinkhan, G.M. (1990). In Search of Brand Image: A Foundation Analysis. Advances in Consumer Research, 17, 110-119. Echtner and Ritchie. (1991). The meaning and measurement of the destination image. Journal of Tourism Studies, 2 (1991), pp. 2-12. Galbreath, Jeremy. (2010). How does corporate social responsibility benefit firms? Evidence from Australia. European Business Review. 22. 411-431. 10.1108/09555341011056186. Gatti, L., Caruana, A. and Snehota, I. (2012). The role of corporate social responsibility, perceived quality and corporate reputation on purchase intention: implications for brand management, Journal of Brand Management, Vol. 20 No. 1, pp. 65-76. Kadelbach, Stefan (2007). "Part V: Citizenship Rights in Europe". In Ehlers, Dirk (ed.). European Fundamental Rights and Freedoms. Berlin: De Gruyter Recht. pp. 547–548. ISBN 9783110971965. Khare, A., Handa, M. (2011). Need for uniqueness as antecedents to purchase behavior amongst Indian youth, American Journal of Business and Globalization, Vol. 6, No 1, 2011. Kotler, P. (1988). Marketing Management: Analysis, Planning, Implementation, and Control. Englewood Cliffs, NJ: Prentice-Hall. Lee, J. L., James, J. D., & Kim, Y. K. (2014). A Reconceptualization of Brand Image. International Journal of Business Administration, 5(4). <https://doi.org/10.5430/ijba.v5n4p1>. Lee, K.H. and Shin, D. (2010). Consumers' responses to CSR activities: the linkage between increased awareness and purchase intention, Public Relations Review, Vol. 36 No. 2, pp. 193-195. Meskaran, F., Ismail, Z., & Shanmugam, B. (2013). Online purchase intention: Effects of trust and security perception. Australian journal of basic and applied sciences, 7(6), 307-315. Moeller, M., Harvey, M., Griffith, D., & Richey, G. (2013). The impact of country-of-origin on the acceptance of foreign subsidiaries in host countries: An examination of the "liability-of-foreignness.". International Business Review, 22(1), 89–99. <https://doi-org.proxy-ub.rug.nl/10.1016/j.ibusrev.2012.02.006>. Mohr, L.A., Webb, D.J. and Harris, K.E. (2001). Do consumers expect companies to be socially responsible? The impact of corporate social responsibility on buying behavior. Journal of Consumer Affairs, Vol.

35 No. 1, pp. 45-72. Opatha, Malki. (2015). Definitions of Brand Image. Journal of Brand Image. Israel, Glenn D. (1992). Sampling the Evidence of Extension Program Impact. Program Evaluation and Organizational Development, IFAS, University of Florida. PEOD-5. October. Ramos, V., & Francisco, Á. (2002). Modelos multidimensionales para la medición del valor de marca. Investigaciones Europeas De Dirección Y Economía De La Empresa, 8(3), 13–44. <https://dialnet.unirioja.es/descarga/articulo/634171.pdf>. Rezvani, S., Javadian Dehkordi, G., Sabbir Rahman, M., Fouladivanda, F., Habibi, M., & Eghtebasi, S. (2012). A Conceptual Study on the Country of Origin Effect on Consumer Purchase Intention. Asian Social Science, 8(12). <https://doi.org/10.5539/ass.v8n12p205>. Sheehy, B. (2014). Defining CSR: Problems and Solutions. Journal of Business Ethics, 131(3), 625–648. <https://doi.org/10.1007/s10551-014-2281-x>. Spreng, R. A., & Page, T. J. (2001). The impact of confidence in expectations on consumer satisfaction. Psychology & Marketing, 18(11), 1187–1204. <https://doi.org/10.1002/mar.1049>. Planken, B. (2013). Definitions of Social Responsibility. Encyclopedia of Corporate Social Responsibility, 768–772. https://doi.org/10.1007/978-3-642-28036-8_476. Putrevu, S., & Lord, K. R. (1994). Comparative and noncomparative advertising: Attitudinal effects under cognitive and affective involvement conditions. Journal of Advertising, 23(2), 77–91. <https://doi.org/10.1080/00913367.1994.10673443>. Vo, T. T., Xiao, X., & Ho, S. Y. (2017). How Does Corporate Social Responsibility Engagement Influence Word of Mouth on Twitter? Evidence from the Airline Industry. Journal of Business Ethics, 157(2), 525–542. <https://doi.org/10.1007/s10551-017-3679-z>. Netherlands Population (2020) - Worldometer. (n.d.). <https://www.worldometers.info/world-population/netherlands-population/> Yusof, J. M., Manan, H. A., Karim, N. A., & Kassim, N. A. (2015). Customer's loyalty effects of CSR initiatives. Procedia - Social and Behavioral Sciences, 170, 109–119. <https://doi.org/10.1016/j.sbspro.2015.01.020> Yu, Y., & Liu, Y. (2018). Country-of-origin and social resistance in host countries: The case of a Chinese firm. Thunderbird International Business Review, 60(3), 347– 363. <https://doi-org.proxy-ub.rug.nl/10.1002/tie>

Appendix: Table 3. Moderation Variable Questions Correlation

	MV1	MV2	MV3	MV2
MV1	1	.855*	.792**	.787**
MV2	.855**	1	.812**	.781**
MV3	.792**	.812**	1	.816**
MV4	.787**	.781**	.816**	1

** Correlation is significant at the 0.01 level (2-tailed)

Table 4. Dependent Variable Questions Correlation

	DV1	DV2	DV3
DV1	1	.848**	.824**
DV2	.848**	1	.847**
DV3	.824**	.847**	1

** Correlation is significant at the 0.01 level (2-tailed)

Table 5. Reliability Analysis

Variable	Cronbach's Alpha
BI*	0.943
WTB*	0.940

*Variables name: BI is Brand Image, WTB is Willingness to Buy

Table 6. Frequency Table GENDER

GENDER		
	Frequency	Valid Percent
Male	102	44.7
Female	126	55.3
Total	228	100

Table 7. Frequency Table CSR Information

CSR		
	Frequency	Valid Percent
With CSR (1)	114	50
Without CSR (0)	114	50
Total	228	100

Table 8. Frequency Table AGE

AGE			
	Frequency	Valid Percent	Cumulative Percent
Under 18	20	8.8	8.8
18-21	94	41.2	50
22-30	64	28.1	78.1
31-40	33	14.5	92.5
41 or older	17	7.5	100
Total	228	100	

Table 9. Model Summary of CSR to Brand Image

Outcome Variable						
BI**						
Model Summary						
R	R-sq	MSE	F	df1	df2	p
0.6950	0.4830	1.6850	211.1582	1.0000	226.0000	0.0000
Model						
	coeff	se	t	p	LLCI	ULCI

constant	2.8377	0.1216	23.3401	0.0000	2.5981	3.0773
CSR**	2.4985	0.1719	14.5313	0.0000	2.1597	2.8374

**Variables name: BI is Brand Image as mediator variable, CSR is Corporate Social Responsibility as independent variable.

Table 10. Model Summary of CSR and Brand Image to Willingness to Buy

Outcome Variable						
BW**						
Model Summary						
R	R-sq	MSE	F	df1	df2	p
0.8487	0.7203	0.9895	289.7536	2.0000	225.0000	0.0000
Model						
	coeff	se	t	p	LLCI	ULCI
constant	0.5403	0.1721	3.1405	0.0019	0.2013	0.8794
CSR**	0.6993	0.1832	3.8162	0.0002	0.3382	1.0604
BI**	0.7359	0.0510	14.4376	0.0000	0.6355	0.8364

**Variables name: CSR is Corporate Social Responsibility as independent variable, BI is Brand Image as mediator variable, BW is Buying Willingness as dependent variable.



Table 11. Direct and Indirect Effect

Model Summary						
R	R-sq	MSE	F	df1	df2	p
0.8487	0.7203	0.9895	289.7536	2.0000	225.0000	0.0000
Direct effect of X* on Y*						
Effect	se	t	p	LLCI	ULCI	
0.6993	0.1832	3.8162	0.0002	0.3382	1.0604	
Indirect effect(s) of X on Y						
	Effect	BoostSE	BootLLCI	BootULCI		
MV*	1.8387	0.1738	1.5059	2.1815		

*Variables name: X is independent variable (CSR), Y is dependent variable (Buying Willingness), MV is mediator variable (Brand Image)

Table 12. Questionnaire:

Qualtrics Questionnaire	
Control Variable	
Questions	Answers

AGE	Under 18 18-21 22-30 31-40 41 or older
Gender	Male Female
INFORMATION	
With CSR	Without CSR
You are very attracted to this shoes from IDSHOES while searching for a pair of sneakers. You realize that IDSHOES comes from a developing country and carries out corporate social responsibility (CSR) activities in Indonesia.	You are very attracted to the shoes from IDSHOES while searching for a pair of sneakers. You realize that IDSHOES comes from a developing country and it doesn't conduct any corporate social responsibility (CSR) activities.
	
Independent Variable – CSR	
Based on the information, IDSHOES is conducting CSR activities	Yes No
mediator Variable - Brand Image	
IDSHOES is a very nice brand/company	7-point Likert scale
IDSHOES is a very attractive brand/company	7-point Likert scale
IDSHOES has a powerful image	7-point Likert scale
IDSHOES Is a hugely sympathetic brand/company	7-point Likert scale
Dependent Variable - Buying Willingness	
I will purchase IDSHOES the next time I need a shoe	7-point Likert scale
It is very likely that I will buy IDSHOES	7-point Likert scale
Definitely, I will buy product of IDSHOES	7-point Likert scale

Interdependent Purchase More in Online Shopping Compared to

Independents: Evidence from The Netherlands and Indonesia



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Abstract: Customers are now becoming more impulsive and online purchasing platforms are responding by giving ever more promotions, especially since the pandemic. This event may affect differently in different cultural orientations; thus, the impacts of this phenomenon need to be studied. Therefore, the purpose of this study is to understand holistically the influence of self-construal, mediated by impulsivity, on purchase intention in eCommerce with the presence of promotion. According to the findings of this cross-country study, which included 182 questionnaire respondents from Indonesia and The Netherlands, interdependents (versus independents) self-construals are more likely to purchase online and independents have a higher impulsivity trait. However, contrary to prior studies, impulsivity and promotion have no significant role in the relationship between self-construal and purchase intention in eCommerce. Even though this paper adds to the understanding of consumer behavior and purchase intention in eCommerce, further research is needed to fully understand the impact of impulsivity and promotion. Managerially, this helps a better understanding of the market environment in The Netherlands and Indonesia that Indonesian consumers purchase more through online shopping.

Keywords: Self-construal, Impulsivity, Purchase Intention, Promotion, Online Shopping

Introduction: Nowadays our daily life cannot be separated from using the internet. This results in altered consumer behavior and habits due to the widespread development of internet-based platforms (Tiago & Veríssimo, 2014). One of the internet-based platforms is electronic commerce, which is now increasing widely, rising from 15% in 2019 to 21% in 2021 of total retail sales globally (Morgan Stanley, 2022). With the ease of conducting shopping through eCommerce, impulsive buying of products is a possibility, and it occurs occasionally among customers (Chen & Wang, 2015). Therefore, eCommerce platforms use promotions to lure their customers' impulsivity even more. Online businesses frequently compete with one another by providing large discounts with quantity and time limits to stimulate impulsive buying (Luo, Cheng, Zhou, Song, & Yu, 2021). This shows that there is a problem where customers are becoming more impulsive and online buying platforms are responding by offering increasingly more promotions. In understanding the phenomena, the literature has examined the role played by impulsivity and purchase intention in eCommerce (Dholakia, 2000; Iyer, Blut, Xiao, & Grewal, 2019) and the role of impulsivity moderated by promotion-related situations (Chen & Wang, 2015). Promotions have also been studied in eCommerce whereas several special promotions indicated for eCommerce have been mentioned, such as limited promotion (Chen & Wang, 2015; Luo et al., 2021). However, will these effects of promotion and impulsivity be the same in different cultural situations? How is the effect after being impacted by cultural orientation on consumers' purchase intention in eCommerce? Different cultural orientations may result in different self-construals (Singelis, Bond, Sharkey, & Lai, 1999). Self-construal refers to the way a person views the role that is allocated to the other in defining themselves, whether independent or interdependent (Markus & Kitayama, 1991). There has been

prior research about self-construal and its impact on eCommerce where independents have a higher purchase intention in eCommerce (Rosillo-Díaz, Blanco-Encomienda, & Crespo-Almendros, 2019; Lim, Leung, Sia, & Lee, 2004). Although previous research has demonstrated that impulsivity positively affects purchase intention and even larger positive effect in the presence of promotion, the author argues that the mechanism of cultural orientation influence in this context has not been adequately defined. Markus & Kitayama (1991) argued that different self-construals may have varied effects on different events. Therefore, the author posits that self-construal impacts purchase intention in eCommerce via impulsivity and that the relationship strengthens with the presence of promotion. This study intends to expand on previous research by characterizing the role of self-construal on purchase intention in an online context when a promotion is available and added to an impulsive self. Therefore, the main research question is how self-construal, mediated by impulsivity, will influence purchase intention in eCommerce with the presence of promotion. The results of this study provide several contributions to the existing literature. First, the effect of several promotions toward self-construal has been researched in an offline setting (Ng, Bharti, & Goh, 2021; Palazon & Delgado-Ballester, 2011). Online promotion has a rather different pattern than offline promotions (Zhang & Wedel, 2009). Therefore, this study will explore online promotions. The research finding adds to the study of consumer behavior first and foremost by addressing the relationship between self-construal and purchase intention in eCommerce as influenced by impulsivity and promotion. Individualists, according to prior research, have greater rates of online shopping than collectivists (Rosillo-Díaz et al., 2019; Lim et al., 2004). Nevertheless, the effect of promotion and impulsivity towards purchase intention in eCommerce may differ in different cultural orientations hence it is important to understand the complete story to extend the consumer behavior study and become an important insight for international marketers in the management, as well as extend Chen & Wang (2015) literature by understanding how it affects in different cultural orientations. Other than that, the author argued that due to COVID-19 where people tend to conduct more online shopping (Morgan Stanley, 2022), regardless of their cultural orientation, some consumer behavior might change and needs updated research. Managerially, the insights can help marketers understand their customers better by not being limited by geography and centered on cultural dimensions. This study can also help managers better understand how to strategize their promotional strategies for eCommerce purchases based on their target market in different countries and cultural orientations.

Literature Review: Self-Construal: To understand cultural orientation, it is important to understand self-construal (Singelis et al., 1999). Self-construal is how an individual perceives the role that is given by another in self-definition, either independent or interdependent (Markus & Kitayama, 1991). According to Markus and Kitayama (1991), construals of the self, others, and the connection between the self and others are represented in cultural differences. However, people may retain both types of self-construals concurrently (Zhang & Shrum, 2009), and which self-construals are engaged at a given time influences their judgments and behavior (Trafimow, Triandis, & Goto, 1991). Self-construal is divided into independent and interdependent (Markus & Kitayama, 1991). Independents place a strong emphasis on developing one's individuality and expressing their qualities (Marsella, De Vos, & Hsu, 1988). Compared to interdependents, independents looked more highly regarded within western cultures (Markus & Kitayama, 1991). On the contrary, many eastern cultures strongly emphasize that people are inherently related to one another (Kondo, 1982). Maintaining this interdependence among people is a normative imperative in eastern cultures (Marsella et al., 1988). In consumer behavior studies, self-construal effects indeed differ amongst different events (Markus & Kitayama, 1991). In a promotional context, interdependents are more aroused with discounts that eventually lead to a greater purchase intention for the designated discounted price (Ng et al., 2021). However, in an online setting, interdependents experience a lower purchase intention due to a high risk-averse trait in unknown situations such as online shopping (Rosillo-Díaz et al., 2019). In conclusion, self-construal has different effects on different phenomena.

In this study, self-construals' purchase intention will be analyzed based on promotions in online settings impacted by impulsivity.

Impulsivity: Currently, there seems to be a phenomenon where customers have higher impulsivity and eCommerce responds to it by offering increasingly more promotions. In an online setting, one of the critical factors in consumer decision-making is impulsivity (Huang & Kuo, 2012). To comprehend this phenomenon, it is needed to first understand the role of impulsivity. Impulsivity is defined as the tendency to respond quickly and without reflection (Doob, 1990). Whiteside & Lynam (2001) argues that every significant personality system contains some element of impulsivity, hence impulsivity is a key psychological concept in psychological studies. In an eCommerce context, normative assessments (Rook & Fisher, 1995), gender (Dittmar, Beattie, & Friese, 1995), and self-control (Sharma, Sivakumaran, & Marshall, 2010) are all impulsivity traits that might reflect customers differently, thus resulting in varying levels of purchase intention. Low self-control, usually correlated with independents (Steinmetz & Mussweiler, 2017), results in higher impulsivity (Sharma et al., 2010). In the gender setting, men impulsively buy products that demonstrate independence and activity, while women prefer to buy symbolic and self-expressive items (Dittmar et al., 1995). While some theorists, like Barratt (1993), argued that emotional elements have little bearing on impulsivity, others have acknowledged (Wallace, Newman, & Bachorowski, 1991) that negative emotions can encourage impulsivity, thus leading to atrocious buying behavior, such as online compulsive buying (Brunelle & Grossman, 2022) and impulsive buying behavior (Ko, Roh, & Lee, 2020). Some of the negative emotions that encourage impulsivity are high dissociation (Chen & Wang, 2015) and incidental moods (Huang & Kuo, 2012). In conclusion, individuals are more prone to act impulsively to soothe their negative emotions, even if doing so has detrimental long-term effects (Whiteside & Lynam, 2001). Therefore, this study will focus on the effect of impulsivity on the emotions of different self-construals.

Promotion: Some stimulations could affect customers' purchases, such as promotion. Promotion is defined as a form of external stimulation used to draw customers' attention throughout the shopping process (Suki, 2013), thus may encourage impulsive buying through impulsivity (Kacen, Hess, & Walker, 2012). Promotion is often regarded as an important marketing tactic for acquiring consumers. Promotion frequently leads to a considerable increase in sales for the advertised brand (Guadagni & Little, 2008; Yan, Wang, Chen, & Cho, 2016). It is often considered that the rise in sales is due to customers judging the marketed brand more positively as a result of the lower price, and so changing their purchasing habits (i.e. a price sensitivity explanation), hence consumer perception of value enhances the chance of purchase due to promotion (Grewal, Monroe, & Krishnan, 1998). However, there might be some unwanted effects of a promotion. Although a lot of research has mentioned that it could increase the purchases of customers (Kacen et al., 2012; Luo et al., 2021; Chen & Wang, 2015), promotions also could result in the opposite effect instead when used incorrectly (Inman & McAlister, 1993; Gupta & Cooper, 1992). Retailers' profitability may have suffered as a result of their lack of expertise in marketing planning (Inman & McAlister, 1993). Gupta and Cooper (1992) add to this by theorizing that the amount of the discount and the store image influence discounting of discounts and changes in purchase intention. Aside from that, the significance of price promotion also affects the customer's intention to purchase (Chen, Monroe, & Lou, 1998). As a result, purchase intent may diminish, or the promotion's efficacy may be lower than intended (Inman & McAlister, 1993). Therefore, promotion could affect purchase intention positively or negatively, depending on different aspects. The presence of promotion when it is not expected or the absence of it when it is expected may have a big influence on consumers (Kalwani & Yim, 1992). Kalwani & Yim (1992) argued that they are more likely to see a price "gain" during a price promotion and respond favorably; conversely, when the bargain is retracted, they are likely to experience a price "loss" and are less likely to purchase the product. Thus, this study will analyze promotion when it is present or absent and whether it impacts differently on different self-construals.

Purchase Intention in eCommerce: According to the Theory of Planned Behavior, behavioral intention is the most prominent predictor of behavior (Ajzen, 1991). As a result, in this study, purchase intention is used to describe purchasing behaviors. Purchase intention is affected differently in an online and offline context. In retail, factors that affect purchase intention mostly focus on the store and the product, such as brand consciousness and store image (Söderlund, Berg, & Ringbo, 2014; Wu, Yeh, & Hsiao, 2011). However, in an online setting, the aspects affecting purchase intention become more complex. The role of social drivers, such as consumer review (Park, Lee, & Han, 2007), as well as internal drivers, such as trust, uncertainty avoidance, and cultural orientations (Rosillo-Díaz et al., 2019) shape online purchase behaviors. The definition of purchase intention in eCommerce is the consumer's tendency to buy from an online seller (Lu, Fan, & Zhou, 2016). Because purchase intention is the most fundamental predictor of behavior (Ajzen, 1991), customers must have the intention to use eCommerce platforms first and receive the information needed to complete the transaction before buying an item or service (Ganguly, Dash, Cyr, & Head, 2010). As a result, purchase intention is the final result of multiple cues for the eCommerce consumer (Ganguly et al., 2010). Since the online environment is very complex, different cultural orientations also affect differently when doing online purchases. Independents may purchase higher because they tend to be more tolerant to risk (Rosillo-Díaz et al., 2019). However, Bianchi and Andrews (2012) showed that even collectivists, who are linked with a high-risk avoidance culture, are willing to keep making online transactions despite the risk associated. This may be due to the trust that they have built with a certain eCommerce platform (Rosillo-Díaz et al., 2019). Yoon (2009) further concluded that high collectivism had no moderating influence on the trust-intention relationship in the eCommerce adoption process. This outcome disparity demands more investigation in the context of online shopping; hence it will be conducted through this research.

Conceptual Development: Self-Construal and Purchase Intention in eCommerce: Customers will be more or less apprehensive to conduct transactions on eCommerce platforms based on their cultural orientations (Yildirim, Arslan, & Barutçu, 2016). As a result, self-construal can have a significant impact on how consumers behave when making purchases. Interdependents, for example, exhibit greater degrees of uncertainty avoidance and are less likely to purchase through eCommerce platforms due to the uncertainty caused by their inability to engage directly with merchants (Zendehdel, Paim, & Delafrooz, 2016). On the contrary, independents experience less uncertainty and are thus more inclined to utilize eCommerce platforms to make purchases (Lim et al., 2004), owing to their sharp levels of innovation and openness to try different things (Yaveroglu & Donthu, 2002). Therefore, a user's tendency to purchase through online platforms decreases when collectivism and risk aversion increase (Rosillo-Daz et al., 2019; Lim et al., 2004). Hence, it is assumed that independents will have a higher purchase intention during online shopping. H1. Independents (versus interdependents) have higher purchase intention in eCommerce.

Self-Construal, Impulsivity, and Purchase Intention in eCommerce: The discrepancies between interdependent and independent self-construals have ramifications for how impulsivity may be connected to behavioral intention. While independents are more concerned with expressing their uniqueness and subscribing to their beliefs and feelings, interdependents are more concerned with social cohesiveness and conforming to societal norms (Ybarra & Trafimow, 1998). Because impulsive consumption is generally regarded as an immature activity that may negatively affect interdependent societies, interdependents should be more likely to activate self-regulation objectives and inhibit impulsive tendencies (Zhang & Shrum, 2009). In addition, interdependents prioritize subjective norms over attitudes (Ybarra & Trafimow 1998), indicating that consumers who perceive themselves as interdependent rely less on their internal emotions to shape their purchase intention, hence they are less susceptible than independents to being affected by their own impulsive tendencies (Markus & Kitayama, 1991). Consumers that exhibit impulsivity traits purchased more. According to Wood (1998), the fundamental concept of an impulse is a lack of willpower, hence the customer's final decisions

usually contradict the best judgment. Those with strong impulsivity qualities are more prone to make impulse purchases than those with low impulsivity traits (Dholakia, 2000). In contrast to low impulsivity consumers, high impulsivity consumers swiftly correlate external information to internal emotion, resulting in stronger purchase intention (Chen & Wang, 2015). As a result, it is anticipated in this study that independents with high impulsivity have higher purchase intention in eCommerce than interdependents with low impulsivity. H2. Independents (versus interdependents) will exhibit a heightened degree of impulsivity that will lead to a greater purchase intention in eCommerce.

Moderation by Presence or Absence of Promotion: There are a lot of types of promotions in eCommerce, such as cash refund promotion (Chen & Wang, 2015) and limited promotion (Luo et al., 2021). This research will focus on limited promotions in time because it is widely used in eCommerce (Luo et al., 2021) and related to impulsivity since the scarcity of preferred products due to a limitation in time induces a sense of urgency in them, which encourages more purchases (Wu, Xin, Li, Yu, & Guo, 2021). Based on the above explanations, independents would have higher purchase intentions in eCommerce platforms (Rosillo-Díaz et al., 2019; Lim et al., 2004) and would have a more positive attitude toward consumption mediated by impulsivity (Zhang & Shrum, 2009). However, interdependents when chancing upon promotion will increase purchase intention due to increased arousal (Ng et al., 2021). In addition, Chen & Wang (2015) argued that promotions alter the relationship between impulsivity and purchase intention in eCommerce. Nakarmi (2018) also examined that everybody likes promotion. Therefore, the author argues promotion as a moderator towards self-construal on purchase intention in eCommerce mediated by impulsivity and assumes that there will be a canceling-out effect. H3. Presence (versus absence) of promotion negatively moderates the relationship between self-construal and purchase intention in eCommerce, such as, in the presence of promotion interdependent (versus independent) self-construal will have a higher purchase intention in eCommerce. H4. Presence (versus absence) of promotion negatively moderates the indirect relationship between self-construal and purchase intention in eCommerce via impulsivity, such as, in the presence of promotion interdependent (versus independent) self-construal will have a higher purchase intention in eCommerce.

Conceptual Model:

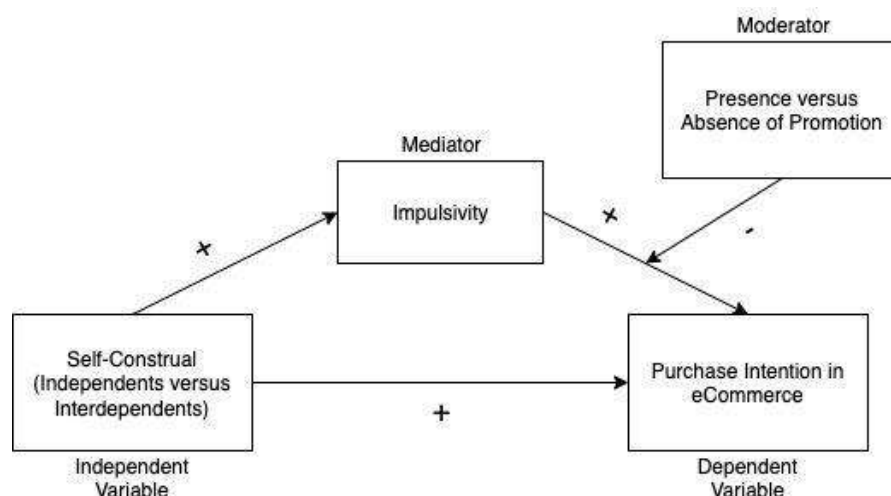


Figure 1. Conceptual Model

METHODOLOGY: Participants: The population of this study will include both self-construals. This study will be conducted in Indonesia and The Netherlands as a cross-country study where Indonesia represents interdependents and The Netherlands represents independents. The author shared the questionnaire with 250 participants online via various digital platforms utilizing Qualtrics and in-person. Since the experiment required individuals that were involved in an online buying activity, participants are primarily internet users with prior online shopping experience (Chen & Wang, 2015) and preferred online compared to offline shopping (Jiang, L. (Alice), Yang, Z., & Jun, M. (2013). Aside

from that, age and gender will be asked as demographic questions instead because nowadays online shoppers come from all ages and gender equally according to Kemp (2021). Thus, age and gender will be additional information for the research findings.

Research Methodology: This research uses experimental research within the quantitative method with primary data using questionnaires and regression as the proposed statistical method. A 2 (country: Indonesia versus The Netherlands) x 2 (promotion: no promotion versus promotion) between-subjects design was conducted. The survey will use a seven-point Likert scale for the independent, mediator, moderator, and dependent variables (Appendix B2). Scale 1 means "strongly disagree," whereas scale 7 means "strongly agree." The independent variable is self-construal (Singelis et al., 1999), the mediator is impulsivity (Rook and Fisher, 1995), and the moderator is the presence or absence of promotion. The dependent variable is purchase intention in eCommerce (Rosillo-Díaz et al., 2019) and the control variable is online shopping preference (Jiang et al., 2013). The participants will first be assigned to an advertisement with either presence of promotion or absence. To put respondents in a more realistic online purchasing scenario, the questionnaire should include a few distinct promotion situations (Luo et al., 2021). Therefore, the price was indicated as being 30% less than the suggested retail price under the promotion condition, and the price was shown as the suggested retail price in the absence of the promotion condition (which was based on the pricing average for each country). The participants who received a promotion in their advertisement will be given an online purchasing scenario for time-limited promotion continued with the purchase intention in the eCommerce questions. Then to test the mediating effect, the participants will answer questions about impulsivity afterward to make sure the answers will not be biased. There will be 2 manipulation checks for self-construal and promotion. For the promotion, the participants will be asked whether they saw a promotion in the previous advertisement or not. For self-construal, the participants will be asked 2 questions from each representative of the self-construal. As mentioned, each participant will represent their self-construal identity per country. At the very end, the demographic questions and the control variable will be asked, which are age, gender, and online shopping preference. Model 14 (Hayes, 2018) in SPSS is used to perform regression for moderated mediation analysis to estimate the relationship between independent and dependent variables with the mediator and moderator. To determine the mediation and the moderation effect, the author will additionally look at models 4 and 1 (Hayes, 2018), respectively. The survey's statistical data will then be converted to SPSS format and analyzed using statistical software. Through the use of SPSS, an independent sample t-test and a one-way ANCOVA will also be used to determine the mean differences between categorical groups. The appendix section will present the statistical findings and other important details. **RESULTS:** Descriptive Statistics: The survey was conducted through Qualtrics and distributed both online and offline. From 250 people, 182 people responded to the questionnaire (44.5% male, 52.7% female, and 2.7% prefer not to answer). The respondents consist of 89 people from The Netherlands and 93 people from Indonesia with the majority of 18-24 years old (79.1%) because the respondents were mainly university students. Reliability Test: The author uses Cronbach Alpha to determine the internal consistency of how closely connected the set of items is as a whole. The mediator ($\alpha = 0.914$) and the dependent variable ($\alpha = 0.866$) have a high Cronbach Alpha (table 1), more than the 0.7 threshold, indicating that the measuring scale is reliable (Churchill, 1979). The reliability of the independent variable ($\alpha = 0.345$ for interdependent questions and $\alpha = 0.316$ for independent questions) is low. A low Cronbach Alpha score might be the result of a small number of questions (Churchill, 1979). It might be because the author only used 2 out of 12 questions from Singelis (1994). However, since the Singelis (1994) questionnaire is used and proven to be reliable, the author decided to continue using this variable. Multicollinearity Check: The author uses the VIF Test to determine whether there is an occurrence of high intercorrelations between two or more independent variables. The test in this situation is for the independent variables. The calculated

variance inflation factor (VIF) index for each variable (table 15) is less than the recommended threshold value of 5, suggesting that multicollinearity problem does not exist in this study. Manipulation Check: Before we continue testing the hypothesis, the manipulation check should be conducted to understand whether the manipulation works for both the independent variable and the moderator. For the manipulation check, an independent-samples t-test is used. For the independent variable, the author analyzes whether the average independent of The Netherlands (coded as 1) respondents is different from the average interdependent of Indonesia (coded as 0) respondents. The test was found to be statistically significant with $t(180) = -3.936$, $p < .004$ (table 2). The mean of interdependent of Indonesia ($M = .3602$, $SE = 1.344$) differs from the mean of independent of The Netherlands ($M = 1.3034$, $SE = 1.8581$) (table 3). Thus, it can be concluded that the manipulation check succeeds hence it is aligned with the theory that Indonesian tend to be interdependent and Dutch tend to be independent. For the moderator of promotion, the author analyzes whether the average presence of promotion (coded as 1) respondents is different from the average absence of promotion (coded as 0) respondents. The result from the mean of the absence of promotion ($M = 2.88$, $SE = 1.652$) differs from the mean of the presence of promotion ($M = 5.81$, $SE = 1.339$) (table 5) and it is significant with $t(183) = -13.121$, $p < .007$ (table 4), hence it can be concluded that the manipulation check works, which means that the respondents saw the promotion when they were faced with a presence of promotion condition.

Hypothesis Testing: Main effect: In analyzing hypothesis 1, which is whether independents (versus interdependents) have higher purchase intention in eCommerce, one-way ANCOVA was performed. The test was carried out to better understand the main effect, which is the impact of self-construal on purchase intention in eCommerce. The independent variable is self-construal with a classification of 0 for Indonesia and 1 for The Netherlands and the dependent variable is purchase intention in eCommerce. The control variable is online shopping preference with demographic questions of age and gender. The result shows a significant difference in means of purchase intention in eCommerce with $F(1,176) = 14.095$, $p < .001$. Both variables of gender and online shopping preference were significantly related to purchase intention in eCommerce with $F(1,176) = 7.426$, $p = .007$ and $F(1,176) = 6.435$, $p = .012$, respectively (table 6). However, the variable of age was not significantly related to purchase intention in eCommerce with $F(1,176) = .444$, $p = .506$ (table 6). Whether an individual is Indonesian (interdependent) or Dutch (independent) has a significant influence on purchase intention in eCommerce, the estimated marginal means (table 7) demonstrate that interdependent has a greater mean value ($M = 4.085$, $SE = .154$) than independent ($M = 3.244$, $SE = .159$). Based on this, because the statistical analysis is significant and the mean for interdependent is higher compared to independent, hypothesis 1 is rejected, meaning that independent self-construal has a lower purchase intention in eCommerce compared to interdependent self-construal. Mediator: To test hypothesis 2 which is independents (versus interdependents) will exhibit a heightened degree of impulsivity that will lead to a greater purchase intention in eCommerce, Hayes' Model 4 (2013) mediation analysis was performed. Hayes model 4 was used to test the mediation analysis with self-construal as the independent variable, impulsivity as the mediator, and purchase intention in eCommerce as the dependent variable. The countries were classified as 0 for Indonesia and 1 for The Netherlands in the analysis. There are also demographic questions which age and gender are while the control variable is online shopping preference. The analysis is conducted to test hypothesis 2 and revealed that the overall model is significant (Effect = $-.8406$, $p = .0002$), however, the mediating effect is rejected (Effect = $.0603$, BootLLCI = $-.0227$, BootULCI = $.1674$) (table 8). Self-construal indeed has a positive significant association with impulsivity ($b = .4612$, $p = .0146$) (table 9). However, impulsivity has an insignificant relationship with purchase intention in eCommerce ($b = .1307$, $p = .1482$) (table 10). The mediation model could be seen in Appendix C1. For the other variables, only gender has a significant effect on purchase intention in eCommerce ($b = .4806$, $p = .0217$), while age ($b = .1290$, $p = .4442$) and online shopping preference

($b = .2178$, $p = .0612$) are not significant (table 10). Thus, hypothesis 2 is rejected because impulsivity does not have any mediating effect between self-construal and purchase intention in eCommerce. Moderator: Two-way ANOVA is used to investigate the relationship between the moderator and the main effect to test hypothesis 3 which is the presence (versus absence) of promotion negatively moderates the relationship between self-construal and purchase intention in eCommerce. The independent variable is self-construal, the dependent variable is purchase intention in eCommerce, and the moderator is promotion, with age and gender as demographic questions and online shopping preference as the control variable. The countries were again classified as 0 for Indonesia and 1 for The Netherlands in the analysis. The result from the two-way ANOVA showed that the moderating effect is insignificant with $F(1,174) = 1.082$, $p = .300$ (table 11). The statistical test is replicated by using Hayes Model 1 to test the moderating effect. The result supports the rejection of hypothesis 3 with an insignificant relationship between the moderator and the main effect ($b = -.46$, $p < .2996$) (table 12). The moderation model could be seen in Appendix C2. As for the other variables, gender ($b = .5523$, $p = .0071$) and online shopping preference ($b = .2662$, $p = .0161$) have a significant effect on purchase intention in eCommerce, while age ($b = .0996$, $p = .5585$) is not significant (table 12). Thus, hypothesis 3 is rejected since promotion does not have any moderating effect on self-construal and purchase intention in eCommerce. **Moderated mediation:** To test hypothesis 4, which is the presence (versus absence) of promotion negatively moderates the indirect relationship between self-construal and purchase intention in eCommerce via impulsivity, Hayes Model 14 is used to test the moderated mediation effect. The independent variable is self-construal, the dependent variable is purchase intention in eCommerce, the moderator is promotion, and the mediator is impulsivity. There are also age and gender as demographic questions and online shopping preference as the control variable. The countries were classified as 0 for Indonesia and 1 for The Netherlands. Hayes Model 14 was run to understand the overall effect of the moderated mediation with the overall result significant. The rejection of the main effect is again being supported by the significance of independents (versus interdependents) having lower purchase intention in eCommerce ($b = -.8724$, $p < .0002$). The variable of gender is significant ($b = .5048$, $p < .0168$) whilst the others are insignificant which are age ($b = .1044$, $p = .5411$) and online shopping preference ($b = .2137$, $p = .0673$) (table 14). Self-construal also has a significant positive relationship with impulsivity ($b = .4612$, $p < .0146$). However, impulsivity has an insignificant relationship with purchase intention in eCommerce ($b = .2254$, $p = .0717$) and promotion does not have any moderated mediation effect ($b = -.1892$, $p = .2624$) based on Hayes Model 14 (figure 2). Thus, hypothesis 4 is rejected since there is no moderated mediation effect.

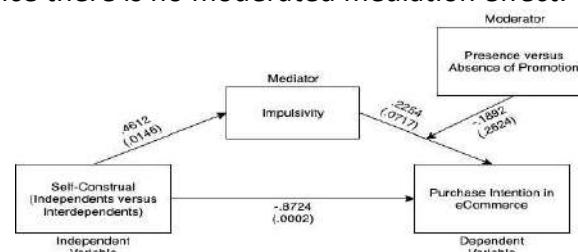


Figure 2. Moderated Mediation Effect

CONCLUSIONS AND RECOMMENDATIONS: Discussion and Conclusion: The phenomenon that is happening nowadays is heightened impulsivity due to the ease of conducting online shopping and businesses respond to it by having more promotions with the hope to increase customers' purchase intention. Previous papers have examined the role played by impulsivity and purchase intention in eCommerce (Dholakia, 2000; Iyer et al., 2019) and the role of impulsivity moderated by promotion-related situations (Chen & Wang, 2015). Therefore, this study is designed to disclose a more holistic effect of impulsivity and promotion towards the differences of self-construals on purchase intentions in eCommerce. Hypothesis 1 emphasizes that independents (versus interdependents) have higher purchase

intention in eCommerce. However, based on the results, this hypothesis is rejected. This may be due to the increasing trend of eCommerce which may result in altered consumer behavior (Tiago & Veríssimo, 2014) and an increase in the total retail globally (Morgan Stanley, 2022). Aside from that, within the self-construals literature, Bianchi & Andrews (2012) have mentioned that interdependents could also make purchases online despite the risks involved. Therefore, based on this cross-country study, interdependent self-construal appears to have a higher purchase intention in eCommerce compared to independent self-construal. Both gender and online shopping preference are significant in the main effect relationship of self-construals and purchase intention in eCommerce. This may be because customers shop online despite their gender (Ulbrich, Christensen, & Stankus, 2010; Kemp, 2021). Hence, the representative gender as seen in the descriptive statistics of this study significantly affects the relationship. For online shopping preference, it supports the notion that people who prefer online shopping compared to offline will purchase more online (Chen & Wang, 2015). The variable of age is not significant in this case because it only represents a small portion of online shoppers whereas eCommerce consumers vary widely and constantly through all ages (Kemp, 2021). Hypothesis 2 mentioned that independents (versus interdependents) will demonstrate greater impulsivity, resulting in higher purchase intention in eCommerce. This mediating concept is rejected in this study. However, independents (versus interdependents) indeed demonstrate more impulsivity. This result is aligned with previous literature mentioning that independents have higher impulsivity (Ybarra & Trafimow, 1998; Zhang & Shrum, 2009). However, the relationship between high impulsivity and higher purchase intention cannot be supported. Therefore, impulsivity does not mediate the relationship between self-construal and purchase intention in eCommerce. The moderating effect of promotion for hypotheses 3 and 4 is not supported since the result is insignificant. The reason for this insignificance may be due to the promotion conditions that are not adequate. Promotions due to price reduction focus on the quantity of the discount, whereas information processing enables users to focus on the amount saved (Chen & Wang, 2015). As a result, firms should indicate price cuts as dollars off (price reduction) rather than percentages off (price discount) (Gendall, Hoek, Pope, & Young, 2006). Aside from that, coupon promotions were rated as more pleasant and successful than discount promotions in affecting clients' purchase intentions (Chen et al., 1998). The next reason is that in this study, the promotion is only for one product, whereas in eCommerce, the bigger the promotion event, the larger the effect of the promotion on the customer's purchase intention. When there are more products in it, the promotion exhausts the self-regulation resources and leads to self-regulation failure, resulting in customers being unable to regulate unplanned consumption successfully and increasing their purchase intention (Yan et al., 2016). The last argument for this is because other things may impact purchase intention. Aside from impulsivity, whether customers are promotion-focused or prevention-focused is also important (Lin, Chen, Wang, & Lin, 2018), because promotion-focused individuals are much more sensitive to the presence or absence of positive outcomes such as gains or non-gains (Das, 2015), so the more promotion-focused they are, the more likely they are to purchase due to promotions. This factor is not examined in this study. In conclusion, the impact of self-construal on purchase intention in eCommerce when a promotion is available and added to an impulsive self has been studied within this cross-country study. Interdependents showcase higher purchase intention compared to independents and as for the mediating and moderating effect, it could not be supported. In other words, impulsivity does not mediate the relationship between self-construal and purchase intention in eCommerce, and promotion does not moderate the direct and indirect relationship between self-construal and purchase intention via impulsivity.

Theoretical and Managerial Implications: Several researchers have produced papers on self-construal, impulsivity, promotion, and purchase intention in eCommerce. The purpose of this study, however, is to explore deeper into the relationship between the aforementioned variables. In theory, this discovery broadens the scope of consumer behavior study. Individualist cultures have greater rates of online purchasing than collectivist cultures (Rosillo-Daz et al., 2019; Lim et al., 2004), however, other research has revealed that collectivists, who have a high-risk avoidance culture, are nevertheless eager to make purchases online despite the risk associated (Bianchi & Andrews, 2012). The result of this cross-country study supports the paper from Bianchi & Andrews (2012) where interdependents purchase more in eCommerce than independents. Since the rest of the hypothesis is not significant, this means that the result contradicts prior research. Chen & Wang (2015) argued that high impulsivity customers lead to a higher purchase intention. A study also examined that a positive attitude toward consumption is mediated by impulsivity (Zhang & Shrum, 2009). However, in this study, the effect of impulsivity is insignificant as the mediator. Chen and Wang (2015) also claimed that promotions modify the link between impulsivity and purchase intention in eCommerce, which this study refutes. The insignificance also implies that prior research cannot be generalized in The Netherlands and Indonesia since the effect is not the same. Aside from that, this research extends the literature of Chen and Wang (2015) by analyzing whether culture influences consumer online impulsive buying behavior or not in presence of promotion and the answer is that the cultural dimension has no significant effects on the moderated mediation of impulsivity and promotion. Managers will benefit from this study since it will help them better comprehend consumers' situations depending on their cultural backgrounds, notably the link between self-construal (independent versus interdependent) and purchase intention in eCommerce. As an outcome of this study, marketers now have a better understanding of the market environment in The Netherlands and Indonesia. It enables managers to better allocate their resources and competencies to satisfy the demands of Dutch and Indonesian customers. Indonesian consumers tend to purchase more in eCommerce, despite the risk, therefore marketers can focus on selling products online. However, taking into consideration prior research that interdependents need to have trust that they have built with a certain eCommerce platform (Rosillo-Díaz et al., 2019), marketers should pay attention to the customer relationship with interdependents in Indonesia to build that trust. As for promotion, time-limited promotion was used in this study and the result was not significant. Therefore, marketers should utilize other types of promotion when strategizing in Indonesia or The Netherlands such as emphasizing price reduction (Gendall et al., 2006), tapping into major promotions such as 11.11 or Black Friday (Yan et al., 2016), and coupon usage (Chen et al., 1998). In addition, marketers could take a look into other traits aside from impulsivity, such as whether the customer is promotion-focused or prevention-focused since impulsivity is not significant in these two countries.

Limitations and Future Research: Despite the study's findings, certain limitations may require more research. First, the data could be better if there is more time. With more time, the respondents could be larger and more representative compared to the population in Indonesia and The Netherlands. The number of respondents is also limited, given that the number of active internet users in January 2022 is expected to reach about 5.03 billion (Statista, 2022). The respondents are also voluntary and not paid. If the respondents are paid, it may provide better data since the respondents are more likely to answer it more seriously. Another limitation is that the finding of whether interdependents purchase higher or not in eCommerce still needs to be justified in other eastern countries besides Indonesia. Kondo (1982) argued that many eastern cultures tend to be more interdependent. Although

independents purchase higher because they tend to be more tolerant of risk (Rosillo-Díaz et al., 2019), the finding in this paper showed that Indonesians as interdependents tend to purchase higher compared to independents from The Netherlands. This finding needs to be further investigated in other countries that could be correlated with interdependent self-construal. Aside from that, the pandemic has influenced people to engage more in eCommerce regardless of their culture (Goel, Parayitam, Sharma, Rana, & Dwivedi, 2022), therefore the effect of impulsivity and promotion may differ from what previous research has suggested. Furthermore, impulsivity may not be the sole factor mediating the association between self-construal and purchase intention. Other factors might mediate the relationship, such as promotion-focus versus prevention-focus, perceived brand quality, and a lack of impulsive control. Future research could also focus on various forms of promotion, such as huge event promotion (Chen & Wang, 2015) and quantity-restricted promotion (Luo et al., 2021) since the time-limited promotion is not significant in this study.

REFERENCES:
 Agee, J. 2009. Developing qualitative research questions: A reflective process. *International Journal of Qualitative Studies in Education*, 22(4): 431–447.
 Ajzen, I. 1991. The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2): 179–211.
 Alqahtani, A. S., Goodwin, R., & de Vries, D. 2018. Cultural factors influencing e-commerce usability in Saudi Arabia. *International Journal of ADVANCED AND APPLIED SCIENCES*, 5(6): 1–10.
 Barratt, E. S. 1993. Impulsivity: Integrating cognitive, behavioral, biological, and environmental data. *The Impulsive Client: Theory, Research, and Treatment.*, 39–56.
 Bianchi, C., & Andrews, L. 2012. Risk, trust, and Consumer Online Purchasing Behaviour: A Chilean perspective. *International Marketing Review*, 29(3): 253–275.
 Brunelle, C., & Grossman, H. 2022. Predictors of online compulsive buying: The role of personality and mindfulness. *Personality and Individual Differences*, 185: 111237.
 Burgess, B., Yaoyuneyong, G., & Gibbs, S. R. 2014. Gender, self-construal and impulse buying behavior of young Thai consumers. *Asian Journal of Business Research*, 4(1). <http://doi.org/10.14707/ajbr.140001>.
 Chen, J. V., Yen, D. C., Pornprijphet, W., & Widjaja, A. E. 2014. E-commerce web site loyalty: A Cross Cultural Comparison. *Information Systems Frontiers*, 17(6): 1283–1299.
 Chen, S.-F. S., Monroe, K. B., & Lou, Y.-C. 1998. The effects of framing price promotion messages on consumers' perceptions and purchase intentions. *Journal of Retailing*, 74(3): 353–372.
 Chen, Y.-F., & Wang, R.-Y. 2015. Are humans rational? exploring factors influencing impulse buying intention and continuous impulse buying intention. *Journal of Consumer Behaviour*, 15(2): 186–197.
 Churchill, G. A. 1979. A paradigm for developing better measures of marketing constructs. *Journal of Marketing Research*, 16(1): 64.
 Cloninger, C. R. 1993. A psychobiological model of temperament and character. *Archives of General Psychiatry*, 50(12): 975.
 Das, G. 2015. Retail shopping behaviour: Understanding the role of regulatory focus theory. *The International Review of Retail, Distribution and Consumer Research*, 25(4): 431–445.
 Dholakia, U. M. 2000. Temptation and resistance: An integrated model of Consumption Impulse Formation and enactment. *Psychology and Marketing*, 17(11): 955–982.
 Dittmar, H., Beattie, J., & Friese, S. 1995. Gender Identity and material symbols: Objects and decision considerations in impulse purchases. *Journal of Economic Psychology*, 16(3): 491–511.
 Doob, L. W. 1990. *Hesitation: Impulsivity and reflection*. New York: Greenwood Press.
 Ganguly, B., Dash, S. B., Cyr, D., & Head, M. 2010. The effects of website design on purchase intention in online shopping: The mediating role of trust and the moderating role of culture. *International Journal of Electronic Business*, 8(4/5): 302.
 Gefen, D., & Straub, D. W. 2004. Consumer Trust in B2C e-commerce and the importance of social presence: Experiments in E-products and e-services. *Omega*, 32(6): 407–424.
 Gendall, P., Hoek, J., Pope, T., & Young, K. 2006. Message framing effects on price discounting. *Journal of Product & Brand Management*, 15(7): 458–465.
 Goel, P., Parayitam, S., Sharma, A., Rana, N. P., &

Dwivedi, Y. K. 2022. A moderated mediation model for e-impulse buying tendency, customer satisfaction and intention to continue e-shopping. *Journal of Business Research*, 142: 1–16.

Grewal, D., Monroe, K. B., & Krishnan, R. 1998. The effects of price-comparison advertising on buyers' perceptions of acquisition value, transaction value, and behavioral intentions. *Journal of Marketing*, 62(2): 46.

Guadagni, P. M., & Little, J. D. 2008. A logit model of brand choice calibrated on Scanner Data. *Marketing Science*, 27(1): 29–48.

Gupta, S., & Cooper, L. G. 1992. The discounting of discounts and promotion thresholds. *Journal of Consumer Research*, 19(3): 401.

Here's Why E-Commerce Growth Can Stay Stronger for Longer. 2022, June 14. Morgan Stanley. <https://www.morganstanley.com/ideas/global-ecommerce-growth-forecast-2022>.

Hong, J., & Chang, H. H. 2015. “I” follow my heart and “we” rely on reasons: The impact of self-construal on reliance on feelings versus reasons in decision making. *Journal of Consumer Research*, 41(6): 1392–1411.

Huang, Y.-F., & Kuo, F.-Y. 2012. How impulsivity affects consumer decision-making in e-commerce. *Electronic Commerce Research and Applications*, 11(6): 582–590.

Hultén, P., & Vanyushyn, V. 2011. Impulse purchases of groceries in France and Sweden. *Journal of Consumer Marketing*, 28(5): 376–384.

Inman, J. J., & McAlister, L. 1993. A retailer promotion policy model considering promotion signal sensitivity. *Marketing Science*, 12(4): 339–356.

Iyer, G. R., Blut, M., Xiao, S. H., & Grewal, D. 2019. Impulse buying: A meta-analytic review. *Journal of the Academy of Marketing Science*, 48(3): 384–404.

Jiang, L. (A.), Yang, Z., & Jun, M. 2013. Measuring consumer perceptions of online shopping convenience. *Journal of Service Management*, 24(2): 191–214.

Kacen, J. J., Hess, J. D., & Walker, D. 2012. Spontaneous selection: The influence of product and retailing factors on consumer impulse purchases. *Journal of Retailing and Consumer Services*, 19(6): 578–588.

Kalwani, M. U., & Yim, C. K. 1992. Consumer price and promotion expectations: An experimental study. *Journal of Marketing Research*, 29(1): 90.

Kemp, S. 2021, October 22. Digital 2021: Global Overview Report - DataReportal – Global Digital Insights. DataReportal. DataReportal – Global Digital Insights. <https://datareportal.com/reports/digital-2021-global-overview-report>.

Ko, Y.-M., Roh, S., & Lee, T. K. 2020. The association of problematic internet shopping with dissociation among South Korean internet users. *International Journal of Environmental Research and Public Health*, 17(9): 3235.

Kock, N., & Lynn, G. 2012. Lateral collinearity and misleading results in variance-based SEM: An illustration and recommendations. *Journal of the Association for Information Systems*, 13(7): 546–580.

Kondo, D. K. 1982. Work, family, and the self: A cultural analysis of Japanese family enterprise. dissertation.

Lim, K. H., Leung, K., Sia, C. L., & Lee, M. K. O. 2004. Is ecommerce boundary-less? effects of individualism–collectivism and uncertainty avoidance on internet shopping. *Journal of International Business Studies*, 35(6): 545–559.

Lin, C.-T., Chen, C.-W., Wang, S.-J., & Lin, C.-C. 2018. The influence of impulse buying toward consumer loyalty in online shopping: A regulatory focus theory perspective. *Journal of Ambient Intelligence and Humanized Computing*. <http://doi.org/10.1007/s12652-018-0935-8>.

Lu, B., Fan, W., & Zhou, M. 2016. Social Presence, trust, and Social Commerce Purchase Intention: An empirical research. *Computers in Human Behavior*, 56: 225–237.

Luo, H., Cheng, S., Zhou, W., Song, W., Yu, S., et al. 2021. Research on the impact of online promotions on consumers' impulsive online shopping intentions. *Journal of Theoretical and Applied Electronic Commerce Research*, 16(6): 2386–2404.

Markus, H. R., & Kitayama, S. 1991. Culture and the self: Implications for cognition, emotion, and motivation. *Psychological Review*, 98(2): 224–253.

Marsella, A. J., De Vos, G. A., & Hsu, F. L. K. 1988. Culture and self: Asian and western perspectives. New York, New York: Routledge.

Nakarmi, A. 2018. Effect of Sales Promotion on Consumer Behavior. thesis.

Ng, S., Bharti, M., & Goh, K. H. 2021. Price promotions are inherently more arousing for interdependents. *Journal of the Association for Consumer Research*, 6(1): 67–80.

Palazon, M., & Delgado-Ballester, E.

2011. The expected benefit as determinant of deal-prone consumers' response to sales promotions. *Journal of Retailing and Consumer Services*, 18(6): 542–547. Park, D.-H., Lee, J., & Han, I. 2007. The effect of on-line consumer reviews on consumer purchasing intention: The moderating role of involvement. *International Journal of Electronic Commerce*, 11(4): 125–148. Published by Statista Research Department, & 20, S. 2022, September 20. Internet and social media users in the world 2022. Statista. <https://www.statista.com/statistics/617136/digital-population-worldwide/>. Rook, D. W., & Fisher, R. J. 1995. Normative influences on impulsive buying behavior. *Journal of Consumer Research*, 22(3): 305. Rosillo-Díaz, E., Blanco-Encomienda, F. J., & Crespo-Almendros, E. 2019. A cross-cultural analysis of perceived product quality, perceived risk and purchase intention in e-commerce platforms. *Journal of Enterprise Information Management*, 33(1): 139–160. Sharma, P., Sivakumaran, B., & Marshall, R. 2010. Impulse buying and variety seeking: A trait-correlates perspective. *Journal of Business Research*, 63(3): 276–283. Singelis, T. M., Bond, M. H., Sharkey, W. F., & Lai, C. S. 1999. Unpackaging culture's influence on self-esteem and embarrassability. *Journal of Cross-Cultural Psychology*, 30(3): 315–341. Steinmetz, J., & Mussweiler, T. 2017. Only one small sin: How self-construal affects self-control. *British Journal of Social Psychology*, 56(4): 675–688. Suki, N. M. 2013. Consumer shopping behaviour on the internet: Insights from Malaysia. *Electronic Commerce Research*, 13(4): 477–491. Sunny, S., Patrick, L., & Rob, L. 2019. Impact of cultural values on technology acceptance and technology readiness. *International Journal of Hospitality Management*, 77: 89–96. Söderlund, M., Berg, H., & Ringbo, J. 2014. When the customer has left the store: An examination of the potential for satisfaction rub-off effects and purchase versus No Purchase Implications. *Journal of Retailing and Consumer Services*, 21(4): 529–536. Tiago, M. T., & Veríssimo, J. M. 2014. Digital Marketing and social media: Why bother? *Business Horizons*, 57(6): 703–708. Trafimow, D., Triandis, H. C., & Goto, S. G. 1991. Some tests of the distinction between the private self and the collective self. *Journal of Personality and Social Psychology*, 60(5): 649–655. Ulbrich, F., Christensen, T., & Stankus, L. 2010. Gender-specific on-line shopping preferences. *Electronic Commerce Research*, 11(2): 181–199. Wallace, J. F., Newman, J. P., & Bachorowski, J.-A. 1991. Failures of response modulation: Impulsive behavior in anxious and impulsive individuals. *Journal of Research in Personality*, 25(1): 23–44. Whiteside, S. P., & Lynam, D. R. 2001. The Five factor model and impulsivity: Using a structural model of personality to understand impulsivity. *Personality and Individual Differences*, 30(4): 669–689. Wood, M. 1998. Socio-economic status, delay of gratification, and impulse buying. *Journal of Economic Psychology*, 19(3): 295–320. Wu, P. C. S., Yeh, G. Y.-Y., & Hsiao, C.-R. 2011. The effect of store image and service quality on brand image and purchase intention for private label Brands. *Australasian Marketing Journal*, 19(1): 30–39. Wu, Y., Xin, L., Li, D., Yu, J., & Guo, J. 2021. How does scarcity promotion lead to impulse purchase in the online market? A field experiments. *Information & Management*, 58(1): 103283. Yan, Q., Wang, L., Chen, W., & Cho, J. 2016. Study on the influencing factors of unplanned consumption in a large online promotion activity. *Electronic Commerce Research*, 16(4): 453–477. Yaveroglu, I. S., & Donthu, N. 2002. Cultural influences on the diffusion of new products. *Journal of International Consumer Marketing*, 14(4): 49–63. Ybarra, O., & Trafimow, D. 1998. How priming the private self or collective self affects the relative weights of attitudes and subjective norms. *Personality and Social Psychology Bulletin*, 24(4): 362–370. Yildirim, E., Arslan, Y., & Barutçu, M. T. 2016. The role of uncertainty avoidance and indulgence as cultural dimensions on online shopping expenditure. *Eurasian Business & Economics Journal*, 4(4): 42–51. Yoon, C. 2009. The effects of national culture values on consumer acceptance of e-commerce: Online shoppers in China. *Information & Management*, 46(5): 294–301. Zendehdel, M., Paim, L. H., & Delafrooz, N. 2016. The

moderating effect of culture on the construct factor of perceived risk towards online shopping behaviour. *Cogent Business & Management*, 3(1): 1223390. Zhang, J., & Wedel, M. 2009. The effectiveness of customized promotions in online and offline stores. *Journal of Marketing Research*, 46(2): 190–206. Zhang, Y., & Shrum, L. J. 2009. The influence of self-construal on impulsive consumption. *Journal of Consumer Research*, 35(5): 838–850.

APPENDIX A:

Table 1. Reliability Test:

Variable	Variable Explanation	Cronbach Alpha
SCINT	Manipulation Check for Interdependent	.345
SCIND	Manipulation Check for Independent	.316
IMP	Impulsivity	.914
PI	Purchase Intention	.866

Table 2. Independent-sample t-test for self-construal manipulation check

				t-test for Equality of Means							
		F	Sig.	t	df	Significance		Mean Difference	Standard Error Difference	95% Confidence Interval of the Difference	
						One-Side d p	Two-Side d p			Lower	Upper
SCMANCH	Equal variance s assumed	8.554	.004	-3.936	180	<.001	<.001	-.9432	.2396	-1.416	-.4704
	Equal variance s not assumed			-3.909	159.853	<.001	<.001	-.9432	.2413	-1.4197	-.4667

*SCMANCH is the computed variable of manipulation check items and computed by subtracting the means of independent with interdependent items.

Table 3. Group Statistic for Independent-sample t-test for self-construal manipulation check

	Country	N	Mean	Std. Deviation	Std. Error Mean
SCMANCH	0	93	.3602	1.344	.1394
	1	89	1.3034	1.8581	.197

*SCMANCH is the computed variable of manipulation check items and is computed by subtracting the means of independent with interdependent items.

Table 4. Independent-sample t-test for promotion manipulation check

		t-test for Equality of Means									
		F	Sig.	t	df	Significance		Mean Difference	Standard Error Difference	95% Confidence Interval of the Difference	
						One-Sided p	Two-Sided p			Lower	Upper
Are there any discounts in the advertisement you saw?	Equal variances assumed	7.321	.007	-13.121	181	<.001	<.001	-2.926	.223	-3.366	-2.486
	Equal variances not assumed			-13.196	176.857	<.001	<.001	-2.926	.222	-3.364	-2.488

Table 5. Group Statistic for Independent-sample t-test for promotion manipulation check

	Promotion*	N	Mean	Std. Deviation	Std. Error Mean
Are there any discounts in the	0	93	2.88	1.652	.170

advertisement you saw?	1	89	5.81	1.339	.142
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*0 = absence of promotion, 1 = presence of promotion

Table 6. Analysis of Covariance for the Main Effect

Tests of Between-Subjects Effects: Dependent Variable: PI (Purchase Intention)

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	62.449*	4	15.612	7.233	<.001
Intercept	5.182	1	5.182	2.401	.123
GENDER	16.028	1	16.028	7.426	.007
AGE	.958	1	.958	.444	.506
CV**	13.890	1	13.890	6.435	.012
Country^	30.421	1	30.421	14.095	<.001
Error	379.869	176	2.158		
Total	2888.000	181			
Corrected Total	442.318	180			

*R Squared = .141 (Adjusted R Squared = .122) **CV is the control variable for the online shopping preference compared to offline shopping ^0 = Indonesia (interdependent), 1 = The Netherlands (independent).

Table 7. Estimated Marginal Means Country (Interdependent versus Independent)

Dependent Variable: PI (Purchase Intention)

Country**	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
0	4.085*	.154	3.780	4.389
1	3.244*	.159	2.931	3.557

*Covariates appearing in the model are evaluated at the following values: What is your gender? = 1.58, How old are you? = 2.24, CV = 4.8895 **0 = Indonesia (interdependent), 1 = The Netherlands (independent)

Table 8. Hayes Model 4 Total and Indirect Effect of Self-construal to Purchase Intention in eCommerce Mediated by Impulsivity

Total Effect: Country → PI*

Effect	SE	t	p	LLCI	ULCI
-.8406	.2239	-3.7543	.0002	-1.2825	-.3987

Variable name: PI is Purchase Intention (Dependent Variable), IMP is impulsivity (mediator), Country is country of Indonesia or The Netherlands (Represent Self-Construal). Indirect Effect: Country → PI

IMP	Effect	BootSE	BootLLCI	BootULCI
	.0603	.0489	-.0227	.1674

*Variable name: PI is Purchase Intention (Dependent Variable), IMP is impulsivity (mediator), Country is the country of Indonesia or The Netherlands (Represent Self-Construal)

Table 9. Hayes Model 4 Model Summary Self-construal to Impulsivity Outcome Variable: IMP* Model Summary:

Model Summary

R	R-sq	MSE	F	df1	df2	P
.4293	.1843	1.5048	9.939	4	176	<.001

Model

	coeff	se	t	p	LLCI	ULCI
constant	.6989	.6588	1.061	.2901	-.6011	1.999
Country^	.4612	.1870	2.467	.0146	.0923	.8302
CV	.4447	.0908	4.8973	.0000	.2655	.6340
Gender	.5416	.1690	3.2053	.0016	.2081	.8750
Age	-.1289	.1406	-.9168	.3605	-.4063	.1486

*Variable name: IMP is impulsivity, Age is Control Variable, CV is Control Variable, Gender is Control Variable, Country is country of Indonesia or The Netherlands (Represent Self-Construal)

^0 = Indonesia (interdependent), 1 = The Netherlands (independent)

Table 10. Hayes Model 4 Model Summary Impulsivity to Purchase Intention Outcome Variable: PI* Model Summary

R	R-sq	MSE	F	df1	df2	P
.3891	.1514	2.1448	6.2452	5	175	<.001

Model

	coeff	se	t	p	LLCI	ULCI
constant	1.52	.789	1.9265	.0557	-.0371	3.0771
Country^	-.9009	.2270	-3.9682	.0001	-1.3489	-.4528
IMP	.1307	.09	1.4525	.1482	-.0469	.3083
CV	.2178	.1156	1.8843	.0612	-.0103	.4459
Gender	.4806	.2075	2.3161	.0217	.0711	.8902
Age	.1290	.1682	.7668	.4442	-.203	.461

*Variable name: PI is Purchase Intention (Dependent Variable), Age is Control Variable, CV is Control Variable, Gender is Control Variable, IMP is impulsivity (mediator), Country is country of Indonesia or The Netherlands (Represent Self-Construal)

^0 = Indonesia (interdependent), 1 = The Netherlands (independent)

Table 11. Analysis of Covariance for the Main Effect

Tests of Between-Subjects Effects

Dependent Variable: PI (Purchase Intention) ^

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	64.960*	6	10.827	4.992	<.001
Intercept	5.719	1	5.719	2.637	.106
GENDER	16.078	1	16.078	7.413	.007
AGE	.745	1	.745	.344	.558
CV	12.821	1	5.912	5.912	.016
Country^^	31.352	1	31.352	14.456	<.001
PRO	.191	1	.191	.088	.767
Country*PRO	2.347	1	2.347	1.082	.300
Error	377.358	174	2.169		
Total	2888.000	181			
Corrected Total	442.318	180			

*R Squared = .147 (Adjusted R Squared = .117)

**CV is the control variable for the online shopping preference compared to offline shopping

^Variable name: PI is Purchase Intention (Dependent Variable), Age is Control Variable, CV is Control Variable, Gender is Control Variable, PRO is promotion (Moderator), Country is country of Indonesia or The Netherlands (Represent Self-Construal) ^^0 = Indonesia (interdependent), 1 = The Netherlands (independent)

Table 12. Hayes Model 1 Model Summary Self-Construal to Purchase Intention Moderated by

Promotion

Outcome Variable: PI* Model Summary

R	R-sq	MSE	F	df1	df2	P
.3832	.1469	2.1687	4.9922	6	174	<.001

Model

	coeff	se	t	p	LLCI	ULCI
constant	1.6049	.7941	2.0210	.0448	.0376	3.1722
Country^^	-.6249	.3067	-2.0378	.0431	-1.2302	-.0197
PRO	.1647	.3084	.5343	.5938	-.4439	.7733
Int_1^	-.46	.4421	-1.0404	.2996	-1.3325	.4126
CV	.2662	.1095	2.4314	.0161	.0501	.4823
Gender	.5523	.2029	2.7228	.0071	.1520	.9527
Age	.0996	.1699	.5862	.5585	-.2358	.4350

*Variable name: PI is Purchase Intention (Dependent Variable), Age is Control Variable, CV is Control Variable, Gender is Control Variable, PRO is promotion (Moderator), Country is country of Indonesia or The Netherlands (Represent Self-Construal) ^Int_1 = Country x PRO ^^0 = Indonesia (interdependent), 1 = The Netherlands (independent)

Table 13. Hayes Model 14 Model Summary Self-construal to Impulsivity

Outcome Variable:

IMP*

Model Summary

R	R-sq	MSE	F	df1	df2	P
.4293	.1843	1.5048	9.939	4	176	<.001

Model

	coeff	se	t	p	LLCI	ULCI
constant	.6989	.6588	1.061	.2901	-.6011	1.999
Country^	.4612	.1870	2.467	.0146	.0923	.8302
CV	.4447	.0908	4.8973	.0000	.2655	.6340
Gender	.5416	.1690	3.2053	.0016	.2081	.8750
Age	-.1289	.1406	-.9168	.3605	-.4063	.1486

*Variable name: IMP is impulsivity, Age is Control Variable, CV is Control Variable, Gender is Control Variable, Country is country of Indonesia or The Netherlands (Represent Self-Construal)

^0 = Indonesia (interdependent), 1 = The Netherlands (independent)

Table 14. Model Summary Hayes Model 14 Outcome Variable: PI*

Model Summary

R	R-sq	MSE	F	df1	df2	P
.3971	.1577	2.1536	4.6261	7	173	<.000

Model

	coeff	se	t	p	LLCI	ULCI
constant	1.1990	.8470	1.4155	.1587	-.4728	2.8707
Country^^	-.8724	.2289	-3.8109	.0002	-1.3243	-.4206
IMP	.2254	.1244	1.8121	.0717	-.0201	.4709
PRO	.6656	.6577	1.0120	.3129	-.6326	1.9638
Int_1^	-.1892	.1683	-1.1243	.2624	-.5214	.1430
CV	.2137	.1160	1.8414	.0673	-.0154	.4427
Gender	.5048	.2091	2.4143	.0168	.0921	.9175
Age	.1044	.1706	.6123	.5411	-.2322	.4411

*Variable name: PI is Purchase Intention (Dependent Variable), Age is Control Variable, CV is Control Variable, Gender is Control Variable, IMP is impulsivity (Mediator), PRO is promotion (Moderator), Country is country of Indonesia or The Netherlands (Represent Self-Construal)

^Int_1 = IMP (represents impulsivity as the mediator) x PRO (represents promotion as the moderator)

^^0 = Indonesia (interdependent), 1 = The Netherlands (independent)

Table 15. Multicollinearity Test

Model	Collinearity Statistics	
	Tolerance	VIF
Country	.952	1.050
AGE	.972	1.028
GENDER	.975	1.026
CV	.977	1.023

*Variable name: Age is Control Variable, CV is Control Variable, Gender is Control Variable, Country is country of Indonesia or The Netherlands (Represent Self-Construal)

APPENDIX B:

Appendix B1. Promotion as Moderator



(in IDR) Presence of Promotion (in EUR) Absence of Promotion

Absence of Promotion (in EUR) Presence of Promotion (in IDR)

Appendix B2. Questionnaire Resources:

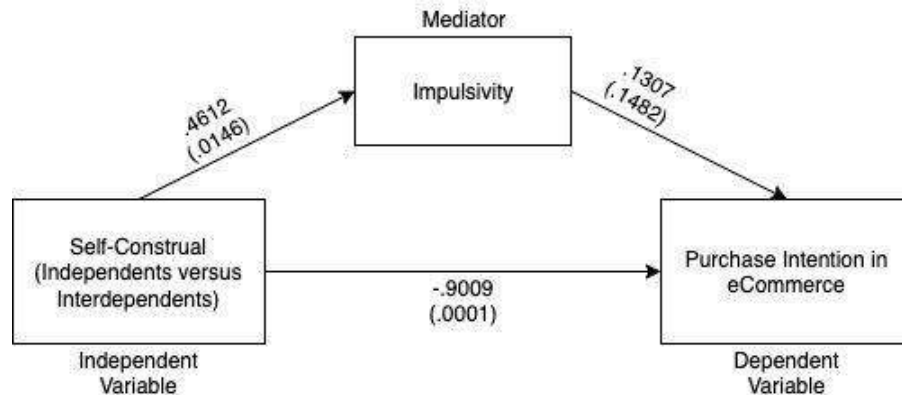
Variable	Questionnaire	Reference	Scale
Purchase Intention	<ol style="list-style-type: none"> 1. I will purchase these sneakers online. 2. I will purchase these sneakers online right now and make the payment. 3. I will purchase these sneakers online the next time I need a pair of sneakers. 	(Rosillo-Díaz et al., 2019)	7-Likert Scale
Impulsivity	<ol style="list-style-type: none"> 1. I often buy things spontaneously 2. "Just do it" describes the way I buy things. 3. I often buy things without thinking. 4. "I see it, I buy it" describes me 5. "Buy now, think about it later" describes me. 6. Sometimes I feel like buying things on the spur-of-the-moment. 7. I buy things according to how I feel at the moment. 8. I carefully plan most of my purchases. 9. Sometimes I am a bit reckless about what I buy <p>*item 8 is in reverse score (7 = 1, 6 = 2, 5 = 3, 4 = 4, 3 = 5, 2 = 6, 1 = 7)</p>	(Rook and Fisher, 1995)	7-Likert Scale
Self- Construal	<ol style="list-style-type: none"> 1. Even when I strongly disagree with group members, I avoid an argument. 	(Singelis et al., 1999)	7-Likert Scale

	2. I will sacrifice my self-interest for the benefit of the group I am in. 3. I prefer to be direct and forthright when dealing with people I've just met. 4. I enjoy being unique and different from others in many respects.		
Online Shopping Preference	1. I prefer online retail over offline. 2. Online payment is simple and convenient. 3. My frequency of online shopping is very high.	(Jiang et al., 2013)	7-Likert Scale

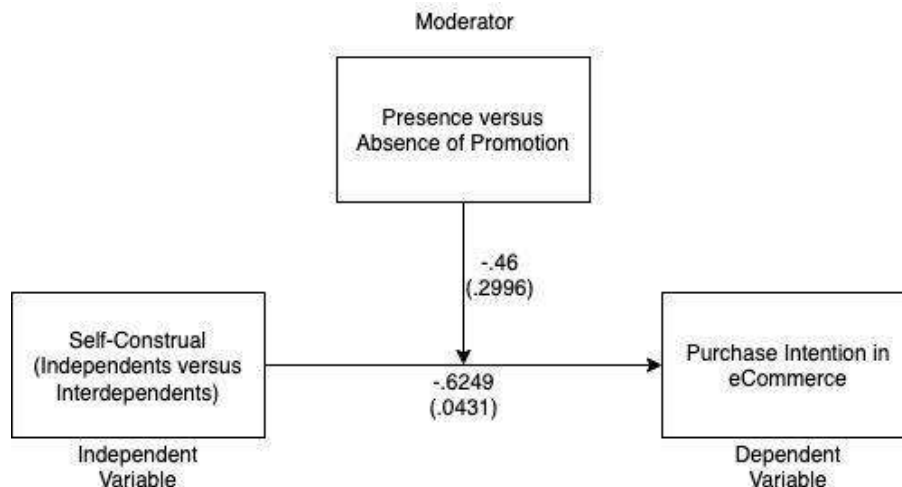
Appendix B3. Manipulation Check for Promotional Ad

1. Are there any discounts in the advertisement you saw?

APPENDIX C: Appendix C1. Hayes Model 4 Summary (Mediation Effect): Self-Construal to Impulsivity to Purchase Intention in eCommerce.



Appendix C2. Hayes Model 1 Summary (Moderation Effect): Self-Construal to Purchase Intention in eCommerce Moderated by Promotion.



The Role of Privacy Risk on Adoption and Purchase Intention of Cloud Premium Service



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Abstract: Users generated more data than before, increasing the demand for storing data online. Cloud providers respond to this trend by offering a freemium business model where users can try the products for free with limited capacity. Thus, it is crucial for providers to be able to convert their non-paying free users into premium users or paying customers. However, there are privacy risks among consumers that might hinder conversion into paid users, and the studies still remain underexplored. This paper aims to investigate the perceived privacy risk role and its impact on technology adoption; performance expectancy and price value, and the purchase intention of cloud services. The data was collected from 153 cloud users currently using the free plan, who expressed their attitudes and intentions toward it using a survey-based methodology. The paper discovered a positive influence of performance expectancy and price value towards intention the of premium cloud services, whereas privacy risk has no negative moderating effect between performance expectancy and price value toward purchase intention. This paper contributes to the perceived privacy risk and consumer behavior theories by integrating the two elements. Managers and cloud providers should increase the user-friendly environment in clouds and take into account how they market and package their promotion offerings to obtain more paid users.

Keywords: Cloud Storage Service, Paid Users, Performance Expectancy, Price Value, Perceived Privacy Risk, Purchase Intention

Introduction: In recent years, data created by individuals and companies due to the rise of big data and the growth of the IoT (Internet of Things). The amount of data is expected to expand by 35% annually, posing a storage difficulty (Wang & Lin, 2016). Cloud computing services emerged as a solution to the growing need to store data in the cloud service (Lowry et al., 2017). Although cloud storage services offer a wide range of new opportunities, there are several issues with their adoption. Users are limited in the number of shared folders they can store and limited storage capacity; as a result, they must purchase an upgrade to the current service to get the full experience (Trenz et al., 2017). Additionally, data security is not always ensured (Arpaci, 2016). Chen (2014) stated that some celebrities private photos and confidential information are leaked to public as the hackers could gain access to their Apple accounts. This issue has sparked serious security and privacy concerns from consumers and undermined confidence and trust in cloud storage security (Chen, 2014). Cloud computing is a popular topic in the international business environment as an innovative technology (Ratten, 2014). Cloud services provide benefits to end-users due to their flexibility in accessing data from anywhere at any time, cost efficiency for users with economies of scale, and protection from the risks of owning their own IT infrastructure (Bhattacharjee & Park, 2014). Data is stored on third-party servers and is accessible via several devices, including web browsers, mobile applications, and software (Itani et al., 2009). A TechTarget survey in 2013 showed that consumers usually use cloud storage

services for back up data and file sharing with other internet users. Cloud service providers use a freemium business model which offers free service with limited storage capacity and features offered. As a result, Kumar (2014) suggested users who exceed the given storage size must either reduce their data or purchase a premium subscription for more storage capacity. On the other hand, the reliance on electronic information has raised privacy concerns. Privacy concern exists because the data stored online contains sensitive and valuable information that is exposed to several potential risks (Nemati, 2010). In terms of cloud storage service, a successful cyberattack would result in a data breach and allow illegal access to all cloud users to the data (Vurukonda & Rao, 2016). Based on research by Yang and Lin (2015), the main concerns consumers are facing are privacy and security in the cloud ecosystem. The concerns caused consumers hindrances to adopting cloud storage. It suggested that privacy protection is a key issue when determining whether or not consumers would utilize the cloud storage service. When users perceive a higher privacy, risk associated with a cloud storage service, consumers are likely to stop using the service and switch to other cloud providers (Yang & Lin, 2015). Meaning that if the person does not feel safe using the product, they most likely will not continue to use and purchase the product. Prior research mainly concentrated on cloud storage users' adoption and acknowledgment (Li & Chang, 2012), continuous usage intention (Yang & Lin, 2015), switching behavior (Goode, 2015; Wu et al., 2017), and eagerness to become premium users (Yan & Wakefield, 2015). Little research on the intention of free users to purchase the premium service and become paid users. Moreover, there is scant research on the effect of negative privacy concerns on consumer decisions to pay more for service (Bordonaba-Juste et al., 2020). Prior research measured the general perception of risk, while privacy risk in cloud storage is still underexplored. Little research has been done on whether the privacy concern among consumers will affect their perception of the service and their decision to purchase the whole package. As a result, the research question is: To what extent does cloud service acceptance, moderated by privacy risks, affect the purchase intention of cloud premium services? This research aims to analyze the impact of privacy perceptions of cloud storage usage on consumer-level and whether it will lead them to decide to purchase the upgraded service. This study provides cloud providers and managers with insights from consumers about their usage behavior. The future success of cloud storage service providers depends on their ability to comprehend and anticipate the attitudes of potential customers toward paying for those services. Besides that, providers can gain insights into consumer perceptions of privacy in using the cloud service and provide better security and privacy policies to increase consumer trust. This paper is structured as follows: A literature review is discussed in the next chapter to form the research foundation on cloud storage service adoption, purchase intention, and underlying privacy risks of cloud storage service adoption. The paper will continue discussing the relationship between each construct to support research hypotheses. In the fourth section, the research methodology is highlighted, and the findings of this study are presented in the fifth section. A conclusion is derived from the results, along with managerial implications, and ends with an acknowledgment of the research limitations and suggestions for future research.

Literature Review: Cloud storage service adoption: According to Cao et al (2013) Cloud storage service refers to users' data being stored in a data center instead of on hardware so that users can access their data from several computing devices (personal computers, smartphones, etc.) through the network anytime and anywhere. Cloud storage services allow individuals and organizations to store, access and manage their data on servers hosted by a third-party provider rather than on local storage devices. These services offer a number of benefits, including improved accessibility, scalability, and reliability of data, as well as

reduced costs for hardware and maintenance. The reliability and speed of the internet network have led to increased demand for file storage in the cloud. Responding to growing demand and business opportunities, IT firms have launched cloud services and become cloud storage service providers, such as Google Drive, Microsoft's OneDrive, Dropbox, Apple's iCloud, and Amazon S3. Cloud providers usually have huge data centers and sell or lease the storage service to consumers. One of the most common theories to determine consumers' acceptance of new technology is the Technology Acceptance Model (TAM) and the Unified Theory of Acceptance and Use of Technology (UTAUT) (Chen and Chang, 2013; Venkatesh, Thong, & Xu, 2012). There has been criticism that TAM lacks focus on other aspects of behavior, the UTAUT framework provides an extension to the TAM model. It emphasizes the importance of utilitarian value (extrinsic motivation) in an organizational context. The UTAUT model developed by Venkatesh et al. (2003) uses elements such as performance expectancy, effort expectancy, social influence, and facilitating conditions. UTAUT2 is created to fit into consumer settings through a model for the hedonic technology context, adding more hedonic variables (intrinsic motivation) such as hedonic motivation, price value, and habit (Venkatesh et al., 2012). The UTAUT2 framework used for this research because the model fits better to cover the attributes of cloud storage service purchase intention. One study found that the most significant factors include the perceived benefits of cloud storage service, such as the usefulness of the technology or performance expectations (Li & Chang, 2012), cloud allows users to access data from anytime and anywhere. There have also been a number of studies on the adoption of cloud storage services in specific industries and sectors. For example, one study found that the healthcare industry has been slower to adopt cloud storage due to concerns about data privacy and security (Ahuja et al., 2012). Other factors that have been identified include the perceived security and privacy of data in the cloud, and the level of trust toward cloud storage providers in educational institutions (Arpaci, 2016).

Perceived privacy risk: Perceived risk explains the consumer's degree of uncertainty regarding the loss or gain of a purchase decision (Murray, 1991; Keong, 2016). Perceived risk has several components, one of them is perceived privacy risk. Privacy is one of the perceived risk components which specifically emphasizes the concerns or fears that individuals or organizations have about the potential loss of privacy when using a particular product or service. In terms of cloud services, perceived privacy risk may refer to the concerns that individuals or organizations have about the potential for their data to be accessed or shared without their knowledge or consent when using cloud storage or cloud computing services. Several studies have investigated the factors that impact the perceived privacy risk of cloud services. One study found that individuals with a higher level of privacy concern are more likely to perceive greater privacy risk when using cloud services (Ratten, 2014). According to Yang & Lin (2015), the major source of privacy risk in cloud services is the provider's inadequate security for users' sensitive information and lack of transparency of data handling practices and privacy policy. Consumers are often worried about the privacy risks involved while adopting new mobile technologies. For example, Johnson et al. (2018) argued perceived privacy risk reduces the consumer's likelihood to adopt mobile payment solutions. Featherman et al. (2010) discovered the adoption and intention to use e-services are negatively influenced by perceived privacy risk. Ghaffari & Lagzian (2018) also found security and privacy risks can challenge the adoption process of cloud storage services. Data stored in the cloud is subject to data loss/leakage, theft, and breach, as well as being hacked/hijacked because users have little control over their data protection and the exact data storage location.

Purchase intention: Consumers' behavioral intention has been affected by their perception regarding the potential benefits of cloud computing as an emerging innovation technology.

According to Theory of Planned Behavior, behavioral intention is a crucial factor in predicting users' acceptance of new technology and services (Ajzen, 1991). Consumer intention are the degree of consumer willingness to perform specific behavior, the behavioral intention of this study is purchase intention (Ajzen, 1991). Purchase intention defined as the likelihood that a consumer or organization will purchase a product or service (Shah et al., 2012). In the context of cloud premium, purchase intention may refer to the likelihood that an individual or organization will purchase a premium version of cloud storage or cloud computing service, as opposed to using a free or basic version of the service. The concept occurs during the pre-purchase stage and reflects the internal and external motivation that impacts the consumer decision (Peña-García et al., 2020). Customer's purchase decision involves the behavior, perceptions, and attitudes of consumers. (Ajzen et al., 1975). Purchase behavior is a key driver for consumers to access and evaluate a specific product. Prior research by Hamari et al (2019) found that the significant factor in purchase intention is the perceived value whilst Wang & Lin, (2016) defined perceived value as the service quality and sacrifice (monetary and non-monetary). Other factors that have been identified includes value for money or price value (Mäntymäki et al., 2019).

Hypothesis Development: Performance expectancy and purchase intention: Performance expectancy (PE) is the extent to an individual perceives that utilizing new technologies will help them improve and accomplish their performance goals. (Venkatesh et al., 2003). Prior research found that PE was one of the strong and consistent antecedents to behavioral intention to use innovative mobile technology (Merhi et al., 2019; Chen and Chang, 2013; Venkatesh et al., 2003). PE was found to be tied to utilitarian motivation for making a purchase decision, due to the perceived benefits of the premium plan that potential consumers will purchase (Gozukara et al., 2014). Better perceptions about performance outcomes from using the technology will lead consumers to purchase the cloud service (Ratten, 2014). Therefore, a greater performance brought by the cloud service will make consumers inclined to use the platform. H1: Performance expectancy of cloud storage service positively affects the purchase intention of cloud storage service.

Price value and purchase intention: Consumers most likely assess if the value of the product they will purchase is worth the money, often called perceived price value. In terms of e-service, perceived value is the most crucial factor that determines the payment intention of consumers (Lu & Hsiao, 2010). Hamari et al. (2019) argued that value perception consists of quality and price. When determining the price value, consumers weigh the benefits and monetary costs of purchasing the product (Dodds et al., 1991). In the consumer technology uses context, pricing is a crucial factor that consumers need to consider when making a purchasing decision (Dodds et al., 1991). In terms of cloud services, consumers who find the cloud service premium plan worth the monetary value, have the intention to pay for the premium plan (Mäntymäki et al., 2019). Venkatesh (2012) argued that price value has a positive influence if the benefits of using technology outweigh the monetary cost, which leads to the price value having a positive impact on consumer behavioral intention. H2: Price value of cloud storage service positively affects the purchase intention of cloud storage service. Moderation by Privacy risk: Originally cloud computing service was made to address several privacy and security issues by reducing users' hardware and establishing computing environments managed by experienced providers, meanwhile, it raises new privacy issues when there is a lack of user data protection and respect from providers (Svantesson and Clarke, 2010). There is possibility providers engage in opportunistic behavior such as unauthorized access and benefiting from users' data without explicit consent (Li & Chang, 2012). This can cause cloud services to be exposed to privacy risks. Users' concerns about privacy will increase risk perception, leading decreasing willingness to adopt the service or

product (Cao et al., 2013). Privacy risks were found to deter online purchase intention, regardless of the positive experience the consumer faced (Chen & Huang, 2015). Thus, the existence of privacy risk can weaken the relationship between user adoption and their purchase intention toward cloud service. H3a: The relationship between the performance expectancy of cloud storage service and the purchase intention of cloud storage service will be affected negatively by perceived privacy risk. The perceived value would have a significant impact on consumers' behavioral intention to adopt new technology (Wang et al., 2013). Privacy risk also can affect how consumers perceive the value of the product they are intending to purchase. Purchase intention may be changed under the influence of price or perceived privacy risk. When it comes to making a purchase decision, consumers estimate the value of the product or service by considering all relevant benefit and sacrifice elements (Kim et al., 2005). When the user thinks that the benefits exceed the sacrifice, the perceived value will be enhanced and vice versa (Ku et al., 2017). If a user's advantage assessment outweighs the potential loss of privacy, he or she will decide to accept the technology. The technology wouldn't be used otherwise (Li et al., 2014). The monetary cost or price is usually integrated with products or services quality to assess the value of products or services (Zeithaml, 1988). Thus, price value is within the scope of perceived value, specifically explaining the monetary value. Prior research discovered that price/value for money influence e-services' perceived value, and perceived risk influences an App user's perceived value toward premium services (Chen & Huang, 2016; Lu & Hsiao, 2010). Hence, the decreasing perceived value, such as price value would affect the users' intention to continue using CSS and possibly affect their purchasing decision. H3b: The relationship between the price value of cloud storage service and the purchase intention of cloud storage service will be affected negatively by perceived privacy risk.

Conceptual model: Figure 1. Conceptual framework model.

METHODOLOGY: Data collection: A sample of 153 respondents who are currently living in Indonesia and the Netherlands will be examined. The countries were chosen as the two international markets because they represent a high-technology country, and Indonesia is one of the largest internet users in the world. The sample of data was limited to cloud service users who are using a free trial plan and have prior knowledge of and experience using cloud services.

Research Methodology: This study used a survey-based approach to test the hypothesized conceptual model. This method was chosen because it is the most convenient way to collect information from a large sample in a short period of time (Gay, 1987). The data used in this study was collected through a Qualtrics online survey platform targeting a sample that meets the criteria. A list of questions for the independent variable, dependent variable, moderating variable, and control variable can be seen in Appendix A. The Independent variable is performance expectancy (Venkatesh et al, 2012) and price value (Venkatesh et al., 2012), the dependent variable (Mäntymäki et al., 2019; Bhattacharjee, 2001), and the moderator variable is perceived privacy risk (Yang & Lin, 2015). All of the measures were derived from past studies and on a seven-point Likert scale that ranges from "strongly disagree" (1) to "strongly agree" (7). To examine the main effect of purchase intention premium subscription is robust, the control variable is implemented and presented in descriptive statistics. The first variable, Country, represents the country the respondents are currently living in. Cultural factors are not examined in this study; thus, nationality is not asked. However, it is crucial to ask where the respondents are currently living due to the fact that cloud premium pricing is based on the country the users live in. Second, Gender, a dummy variable with a value of 1 for male and 0 for female. Third, age, the demographic of internet users and cloud users are between 16-74 years old. Fourth, type of service, represents which cloud service

provider the users are currently adopting. Last, duration of use, this variable presents how long users have used cloud storage service measured in years. Before performing statistical analysis, the questions used to measure the variables need to be merged and transformed into one that represents one of each variable. Thus, factor analysis and correlation tests are performed. Researchers can narrow down the number of questions used to assess a variable to a smaller set of variables by using factor analysis. A reliability test was also conducted to evaluate the stability of the measurement model and whether the scales are measuring the same thing (Kerlinger, 1966). The reliability of the Likert scale is often assessed using Cronbach's alpha. Normally, each indicator and variable should have a reliability score greater than 0.6 (Hair et al., 2010). To estimate the relationship between all variables, statistical methods that will be used are multiple linear regression analysis and moderation analysis using IBM SPSS 28.0 software.

RESULTS: Descriptive statistics: The survey was conducted through the Qualtrics website and distributed via several social media platforms. From 153 respondents (46.4% Male and 53.6% Female), 78 respondents are currently living in Indonesia, and 75 living in the Netherlands. The respondents are within the group of 16-65, with the majority at 16-24 years old or considered to be generation Z. User's prior experience with using cloud services was asked as one of the respondents' criteria. According to Table 2 in Appendix B, the majority of users are long-time cloud users with more than 5 years of cloud storage services usage (39.9%), indicating that participants had knowledge and familiarity about cloud service. Lastly, the majority of respondents are Google Drive (58.8%) and iCloud (32.7%) users. Country, gender, and duration are less than -1, indicating the distribution is too flat and the spread of data is equal in the dataset range. Kurtosis value for age below -1 and type is below +1, indicating a slight normal distribution. For skewness, country, gender, and duration fall within the value of -0.5 and 0.5, meaning the distribution of data are symmetrical. Only variable Type skewness is greater than 1, meaning the data is highly skewed.

Factor analysis: Explanatory factor analysis (EFA) is performed to ensure the list of questions within the questionnaire is measuring the same thing. Factor analysis allows researchers to reduce the number of variables in a dataset by identifying and extracting the underlying factors. These factors are then used to create a smaller set of variables that are more interpretable and easier to analyze. EFA is commonly used as supporting evidence for construct validity (Tavakol & Wetzel, 2020). The EFA KMO value of this study is 0.840, closer to value 1, and a significant Bartlett's test of sphericity (Appendix B Table 3). Thus, the data collected were adequate for factor analysis. Each question per variable has different factor loadings, which are coefficients that represent the degree to which each variable is associated with a particular factor (Tavakol & Wetzel, 2020). The higher the factor loading for a variable, the more strongly it is associated with the corresponding factor. In other words, a high factor loading indicates that the variable contributes significantly to the variance explained by the factor. Factor loadings threshold starting from 0.4, meaning coefficient below 0.4 will be deleted. Based on Appendix B Table 3, we can identify the questions that fall under the same category. 4 factors with an eigenvalue above 1 were extracted and concluded as Purchase intention (PI), Performance expectancy (PE), Price Value (PV), and perceived privacy risk (PPR). Question PI4 was found to have a coefficient less than 0.4, thus we exclude the question from statistical testing. After the analysis is conducted, we can transform and compute the questions into 4 distinct independent variables.

Reliability test: Reliability is an important feature in research, which refers to the extent to which different items measuring the same construct are indeed measuring the same

construct. Reliability analysis was carried out to examine the reliability, internal consistency, and homogeneity of the indicators for variables (Kerlinger, 1966). This research used a 7-point Likert for all variables. The reliability of the Likert scale is often evaluated using Cronbach's Alpha with each indicator should have a score higher than 0.6 as a rule of thumb (Hair et al., 2010). When Cronbach's Alpha for each variable (see Appendix B Table 4), is more than 0.7, it shows that the survey scale used in this research has significant reliability.

Correlation analysis: Pearson correlation analysis was used to evaluate the construct validity and investigate the possibility of multicollinearity. Pearson correlation can be used to verify the existing linear association between variables (de Barros Ahrens et al., 2020). Based on Appendix B Table 5, there are four variables with significant correlation with each other. Perceived privacy risk is negatively correlated with Performance expectancy and price value. Price value and performance expectancy are positively correlated with purchase intention. There was no indication of multicollinearity between independent variables due to the correlation coefficient below the threshold of 0.7. However, there is a low correlation between independent variables with r-value in between 0.26-0.49.

Hypothesis testing: The results of multiple linear regression analysis and moderation analysis performed in this research are displayed in Table 7 (Appendix B). Two regression models are provided in this research. The first model illustrates the main effects which consist of the effect of the independent variables (PE and PV) also moderator variable (PPR) on the dependent variable (PI). The second model shows the interaction effects between independent variables and moderator variable and their impact on the dependent variable.

Main effect: To analyze the main effect between independent variables and dependent variable, multiple linear regression analysis was conducted. The regression analysis was performed along with control variables, such as duration, product type, age, gender, and country. Model 1 (Appendix B table 7) was used to test the main effect and answer hypotheses 1 and 2. Model 1 has an adjusted R-square of 0.481, a model considered to have moderate explanatory power. Model 1 shows the positive influence from the independent variable (PE) to dependent variable (PI) and is significant at 1% ($B=0.572$, $p<0.001$), which provides sufficient evidence to support Hypothesis 1. PV and PI also show a significant positive relationship ($B=0.402$, $p<0.001$), therefore Hypothesis 2 is accepted. Three control variables in Model 1 have a significant effect on the dependent variable, which are country ($B = -0.385$, $p<0.05$), type ($B = 0.303$, $p<0.05$), and duration of usage ($B = -0.150$, $p<0.05$).

Moderator: To test hypotheses H3a and H3b, moderator analysis was used to test the interaction between the independent variables and the moderator variable toward the dependent variable. Model 2 illustrates the interaction between PE and PPR with an adjusted R-square of 0.491. Hypothesis 3a states that PPR negatively moderates the relationship between PE and PI cloud premium service. However, the hypothesis contrast with the results obtained from respondents. The interaction between PE and PPR is positive and insignificant ($B=0.132$, $P>0.1$). A positive value for the interaction effect implied that the higher the PPR, the greater or more positive the effect on the intention to purchase the premium version of the cloud service. In conclusion, moderating effect of perceived privacy on the main effect is not confirmed, and thus hypothesis 3a rejected. Model 2 also illustrated the interactions between PV and PPR to answer Hypothesis 3b, where price value and purchase intention are negatively moderated by perceived privacy risk. The result showed a significant positive interaction between the moderator (PPR) and main effect (PV and PI) ($B=0.181$, $p<0.1$). Our result contrast with the hypothesis, meaning the result shows the increase of PPR would cause the relationship between the main effect becomes more positive or stronger. The control variable country ($B = -0.415$, $p<0.05$), type ($B=0.412$, $p<0.1$), and duration ($B=-0.157$, $p<0.05$) are significant. Although it is not included in the hypothesis, we found that PPR has

a direct and significant negative effect on PI ($B=-0.344$, $P<0.001$).

DISCUSSIONS AND CONCLUSION: Discussion and conclusion: The rise of information and the emergence of big data generated by internet users is increasing the demand for cloud computing service development. This phenomenon also opens the opportunity to create new business models for cloud providers with objectives to increase the adoption and the intention to purchase or convert into paying cloud service users. With the development of cloud services, they also face several security and privacy risks (data leakage, surveillance, data loss, and privacy breach) due to the data they upload on the cloud. Users' decision to make online purchases includes assessing the risks and benefits involved with using the online service. Therefore, this paper aims to investigate the impact of technology adoption element on the cloud premium services purchase intention with moderation from perceived privacy risk. Hypothesis 1 stated that the performance of CSSs positively influenced the purchase intention with statistically significant evidence and acceptance. Thus, the results confirmed that consumers perceive cloud service can improve productivity, enhance effectiveness, and upgrade users' performance to carry out daily tasks and achieve their goals which leads to their intention to purchase the service. It also represents an individual's belief about the usefulness and effectiveness of the service. If users believe that a cloud premium service will help them achieve their goals and meet their needs, they are more likely to be interested in purchasing the service. Similarly, Hypothesis 2 emphasized price value of cloud storage service positively impacts the purchase intention of cloud storage service was accepted. It is found to have a positive significant relationship between the price value of cloud storage service and purchase intention. It explains that the benefits of the paid the version of service is perceived to be greater than the monetary costs to purchase, if an individual believes that a cloud premium service offers good value for money, they are more likely to be interested in purchasing the service. Hypothesis 3a examines if perceived privacy risk moderates the main effect of performance expectancy and purchase intention of cloud service. The moderating effect of the perceived privacy risk was found to be positively correlated and statistically insignificant. Within this study, we cannot confirm the moderating effect of perceived privacy risk on performance expectancy and purchase intention. Thus, hypothesis 3a rejected. The reason for this result because the relationship between these variables is not strong enough to produce a significant effect. It means that the relationship between performance expectancy and perceived privacy risk does not have a significant impact on an individual's intention to purchase a cloud premium service. The opposite direction of the findings could be because the majority of respondents are long-time users, they are familiar with the service, and the benefits of using cloud service could outweigh the risk that comes along with it (Chiu et al., 2012). Its benefits and value still drive people to purchase the upgraded cloud service although using cloud service has been considered risky. Another third hypothesis point, Hypothesis 3b, was also rejected. Our research could not provide sufficient evidence to answer hypothesis 3b, perceived privacy risk negatively moderates the relationship between price value and purchase intention. Our results show a significant positive interaction effect between price value and privacy risk. The sign of interaction in this study is opposite to prior research where privacy risk negatively moderates the relationship (Chiu, 2014). It is implied that perceived privacy risk does not diminish the monetary value of cloud services and their purchase decision. Prior research explains that consumers who are aware of privacy risks also have been the victim of privacy breaches and they purchase the product as their privacy protection behavior (Bordonaba-Juste et al., 2020). The findings in this study contribute to consumer behavior studies and highlight the influence of privacy risk in cloud services. Findings in hypothesis 3 are in line with previous research that found purchase intention is not influenced by perceived risk if

the consumer has utilitarian purchase motivation (Gozukara et al., 2014). Other research found that security and privacy issues are no longer an impediment to the use of cloud services because consumers are willing to face privacy risk in order to obtain the service (Alsmadi & Prybutok, 2018). Thus, this suggests that privacy risks are less influential due to consumers perceiving cloud providers to be trustworthy and reliable (Mariani et al., 2021). In conclusion, this study has confirmed that performance expectancy and price value of cloud service positively influence the purchase intention for paid cloud service. For moderating effect, this study could not confirm whether perceived privacy risk can negatively moderate the relationship between the main effect or independent and dependent variables. The interaction sign found in our results is heading in the opposite direction compared to the hypothesis. It is also found that the type of product and duration of usage also have an effect on purchase intention due to their significance in two regression analysis models.

Theoretical and Managerial Implications: This study can provide managerial recommendations and contributions to the literature in several ways. First, the results obtained from the first and second hypothesis are in line with previous findings in the literature (Wang & Lin, 2016; Yan & Wakefield, 2018), validating that the UTAUT2 model can be generalized to other behavioral intentions. The results demonstrated that the UTAUT2 model could be used to explain how cloud storage services are used. Performance expectancy and price value are effective in determining the consumer purchase decision, thus managers should increase platform performance in order to obtain more paying users. For price value, cloud providers should take into account how they market and package their promotion offerings. Duration of usage was also found to have a significant negative effect on purchase decisions, meaning the longer duration of usage results in consumers being less likely to purchase the paid version. Managers can take action by highlighting certain functional and security aspects to accelerate the conversion process into paid customers instead of free ones. It is interesting to acknowledge that perceived privacy risks do not hold a significant negative moderating effect on both performance expectancy and price value, according to our research results. This is an indication that the risk of using cloud services does not outweigh the benefits. The findings are in contrast with the previous literature, these findings could also be an indication that users now possibly no longer concerned about privacy issues in cloud service. Other factors also perceived privacy risk does not stop the consumer to purchase the service because they found cloud service offers many benefits at a reasonable price. Providers should see this as an opportunity to assess the risk perception of their current and potential consumers. Providers then can further emphasize the safety features of the cloud service to gain more trust and confidence from consumers.

Limitations and Recommendations for Future Research: We discovered several limitations in the study which could lead to future research opportunities. Due to time constraints and a limited ability to reach more respondents, the sample for this study is considerably small, compared to the total of cloud users all over the world reaching more than 1 billion. The results taken from 153 respondents may not be sufficient to generalize most of the cloud users to a particular population, and the situation in other countries might differ. In addition, this study covers a wide age group (from 16 to 65+ years old) that has different online consumption behaviors. Age was found to insignificantly affect purchase intention, which means that no matter how old the respondent is, their purchase intention may vary in a different country. Future research could increase the sample size from different countries to have more valid and trustworthy results. A comparison study between two or more age groups in valuing their data privacy is also possible for future research. Next, the respondents from this research are from Indonesia and the Netherlands. While this research

does not include cultural factors, it opens the possibility for future research to conduct similar studies with a focus on cultural factors between countries. No monetary compensation was given to the participants, future research should consider giving respondents compensation with the objective to participate more seriously and provide better data. Another way to ensure the seriousness of participants is to add manipulation questions to check whether they are really reading the question instead of randomly clicking toward the scale. This study only analyzes two dimensions of the UTAUT2 framework. Future research can analyze all the elements within the UTAUT2 model or use different measurements of technology adoption. Lastly, the limitation of this research is that we could not confirm the moderating effect of privacy risk due to insignificant statistical testing results. Thus, this limitation opens up further investigation into why there is a difference between prior research and the results of this study. Future research should focus on whether privacy risk does or does not hinder the user intention of technology usage.

REFERENCES: Ahuja, S. P., Mani, S., & Zambrano, J. (2012). A Survey of the State of Cloud Computing in Healthcare. *Network and Communication Technologies*, 1(2). <https://doi.org/10.5539/nct.v1n2p12>

Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179–211. [https://doi.org/https://doi.org/10.1016/0749-5978\(91\)90020-T](https://doi.org/https://doi.org/10.1016/0749-5978(91)90020-T)

Ajzen, I., Flanders, N. A., & Fishbein, M. (1975). *Belief, Attitude, Intention, and Behavior*. Addison-Wesley.

Alsmadi, D., & Prybutok, V. (2018). Sharing and storage behavior via cloud computing: Security and privacy in research and practice. *Computers in Human Behavior*, 85, 218–226. <https://doi.org/10.1016/j.chb.2018.04.003>

Ambrose, P., Chiravuri, A., & Chiravuri, P. (2010). An Empirical Investigation of Cloud Computing for Personal Use (p. 24). <https://aisel.aisnet.org/cgi/viewcontent.cgi?article=1023&context=mwais2010>

Arpaci, I. (2016). Understanding and predicting students' intention to use mobile cloud storage services. *Computers in Human Behavior*, 58, 150–157. <https://doi.org/10.1016/j.chb.2015.12.067>

Bhattacharjee, A. (2001). Understanding Information Systems Continuance: An Expectation Confirmation Model. *MIS Quarterly*, 25(3), 351–370. <https://doi.org/10.2307/3250921>

Bhattacharjee, A., & Park, S. C. (2014). Why end-users move to the cloud: a migration-theoretic analysis. *European Journal of Information Systems*, 23(3), 357–372. <https://doi.org/10.1057/ejis.2013.1>

Bordonaba-Juste, M. V., Lucia-Palacios, L., & Pérez-López, R. (2020). Generational differences in valuing usefulness, privacy and security negative experiences for paying for cloud services. *Information Systems and E-Business Management*, 18(1), 35–60. <https://doi.org/10.1007/s10257-020-00462-8>

Cao, Y., Bi, X., & Wang, L. (2013). A Study on User Adoption of Cloud Storage Service in China: A Revised Unified theory of Acceptance and Use of Technology Model. 2013 International Conference on Information Science and Cloud Computing Companion. <https://doi.org/10.1109/iscc-c.2013.32>

Chen, Y.-S., & Chang, C.-H. (2013). Greenwash and Green Trust: The Mediation Effects of Green Consumer Confusion and Green Perceived Risk. *Journal of Business Ethics*, 114(3), 489–500. <https://www.jstor.org/stable/23433794>

Chen, Y.-S., & Huang, S. Y. B. (2016). The effect of task-technology fit on purchase intention: The moderating role of perceived risks. *Journal of Risk Research*, 20(11), 1418–1438. <https://doi.org/10.1080/13669877.2016.1165281>

Chiu, C.-M., Wang, E. T. G., Fang, Y.-H., & Huang, H.-Y. (2012). Understanding customers' repeat purchase intentions in B2C e-commerce: the roles of utilitarian value, hedonic value and perceived risk. *Information Systems Journal*, 24(1), 85–114. <https://doi.org/10.1111/j.1365-2575.2012.00407.x>

Chu, C., & Lu, H. (2007). Factors influencing online music purchase intention in Taiwan. *Internet Research*, 17(2), 139–155. <https://doi.org/10.1108/10662240710737004>

de Barros Ahrens, R., da Silva Lirani, L., & de

Francisco, A. C. (2020). Construct Validity and Reliability of the Work Environment Assessment Instrument WE-10. *International Journal of Environmental Research and Public Health*, 17(20), 7364. <https://doi.org/10.3390/ijerph17207364>

Dodds, W. B., Monroe, K. B., & Grewal, D. (1991). Effects of Price, Brand, and Store Information on Buyers' Product Evaluations. *Journal of Marketing Research*, 28(3), 307–319. <https://doi.org/10.1177/002224379102800305>

Featherman, M. S., Miyazaki, A. D., & Sprott, D. E. (2010). Reducing online privacy risk to facilitate e-service adoption: the influence of perceived ease of use and corporate credibility. *Journal of Services Marketing*, 24(3), 219–229. <https://doi.org/10.1108/08876041011040622>

Fox, G. (2020). Understanding and Enhancing Consumer Privacy Perceptions in the Cloud. *Palgrave Studies in Digital Business & Enabling Technologies*, 59–78. https://doi.org/10.1007/978-3-030-54660-1_4

Ghaffari, K., & Lagzian, M. (2018). Exploring users' experiences of using personal cloud storage services: a phenomenological study. *Behaviour & Information Technology*, 37(3), 295–309. <https://doi.org/10.1080/0144929x.2018.1435722>

Goode, S. (2015). A Note on Service Switching: Evidence from Cloud Storage Services. *Services Marketing Quarterly*, 36(2), 153–172. <https://doi.org/10.1080/15332969.2015.1014240>

Gozukara, E., Ozyer, Y., & Kocoglu, I. (2014). THE MODERATING EFFECTS OF PERCEIVED USE AND PERCEIVED RISK IN ONLINE SHOPPING. *Journal of Global Strategic Management*, 2(8), 67–67. <https://doi.org/10.20460/jgsm.2014815643>

Hair, J., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). *Multivariate data analysis: a global perspective*. Pearson Education, Cop. Hamari, J., Hanner, N., & Koivisto, J. (2019). “Why pay premium in freemium services?” A study on perceived value, continued use and purchase intentions in free-to-play games. *International Journal of Information Management*, 51, 102040. <https://doi.org/10.1016/j.ijinfomgt.2019.102040>

Hsiao, K.-L., & Chen, C.-C. (2016). What drives in-app purchase intention for mobile games? An examination of perceived values and loyalty. *Electronic Commerce Research and Applications*, 16, 18–29. <https://doi.org/10.1016/j.elerap.2016.01.001>

Itani, W., Kayssi, A., & Chehab, A. (2009). Privacy as a Service: Privacy-Aware Data Storage and Processing in Cloud Computing Architectures. 2009 Eighth IEEE International Conference on Dependable, Autonomic and Secure Computing. <https://doi.org/10.1109/dasc.2009.139>

Li, Y., & Chang, K.-C. (2012). Association for Information Systems AIS Electronic Library (AISeL) A Study on User Acceptance of Cloud Computing: A Multi-Theoretical Perspective Recommended Citation. https://web.archive.org/web/20200324031113id_/https://aisel.aisnet.org/cgi/viewcontent.cgi?referer=&httpsredir=1&article=1025&context=amcis2012

Lowry, P. B., Dinev, T., & Willison, R. (2017). Why security and privacy research lie at the centre of the information systems (IS) artefact: proposing a bold research agenda. *European Journal of Information Systems*, 26(6), 546–563. <https://doi.org/10.1057/s41303-017-0066-x>

Lu, H.-P., & Hsiao, K.-L. (2010). The influence of extro/introversion on the intention to pay for social networking sites. *Information & Management*, 47(3), 150–157. <https://doi.org/10.1016/j.im.2010.01.003>

Mäntymäki, M., Islam, A. K. M. N., & Benbasat, I. (2019). What drives subscribing to premium in freemium services? A consumer value-based view of differences between upgrading to and staying with premium. *Information Systems Journal*, 30(2). <https://doi.org/10.1111/isj.12262>

Mariani, M. M., Ek Styven, M., & Teulon, F. (2021). Explaining the intention to use digital personal data stores: An empirical study. *Technological Forecasting and Social Change*, 166, 120657. <https://doi.org/10.1016/j.techfore.2021.120657>

Mirabi, V., Akbariyeh, H., & Tahmasebifard, H. (2015). A Study of Factors Affecting on Customers Purchase Intention Case Study: the Agencies of Bono Brand Tile in Tehran. *Journal of Multidisciplinary Engineering Science and Technology (JMEST)*, 2(1), 3159–3199. <https://www.jmest.org/wp->

[content/uploads/JMESTN42350395.pdf](#) Murray, K. B. (1991). A Test of Services Marketing Theory: Consumer Information Acquisition Activities. *Journal of Marketing*, 55(1), 10–25. <https://doi.org/10.1177/002224299105500102> Nemati, H. (Ed.). (2010). *Pervasive Information Security and Privacy Developments: Trends and Advancements: Trends and Advancements*. IGI Global. Nemati, 2010 Peña-García, N., Gil-Saura, I., Rodríguez-Orejuela, A., & Siqueira-Junior, J. R. (2020). Purchase intention and purchase behavior online: A cross-cultural approach. *Heliyon*, 6(6), e04284. <https://doi.org/10.1016/j.heliyon.2020.e04284> Ratten, V. (2015). Factors influencing consumer purchase intention of cloud computing in the United States and Turkey. *EuroMed Journal of Business*, 10(1), 80–97. <https://doi.org/10.1108/emjb-02-2014-0007> Shah, R., & Pillai, P. (2012). in Opinion: International Journal of Management 24 Consumer's Environmental Concern & its Influence on their Purchase Intention: SEM Approach. Print) Opinion, ISSN (1), 2231–5470. https://citeseerx.ist.psu.edu/document?repid=rep1&type=pdf&doi=8b8178fa84b6bce4db_a25fdf165dcb3f6f06b8bc Singh, A., Abdallah, M., Alryalat, A., Alzubi, J., & Sarma, H. (2017). Understanding Jordanian Consumers' Online Purchase Intentions: Integrating Trust to the UTAUT2 Framework. *International Journal of Applied Engineering Research*, 12, 10258–10268. http://www.ripublication.com/ijaer17/ijaerv12n20_147.pdf Tavakol, M., & Wetzal, A. (2020). Factor Analysis: a means for theory and instrument development in support of construct validity. *International Journal of Medical Education*, 11, 245–247. <https://doi.org/10.5116/ijme.5f96.0f4a> Trenz, M., Huntgeburth, J., & Veit, D. (2017). How to Succeed with Cloud Services? *Business & Information Systems Engineering*, 61(2), 181–194. <https://doi.org/10.1007/s12599-017-0494-0> Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003). User Acceptance of Information Technology: Toward a Unified View. *MIS Quarterly*, 27(3), 425–478. <https://doi.org/10.2307/30036540> Venkatesh, V., Thong, J. Y. L., & Xu, X. (2012). Consumer Acceptance and Use of Information Technology: Extending the Unified Theory of Acceptance and Use of Technology. *MIS Quarterly*, 36(1), 157–178. <https://doi.org/10.2307/41410412> Wang, C.-S., & Lin, S.-L. (2016). Why are people willing to pay for cloud storage service? 2016 IEEE/ACIS 15th International Conference on Computer and Information Science (ICIS). <https://doi.org/10.1109/icis.2016.7550806> Wu, K., Vassileva, J., & Zhao, Y. (2017). Understanding users' intention to switch personal cloud storage services: Evidence from the Chinese market. *Computers in Human Behavior*, 68, 300–314. <https://doi.org/10.1016/j.chb.2016.11.039> Xu, H., & Gupta, S. (2009). The effects of privacy concerns and personal innovativeness on potential and experienced customers' adoption of location-based services. *Electronic Markets*, 19(2-3), 137–149. <https://doi.org/10.1007/s12525-009-0012-4> Yang, H.-L., & Lin, S.-L. (2015). User continuance intention to use cloud storage service. *Computers in Human Behavior*, 52, 219–232. <https://doi.org/10.1016/j.chb.2015.05.057> Yan, K., & Wakefield, R. (2015). Cloud Storage Services: Converting the Free-Trial User to a Paid Subscriber. <https://web.archive.org/web/20170707063204id/http://aisel.aisnet.org:80/cgi/viewcontent.cgi?article=1578&context=icis2015> Zeithaml, V. A. (1988). Consumer Perceptions of Price, Quality, and Value: A Means-End Model and Synthesis of Evidence. *Journal of Marketing*, 52(3), 2–22. <https://doi.org/10.1177/002224298805200302>

APPENDIX A: Appendix A1 Control variable questions: Country: Where are you currently living? Indonesia/Netherlands. Gender: What is your gender? Male/Female. Age: What is your age? __ years old. 1. 16–24 2. 25–34 3. 35–44 4. 45–54 5. 55–64 6. 65 and older. Type of service: Which personal cloud service are you currently using? 1. Dropbox 2. Google Drive 3. iCloud 4. Microsoft's OneDrive 5. Amazon S3/ Amazon Web Service 6. Others: __. Duration of using. How long have you used cloud storage service?

1. 1 years 2. 2 years 3. 3 years 4. 4 years 5. 5 years and more. Appendix A2 Purchase intention (Mäntymäki et al., 2019; Bhattacharjee, 2001) 1. I would consider to use the paid plan of personal cloud storage service 2. I would be willing to pay to access the paid version of personal cloud storage service. 3. In the future, I intend to purchase a paid plan for personal cloud storage services. 4. If I could, I would like to discontinue my use of personal cloud storage service (reversed)*. Appendix A3 Performance expectancy (Venkatesh et al, 2012) 1. I find personal cloud storage services useful in my daily life. 2. Using personal cloud storage services increases my chances of achieving things that are important to me. 3. Using personal cloud storage services helps me accomplish things more quickly. 4. Using personal cloud storage services increases my productivity. Appendix A4 Price Value (Venkatesh et al., 2012). In my opinion, the personal cloud storage service paid plan is ... 1. Reasonably priced 2. Good value for the money 3. Provides good value at the current price. Appendix A5 Perceived privacy risk (Yang & Lin, 2015) I am worried that ... 1. Cloud storage service provider is able to see and access my privacy data stored in the cloud space, (e.g. photos, calendar, chat history, and directory) 2. Cloud storage service provider will analyze my history of using the cloud storage service or my access records to seek profits (e.g. sign-in address and device, the types and time I access data) 3. The invasion of the cloud storage service provider's cloud server by a hacker will result in leakage of my personal private data stored in the cloud storage. 4. My personal data stored in the cloud storage will be stolen and illegally utilized by hackers and vicious users to cause damage and loss to my reputation.

APPENDIX B:

Table 1: Descriptive statistics

	N	Min	Max	Mean	Median	Std. Deviation	Skewness	Kurtosis
Country	153	1.00	2.00	0.49	0.00	0.502	0.040	-2.025
Gender	153	1.00	2.00	0.54	1.00	0.500	-0.146	-2.005
Age	153	1.00	6.00	2.15	1.00	1.390	0.815	-0.726
Type	153	1.00	5.00	2.46	2.00	0.669	1.001	0.849
Duration	153	1.00	5.00	3.549	4.00	1.437	-0.463	-1.148
Valid N (listwise)	153							

Table 2: Respondents' demography

Demographic		Frequency
Country	Indonesia	78
	Netherlands	75
Gender	Male	71
	Female	82

Age	16–24	77
	25–34	24
	35–44	155
	45–54	27
	55–64	9
	65 and older	1
Type	Dropbox	2
	Google Drive	90
	iCloud	50
	Microsoft’s OneDrive	10
	Amazon S3 or Amazon Web Services	1
Duration	1 years	19
	2 years	20
	3 years	33
	4 years	20
	5 years and more	61

Table 3: KMO and Bartlett’s Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.840
Bartlett’s Test of Sphericity	Approx. Chi-Square	1236.280
	df	91
	Sig.	<.001

Table 4: Factor Analysis and Factor Loadings (Rotated using Varimax method)

Variable and Items	Component			
	1	2	3	4
Purchase intention (PI)				

PI1	0.796			
PI2	0.862			
PI3	0.762			
PI4 (reversed)*				
Performance Expectancy (PE)				
PE1		0.401		
PE2		0.765		
PE3		0.875		
PE4		0.885		
Price Value (PV)				
PI1			0.913	
PI2			0.898	
PI3			0.860	
Perceived privacy risk (PPR)				
PPR1				0.807
PPR2				0.804
PPR3				0.755
PPR4				0.694

*Factor loadings below 0.4 are not shown

Table 5: Reliability test - Cronbach alpha

Performance expectancy	Price Value	Perceived Privacy Risk	Purchase Intention
0.809	0.918	0.804	0.889

Table 6: Pearson Correlation Matrix

	PE	PV	PPR	PI
PE	1			
PV	0.274**	1		

PPR	-0.303**	-0.356**	1	
PI	0.513**	0.500**	-0.441**	1

** Correlation is significant at the 0.01 level (2-tailed).

Table 7: Regression Analysis

Variables	Model 1	Model 2
Control variables		
Country	-0.385** (0.186)	-0.415** (0.185)
Gender	0.022 (0.190)	-0.085 (0.195)
Age	-0.093 (0.070)	-0.091 (0.069)
Type	0.357** (0.140)	0.303** (0.142)
Duration	-0.158** (0.063)	-0.150** (0.062)
Main effects		
Performance Expectancy (PE)	0.572*** (0.101)	0.491*** (0.111)
Price Value (PV)	0.402*** (0.074)	0.392*** (0.073)
Perceived Privacy Risk (PPR)	-0.238*** (0.073)	-0.335*** (0.086)
Interaction effect		
Performance expectancy (PE)*Perceived Privacy Risk (PPR)		0.139 (0.107)
Price value (PV)*Perceived Privacy Risk (PPR)		0.181* (0.101)
(Constant)	0.995 (0.993)	2.286* (1.166)
Observations	153	153

F-statistic	18.639	15.641
R-2	0.509	0.524
Adjusted R-2	0.481	0.491

Notes: Standard errors in parentheses reported under the regression coefficients; * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

The Influence of Voice-Based Digital Assistant Adoption, Trust, and Perceived Privacy Risk on Consumers' Satisfaction: Evidence from Southeast Asian Countries



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Abstract: Voice-based digital assistants (VBDAs) have been increasingly utilised, creating satisfaction amongst consumers. Psychological factors such as trust have shown detrimental factors on adopting technology. The impact of this phenomena when perceived privacy risks are involved has not yet been studied. This study aims to determine the impact of perceived privacy risks on technology adoption, trust, and consumers' satisfaction. The findings in this study includes 193 respondents from Indonesia, Malaysia, and The Philippines who have used VBDAs on a day-to-day basis. Results show that performance expectancy, perceived enjoyment, and trust are positively related to consumers' satisfaction with VBDAs, and perceived privacy risks negatively moderates perceived enjoyment. However, in contrast to prior studies, perceived privacy risks do not possess significant negative moderation on performance expectancy and trust. Although this paper contributes to the understanding of perceived privacy risk on AI-based technologies, further research is needed to investigate the impact of privacy risks on adoption of VBDAs. This study proposes managers a better understanding of how consumers perceive privacy risks, and how this may affect users' adoption in the three Southeast Asian countries.

Keywords: Performance Expectancy, Perceived Enjoyment, Trust, Perceived Privacy Risk, Voice-Based Digital Assistant

Introduction: One of the applications of Artificial Intelligence (AI) is digital assistants such as Siri, Alexa, or Bixby, which is also known as voice-based digital assistants (VBDAs). These systems are being adopted rapidly by many people (Kinsella, 2018). People believe that these products are useful since they satisfy many consumer needs, expectations, and are convenient to use (Poushneh, 2021). The numerous benefits it offers reflect an increase in individual satisfaction (Brill et al., 2019). While individuals may be benefitted, these digital

assistants have enlightened the light to raising security and privacy concerns (Shin et al., 2020). Recent advancement in machine learning capabilities with digital assistants allow discoveries from the data compiled that reveal personal interactivity insights (Ethem Alpaydin, 2014). Intuitively, one would expect that privacy may inflict the adoption process, and trust affecting the overall satisfaction of technological adoption. Digital assistants are voice-enabled devices that are integrated with AI. These softwares are being embraced rapidly by consumers (Goksel Canbek & Mutlu, 2016). Currently, there are estimated usage of 3.25 billion digital assistants worldwide (Smith, 2019). The usage is projected to increase to approximately 8 million users by 2023, which is reflected by the average 25.4% growth rate (Juniper Research, 2018). It offers various benefits to consumers as they aim to deliver relevant, reliable and also personalised content to consumers (Baier et al., 2018). Although digital assistants are complex in terms of technologies, the functional application varies in an individual user can use digital assistants to perform and assist basic personal tasks (e.g. schedule and manage appointments or calendars, send instant messages) or a more advanced connected-device integration (e.g. navigation, home automation, and health monitoring) (Kumar et al., 2015). With the given benefits, users tend to feel satisfied using the service. According to Morgan, Rego & Fornell (2013) concluded that consumer satisfaction has long been a determining concept in the consumer behaviour, marketing strategy and other research streams in marketing. However, evidence on studies concerning consumer satisfaction with digital assistants is limited. The lack of study on this area provides chances for organisations to gain clarity and insights as they undertake ongoing programs using digital assistants. Digital voice assistants with AI can also expand their abilities and anticipate the wishes and needs of their users after a certain period of time, resulting in the creation of a personalised online environment tailored to the individual user (Stucke, 2017). The tailored content is few amongst the many factors that drive consumer satisfaction as it reduces information overload from users (Liang et al., 2006). AI implementations have been affecting consumers' satisfaction, which is reflected by users' perceived privacy risk (Cheng & Jiang, 2020). The breakthrough in technology creates a worrying digital footprint that contains private users data (Belanger & Xu, 2015). Smith et al. (2011) argues that controversial data collection raises the greatest individual concerns, privacy. Concern exists amongst users as the data may be abused or misused (Bhartt, 2014). The increasing privacy risk is deemed to create feelings of distrust, and insecurity amongst users (Olson & Kemery, 2019). The situation has worsened ever since the Cambridge Analytica scandal soared in 2018 (Jones, 2018). Prior studies largely focused on the impact of privacy risks on users' satisfaction (Cheng & Jiang, 2020) and brand loyalty (Hasan et al., 2020). Analysis on digital assistant adoption has been conducted (Marikyan et al., 2022) and its influence on consumer satisfaction (Brill et al., 2019). Also, the significance role of trust as a determining factor of user's satisfaction has been researched (Uzir et al., 2021; Seo & Lee, 2021). However, these studies only addressed privacy risks in a limited field of AI. Sundar & Kim (2019) argues that it is still unclear how users perceive privacy risks on adopting AI-equipped digital assistants relates to consumers' satisfaction. The above research gaps lead us to the research aims to understand the impact of consumers' privacy risks on VBDA adoption on a personal context, that may ultimately implicate consumers' satisfaction. Which leads us to the research question: "What is the influence of VBDA adoption and trust with consumers' satisfaction, moderated by perceived privacy risks in using digital assistants?" This study provides technological firms that establish VBDA and managers with insights from consumers regarding their perception of privacy risks upon adopting the technology. This is crucial as technological firms may need to develop contingency plans if consumers' perception on privacy inflicts with the adoption of the technology.

Literature Review: Voice Recognition Digital Assistant and Its Adoption: People have long dreamt of having computers as their virtual companion. However, the human factor that the computer is lacking is its linguistic capabilities (Harari, 2014). The introduction of the AI-based digital assistant began with Apple's introduction to Siri in 2012 and followed by Google Assistant and Amazon Alexa. These digital assistants come natively in smart devices. The number of smart devices has recently increased, ranging from smartphones to smart wearables to VBDA. Prior research has explored this phenomenon of technology adoption in a variety of contexts, including smartwatches (Pal et al., 2020), smartphones (Kim, 2008), and VBDA (Kowalczyk, 2018; Han & Yang, 2018). As a result, in order to assure their success, it is necessary not only to study the adoption of these technologies by users, but also to comprehend their spread throughout the general population. Research on the usage of VBDA is shown to be limited on the application of voice-commerce (Smith, 2018). There have been earlier attempts to examine VBDA from an end-user standpoint, focusing solely on them. For example, researchers investigated customer engagement and loyalty toward VBDA using Google Home as the target device (Moriuchi, 2019). Researchers tested an acceptance model to investigate customers' intentions to utilise smart speakers, specifically Alexa from Amazon (Kowalczyk, 2018). Coskun-Setirek & Mardikyan (2017) present a theoretical model that is grounded from Technology Acceptance Model (TAM) for understanding the factors impacting users' actions and attitudes concerning VBDA usage. Generally, most research is built on the TAM. Despite being widely used in many studies, TAM has rapidly evolved. The theory has been improved by adding more constructs, which improves the application of the theory. For instance, as TAM measures perceived usefulness, Van der Heijden (2004) and Davis et al. (1992) made revision to the TAM to include the perceived enjoyment as the impact of enjoyment on behaviour intentions has not been examined. In addition, Venkatesh et al. (2003) proposed a more recent Information System (IS) adoption theory, named Unified Theory of Acceptance and Use of Technology (UTAUT). UTAUT has shown to be a powerful theoretical model for explaining technology acceptance in a variety of technological applications (Venkatesh et al., 2016; Williams et al., 2015). The new model has been used to investigate mobile technology, smart technology and virtual reality adoption (Moriuchi, 2021; Abbas et al., 2018). Trust and Voice-based Digital Assistant: Despite the revisions of TAM, and the emergence of newer TAM-based theories such as UTAUT, many authors still choose to perform researches based on these theories as its broad use in earlier studies (Williams et al., 2015). Indeed, the UTAUT model is evolutionary in nature, yet it is sometimes seen to lack a key element such as trust. This study kept the absence variable in mind since trust issues about individuals' privacy, which is tied to the increasing trend of supplying and sharing data in recent years (Hoy, 2018; Jones, 2018). Over the years, trust has become increasingly important, especially on the rise of digitalisation, reflected on smarter, AI-enabled devices. The assumption that other people will behave in a predictable manner is defined as trust (Luhmann, N., 1971). According to Tussyadiah et al. (2020) trust is defined as an individual's expectations that robots or other AI technologies will fulfil the expected responsibilities. Consumers should examine the risk of responsibility resulting from the performance of robots since they are trained to conduct various jobs and make judgments autonomously without human intervention (Tussyadiah et al., 2020; Yagoda & Gillan, 2012). Because of the significant amount of uncertainty possessed, it is acceptable to claim that trust is a key component in AI-enabled gadgets. Trust is frequently seen as a key aspect in the use of technology since it adds to a lower amount of uncertainty from utilising such AI-enabled devices that run with little or no human involvement (Tussyadiah et al., 2020; Yagoda & Gillan, 2012). Trust, as a key component, helps to the success of AI-enabled devices (Rajavi et al., 2019). For instance, when it comes to

maintaining privacy and confidentiality, users frequently expect AI-enabled gadgets to be trusted on managing users' private information. In the healthcare industry, for example, the impersonal aspect of AI-enabled gadgets that provide assistance in the healthcare industry may cause trust issues as people may not trust technology when it comes to diagnosing and prescribing medications for their health. As a result, the author infers that customers want their privacy to be prioritised and kept confidential whilst using the services. Together with the acceptance theories above, these factors may impede consumers's satisfaction.

Consumers Satisfaction and Voice-based Digital Assistant: Consumer satisfaction is an important metric for marketers. Satisfaction benefits both consumers and companies since it satisfies customer needs and gives a level of competitive advantage to firms (Minta, 2018; Akbari et al., 2015). Existing marketing literature offers numerous definitions of consumer satisfaction that reflect a wide range of characteristics and applications. Hence, based on the factors discussed, there is no all-encompassing, globally acknowledged definition of consumer satisfaction (Giese & Cote, 2000). So, in this research, consumer satisfaction is defined as a positive affective reaction to a previous experience (Ganesan, 1994). VBDA is unique than any other AI technologies. It emulates traits that only humans have by conversing to consumers in a natural flow of language that is controlled by voice-based interface. VBDA allows customers to multitask (Strayer et al., 2017): they may utilise their hands for other chores such as taking notes, cooking, etc. These assistance on day-to-day activities bring convenience, allowing customers to retrieve more information, increasing the consumer satisfaction. Moreover, digital assistants are tangled with AI, which allows them to make personalisation to the users. Personalisation is made through refining users' responses and past task behaviour that exemplifies users' dependence to the technology (Wollerton, 2019). Together with AI, the sophisticated technology possesses the ability to predict better references for the future as it learns based on their previous interactions (Kumar et al., 2016). Conversely, a decrease in consumer satisfaction may be faced by consumers. Upon retrieving information, users' may be faced with frustration (Kiseleva et al., 2016), also task incompleteness done by VBDA is negatively correlated with user satisfaction. Prior research suggests that combining the UTAUT model and TAM3 exclusively determines drivers of satisfaction (Marikyan et al., 2022).

Perceived Privacy Risks of Voice-based Digital Assistant: Risk is a rather subjective concept. It is often described as the likelihood of a person losing something. According to Peter et al. (1975), it is the likelihood of a firm to engage in an opportunistic behaviour that results in a consumer loss. Privacy risks are defined as the severity of loss associated when a user disclose their personal information. (Featherman & Pavlou, 2003; H.; Iyer & Singh, 2018; Smith et al., 2011). With the disclosed personal information, VBDA's are also able to make personalised requests (Wang & Lin, 2017). To provide personalised content, harvesting an abundant amount of data is necessary, which requires heavy data analysis. AI and machine learning has taken data analysis to the next level. These digital assistants can intelligently translate our voice into commands, by picking up keywords and executing them to make personalised responses. The information retrieved gets richer and richer, enabling the software to respond in a smarter way, increasing its ability to provide more services for the users (Hoy, 2018). Given the very sensitive microphones, and always-listening capabilities, many countries have expressed serious data and privacy security concerns, creating distrust (Chung et al., 2017; Vimalkumar et al., 2021). However, the extent of studies about VBDA adoption and privacy concerns have only been focused specifically to western, individualistic and developed countries (Kowalcuk, 2018; Foehr & Germelmann, 2020). Privacy risks are considered a significant issue due to the rapid advancement of AI that underpin the technology, working conjunctively with the easily accessible internet allows firms to retrieve,

store and process sensitive users data (Smith et al., 2011). In a study, Belanger & Crossler (2011) concluded that control over an individual's personal information, particularly secondary use of the information, is a highly-researched topic in most research on information privacy. For instance, Kokolakis (2017) attempts to address whether or not individuals care about their privacy when using technology. Studies conducted by Rainie (2015) concluded that information privacy is a top priority for digital-age individuals. However, despite reporting that they were extremely worried about privacy, individuals freely volunteered their personal information in a variety of situations (Krasnova et al., 2009). The "privacy paradox" refers to the disparity between sentiments toward privacy and actual behaviour (Lee et al., 2013). This contradiction gives us the opportunity to reassess users' privacy risks and technology adoption through an extended model of technology adoption and trust.

CONCEPTUAL DEVELOPMENT: Performance Expectancy and Consumers' Satisfaction: The notion that using voice-based digital assistants would increase one's tasks performance is referred to as performance expectancy. Performance expectancy is widely recognised to aid in the technology adoption process (Jadil et al., 2021). Moreover, the stance can also predict the early adoption of technology amongst individuals. For instance, in the usage of e-government services, the implementation of AI in these services has been perceived to be extremely useful for users (Rey-Moreno et al., 2018). Prior research examined that individuals that often see the usefulness of gadgets in their daily life, they are often more satisfied, and thus adopting them in their daily life (Vimalkumar et al., 2021). Also, research on technology adoption supports the link between satisfaction and performance expectancy, suggesting that users' contentment is predicted by their impression of the utility of technological features (Xu & Du, 2018; Choi et al., 2011). In VBDAs, performance expectancy is indicated to be the most significant predictor of satisfaction (Marikyan et al., 2022). H1: There is a positive relationship between performance expectancy and consumers' satisfaction with voice-based digital assistants.

Perceived Enjoyment and Consumers' Satisfaction: Davis et al. (1992) defines perceived enjoyment as the level on how using computers is considered to be enjoyable, independent of any expected performance outcome. Perceived enjoyment is amongst the most critical driving factors to adopt AI-based assistants (Fernandes & Oliveira, 2021; Moriuchi, 2019). In the context of VBDAs on personal context, perceived enjoyment measures consumers' perceptions of whether they find that it is enjoyable or fun. According to Balog and Pribeanu (2010), perceived enjoyment is a fundamental incentive that drives behaviour. Perceived enjoyment also has consequences on people's behaviour and satisfaction (Balog & Pribeanu, 2010; Van der Heijden, 2004). In the application of chatbots, interaction with AI-based technology is found to be pleasant, hence developing feeling of satisfaction on using the system (Ashfaq et al., 2020). Hence, when users enjoy using VBDAs, the consumer's satisfaction will increase subsequently. H2: There is a positive relationship between perceived enjoyment and satisfaction with voice-based digital assistants.

Trust and Consumers' Satisfaction: When considering technological adoption, trust is essential (Arfi et al., 2021; Patil et al., 2020). For instance, individuals will purchase items online if they trust the seller, which establishes behavioural intention (Gefen et al., 2003). Trust has also been demonstrated as a strongest predictor of people's attitudes regarding digital technology adoption (Patil et al., 2020). When faced with new technology, consumers may experience a significant level of psychological risk, including fear, hesitancy, and even some negative reactions (Morosan. C., 2012). Trust increases the consumer's belief in technology. Hence, it is critical in the adoption of technology that is based on AI, such as voice assistants (Liao et al., 2019). Previous research observed that there are direct and indirect implications on the application of trust in digital assistants (Fernandes & Oliveira,

2021). Yen & Chang (2020) found that with the application of trust in chatbot services, intention of making a purchase is increased by trust. Hence, trust in digital assistants increases the likelihood of using them (Fernandes & Oliveira, 2021; Vimalkumar et al., 2021) which may inflict an increase in satisfaction. H3: There is a positive relationship between trust and consumers' satisfaction in the application of voice-based digital assistants.

Moderation by Perceived Privacy Risks: Recently, there has been a great deal of controversy and concern expressed about how digital companies like Google, Facebook, and Apple acquire and use information (Agrawal et al., 2018; Kak, 2018). The lack of consent on collection and processing of information presents anxiety amongst consumers (Zhou, 2012). Given that huge companies are the reason behind the development of voice-based assistants, users may perceive privacy issues associated with these advanced technologies (Gardiner, 2018) which might impede adoption (Rauschnabel et al., 2018). Previous research indicated that perceived privacy risks are adversely related to disclosing their sensitive, personal information to companies (Xu & Gupta, 2009) which may decrease their satisfaction on using the VBDAs. H4a: The perceived privacy risk will negatively moderate the relationship between performance expectancy and consumers's satisfaction with VBDAs. H4b: The perceived privacy risk will negatively moderate the relationship between perceived enjoyment and consumers's satisfaction with VBDAs. Despite the evolution in nature, the UTAUT model is often criticised by the lack of important variables such as privacy risk (Hasan et al., 2020). Given the prominent privacy and security issues associated with employing AI-based assistants (Chung et al., 2017; Hasan et al., 2021; Vimalkumar et al., 2021), trust can be a crucial enabler. Trust helps individuals overcome their fears of uncertainty and risks and engage in "trust-related behaviours" using digitally-enabled devices. (McKnight et al., 2002). Prior research suggests the relevance of trust in the context of innovative technology usage, which supports the inclusion of this element (Vimalkumar et al., 2021). Previous studies revealed that consumers' perceptions of privacy risks upon visiting a website lowers the trust as they fear misuse of their information (Martin, 2018). Dinev and Hart (2006) emphasised that the bigger the perceived privacy risks, the less trust consumers have in VBDAs. As a result, users of digital assistants need to be faced with challenging trade-offs between technical advancement and the possibility of information privacy risks (Acquisti et al., 2015). H4c: The perceived privacy risk will negatively moderate the relationship between trust and consumers's satisfaction with VBDAs.

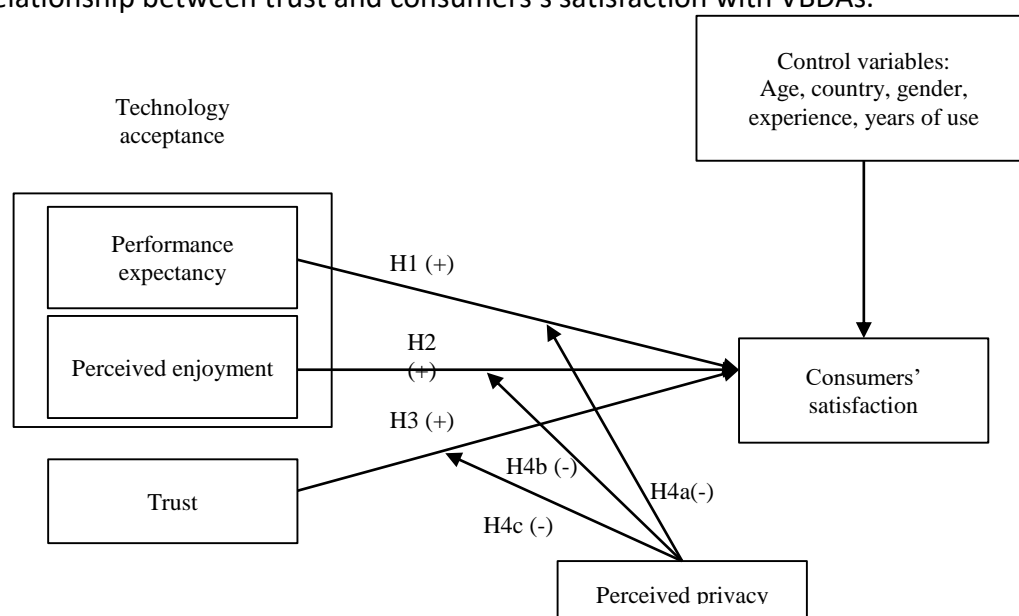


Figure 1: Conceptual Model

RESEARCH METHODOLOGY: Data Collection and Sample: The survey was conducted through Qualtrics and distributed both offline and online. The proposed sample size for the study is 350. Control variables (Appendix A1) will be included to ensure the accuracy of the study. Country is one of the control variables used since there have been plenty of researchers studying the western populations and developed countries in the application of VBDAs (Kowalczyk, 2018). Hence, Asian countries have been selected for our samples. These countries are Indonesia, Malaysia and The Philippines, which represent Southeast Asia. Nationality, on the other hand, is not inquired as the study does not investigate cultural factors. According to Kinsella (2019), Age is less age dependent, with increasing age comes increasing frequency of use, which may inflict an increasing experience of using the device. Experience reflects how long respondents have used VBDAs, ranging from less than a year of use to five years. Hence, Age and Experience will be inquired as one of the control variables in the study. Moreover, to further analyse adopter characteristics, other socio demographics information such as Gender need to be collected (Rogers, 2003). Lastly, in order to maximise the internal validity of the study, the Type of the digital assistant is asked since the measurement of the 2 behaviour intentions and trust will be based on commercial, digital assistants such as Siri, Google, Bixby, and Alexa. Further, seven-point Likert scale for the independent, dependent, and moderator variables (Appendix A2). The scale 1 translates to “strongly disagree” and 7 translates to “strongly agree”. The independent variables are performance expectancy (Venkatesh et al., 2003), perceived enjoyment (Venkatesh & Bala, 2008), and trust (Chandra et al., 2010). The dependent variable is consumers’ satisfaction (Bhattacharjee & Premkumar, 2004). The moderator variable is perceived privacy risks (Vimalkumar et al., 2021).

Data Analysis: Prior to statistical testing, factor analysis, multicollinearity test, reliability tests, and correlation analysis will be conducted. The statistical software used is IBM SPSS Statistics 28.0, and the test conducted is multiple regression analysis. In addition, moderation analysis will be conducted as the study aims to also assess the interactions effect between the independent and moderating variables that may affect the dependent variable.

RESULTS: Factor Analysis: Factor analysis is done to assist researchers in reducing the number of questions used to measure a variable to a simpler set of factors. Looking at the Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy (Appendix B5), the threshold to conduct Exploratory Factor Analysis (EFA) of 0.6 and above. The test statistics resulted in 0.867. EPA is done to verify that the questionnaire's questions are measuring the same thing. The variables tested in this step of analysis are only the independent variables because factor analysis only allows it to analyse interval questions. This study assumes a correlation between the components that measure each independent variable, oblique rotation is performed using the direct oblmin choices. Loadings above .45 are depicted to be relevant (Bentler & Dudgeon, 1996). Hence, the threshold of .45 is used to suppress small coefficients (Appendix B1). Amongst all the independent variables, all the scales used represent the respective variable its measuring.

Reliability Test: The test is conducted to assess the consistency of the scale used in measuring the specific variable by computing Cronbach’s alpha. The threshold of the test is 0.6. As seen in Appendix B6, the lowest measurement is trust ($\alpha = .808$) and the highest measurement is performance expectancy ($\alpha = .889$). Hence, all the independent and dependent variables have a Cronbach alpha of more than 0.6, which indicates that the measurement question is reliable (Churchill, 1979).

Multicollinearity Check: To determine whether or not there is multicollinearity, the study analyses the Variance Inflation Factor (VIF). The test is conducted to determine whether high

intercorrelations exist between two or more independent variables in the regression model. The test analyses the independent and control variables. The highest VIF index is performance expectancy, which is measured at 1.691. The index is less than the suggested threshold value of 5 (Appendix B7), indicating that there is no multicollinearity in this study.

Correlation Analysis: After the questions are categorised respectively to its variable, correlation analysis is conducted in the study to assess the correlations between variables and whether they are connected or not. As seen in Appendix B4, there are seven variables that have significant correlation with each other at 0.01 level. For instance, there is a significant relationship between perceived enjoyment and consumers' satisfaction.

Descriptive Statistics: The questionnaire was conducted through Qualtrics. Out of 350 people, 193 responded to the questionnaire. The sample size is sufficient as it exceeds the recommended sample size of 100 (Hair et al., 2010). Based on the 5 control variables (Appendix B3), the variable Gender shows that 52.3% of the respondents are female, and the remaining is male. Second, the Age of the respondents were mainly less than 25 years old (73.1%) and following the age group of 25-35 years old (18.1%). Third, the variable Experience reflects that respondents dominantly have used VBDA's for 2 years (24.9%). Fourth, the Type of digital assistant summarises that Siri represents the most used VBDA's, measuring 62.5% in comparison to other digital assistants. Fifth, the Country of origin of the respondents was dominated by Indonesia (99; 51.3%), followed by Malaysia (62; 32.1%) and The Philippines (32; 16.6%). Of all control variables, Byrne (2013) recommends testing the normality of the distribution based on the recommended threshold of kurtosis (between -7 and +7) and skewness (between -2 and +2). Skewness is used to measure the symmetry of the distribution (Hair et al., 2010). Kurtosis measures how "peaked" the distribution is (Kim, 2013). The results (Appendix B2) reveal that the kurtosis falls within the acceptable range. However, the test statistics for Age measured 2.220, which exceeds the threshold. So, the distribution for Age is not normally distributed.

Hypothesis Testing: The results of multiple regression analysis that was performed in this research (Appendix B8). Two regression models are provided in this study. Model 1 depicts the main effect which consists of the effect of independent variables on the dependent variables. Model 2 depicts both the main effect and the interaction effect of the moderator variables on the dependent variables.

Main Effect: Looking at Model 1, this study tests the independent variables' performance expectancy, perceived enjoyment and trust and the control variables. First, the control variables suggest that none of them possess significance. The variables have a p-value of $>.10$. Second, looking at the independent variables, the variable performance expectancy obtains a positive value of regression coefficient of .240, $p<.001$. This translates that VBDA's performance expectations does have a positive relationship with consumers' satisfaction and this effect is significant at a significance level of 1%. Hence, Hypothesis 1 is accepted. The variable perceived enjoyment also obtains a positive regression coefficient value of .238, $p<.001$. This means that users' enjoyment of using VBDA's does have a positive relationship with consumers' satisfaction, and the effect is significant at a significance level of 1%. So, Hypothesis 2 is accepted. The last independent variable, trust, obtains a positive regression coefficient value of .149, $p<.005$. This concludes that users' trust on using VBDA's have a positive relationship with consumers' satisfaction, and the effect is significant at a significance level of 5%. Thus, Hypothesis 3 is accepted. **Moderator:** In this research, moderator analysis is used to investigate the relationship between the moderator and the main effect to test Hypotheses 4a, 4b, and 4c. These hypotheses are depicted in Model 2, the study analysed the interactions between performance expectancy and perceived privacy risks. The moderation model resulted in a positive B-coefficient of .174, $p<.005$. Overall,

there is a positive interaction between the performance expectancy and perceived privacy risk, and the effect is significant at a level of 5%. This indicates that the relationship between performance expectancy and consumers' satisfaction is strengthened by perceived privacy risk by 17.4 percentage points. The interaction leads to an increase of expectations on VBDAs performance, which increases user's satisfaction on using the technology. So, Hypothesis 4a is rejected. Moreover, in the same model, the study also analysed the interactions between perceived enjoyment and perceived privacy risks. Our research supports Hypothesis 4b, with B-coefficient of $-.124$, $p=.028$. The results conclude negative interaction between perceived enjoyment and perceived privacy risk, and the effect is significant at a significance level of 5%. To sum up, it is indicated that the relationship between perceived enjoyment and customer satisfaction is weakened by perceived privacy risk by 12.4 percentage points. The interaction leads to a decrease of individual's enjoyment, which increases user's satisfaction on using the technology. Hence, Hypothesis 4b is accepted. Lastly, Model 2 also investigates the interactions between trust and perceived privacy risks. Our research does not support Hypothesis 4c, with B-coefficient of $-.034$, $p=.515$. So, there is an insignificant negative interaction between perceived privacy risk and trust. Hence, the relationship between trust and consumers' satisfaction is weakened by perceived privacy risk by 3.4 percentage points. The interaction leads to a decrease of individual's trust, which increases user's satisfaction of using VBDAs. However, due to the insignificant result, Hypothesis 4c is rejected.

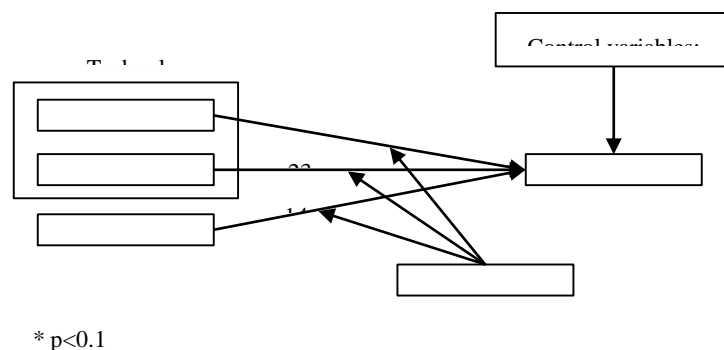


Figure 2: Moderation Effect

DISCUSSIONS, CONCLUSIONS AND MANAGERIAL IMPLICATIONS: Discussions: Nowadays, the increasing usage of VBDAs in our daily lives since they provide several benefits that encourage consumers to continue using the technology (Poushneh, 2021). Concurrently, new phenomena of increasing privacy risks arise with the rapid adoption of this technology that impacts individual trust. Previous studies have also studied technology adoption of digital assistants on consumer satisfaction (Brill et al., 2019). This study is designed to reveal a more holistic effect of technology adoption, such as performance expectancy and perceived enjoyment, and trust on consumers' satisfaction and see the interaction effect of perceived privacy risk in daily activities. Hypothesis 1 tests the positive effect of performance expectancy on consumer satisfaction. The study found that one of the most significant factors in TAM, performance expectancy, to be positively related in predicting individual's satisfaction. The result aligns with previous study which considers the variable to be one of the significant predictors on satisfaction (Marikyan et al., 2022). So, technology applications, in general, increase the efficiency of implementing and completing tasks due to the functionality it offers. (Lin, 2012). In line with prior research (Choi et al., 2011), the findings indicate people that use VBDAs are satisfied with its performance. They believe that the technology is extremely useful, and that this has a clear association with individuals' performance and engagement habits. Moreover, Hypothesis 2 investigates the positive

impact of perceived enjoyment on user's satisfaction, and aligns with previous findings (Van der Heijden, 2004; Ashfaq et al., 2020). It can be concluded that when individuals have positive experience on using a technology, they tend to be more willing to use it again due to the pleasant and enjoyable experience given. Digital assistants may add enjoyment to daily life by assisting users in executing and completing personal tasks. To begin with, voice control enhances the hedonic experience of carrying out functional tasks. These clever softwares are also able to provide entertainment services. So, the more the enjoyment associated with using VBDA, the greater the satisfaction with the digital assistants. The positive relationship between trust and consumers' satisfaction is tested on Hypothesis 3. The study found that an element of trust in each individual using the VBDA is positively related in predicting individual's satisfaction. Hence, satisfaction with digital assistants rises in parallel with the feeling of trust on using the technology. The finding is in line with previous research which postulates that trust is a fundamental, critical factor in adopting technology (Vimalkumar et al., 2021; Fernandes & Oliveira, 2021). So, this suggests that trust is a significant element in VBDA adoption and that increasing trust in the technology may considerably improve individual behaviour and intention on adopting the technology. Moderating effect of perceived privacy risks is supported on Hypothesis 4b. In line with previous findings (Cheng & Jiang, 2020). This is due to the uncertainty that AI-based digital technology possesses, through revealing customers' personal information (Wang & Lin, 2017). Despite the personalisation features that increase adoption (Sundar & Marathe, 2010), users may realise the risks, therefore feel concerned about the amount of personal information collected, deeming the usage of VBDA as an inconvenience, leading to dissatisfaction. On the other hand, Hypothesis 4a and 4c is not supported. The hypotheses do not align with previous findings (Cheng & Jiang, 2020). In the case of chatbots, the risk on individual's privacy is a primary source of consumers' dissatisfaction with chatbot services. VBDA may not be offering the same hedonic motivations as chatbots do. So, the application of AI in chatbots and VBDA possess different outcomes. This finding can be explained by the privacy calculus that users are faced with (Dinev & Hart, 2006). Similarly, when it comes to trust, the result is insignificant. This may be due to the nature of advanced technology that increases perceived privacy risks, therefore decreasing trust.

Conclusion: To conclude, behavioural intentions, performance expectancy, perceived enjoyment and trust are positively related to consumers' satisfaction and as for the moderating effect, only the interaction between perceived privacy risks and perceived enjoyment is supported. The interaction with performance expectancy and trust is not supported. In other words, perceived privacy risks only negatively moderate the relationship between perceived enjoyment and consumers' satisfaction. Theoretical and Managerial Implications: The theoretical implications are twofold. Firstly, the study increases the contribution in literature concerning AI. As the literature is still in its infancy, the research is scarce. Most research has largely been focused on the narrow scope of chatbots. This research focuses on VBDA, and factors such as acceptance and trust that may inflict consumers' satisfaction upon using it are explored. As there have been studies assessing the utility of VBDA in the work context (Marikyan et al., 2022) this study contributes to the utilisation and impact of VBDA in other contexts, such as day-to-day usage in effort of increasing productivity. Additionally, previous studies often try to replicate existing frameworks, such as TAM or UTAUT (Kowalczyk, 2018; Coskun-Setirek & Mardikyan). This study explores beyond the established and conventional framework by assessing the impact of trust in adopting such technology. Secondly, the rest of the hypotheses that assess the moderating effect of perceived privacy risk is not supported. This means that the result contradicts prior research (Dinev & Hart, 2006; Gardiner, 2018; Rauschnabel et al., 2018).

Perceived privacy risk does not negatively affect user adoption of the advanced and clever VBDAs. This may infer that the benefit imposed such as providing reliable, accurate, and personalised data to increase day to day productivity outweighs the risk imposed which includes collecting, harvesting and analysing data that may be used internally or disclosed to third parties without user consent. The study found that consumers may be faced with a prominent privacy calculus, which significantly influences the technology adoption including those of AIs. Further, the findings depicts that people from Southeast Asian countries do not care about privacy whilst adopting VBDAs. Overall, this study provides extension in the technology adoption literature. The paper provides a model to estimate individual's perceptions towards VBDA's adoption in Malaysia, Indonesia, and The Philippines, and some interesting results were achieved. Overall, AI applications on digital assistants do not only benefit individuals, but also firms. The findings in this research can form managerial implications. Managers can make the users more aware of the benefits and applications of the technology to increase satisfactions. For instance, individuals might be taught about a variety of beneficial features and functionalities of VBDAs (such as notetaking or scheduling an event). Managers could also preserve each individual's privacy and security by implementing regulations and guidelines on safe data access via VBDAs and integration. Also, given that algorithmic capabilities differ amongst AI devices (Lichtenthaler, 2020), managers must improve the technology's analytical and interactional skills. For instance, to increase the sense of human-like conversation upon reading out incoming emails or texts. These unique customization features will undoubtedly convey the impression that technology is more beneficial for individuals, since they may elicit a sense of social presence and intelligence. So, managers may be able to guide users to use such features, while also addressing individual's perception of risks on using VBDAs to achieve better productivity, mitigate privacy risks, and to introduce new features that will ultimately maximise consumers satisfaction.

LIMITATIONS AND SUGGESTIONS: There are limitations that can be addressed for future research. First is lack of time. More time may reflect a larger sample size, and therefore represent more populations in Malaysia, Indonesia and The Philippines or possibly more Southeast Asian countries. As for reference, currently the number of active internet users as of January 2022 reached over 5.03 billion (Statista, 2022). The sample of the study may not fully represent the whole Southeast Asian populations, as it is only done in selected Southeast Asian countries. Respondents were also not given incentives, it was voluntary. Future research can be done in a more representative manner, including more Southeast Asian countries listed in ASEAN and providing incentives such as monetary compensation is given, the respondents are more likely to give effort and motivation to complete the questionnaire. Second, the concept of a privacy calculus with VBDAs was not examined in this study. Privacy calculus is defined as the trade-off when it comes to risk and benefits (Dinev & Hart, 2006; Belanger & Crossler, 2011). This concept discusses the most relevant and largely accepted explanation on characterising the cognitive process behind an individual's privacy-related behaviour, known as the notion of "calculus of behaviour" (Knijnenburg et al., 2018). So, if good performance from VBDAs is seen, then perceived privacy risk is considered to be less of an issue. However, it is vice versa if the performance is unsatisfactory, meaning that privacy risks have a substantial impact on adoption behaviour. A more in-depth analysis in this issue can be investigated along with the links between privacy concerns, and how it may lead to an increase or stoppage of VBDAs adoption. Third, the effect of moderating variables such as age was not explored in the study. The role of age as a moderating variable on behavioural intentions and satisfaction can be addressed in future studies. Previous literature has provided evidence of the influence of

age with technology acceptance, so future studies can also account for it as a moderator (Koon et al., 2019). Also, culture can also be identified on analysing the population in Southeast Asian nations. Existing literature has attributed that culture may play a factor on determining the effect of behavioural intentions on satisfactions (Balakrishnan & Dwivedi, 2021). Hence, future research may assess the hypotheses above including the given two moderators.

References: Abbas, S. K., Hassan, H. A., Asif, J., Ahmed, B., Hassan, F., & Haider, S. S. (2018). Integration of TTF, UTAUT, and ITM for mobile Banking Adoption. *International Journal of Advanced Engineering, Management and Science*, 4(5), 375–379. <https://doi.org/10.22161/ijaems.4.5.6>

Acquisti, A., Brandimarte, L., & Loewenstein, G. (2015). Privacy and human behavior in the age of information. <https://www.cmu.edu/dietrich/sds/docs/loewenstein/PrivacyHumanBeh.pdf>

Akbari, M., Salehi, K., & Samadi, M. (2015). Brand Heritage and Word of Mouth: The Mediating Role of Brand Personality, Product Involvement and Customer Satisfaction. *Journal of Marketing Management (JMM)*, 3(1). <https://doi.org/10.15640/jmm.v3n1a8>

Arfi, W. B., Nasr, I. B., Kondrateva, G., & Hikkerova, L. (2021). The role of trust in intention to use the IoT in eHealth: Application of the modified UTAUT in a consumer context. *Technological Forecasting and Social Change*, 167, 120688. <https://doi.org/10.1016/j.techfore.2021.120688>

Ashfaq, M., Yun, J., Yu, S., & Loureiro, S. M. C. (2020). I, Chatbot: Modeling the determinants of users' satisfaction and continuance intention of AI-powered service agents. *Telematics and Informatics*, 54, 101473. <https://doi.org/10.1016/j.tele.2020.101473>

Baier, D., Rese, A., & Röglinger, M. (2018). Conversational User Interfaces for Online Shops? A Categorization of Use Cases. <https://www.semanticscholar.org/paper/Conversational-User-Interfaces-for-Online-Shops-A-Baier-Rese/ba081bf6603d6a88412114b4b69ab0b7921e8d70>

Balakrishnan, J., & Dwivedi, Y. K. (2021). Conversational commerce: entering the next stage of AI-powered digital assistants. *Annals of Operations Research*. <https://doi.org/10.1007/s10479-021-04049-5>

Balog, A., & Pribeanu, C. (2010). The Role of Perceived Enjoyment in the Students' Acceptance of an Augmented Reality Teaching Platform: a Structural Equation Modelling Approach. *Studies in Informatics and Control*, 19(3). <https://doi.org/10.24846/v19i3y201011>

Belanger, F., & Xu, H. (2015). The role of information systems research in shaping the future of information privacy. *Information Systems Journal*, 25(6), 573–578. <https://doi.org/10.1111/isi.12092>

Bentler, P. M., & Dudgeon, P. (1996). COVARIANCE STRUCTURE ANALYSIS: Statistical Practice, Theory, and Directions. *Annual Review of Psychology*, 47(1), 563–592. <https://doi.org/10.1146/annurev.psych.47.1.563>

Bhattacharjee, & Premkumar. (2004). Understanding Changes in Belief and Attitude toward Information Technology Usage: A Theoretical Model and Longitudinal Test. *MIS Quarterly*, 28(2), 229. <https://doi.org/10.2307/25148634>

Brill, T. M., Munoz, L., & Miller, R. J. (2019). Siri, Alexa, and other digital assistants: a study of customer satisfaction with artificial intelligence applications. *Journal of Marketing Management*, 35(15-16), 1401–1436. <https://doi.org/10.1080/0267257x.2019.1687571>

Byrne, B. M. (2013). *Structural Equation Modeling with AMOS*. Routledge. <https://doi.org/10.4324/9780203805534>

Caron, X., Bosua, R., Maynard, S. B., & Ahmad, A. (2016). The Internet of Things (IoT) and its impact on individual privacy: An Australian perspective. *Computer Law & Security Review*, 32(1), 4–15. <https://doi.org/10.1016/j.clsr.2015.12.001>

Cheng, Y., & Jiang, H. (2020). How Do AI-driven Chatbots Impact User Experience? Examining Gratifications, Perceived Privacy Risk, Satisfaction, Loyalty, and Continued Use. *Journal of Broadcasting & Electronic Media*, 64(4), 1–23. <https://doi.org/10.1080/08838151.2020.1834296>

Choi, H., Kim, Y., & Kim, J. (2011). Driving

factors of post adoption behavior in mobile data services. *Journal of Business Research*, 64(11), 1212–1217. <https://doi.org/10.1016/j.ibusres.2011.06.025>

Coskun-Setirek, A., & Mardikyan, S. (2017). Understanding the Adoption of Voice Activated Personal Assistants. *International Journal of E-Services and Mobile Applications*, 9(3), 1–21. <https://doi.org/10.4018/ijesma.2017070101>

Davis, F. D., Bagozzi, R. P., & Warshaw, P. R. (1992). Extrinsic and intrinsic motivation to use computers in the workplace. *Journal of Applied Social Psychology*, 22(14), 1111–1132. <https://doi.org/10.1111/j.1559-1816.1992.tb00945.x>

Ethem Alpaydin. (2014). *Introduction to machine learning*. The Mit Press.

Featherman, M. S., & Pavlou, P. A. (2003). Predicting e-services adoption: a perceived risk facets perspective. *International Journal of Human-Computer Studies*, 59(4), 451–474. [https://doi.org/10.1016/s1071-5819\(03\)00111-3](https://doi.org/10.1016/s1071-5819(03)00111-3)

Ganesan, S. (1994). Determinants of Long-Term Orientation in Buyer-Seller Relationships. *Journal of Marketing*, 58(2), 1. <https://doi.org/10.2307/1252265>

Gefen, D., Karahanna, E., & Straub, D. W. (2003). Trust and TAM in Online Shopping: An Integrated Model. *MIS Quarterly*, 27(1), 51–90. <https://doi.org/10.2307/30036519>

Giese, J. L., & Cote, J. A. (2000). Defining Consumer Satisfaction. https://cdn.ymaws.com/www.ams-web.org/resource/resmgr/original_amsr/giese01-2000.pdf

Goksel Canbek, N., & Mutlu, M. E. (2016). On the track of Artificial Intelligence: Learning with Intelligent Personal Assistants. *International Journal of Human Sciences*, 13(1), 592. <https://doi.org/10.14687/ijhs.v13i1.3549>

Goldfarb, A., Agrawal, A., & Gans, J. (2018, May 30). Google's AI Assistant Is a Reminder that Privacy and Security Are Not the Same. *Harvard Business Review*. <https://hbr.org/2018/05/googles-ai-assistant-is-a-reminder-that-privacy-and-security-are-not-the-same>

Hair, J., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). *Multivariate data analysis: a global perspective*. Pearson Education, Cop.

Han, S., & Yang, H. (2018). Understanding adoption of intelligent personal assistants. *Industrial Management & Data Systems*, 118(3), 618–636. <https://doi.org/10.1108/imds-05-2017-0214>

Harari, Y. N. (2015). *Sapiens: a brief history of humankind*. Vintage Books.

Hasan, R., Shams, R., & Rahman, M. (2020). Consumer trust and perceived risk for voice-controlled artificial intelligence: The case of Siri. *Journal of Business Research*. <https://doi.org/10.1016/j.ibusres.2020.12.012>

Hoy, M. B. (2018). Alexa, Siri, Cortana, and More: An Introduction to Voice Assistants. *Medical Reference Services Quarterly*, 37(1), 81–88. <https://doi.org/10.1080/02763869.2018.1404391>

Iyer, G., & Singh, S. (2016, April 1). Voluntary Product Safety Certification. *Papers.ssrn.com*. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3679313

Juniper Research. (2018). Digital Voice Assistants in Use to Triple to 8 billion by 2023, Driven by Smart Home Devices. *Juniperresearch.com*. <https://www.juniperresearch.com/press/digital-voice-assistants-in-use-to-8-million-2023>

Kim, H.-Y. (2013). Statistical notes for clinical researchers: Assessing normal distribution (2) using skewness and kurtosis. *Restorative Dentistry & Endodontics*, 38(1), 52–54. <https://doi.org/10.5395/rde.2013.38.1.52>

Kim, S. H. (2008). Moderating effects of Job Relevance and Experience on mobile wireless technology acceptance: Adoption of a smartphone by individuals. *Information & Management*, 45(6), 387–393. <https://doi.org/10.1016/j.im.2008.05.002>

Kini, A., & Choobineh, J. (1998, January 1). Trust in electronic commerce: definition and theoretical considerations. *IEEE Xplore*. <https://doi.org/10.1109/HICSS.1998.655251>

Kinsella, B. (2018, April 3). Over Half of Smartphone Owners Use Voice Assistants, Siri Leads the Pack. *Voicebot.ai*. <https://voicebot.ai/2018/04/03/over-half-of-smartphone-owners-use-voice-assistants-siri-leads-the-pack/>

Kinsella, B. (2019, June 21). Voice Assistant Demographic Data - Young Consumers More Likely to Own Smart Speakers While Over 60 Bias Toward Alexa and Siri. *Voicebot.ai*. <https://voicebot.ai/2019/06/21/voice-assistant-demographic-data-young->

consumers-more-likely-to-own-smart-speakers-while-over-60-bias-toward-alexa-and-siri/

Kiseleva, J., Williams, K., Jiang, J., Hassan Awadallah, A., Crook, A. C., Zitouni, I., & Anastasakos, T. (2016). Understanding User Satisfaction with Intelligent Assistants. *Proceedings of the 2016 ACM on Conference on Human Information Interaction and Retrieval - CHIIR '16*. <https://doi.org/10.1145/2854946.2854961>

Kokolakis, S. (2017). Privacy attitudes and privacy behaviour: A review of current research on the privacy paradox phenomenon. *Computers & Security*, 64, 122–134. <https://doi.org/10.1016/j.cose.2015.07.002>

Koon, L. M., McGlynn, S. A., Blocker, K. A., & Rogers, W. A. (2019). Perceptions of Digital Assistants from Early Adopters Aged 55+. *Ergonomics in Design: The Quarterly of Human Factors Applications*, 28(1), 16–23. <https://doi.org/10.1177/1064804619842501>

Kowalczyk, P. (2018). Consumer acceptance of smart speakers: a mixed methods approach. *Journal of Research in Interactive Marketing*, 12(4), 418–431. <https://doi.org/10.1108/jrim-01-2018-0022>

Krasnova, H., Günther, O., Spiekermann, S., & Koroleva, K. (2009). Privacy concerns and identity in online social networks. *Identity in the Information Society*, 2(1), 39–63. <https://doi.org/10.1007/s12394-009-0019-1>

Kumar, V. (2016). Introduction: Is Customer Satisfaction (Ir)relevant as a Metric? *Journal of Marketing*, 80(5), 108–109. <https://doi.org/10.1509/jm.80.5.1>

Kumar, V., Dixit, A., Javalgi, R. G., & Dass, M. (2015). Research framework, strategies, and applications of intelligent agent technologies (IATs) in marketing. *Journal of the Academy of Marketing Science*, 44(1), 24–45. <https://doi.org/10.1007/s11747-015-0426-9>

Lee, H., Park, H., & Kim, J. (2013). Why do people share their context information on Social Network Services? A qualitative study and an experimental study on users' behavior of balancing perceived benefit and risk. *International Journal of Human-Computer Studies*, 71(9), 862–877. <https://doi.org/10.1016/j.ijhcs.2013.01.005>

Liang, T.-P., Lai, H.-J., & Ku, Y.-C. (2006). Personalized Content Recommendation and User Satisfaction: Theoretical Synthesis and Empirical Findings. *Journal of Management Information Systems*, 23(3), 45–70. <https://doi.org/10.2753/mis0742-1222230303>

Liao, Y., Vitak, J., Kumar, P., Zimmer, M., & Kritikos, K. (2019). Understanding the Role of Privacy and Trust in Intelligent Personal Assistant Adoption. https://mobileprivacy.umd.edu/wp-content/uploads/2019/01/Liao_et al-2019-iconference.pdf

Lichtenthaler, U. (2018). Beyond artificial intelligence: why companies need to go the extra step. *Journal of Business Strategy*. <https://doi.org/10.1108/jbs-05-2018-0086>

Loureiro, S. M. C., Cavallero, L., & Miranda, F. J. (2018). Fashion brands on retail websites: Customer performance expectancy and e-word-of-mouth. *Journal of Retailing and Consumer Services*, 41, 131–141. <https://doi.org/10.1016/j.jretconser.2017.12.005>

Luhmann, N., & Schorr, K. E. (1979). „Kompensatorische Erziehung “unter pädagogischer Kontrolle? *Bildung Und Erziehung*, 32(jg), 551–570. <https://doi.org/10.7788/bue-1979-jg53>

Marikyan, D., Papagiannidis, S., Rana, O. F., Ranjan, R., & Morgan, G. (2022). “Alexa, let’s talk about my productivity”: The impact of digital assistants on work productivity. *Journal of Business Research*, 142, 572–584. <https://doi.org/10.1016/j.jbusres.2022.01.015>

Minta, Y. (2018). Link between Satisfaction and Customer Loyalty in the Insurance Industry: Moderating Effect of Trust and Commitment. *Journal of Marketing Management*, 6(2), 2333–6099. <https://doi.org/10.15640/jmm.v6n2a3>

Moriuchi, E. (2019). Okay, Google! An empirical study on voice assistants on consumer engagement and loyalty. *Psychology & Marketing*, 36(5), 489–501. <https://doi.org/10.1002/mar.21192>

Morosan, C. (2010). Theoretical and Empirical Considerations of Guests' Perceptions of Biometric Systems in Hotels. *Journal of Hospitality & Tourism Research*, 36(1), 52–84. <https://doi.org/10.1177/1096348010380601>

Niehaves, B., & Plattfaut, R. (2014). Internet adoption by the elderly: employing IS technology acceptance theories for understanding the age-related digital divide. *European*

Journal of Information Systems, 23(6), 708–726. <https://doi.org/10.1057/ejis.2013.19>

Olson, C., & Kemery, K. (2019, April). The 2019 Voice Report. Microsoft Advertising. <https://about.ads.microsoft.com/en-us/insights/2019-voice-report>

Pal, D., Arpnikanondt, C., Funilkul, S., & Razzaque, M. A. (2020). Analyzing the adoption and diffusion of voice-enabled smart-home systems: empirical evidence from Thailand. Universal Access in the Information Society. <https://doi.org/10.1007/s10209-020-00754-3>

Pal, D., Funilkul, S., & Vanijja, V. (2018). The future of smartwatches: assessing the end-users' continuous usage using an extended expectation-confirmation model. Universal Access in the Information Society. <https://doi.org/10.1007/s10209-018-0639-z>

Patil, P., Tamilmani, K., Rana, N. P., & Raghavan, V. (2020). Understanding consumer adoption of mobile payment in India: Extending Meta-UTAUT model with personal innovativeness, anxiety, trust, and grievance redressal. International Journal of Information Management, 54, 102144. <https://doi.org/10.1016/j.ijinfomgt.2020.102144>

Peter, J. P., & Tarpey, L. X. (1975). Peter, J.P. and Tarpey, L.X. (1975) A Comparative Analysis of Three Consumer Decision Strategies. Journal of Consumer Research, 2, 215-224. - References - Scientific Research Publishing. www.scirp.org. [https://www.scirp.org/\(S\(351jmbntvnsjt1aadkposzje\)\)/reference/ReferencesPapers.aspx?ReferenceID=1471951](https://www.scirp.org/(S(351jmbntvnsjt1aadkposzje))/reference/ReferencesPapers.aspx?ReferenceID=1471951)

Poushneh, A. (2021). Humanizing voice assistant: The impact of voice assistant personality on consumers' attitudes and behaviors. Journal of Retailing and Consumer Services, 58, 102283. <https://doi.org/10.1016/j.jretconser.2020.102283>

Rainie, L. (2015, June 3). Privacy in the Digital Age. Pew Research Center: Internet, Science & Tech. <https://www.pewresearch.org/internet/2015/06/03/privacy-in-the-digital-age/>

Rajavi, K., Kushwaha, T., & Steenkamp, J.-B. E. M. (2019). In Brands We Trust? A Multicategory, Multicountry Investigation of Sensitivity of Consumers' Trust in Brands to Marketing-Mix Activities. Journal of Consumer Research, 46(4), 651–670. <https://doi.org/10.1093/jcr/ucz026>

Rauschnabel, P. A., He, J., & Ro, Y. K. (2018). Antecedents to the adoption of augmented reality smart glasses: A closer look at privacy risks. Journal of Business Research, 92, 374–384. <https://doi.org/10.1016/j.jbusres.2018.08.008>

Rego, L. L., Morgan, N. A., & Fornell, C. (2013). Reexamining the Market Share–Customer Satisfaction Relationship. Journal of Marketing, 77(5), 1–20. <https://doi.org/10.1509/jm.09.0363>

Rey-Moreno, M., Felício, J. A., Medina-Molina, C., & Rufín, R. (2018). Facilitator and inhibitor factors: Adopting e-government in a dual model. Journal of Business Research, 88, 542–549. <https://doi.org/10.1016/j.jbusres.2017.11.015>

Rogers, E. M. (2003). Diffusion of innovations (5th ed.). Free Press. (Original work published 1962)

Sakaluk, J. K., & Short, S. D. (2016). A Methodological Review of Exploratory Factor Analysis in Sexuality Research: Used Practices, Best Practices, and Data Analysis Resources. The Journal of Sex Research, 54(1), 1–9. <https://doi.org/10.1080/00224499.2015.1137538>

Seo, K. H., & Lee, J. H. (2021). The Emergence of Service Robots at Restaurants: Integrating Trust, Perceived Risk, and Satisfaction. Sustainability, 13(8), 4431. <https://doi.org/10.3390/su13084431>

Shen, L.-Q., Zang, X.-Y., & Cong, J.-Y. (2018). Nurses' satisfaction with use of a personal digital assistants with a mobile nursing information system in China. International Journal of Nursing Practice, 24(2), e12619. <https://doi.org/10.1111/ijn.12619>

Shin, D., Zhong, B., & Biocca, F. A. (2020). Beyond user experience: What constitutes algorithmic experiences? International Journal of Information Management, 52, 102061. <https://doi.org/10.1016/j.ijinfomgt.2019.102061>

Sloan, Knijnenburg, Raybourn, Cherry, Wilkinson, & Sivakumar. (2018). Death to the privacy calculus? SSRN Electronic Journal, 25, -. <https://doi.org/https://doi.org/10.2139/ssrn.2923806>

Smith, H., Dinev, T., & Xu, H. (2011). Information Systems Research. Journal of Strategic Information Systems, Journal of the Association for Information Systems,

35(4).

<https://misq.umn.edu/skin/frontend/default/misq/pdf/appendices/2011/SmithDinevXuAppendices.pdf>

Smith, S. (2019, February 12). Juniper Research: Digital Voice Assistants in Use to Triple to 8 Billion by 2023, Driven by Smart Home Devices. www.businesswire.com.

[https://www.businesswire.com/news/home/20190212005064/en/Juniper-Research-Digital-Voice](https://www.businesswire.com/news/home/20190212005064/en/Juniper-Research-Digital-Voice-Assistants-in-Use-to-Triple-to-8-Billion-by-2023-Driven-by-Smart-Home-Devices)

Statista. (2019). Global digital population 2019 | Statista. Statista; Statista. <https://www.statista.com/statistics/617136/digital-population-worldwide/>.

Strayer, D. L., Cooper, J. M., Turrill, J., Coleman, J. R., & Hopman, R. J. (2017). The smartphone and the driver's cognitive workload: A comparison of Apple, Google, and Microsoft's intelligent personal assistants. *Canadian Journal of Experimental Psychology/Revue Canadienne de Psychologie Expérimentale*, 71(2), 93–110. <https://doi.org/10.1037/cep0000104>

Sundar, S. S., & Kim, J. (2019). Machine Heuristic. *Proceedings of the 2019 CHI Conference on Human Factors in Computing Systems - CHI '19*. <https://doi.org/10.1145/3290605.3300768>

Sundar, S. S., & Marathe, S. S. (2010). Personalization versus Customization: The Importance of Agency, Privacy, and Power Usage. *Human Communication Research*, 36(3), 298–322. <https://doi.org/10.1111/j.1468-2958.2010.01377.x>

Tussyadiah, I. P., Zach, F. J., & Wang, J. (2020). Do travelers trust intelligent service robots? *Annals of Tourism Research*, 81, 102886. <https://doi.org/10.1016/j.annals.2020.102886>

Uzir, M. U. H., Al Halbusi, H., Lim, R., Jerin, I., Abdul Hamid, A. B., Ramayah, T., & Haque, A. (2021). Applied Artificial Intelligence and user satisfaction: Smartwatch usage for healthcare in Bangladesh during COVID-19. *Technology in Society*, 67, 101780. <https://doi.org/10.1016/j.techsoc.2021.101780>

Uzir, Md. U. H., Al Halbusi, H., Thurasamy, R., Thiam Hock, R. L., Aljaberi, M. A., Hasan, N., & Hamid, M. (2021). The effects of service quality, perceived value and trust in home delivery service personnel on customer satisfaction: Evidence from a developing country. *Journal of Retailing and Consumer Services*, 63, 102721. <https://doi.org/10.1016/j.jretconser.2021.102721>

Van der Heijden, H. (2004). User Acceptance of Hedonic Information Systems. *MIS Quarterly*, 28(4), 695–704. <https://doi.org/10.2307/25148660>

Venkatesh, V., & Bala, H. (2008). Technology Acceptance Model 3 and a Research Agenda on Interventions. *Decision Sciences*, 39(2), 273–315. <https://doi.org/10.1111/j.1540-5915.2008.00192.x>

Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003). User Acceptance of Information Technology: Toward a Unified View. *MIS Quarterly*, 27(3), 425–478. <https://doi.org/10.2307/30036540>

Venkatesh, V., Thong, J., & Xu, X. (2016). Unified Theory of Acceptance and Use of Technology: A Synthesis and the Road Ahead. *Journal of the Association for Information Systems*, 17(5), 328–376. <https://doi.org/10.17705/1jais.00428>

Wang, E. S.-T., & Lin, R.-L. (2016). Perceived quality factors of location-based apps on trust, perceived privacy risk, and continuous usage intention. *Behaviour & Information Technology*, 36(1), 1–9. <https://doi.org/10.1080/0144929x.2016.1143033>

Wise, J. (2016, September). The Rise of Intelligent Agents. *Forrester*. <https://www.forrester.com/report/The-Rise-Of-Intelligent-Agents/RES128047>

Wollerton, M. (2019, June 9). Alexa, Google Assistant and Siri will get smarter this year. Here's how. *CNET*. <https://www.cnet.com/home/smart-home/alexa-vs-google-assistant-vs-siri-the-state-of-voice-after-google-io-and-wwdc-2019/>

Yagoda, R. E., & Gillan, D. J. (2012). You Want Me to Trust a ROBOT? The Development of a Human–Robot Interaction Trust Scale. *International Journal of Social Robotics*, 4(3), 235–248. <https://doi.org/10.1007/s12369-012-0144-0>

Yen, C., & Chiang, M.-C. (2020). Trust me, if you can: a study on the factors that influence consumers' purchase intention triggered by

chatbots based on brain image evidence and self-reported assessments. Behaviour & Information Technology, 1–18. <https://doi.org/10.1080/0144929x.2020.1743362> Yu, J., Lee, H., Ha, I., & Zo, H. (2017). User acceptance of media tablets: An empirical examination of perceived value. Telematics and Informatics, 34(4), 206–223. <https://doi.org/10.1016/j.tele.2015.11.004>

Appendix A: Appendix A1. Control variables measurements:

Variable	Questionnaire
Country of origin	To what extent do you agree to the following statements? 1. I find voice-based digital assistants useful in my daily life. 2. Using a voice-based digital assistant increases my chances of achieving tasks that are important to me. 3. Using a voice-based digital assistant helps me accomplish tasks more quickly. 4. Using voice-based digital assistant increases my productivity
Age	How old are you? 1. Less than 25 years old 2. 25–35 years old 3. 36–45 years old 4. 46–55 years old 5. 56 years old or more
Gender	What is your gender? 1. Male 2. Female
Type of digital assistant used	What is the type of digital assistant that you use? 1. Google 2. Siri 3. Alexa 4. Bixby 5. Others (please specify)
Years of use	How long have you been using the digital assistant? 1. 1 year ago, or less 2. 2 years ago 3. 3 years ago 4. 4 years ago 5. 5 years ago, and more

Appendix B: Appendix B1. Factor analysis and factor loadings:

Variable	Component				
	1	2	3	4	5
Consumers satisfaction					
Happy.	.794				
Delighted.	.722				
Pleased.	.722				

Satisfied.	.718				
That I should recommend it to my friends	.673				
Performance expectancy					
Using a voice-based digital assistant increases my chances of achieving tasks that are important to me.		.841			
I find voice-based digital assistants useful in my daily life.		.829			
Using voice-based digital assistant increases my productivity		.726			
Using a voice-based digital assistant helps me accomplish tasks more quickly.		.717			
Perceived privacy risks					
Data gathered by voice-based digital assistants could be made available to government agencies.			.862		
Data gathered by voice-based digital assistants could be given to unidentified persons or companies without my consent.			.841		
Data gathered by voice-based digital assistants may be sold to third parties.			.833		
Personal data in voice-based digital assistants may be misused.			.769		
Perceived enjoyment					
is fun				.877	
is pleasant				.813	
is enjoyable				.705	
Trust					
I believe that it is trustworthy.					.882
I trust that it is secure.					.791
I have overall trust in it.					.647
I trust that it is reliable.					.478

*Factor loadings below 0.45 are not shown. Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalisation. a. Rotation converged in 6 iterations.

Appendix B2. Descriptive statistics

	N	Min	Max	Mean	Std. Deviation	Skewness		Kurtosis	
						Statistics	Std.error	Statistics	Std.error
Country	193	1.00	2.00	4.65	.749	.667	.175	-.927	.348
Gender	193	1.00	2.00	1.52	.501	-.094	.175	-2.012	.348
Age	193	1.00	5.00	1.41	.813	2.220	.175	4.586	.348
Type	193	1.00	4.00	1.69	.625	.847	.175	2.074	.348
Experience	193	1.00	5.00	2.85	1.392	.239	.175	-1.169	.348
Valid N (listwise)	193								

Appendix B3. Demographics sample

Demographic		Frequency
Country	Indonesia	99
	Malaysia	62
	The Philippines	32
Gender	Male	92
	Female	101
Age	Less than 25 years	141
	25–35 years old	35
	36-45 years old	7
	46-55 years old	9
	56 years old or more	1
Type	Google Assistant	72
	Siri	112
	Alexa	5
	Bixby	4
Experience	1 year or less	39
	2 years	48
	3 years	45

	4 years	24
	5 years and more	37

Appendix B4. Correlation analysis - Pearson correlation matrix

	Performance expectancy	Perceived enjoyment	Trust	Consumers' satisfaction	Perceived privacy risk
Performance expectancy	1				
Perceived enjoyment	.533**	1			
Trust	.522**	.407**	1		
Consumers' satisfaction	.624**	.575**	.489**	1	
Perceived privacy risk	-.035	-.019	-.238**	-.007	1

**Correlation is significant at the 0.01 level

*Correlation is significant at the 0.05 level

Appendix B5. KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.867
Bartlett's Test of Sphericity	Approx. Chi-Square	2316.042
	df	190
	Sig.	<.001

Appendix B6. Reliability test - Cronbach Alpha

Variable	Variable Explanation	Cronbach Alpha
PEX	Performance expectancy	.889
PEN	Perceived enjoyment	.872
TRU	Trust	.808
PPR	Perceived privacy risk	.852
CSAF	Customers' satisfaction	.815

** . Correlation is significant at the 0.01 level (2-tailed)

* . Correlation is significant at the 0.05 (2-tailed)

Appendix B7. Multicollinearity test

	Collinearity Statistics
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Model	Tolerance	VIF
Performance expectancy	.591	1.691
Perceived enjoyment	.665	1.505
Trust	.651	1.537
Perceived privacy risk	.914	1.094
Country	.930	1.075
Age	.942	1.061
Gender	.960	1.042
Type	.983	1.017
Experience	.912	1.096

Employees Initial Education, Training, and Firm Internationalization Speed in Indonesian Firms



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Abstract: This study investigates how employees' initial education and training affect the speed with which Indonesian firms internationalize. We put our theories to the test using a longitudinal dataset of 30 major Indonesian firms that internationalized between 2015 and 2019 and have complete information on their employees' initial education and training. The results indicate that both initial education and specific training have a beneficial relationship with a firm's speed of internationalization. This implies that human capital investment plans can improve and develop personnel for the benefit of the organization through the firm's speed of internationalization.

Keywords: Internationalization Speed, Initial Education, Training, Human Capital, Firm

Introduction: Globalization has affected firms to compete internationally, therefore agility and speed become important components to gain an advantage against competitors (Tan & Mathews, 2015). The effect of internationalization on firm performance has been researched for many years (Chang & Rhee, 2011a; Chen et al., 2014; Jain et al., 2019). However, the significance of human

resource capabilities in terms of internationalization speed is not well understood. According to the resource-based point of view, acquiring intangible and tangible assets will result in a strong performance, allowing for internationalization (FIEGENBAUM et al., 1997). Human resource is an important resource for a firm (Backman, 2014). By taking that into account, there is a possible connection between human resource capabilities toward internationalization speed. Furthermore, there is evidence that more training improves firm performance in large US firms with a lower influence in the smaller firms (Storey, 2002). While according to HL Chen (2014) education levels of CEO have association in firms' international expansion. Therefore, human capital development and competencies are likely to be crucial resources for businesses to increase the speed of their internationalization. All companies focus on pursuing growth, whether it is in their financial performance (Claessens & Laeven, 2003), internal and external capabilities (Gupta et al., 2013), or customer equity (Lemon et al., 2001). As a result, the firm will improve its capabilities in every sector possible, including internal factors over which companies can exert greater control. On accelerated internationalization, the human capital of the entrepreneur or manager is heavily considered in studies. Oviatt and McDougall (1994) pointed out that one important aspect influencing early internationalization was the managerial "readiness" to global opportunities. Especially when making choices that affect how well the company performs. Although the entrepreneur plays a crucial role in SMEs, the impact of the company's human capital has received less attention (Onkelinx et al., 2012). According to Penrose's (Penrose, 1959) resource-based view, human resources are one of three important factors in the firm's growth. Consequently, with employees as the primary tangible assets of the firm's internal resources, it is reasonable for the firm to choose the best candidate who is capable of doing the job. According to Becker's (1962) foundational theory of human capital, a company's employees' competencies are acquired via education, experience, and training. Employees who are well-educated are desired in firms since they are more adaptable and open to new ideas (Kirca et al., 2010). Aside from that, education has a tremendous impact on a company's profitability, notably in the financial sector (Magoutas et al., 2011). Capable individuals undoubtedly contribute to firm growth and can be a valuable source of competitive advantages, each employee must first adapt to the firm's environment. As a result, investment comes to mind as a necessary action for assisting employees in effectively executing their jobs. One of the most significant instruments for assisting employees is training. Even the most capable individuals will struggle to adjust to their new surroundings if they are not prepared. As a result, training is essential and will positively affect the firm's development (GONTKOVIČOVÁ & DUŠOVÁ SPIŠÁKOVÁ, 2015; Knoke & Kalleberg, 1994; Lucas, 1993). Based on the resource-based perspective, a number of studies describe the impact of specific resources on the internationalization of SMEs (Dhanaraj & Beamish, 2003; Westhead et al., 2001). Management abilities are required for capitalizing on opportunities for foreign development, managing procedures and relationships in unfamiliar environments, and building routines that facilitate overseas subsidiaries (Westhead et al., 2001). Human resources have a significant impact on the internationalization process. A relevant internal resource barrier to exporting has been identified as a lack of qualified staff (Rabino, 1980). As, a matter of fact, we argue that education and training of employee are important in firm speed of internationalization. Companies nowadays require employees who are responsive to technological change and understand the company's vision and mission (Sinaga & Putra, 2021). Nonetheless, many developing countries, including Indonesia, continue to lack highly qualified teachers (Agustang et al., 2021; Priscilla, n.d.), limiting student potential and likely to result in the loss of talented human resources (Agustang et al., 2021). Getting highly skilled and capable employees is no easy task either. Even highly educated employees would struggle if they lack the skill to do the jobs. Furthermore, the relationships between human resource capability and the effect on the firm's internationalization speed are not well understood, particularly in developing countries like Indonesia. Other Southeast Asian countries, such as Thailand, the Philippines, and Malaysia, have managed to improve their

international standing. Indonesia squandered numerous opportunities to expand in the international market (Sinaga & Putra, 2021) As a result, there is a lack of information, particularly about Indonesia's speed of internationalization. Therefore, the research will be critical to conduct because rapid internationalization can result in enhanced worldwide performance for Indonesian firms. By focusing on employee knowledge and development, the research will connect and deepen understanding of human capital toward internationalization speed. Furthermore, the research will expand opportunities in Indonesian international business. Some examples are the chance of addition by the government on the policies to increase the international process (Meilani, 2019), firm better training strategies, and motivating better learning, which may improve Indonesia's agility in internationalizing. As a result, we analyse our research questions using a customized longitudinal data set we developed utilizing publicly available data. Consequently, we applied Generalized least squares (GLS) to examine the effect on 30 prominent Indonesian enterprises listed on the Indonesia stock exchange. Furthermore, to mitigate the effects of COVID-19, the dataset includes information on the internationalization of the biggest publicly traded Indonesian corporations between 2015 and 2019. Fig. 1 offers the conceptual framework examined in this paper.

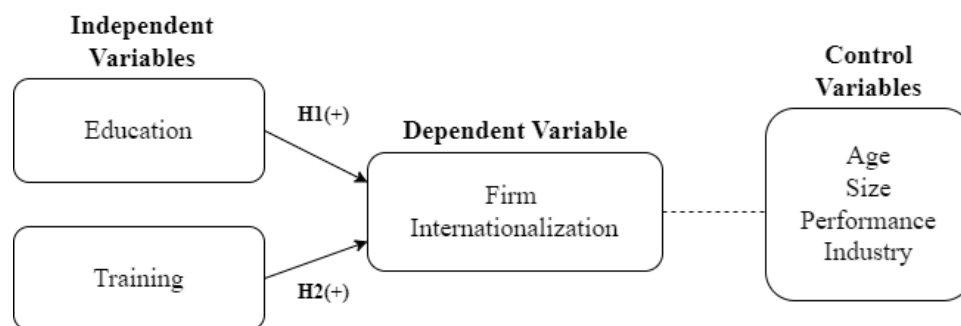


Fig. 1. Theoretical Model

The following is how the paper will be organized. The second section will be a review of the literature. The third section is where the hypothesis then developed. In the fourth section, we will describe the method and test the developed hypothesis. Finally, the last section we will discuss findings and conclusions, with a plan for future research that addresses the research limitations.

Literature Review: 1. Training and Education: The Resource-based view (RBV) of strategic management explains the connection between valuable, rare, and difficult to imitate (Barney, 1991). Moreover, superior idiosyncratic resources firms will have better performance. As human capital is one such resource, which is an intangible resource that individuals possess (Becker, 1964). Human capabilities, skills, knowledge, and experience are intangible assets (Becker, 1964). The aggregation of human capital helps economic growth, especially at the macro-economic level (Lucas, 1993). With human capital as a direct impact as input, advanced productivity of educated people, better decision and organization will be an excellent value added (Gemmell, 1997). As human capital is the important main resource for a firm (Samagaio & Rodrigues, 2016). On top of that, better-trained workers tend to influence and upskill their team members (Baron and Kreps, 1999). Workers with a greater level of education, aptitude, and skill can participate in challenging, non-routine jobs and finish them swiftly while maintaining high-quality standards, enhancing the value of the company (Onkelinx et al., 2016). According to the knowledge-based view, the most strategically important resource is knowledge (Grant, 1996). In this regard, it's critical to emphasize how knowledge growth can result in a positive feedback loop whereby a firm is motivated to speed up its internationalization process by having more information (Morgan et al., 2012), which in turn boosts company knowledge and abilities. Rullani (2014) stated that knowledge is a resource that grows with use rather than depleting. As a result, by strengthening employees' organizational capabilities through training and education, management may develop human resources to be more valuable and sustainable, which will undoubtedly help companies achieve their objectives (Noe et al., 2007). There is general and

specific training (Chapman, 1993), usually, general training knowledge can be learned and transferred outside the firm, such as through education and work experience. While specific training knowledge cannot be carried on to another place, as the knowledge only works in specific methods or due to the familiarity need of certain instruments. Penrose (1959) defines a firm as a collection of productive resources that differ significantly between firms and cause firms to behave differently even when faced with the same business opportunity. Therefore, firms will employ people with highly general knowledge, as generated capability from previous learning will be a great foundation to further improve skill and talent through on-the-job training (Ployhart et al., 2011). Then, upskilling employees with specific training is an investment to reduce turnover and a longer period of time to receive the return. Understanding the process of getting the framework of knowledge and skills is the meaning of education. In general, education is the preparation to become a candidate for a corporation or institution whereas training is associated with the development of skills or workers' capabilities in the workplace (Notoadmodjo, 1998). Moreover, education is connected to the development of general knowledge and understanding of the surrounding, while training focuses on improving knowledge and skills (Flippo, 1979). Similarly, education may be a need to boost one's cognition together with the improvement of theory and talent mastery by formulating varied problems regarding activities within the accomplishment of goals (Hidayat & Budiartma, 2018). While training and education are associated with individualist conceptualization of the globe, many tend to focus on the individual side and exclude the additional collectivist ideas of learning, like learning in groups, organizations, and also the community (Pinnington & Edwards, 2000). Based on the definitions, we can conclude that training and education are different, however, they have a close connection. Education is theoretical knowledge while training is the application of advanced knowledge. Despite the fact that they totally different but they have the same purpose to improve performance.

2. Internationalization Speed: Internationalization speed has been researched by a lot of people, especially in international business. Numerous studies have introduced speed as another similar concept, such as accelerated (Bangara et al., 2012; Mathews & Zander, 2007; Weerawardena et al., 2007), rapid (Chandra et al., 2012; Loane et al., 2007), and pace (Lin, 2012; Vermeulen et al., 2002). According to Vermeulen and Barkema (2002), internationalization speed is the quantity of a company's international expansion during a specific time frame. Autio, Sapienza, and Almeida then mention the "time lag between the founding of a firm and the initiation of international operations" (2000, p. 909). While Casillas and Acedo (2013) determine a relationship between time and a company's foreign events as the speed of the internationalization process. However, time has rarely been seen as a primary conceptual component, despite the fact that it is a key variable in the internationalization process and is increasingly seen as a crucial factor and a limited resource for internationalizing enterprises to manage (Chetty et al., 2014; Jones et al., 2005). Oviatt and McDougall's pioneering study from 2005 and Casillas and Acedo's (2013) work on the different dimensions of internationalization speed have had an impact. As Oviatt and McDougall make time become commonly utilized as a predictor of knowledge accumulation. An early study on a company's internationalization (e.g., Bilkey & Tesar, 1977; Johanson & Vahlne, 1977) predicts a lengthy period of time between the company's founding and its first international sales, and that further internationalization will have an incremental change. However, the fast pace of internationalization such as born global (Melén & Nordman, 2009) and international new ventures (INV) (Moen & Servais, 2002) has made us aware of the fact that many firms internationalize quickly in their early years. Since access to new knowledge and location-specific assets is one of the multinational corporations' goals when expanding abroad. Moreover, this will reduce the negative consequences of knowledge depreciation and assist in expanding their existing knowledge base (Guillén & Garcia-Canal, 2009). Nevertheless, the frameworks proved insufficient for defining such ventures. Therefore, the international new venture proposed by Oviatt and McDougall (1994) explains significant competitive

advantage through the use of resources and the sale of outputs in multiple countries from the start. Different internationalization techniques are available for businesses; some decide to focus on growing one country at a time while others prefer to take on several at once (Sleuwaegen & Onkelinx, 2010; Tellis & Stremersch, 2004). Despite the inherently higher risk of quick internationalization, companies are increasingly seeking to internationalize by tackling multiple nations at once. By concurrently expanding worldwide in a number of areas, businesses can increase revenue by exploiting economies of scale in R&D and manufacturing. Having a significant first-mover advantage may result from entering markets before rivals (Lieberman & Montgomery, 1988). Additionally, there may be strategic windows of opportunity in some industries (Abell, 2018), and to succeed, companies must enter and establish a competitive position during those relatively brief windows of time before competition intensifies and entry becomes less attractive. Mascarenhas (1997) discovered empirically that dominating a market early led to higher long-term international market shares and survival rates. Despite how alluring it can seem, faster internationalization through resource-intensive foreign market diversification is a dangerous strategy. Company faces fresh competitors and institutional constraints with every new market it chooses to join, which raises uncertainty (Johanson & Vahlne, 1977). Additionally, company especially SME faces a liability of foreignness in each subsequent market, which is an inherent disadvantage in comparison to embedded local competitors (Hymer, 1976). As a result, SMEs must have a solid resource base and set of skills that will enable them to successfully overcome the obstacles to entering overseas markets as well as the risk associated with being foreign in the eyes of various local actors. There are many studies that correlate internationalization speed and performance (Hilmersson & Johanson, 2016; Jain et al., 2019; Review & 2014, 2014). Several explain resources as moderating effects (Chang & Rhee, 2011b; Jain et al., 2019). However, there is a limited amount of information that explains the relationship between resources and internationalization speed especially, the human capital and its development. Therefore, we will approach the connection of the resources from their education.

3. Education and Internationalization Speed: Education is now recognized as a group learning process facilitated by an instructor. In this new educational environment, learner knowledge construction is synonymous with self-process, and learners gain knowledge by fully involving and cooperating with others (MacLellan et al., 2004). However, in a more globalized world, higher education must be viewed strategically from a global standpoint. In a competitive global economy, this makes the issue of providing quality higher education services critical (Gül et al., 2010). According to Hitt and Tyler (1991), the process and results of strategic decision-making are influenced by educational background. Moreover, an executive's cognitive base is shaped by people's educational background and functional work experience (Bantel & Jackson, 1989), as it may utilize some influence (Hambrick & Mason, 1984). According to some other studies, highly educated executives have greater cognitive complexity (Herrmann & Datta, 2005; Hitt & Tyler, 1991; Yavuz, 2021). Education improves one's ability to absorb new ideas and process information. As a result, higher education is associated with a greater capacity for information processing and a higher ability to differentiate between a variety of effects (Herrmann & Datta, 2005). Therefore, human resources will improve a firm's growth (Penrose, 1959) and according to the resource-based view, the development of the firm will allow internationalization to occur (Barney, 1991). However, according to the Republic of Indonesia's Ministry of Development Planning's Division (2014), the distribution of education in various regions of Indonesia faces a number of implementation challenges. Due to difficulties in obtaining education services in remote rural areas, education has not been widely spread. This could affect human capital capabilities and internationalization speed. As a result, we propose the following hypothesis: H1: Employee's initial education level will positively affect Indonesian firm's speed in internationalization.

4. Training and Internationalization Speed: Human resources are not only the foundation for a firm's long-term development, but they're also one of the most significant sources for acquiring and

maintaining a competitive advantage. Employees with professional skills and expertise can work with greater quality and efficiency, which improves firm performance and gives them a competitive advantage in the internationalization process (You et al., 2019). Since few people are hired with the comprehensive experience and expertise necessary for the job, training is designed to provide learners with the skills and competencies necessary for their current job (Fitzgerald, 1992). Becker (1962) offers a thorough explanation of human capital investment and the associated performance, wages, and employee mobility. The investment has not only provided an organization with competitive advantages (Salas & Cannon-Bowers, 2003), but it has also provided innovations and acquiring new knowledge technologies, as well as enhanced employee abilities, understanding, and firm performance. Moreover, employer-provided training can be viewed as a human capital investment, and as such, it can only be justified if the benefits outweigh the costs (Becker, 1962). Employees with creative minds can create new products or innovative ideas that aid in the internationalization of SMEs. (You et al., 2019). Furthermore, the effect can be amplified with training programs that help with international business expansion, improving a company's competitiveness and ability to manage international interactions (Pascucci et al., 2016). However, numerous studies have demonstrated that training has a significant impact on company performance (Bartel et al., 1995; Storey, 2002; Zwick, 2006). Since the investments complement one another, and the degree of internationalization is positively related to employees' general and specific training. This is because most skills can only be developed through a mix of experience and specialization, which can be obtained in part through education and in part through on-the-job experience (Becker, 1962). Furthermore, according to Autio et al. (2000) and Zahra et al. (2000), they are the same skill sets that have been identified in fast internationalizing organizations. However, according to a World Bank Enterprises survey, less than 10% of enterprises in Indonesia provide formal training. This figure is still lower than the percentage of companies actively boosting the competency of staff in neighbouring nations. For example, Vietnam receives 20%, the Philippines 60%, and China 80%. As a result, we offered the following hypothesis to help explain Indonesian firm training relations toward speed: H2: Employee's training positively affects Indonesian firms' speed in internationalization.

Methodology and Data: The studies will use data from the major Indonesian firms according to [Idnfinancial.com](http://idnfinancial.com). Indonesian companies were chosen since there is a lack of attention in the mainstream international business management literature despite being one of the fastest-growing emerging economies. We limit the sample to companies with annual reports and sufficient data for the research. In this case, the data will be taken in the span of 2015 until 2019, to reduce the influence of COVID-19. Moreover, since publicly available data, such as Orbis, do not provide complete information on their training costs. As a result, after reviewing the annual reports of the top 200 Indonesian firms, we identify 30 Indonesian companies with foreign subsidiaries and complete training data. The firm's major industry is services, and the average age of 47.8 and age range of 8 to 124, with no missing values in the data set.

Measures: Dependent variable: Internationalization Speed, in accordance with Vermeulen and Barkema (2002), we assess the speed of internationalization by determining the average number of foreign subsidiaries annually, which is equal to the total number of foreign subsidiaries divided by the number of years since the company's first overseas expansion.

Independent variables: Training, we measure the training according to the firm annual training expenditures. Following Ballot (2001), the training expenditures will be divided by the number of firm employees. Numerous public websites did not include this information because the result is usually mixed in with other expenses. Therefore, we gather the information through respective companies' annual reports. Education is measured according to the percentage of employees with a university degree. Similarly, Magoutas (2011) counts the number of employees with universities degree on the total number of employees.

Control Variables: We will control the variables with firm performance in their profitability aspect. As using profit will be reasonable in measuring performance. We use firm return on asset (ROA) following Jung (2009) and Chang & Rhee (2011). It has also been demonstrated that older and larger firms are more internationally oriented than younger and smaller firms (Hitt et al., 1997; Kotabe et al., 2002; Zahra & Garvis, 2000). Therefore, it's important to put firm age (assessed by subtracting the year from the foundation year) and firm size (measured by the log of the number of employees) as controls (Jain et al., 2019). Moreover, we control the firm's industry as a dummy variable with a value of 1 belonging to the service industry and 0 to other and multiple industries.

Method of Analysis: Generalized least squares (GLS) models for panel data, with correction for heteroskedasticity and panel-specific autocorrelation, are used to test the arguments. This model works well with panel data because it is built to address a number of issues that are frequently related to the error structure of data of this nature (Bai et al., 2020). This is why it is frequently utilized in the literature. A Hausman Test was carried out to determine if fixed or random effects should be used. The results (Chi-Square = 48.75; $p = 0.000$) show that a fixed effect specification is suitable because the difference in the coefficients between the two models is consistent (Hausman, 1978). We tested the skewness of the variables and discovered that some of them are significantly skewed (performance, speed, and training). As a result, we performed the log transformation on the variables. There are three main models that were utilized to test the paper's arguments are described below in detail. Model 0 (M0) is consisted of the control variables. Model 1 (M1), examines the direct impact of education's rate of internationalization. The control variables and the independent variable of education build up the model. This will address the first hypothesis, which argues that a rise in education will positively affect internationalization speed. Then, model 2 (M2) is used to answer the second hypothesis, which suggests an increase in training will be found to be positively associated with internationalization speed. Finally, the independent and control variables are all included in the third model (M3) which is the full model.

Results: Table 1: Descriptive Statistics:

Variable	Obs	Mean	Std. Dev.	Min	Max
speed	150	.266	.281	0	2
ln training	150	13.441	2.364	8.263	16.91
education	150	.46	.276	.013	.901
performance	150	.046	.067	-.501	.2
size	150	3.748	.744	2.017	5.354
age	150	47.8	24.73	8	124
industry	150	.467	.501	0	1

Table 2: Correlations Table:

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)
(1) speed	1.000						
(2) training	0.077	1.000					
(3) education	0.133	0.185	1.000				
(4) performance	0.022	0.078	-0.037	1.000			
(5) size	-0.016	-0.330	-0.035	-0.069	1.000		
(6) age	0.007	0.138	0.198	0.008	0.458	1.000	
(7) industry	0.016	0.099	0.635	0.019	0.120	0.241	1.000

Table 3: Result of the GLS analysis on Internationalization Speed:

	(1)	(2)	(3)	(4)
VARIABLES	M0	M1	M2	M4
education		0.325***		0.296***

		(0.0217)		(0.0320)
ln_performance	0.0233*	0.0355***	0.0323***	0.0437***
	(0.0131)	(0.0125)	(0.0105)	(0.00855)
size	-0.00246	0.0318**	0.00630	0.0459***
	(0.0166)	(0.0143)	(0.0185)	(0.0161)
age	0.000189	-0.000684**	0.000179	-0.000829**
	(0.000465)	(0.000332)	(0.000503)	(0.000371)
industry	0.0515*	-0.0614***	0.0145	-0.0514***
	(0.0286)	(0.0179)	(0.0276)	(0.0183)
ln_training			0.0157***	0.00836**
			(0.00403)	(0.00347)
Constant	0.312***	0.158***	0.121	0.0426
	(0.0680)	(0.0592)	(0.0930)	(0.0754)
Wald X ²	9.89	484.13	32.10	240.28
Observations	134	134	134	134
Number of firms	30	30	30	30

Standard errors in parentheses *** p<0.01, ** p<0.05, * p<0.1

The first table presents descriptive statistics, whereas the second table provides correlations for the study's variables. A variance inflation factors (VIF) analysis was carried out to check for possible collinearity. The average and maximum VIFs are both significantly below the generally accepted cutoff point of 10, at 1.49 and 1.77, respectively (Kutner et al., 2004). The models that were generated coincide with those in the primary analyses. These findings imply that multicollinearity is not a significant problem for the analysis. We have already mentioned that our data are longitudinal. Therefore, the typical ordinary least square (OLS) models are inappropriate since the sample consists of repeated observations of the same firms across time and the premise of observational independence is obviously violated. To account for potential unequal error variances and for correlations between various mistakes, we use GLS as an extension of OLS. The results of the models, which are presented in Table 3, provide support for the first hypothesis (H1) and second hypothesis (H2). M0 is the explanation about control variables. M1 is the addition of the independent variable to the M0, which test the immediate impact on education. The results for the education variable across models are positive and significant (β :0.325, $p<0.01$), demonstrating that this variable has a positive direct impact on the firm internationalization speed. Consequently, it supported the first hypothesis. The second hypothesis is supported by M2, which argues that training seems to have a positive effect on a firm's speed of internationalization. The outcome, demonstrates that the variable of training has influence on speed (β : 0.0157, $p<0.01$). The conclusion is that there is a direct relationship between employee training and the speed of internationalization, and the hypothesis is therefore supported. Furthermore, we can see in the first model that the performance (β : 0.0355, $p<0.01$) and size (β :0.0318, $p<0.05$) from the control variable also have a positive, significant impact on speed, demonstrating that company performance did influence the speed of internationalization. While, the age (β : -0.001, $p<0.01$) and service industry (β : -0.0614, $p<0.01$) is marginally significant but it has a negative impact on speed. The results of the second model differ from those of M1, because the only significant variables are performance (β : 0.0323, $p<0.01$) and training (β : 0.0157, $p<0.01$). As a result, this demonstrates that company performance and training have an impact on the rate of internationalization. Finally, on the final model (M3), all of the variables are significant, indicating that the outcome is in line with the overall model.

Discussion: We examine how human capital, both tangible and intangible resources, affects the speed with which Indonesian firms internationalize. Then, we followed the studies based on a resource-based perspective and literature that emphasize accelerated internationalization and the importance of employee capabilities. When looking at the human capital of the employees, we

change our focus from the manager to those employees who, in the context of the firm, are directly involved in the overall guidance environment, judgement call, and strategy implementation of the company and thus are essential to the operations of the organization. The intangible resource of human capital or general human capital does enable rapid internationalization. This in line with previous work of human capital in the general and specific knowledge (Becker, 1962). According to our research, companies that employ skilled workers are, up to a point, more likely to be internationally diversified. Companies that pursue an accelerated internationalization plan frequently lack the time to build their own internationalization capabilities and must instead increase their organizational capacities through the individual expertise and talents contained in their human capital. This is especially true of SME businesses, which make up the majority of Indonesian companies. This is relevant to how Indonesian workers still lack digital and technological skills, which is harmful for businesses that seek to expand internationally (CNBC, 2022). As a result, highly educated employees are critical in such corporations. In agreement with how employee size affects internationalization, having more human capital does increase the amount of internationalization for these organizations. Moreover, the result can be correlated with Onkelinx et al. (2012) claims that there is a general human capital ceiling at which further investments in human capital have no positive effects on internationalization. In fact, because they are adversely correlated with internationalization, additional expenditures become ineffective after an optimal level of human capital buildup. In the relationship with speed of internationalization, the intangible resources of human resources as specialized knowledge outcome support our hypothesis. Contradict Onkelinx's (2012) conclusion that training has no effect on speed. This can be explained by the different sample used, as we took a sample from a major Indonesia firm with less financial constraints than a full SMEs companies with lesser ability to perform formal training, or whether the lack of formal training adopted in Indonesia may have an impact on the results. Employee motivation may also be regarded as a factor because many employees believe that training is merely for formalities. As a result, some people may exploit this situation to enhance their skills, while others may participate by demand, resulting in inefficient training.

Contribution: The international business research on the rate of internationalization and additional studies on the relationship with human capital were both influenced by this paper. Particularly in the first training of employees as it has a significant impact on increased speed, which can increase a firm's ability to compete in the market. Furthermore, by focusing on Indonesia as the primary research subject, the paper contributes to the body of knowledge on international business in Southeast Asia. Since many studies prefer to use data from Western companies rather than those from Southeast Asia (Ramos, 2011; Garcia-Garcia, 2017; Wagner, 2004).

Managerial and Policymaker Implication: The paper draws an important managerial implication. since it assists managers to make better judgments when examining their hiring procedures. Given that the quality of their human capital is likely to have an impact on the level of internationalization in their organization, SMEs that are pursuing a rapid internationalization plan would be wise to take into account the education and their formal training of their potential workers. Furthermore, we support for the development of policies that enable people to obtain training regardless of their age or level of education. As a result, Indonesians may have the ability to produce better human resources in order to compete on a global scale. Additionally, the manager would be wise to focus on any specific training requirements that the organization genuinely requires.

Limitations and Future Research: The project's limitations must be understood. First, it is challenging to determine whether the findings necessarily apply for other parts of the world since the analysis only includes 30 companies from Indonesia over a 5-year period (2015-2019). It is typical to conduct internationalization speed relations using a limited sample size (Jain et al., 2019; Vermeulen et al., 2002). However, adding more company samples or even additional countries will increase the range of our study. Furthermore, we mentioned that service is the major industry in our sample, but no

specific industry is stated because multiple industries are present. Having a focused industry for future research can improve the quality of the studies, especially in the technology sector, where globalization tends to occur (McDougall et al., 2003). Despite the fact that the majority of the companies are small and medium-sized enterprises (SMEs), the companies themselves may be more focused on one sort of industry in the future, and a comparison study may produce more precise results. Finally, the use of a moderator may have an intriguing influence on the study. The research itself opens up new opportunities for human capital in internationalization. As education becomes more detailed in terms of employee degrees, the variables can become more diverse. Simultaneously, scholars can evaluate the impact of education with an employee's degree from a foreign country, which may have a significant impact on the firm's internationalization. This also has an impact on specialized training as well, as scholars can conduct additional research on employee behavior in training that affects firm internationalization speed and elaborate on firm on-the-job training. Undoubtedly, there is still a lot to learn about company speed in internationalization. In this research, we have discussed a few concerns related to Indonesian firm speed in internationalization and human capital. By doing this, we have added to the discussion on internationalization and human capital in their tangible and intangible purposes. We are starting a new and fascinating conversation about the appropriate level of resource allocations with the threshold effects for universal human capital, and we hope that some other scholars will participate.

References: Abell, D. F. (2018). Strategic Windows. <https://doi.org/10.1177/002224297804200307>, 42(3), 21–26. <https://doi.org/10.1177/002224297804200307> Agustang, A., Mutiara, I., & Asrifan, A. (2021). Masalah Pendidikan di Indonesia. <https://osf.io/preprints/9xs4h/> An Examination of Barriers to Exporting Encountered by Small Manufacturing Companies on JSTOR. (n.d.). Retrieved January 8, 2023, from <https://www.jstor.org/stable/40245537> Autio, E., Sapienza, H. J., & Almeida, J. G. (2000). Effects of age at entry, knowledge intensity, and imitability on international growth. *Academy of Management Journal*, 43(5), 909. <https://doi.org/10.2307/1556419> Backman, M. (2014). Human capital in firms and regions: Impact on firm productivity. *Papers in Regional Science*, 93(3), 557–575. <https://doi.org/10.1111/PIRS.12005> Bai, J., Choi, S. H., & Liao, Y. (2020). Feasible Generalized Least Squares for Panel Data with Cross-sectional and Serial Correlations. Ballot, G., Fakhfakh, F., economics, E. T.-L., & 2001, undefined. (2001). Firms' human capital, R&D and performance: a study on French and Swedish firms. *Elsevier*, 8, 443–462. <https://www.sciencedirect.com/science/article/pii/S0927537101000380> Bangara, A., Freeman, S., & Schroder, W. (2012). Legitimacy and accelerated internationalisation: An Indian perspective. *Journal of World Business*, 47(4), 623–634. <https://doi.org/10.1016/J.JWB.2011.09.002> Bantel, K. A., & Jackson, S. E. (1989). Top management and innovations in banking: Do the composition of the top team make a difference? *Strategic Management Journal*, 10(S1), 107–124. <https://doi.org/10.1002/SMJ.4250100709> Barney, J. (1991). Firm Resources and Sustained Competitive Advantage. *Journal of Management*, 17(1), 99–120. <https://doi.org/10.1177/014920639101700108> Baron, J. N., & Kreps, D. M. (1999). Consistent human resource practices. *California Management Review*, 41(3). Bartel, A. P., Bartel, & P, A. (1995). Training, Wage Growth, and Job Performance: Evidence from a Company Database. *Journal of Labor Economics*, 13(3), 401–425. <https://doi.org/10.1086/298380> Becker, G. S. (1962). Investment Human Capital: A Theoretical Analysis. *The Journal of Political Economy*. *The Journal of Political Economy*, 70, 9–49. Becker, G. S. (1964). Human Capital: A Theoretical and Empirical Analysis with Special Reference to Education, First Edition. <https://www.nber.org/books-and-chapters/human-capital-theoretical-and-empirical-analysis-special-reference-education-first-edition> Bilkey, W. J., & Tesar, G. (1977). The Export Behavior of Smaller-Sized Wisconsin Manufacturing Firms. *Journal of International Business Studies* 1977 8:1, 8(1), 93–98. <https://doi.org/10.1057/PALGRAVE.JIBS.8490783> Casillas, J. C., & Acedo, F. J. (2013). Speed in the Internationalization Process of the Firm. *International Journal of Management Reviews*, 15(1), 15–

29. <https://doi.org/10.1111/J.1468-2370.2012.00331.X> Chandra, Y., Styles, C., & Wilkinson, I. F. (2012). An opportunity-based view of rapid internationalization. *Journal of International Marketing*, 20(1), 74–102. <https://doi.org/10.1509/JIM.10.0147> Chang, S. J., & Rhee, J. H. (2011a). Rapid FDI expansion and firm performance. *Journal of International Business Studies*, 42(8), 979–994. <https://doi.org/10.1057/JIBS.2011.30/FIGURES/2> Chang, S. J., & Rhee, J. H. (2011b). Rapid FDI expansion and firm performance. *Journal of International Business Studies*, 42(8), 979–994. <https://doi.org/10.1057/JIBS.2011.30/FIGURES/2> Chapman, R. A. (1993). Civil Service Recruitment: Fairness or preferential advantage? *Public Policy and Administration*, 8(2), 68–73. https://doi.org/10.1177/095207679300800206/ASSET/095207679300800206.FP.PNG_V03 Chen, Y., Jiang, Y., Wang, C., & Hsu, W. C. (2014). How do resources and diversification strategy explain the performance consequences of internationalization? *Management Decision*, 52(5), 897–915. <https://doi.org/10.1108/MD-10-2013-0527> Chetty, S., Johanson, M., & Martín Martín, O. (2014). Speed of internationalization: Conceptualization, measurement and validation. *Journal of World Business*, 49(4), 633–650. <https://doi.org/10.1016/J.JWB.2013.12.014> Claessens, S., & Laeven, L. (2003). Financial Development, Property Rights, and Growth. *The Journal of Finance*, 58(6), 2401–2436. <https://doi.org/10.1046/J.1540-6261.2003.00610.X> Dhanaraj, C., & Beamish, P. W. (2003). A Resource-Based Approach to the Study of Export Performance. *Journal of Small Business Management*, 41(3), 242–261. <https://doi.org/10.1111/1540-627X.00080> EKONOMI DAN KEBIJAKAN PUBLIK Pusat Penelitian Badan Keahlian DPR Gd Nusantara I Lt, B. R., Jend Gatot Subroto, J., & Meilani Abstrak, H. (n.d.). KAJIAN SINGKAT TERHADAP ISU AKTUAL DAN STRATEGIS HAMBATAN DALAM MENINGKATKAN INVESTASI ASING DI INDONESIA DAN SOLUSINYA. FIEGENBAUM, A., SHAVER, J. M., & YEUNG, B. (1997). WHICH FIRMS EXPAND TO THE MIDDLE EAST: THE EXPERIENCE OF U.S. MULTINATIONALS. *Strategic Management Journal*, 18(2), 141–148. [https://doi.org/10.1002/\(SICI\)1097-0266\(199702\)18:2](https://doi.org/10.1002/(SICI)1097-0266(199702)18:2) Fitzgerald, W. (1992). Training versus development. *Training & Development*, 46(5), 81–84. <https://go.gale.com/ps/i.do?p=AONE&sw=w&issn=10559760&v=2.1&it=r&id=GALE%7CA12543003&sid=googleScholar&linkaccess=fulltext> Flippo, E. B. (1979). A Talk with Professor Flippo. *Asia Pacific Journal of Human Resources*, 17(2), 32–40. <https://doi.org/10.1177/103841117901700205> Gemmel, N., 1997. Externalities to higher education: a review of the new growth literature. National Committee of Inquiry into Higher Education, Higher Education in the Learning Society. HMSO, London. GONTKOVIČOVÁ, B., & DUŠOVÁ SPIŠÁKOVÁ, E. (2015). THE NECESSITY OF EMPLOYEE EDUCATION. *Modern Management Review*. <https://doi.org/10.7862/RZ.2015.MMR.10> Grant, R. M. (1996). Toward a knowledge-based theory of the firm. *Strategic Management Journal*, 17(S2), 109–122. <https://doi.org/10.1002/SMJ.4250171110> Guillén, M. F., & Garcia-Canal, E. (2009). The American model of the multinational firm and the “new” multinationals from emerging economies. *Academy of Management Perspectives*, 23(2), 23–35. <https://doi.org/10.5465/AMP.2009.39985538> Gül, H., Sallan Gül, S., Kaya, E., & Alican, A. (2010). Main trends in the world of higher education, internationalization and institutional autonomy. *Procedia - Social and Behavioral Sciences*, 9, 1878–1884. <https://doi.org/10.1016/J.SBSPRO.2010.12.417> Gupta, P. D., Guha, S., & Krishnaswami, S. S. (2013). Firm growth and its determinants. *Journal of Innovation and Entrepreneurship* 2013 2:1, 2(1), 1–14. <https://doi.org/10.1186/2192-5372-2-15> Hambrick, D. C., & Mason, P. A. (1984). Upper Echelons: The Organization as a Reflection of Its Top Managers. *The Academy of Management Review*, 9(2), 193. <https://doi.org/10.2307/258434> Herrmann, P., & Datta, D. K. (2005). Relationships between Top Management Team Characteristics and International Diversification: An Empirical Investigation*. *British Journal of Management*, 16(1), 69–78. <https://doi.org/10.1111/J.1467-8551.2005.00429.X> Hidayat, R., & Budiartma, J. (2018). Education and job training on employee performance. *International Journal of Social Sciences and Humanities*, 2(1), 171–181. <https://doi.org/10.29332/IJSSH.V2N1.140> Hilmersson, M., & Johanson, M. (2016). Speed of SME Internationalization and Performance. *Management International Review*, 56(1), 67–94.

<https://doi.org/10.1007/S11575-015-0257-4> Hitt, M. A., Hoskisson, R. E., & Kim, H. (1997). International Diversification: Effects on Innovation and Firm Performance in Product-Diversified Firms. *Academy of Management Journal*, 40(4), 767–798. <https://doi.org/10.5465/256948>

Hitt, M. A., & Tyler, B. B. (1991). Strategic decision models: Integrating different perspectives. *Strategic Management Journal*, 12(5), 327–351. <https://doi.org/10.1002/SMJ.4250120502>

Hymer, S.H. (1976) *The International Operations of National Firms: A Study of Direct Foreign Investment*. MIT Press, Cambridge.

Jain, N. K., Celo, S., & Kumar, V. (2019). Internationalization speed, resources and performance: Evidence from Indian software industry. *Journal of Business Research*, 95, 26–37. <https://doi.org/10.1016/J.JBUSRES.2018.09.019>

Johanson, J., & Vahlne, J. E. (1977). The Internationalization Process of the Firm—A Model of Knowledge Development and Increasing Foreign Market Commitments. *Journal of International Business Studies* 1977 8:1, 8(1), 23–32. <https://doi.org/10.1057/PALGRAVE.JIBS.8490676>

Jones, M., studies, N. C.-J. of international business, & 2005, undefined. (2005). Internationalisation: conceptualising an entrepreneurial process of behaviour in time. *Springer*, 36(3), 284–303. <https://doi.org/10.1057/palgrave.jibs.8400138>

Jung, J. C., & Bansal, P. (2009). How firm performance affects internationalization. *Management International Review*, 49(6), 709–732. <https://doi.org/10.1007/S11575-009-0014-7>

Kementerian Perencanaan Pembangunan Nasional / Bappenas. (n.d.). Retrieved January 6, 2023, from <https://sippn.menpan.go.id/pelayanan-publik/wilayah/kementerian-perencanaan-pembangunan-nasional--bappenas>

Kirca, A. H., Hult, G. T. M., Deligonul, S., Perry, M. Z., & Cavusgil, S. T. (2010). A Multilevel Examination of the Drivers of Firm Multinationality. <https://doi.org/10.1177/0149206310369177>, 38(2), 502–530. <https://doi.org/10.1177/0149206310369177>

Knoke, D., & Kalleberg, A. L. (1994). Job Training in U.S. Organizations. *American Sociological Review*, 59(4), 537. <https://doi.org/10.2307/2095930>

Kotabe, M., Srinivasan, S. S., & Aulakh, P. S. (2002). Multinationality and firm performance: The moderating role of r and d and marketing capabilities. *Journal of International Business Studies*, 33(1), 79–97. <https://doi.org/10.1057/PALGRAVE.JIBS.8491006/METRICKS>

Kutner, et al. (2004) *Applied Linear Statistical Models*. 4th Edition, McGraw-Hill, New York. <https://doi.org/10.5539/ibr.v4n1p241>

Lemon, K., Rust, R., management, V. Z.-M., & 2001, undefined. (n.d.). What drives customer equity? Researchgate.Net. Retrieved December 27, 2022, from https://www.researchgate.net/profile/Valarie-Zeithaml-2/publication/239592892_What_Drives_Customer_Equity_A_company%27s_current_customers_provide_the_most_reliable_source_of_future_revenues_and_profits/links/02e7e53cd16b191a4b000000/What-Drives-Customer-Equity-A-companys-current-customers-provide-the-most-reliable-source-of-future-revenues-and-profits.pdf

Lieberman, M. B., & Montgomery, D. B. (1988). First-mover advantages. *Strategic Management Journal*, 9(S1), 41–58. <https://doi.org/10.1002/SMJ.4250090706>

Lin, W. T. (2012). Family ownership and internationalization processes: Internationalization pace, internationalization scope, and internationalization rhythm. *European Management Journal*, 30(1), 47–56. <https://doi.org/10.1016/J.EMJ.2011.10.003>

Loane, S., Bell, J. D., & McNaughton, R. (2007). A cross-national study on the impact of management teams on the rapid internationalization of small firms. *Journal of World Business*, 42(4), 489–504. <https://doi.org/10.1016/J.JWB.2007.06.009>

Lucas, R. E. (1993). Making a Miracle. *Econometrica*, 61(2), 251. <https://doi.org/10.2307/2951551>

Maclellan, E., Review, R. S.-S. E., & 2004, undefined. (n.d.). Theory of learning or theory of education? A response to Smith. Strathprints.Strath.Ac.Uk. Retrieved December 14, 2022, from <https://strathprints.strath.ac.uk/5503/>

Magoutas, A., ... G. A.-I. J. of, & 2011, undefined. (2011). Education and firm performance. Empirical evidence from Greece. *Academia.Edu*, 8(2), 141–152. <https://www.academia.edu/download/8407699/04-Anastasios%20I.%20Magoutas%20%20George%20M.%20Agiomirgianakis.pdf>

Mascarenhas, B., Mascarenhas, & Briance. (1997). The order and size of entry into international markets. *Journal of*

Business Venturing, 12(4), 287–299. <https://EconPapers.repec.org/RePEc:eee:jbvent:v:12:y:1997:i:4:p:287-299> Mathews, J. A., & Zander, I. (2007). The international entrepreneurial dynamics of accelerated internationalisation. *Journal of International Business Studies*, 38(3), 387–403. <https://doi.org/10.1057/PALGRAVE.JIBS.8400271> McDougall, P. P., Oviatt, B. M., & Shrader, R. C. (2003). A Comparison of International and Domestic New Ventures. *Journal of International Entrepreneurship* 2003 1:1, 1(1), 59–82. <https://doi.org/10.1023/A:1023246622972> Melén, S., & Nordman, E. R. (2009). The internationalisation modes of Born Globals: A longitudinal study. *European Management Journal*, 27(4), 243–254. <https://doi.org/10.1016/J.EMJ.2008.11.004> Moen, Ø., & Servais, P. (2002). Born global or gradual global? Examining the export behavior of small and medium-sized enterprises. *Journal of International Marketing*, 10(3), 49–72. <https://doi.org/10.1509/JIMK.10.3.49.19540> Morgan, N. A., Katsikeas, C. S., & Vorhies, D. W. (2012). Export marketing strategy implementation, export marketing capabilities, and export venture performance. *Journal of the Academy of Marketing Science*, 40(2), 271–289. <https://doi.org/10.1007/S11747-011-0275-0/TABLES/5> Noe, R., Hollenbeck, J., Gerhart, B., & Wright, P. (2007). *Fundamentals of human resource management*. <https://www.gammaconstruction.mu/sites/default/files/webform/cvs/pdf-fundamentals-of-human-resource-management-raymond-noe-john-hollenbeck-barry-gerhart-patrick-wright-pdf-download-free-book-7e39f4c.pdf> Onkelinx, J., ... T. M.-F. of, & 2012, undefined. (n.d.). THE ROLE OF EMPLOYEE HUMAN CAPITAL IN THE ACCELERATED INTERNATIONALIZATION OF SMES: EMPIRICAL EVIDENCE FROM BELGIUM. Search.Ebscohost.Com. Retrieved December 13, 2022, from <https://search.ebscohost.com/login.aspx?direct=true&profile=ehost&scope=site&authtype=crawler&jrnl=07407416&AN=94340150&h=wN0BUOfpbrR2xYAIRL71O5vIGsrT1jO%2BDlq3JIHwXW6aTZ3HlhKPmer3mnglCvTkLjnWHPsH%2BUT%2FU8WCdZH0Ow%3D%3D&crl=c> Onkelinx, J., Manolova, T. S., & Edelman, L. F. (2016). The human factor: Investments in employee human capital, productivity, and SME internationalization. *Journal of International Management*, 22(4), 351–364. <https://doi.org/10.1016/J.INTMAN.2016.05.002> Oviatt, B. M., & McDougall, P. P. (2005). Defining international entrepreneurship and modeling the speed of internationalization. *Entrepreneurship: Theory and Practice*, 29(5), 537–554. <https://doi.org/10.1111/J.1540-6520.2005.00097.X> Oviatt, B.M., McDougall, P.P. (1994). Toward a Theory of International New Ventures. *Journal of International Business Studies*, Vol. 25 (1), pp. 45-64. (n.d.). Retrieved December 14, 2022, from <http://www.sciepub.com/reference/102390> Pascucci, F., ... V. T.-C. B., & 2016, undefined. (2016). A model to analyze small and medium enterprises' training needs related to the internationalization. Pdfs.Semanticscholar. Org, 15(1), 18–32. <https://doi.org/10.17265/1537-1506/2016.01.003> Pengembangan Sumber Daya Manusia / Notoatmodjo, Soekidjo | PERPUSTAKAAN UNIVERSITAS MUHAMMADIYAH MAKASSAR. (n.d.). Retrieved January 8, 2023, from <https://library.unismuh.ac.id/opac/detail-opac?id=104834> Penrose, E. (1959). *The theory of the growth of the firm*. John Wiley & Sons, New York. Penrose: The theory of the growth of the firm - Google Scholar. (n.d.). Retrieved December 14, 2022, from https://scholar.google.com/scholar_lookup?hl=en&publication_year=1959&pages=%00empty%00&author=E.+T.+Penrose&isbn=%00null%00&title=The+Theory+of+the+Growth+of+the+Firm Perusahaan RI Sulit Berkembang di Pasar Dunia, Apa Penyebabnya? - Bisnis Liputan6.com. (n.d.). Retrieved December 14, 2022, from <https://www.liputan6.com/bisnis/read/666022/perusahaan-ri-sulit-berkembang-di-pasar-dunia-apa-penyebabnya> Pinnington, A., & Edwards, T. (2000). *Introduction to Human Resource Management*. OUP Catalogue. <https://ideas.repec.org/b/oxp/obooks/9780198775430.html> Ployhart, R. E., van Iddekinge, C. H., & Mackenzie, W. I. (2011). Acquiring and developing human capital in service contexts: The interconnectedness of human capital resources. *Academy of Management Journal*, 54(2), 353–368. <https://doi.org/10.5465/AMJ.2011.60263097> Priscilla, D. (n.d.). “Permasalahan Pendidikan di

Indonesia." Review, H. C.-A. E. and F., & 2014, undefined. (2014). Independent directors' human capital and firm internationalization. *Archive.Aessweb. Com*, 4(10), 1378–1388. <https://archive.aessweb.com/index.php/5002/article/view/1265>

Rullani, E. (2014). Soft innovation in servicing and manufacturing View project. <https://www.researchgate.net/publication/242287952>

Salas, E., & Cannon-Bowers, J. A. (2003). The Science of Training: A Decade of Progress. <https://doi.org/10.1146/Annurev.Psych.52.1.471>, 52, 471–499.

<https://doi.org/10.1146/ANNUREV.PSYCH.52.1.471>

Samagaio, A., & Rodrigues, R. (2016). Human capital and performance in young audit firms. *Journal of Business Research*, 69(11), 5354–5359. <https://doi.org/10.1016/J.JBUSRES.2016.04.137>

Sleuwaegen, L. E., & Onkelinx, J. (2012). Internationalization Strategy and Performance of Small and Medium Sized Enterprises. *SSRN Electronic Journal*. <https://doi.org/10.2139/SSRN.1750048>

society, J. H.-E. J. of the econometric, & 1978, undefined. (n.d.). Specification tests in econometrics. *JSTOR*. Retrieved January 8, 2023, from <https://www.jstor.org/stable/1913827>

Storey, D. J. (2002). Education, training and development policies and practices in medium-sized companies in the UK: do they really influence firm performance? *Omega*, 30(4), 249–264. [https://doi.org/10.1016/S0305-0483\(02\)00035-X](https://doi.org/10.1016/S0305-0483(02)00035-X)

Tan, H., & Mathews, J. A. (2015). Accelerated internationalization and resource leverage strategizing: The case of Chinese wind turbine manufacturers. *Journal of World Business*, 50(3), 417–427. <https://doi.org/10.1016/J.JWB.2014.05.005>

Tellis, G. J., & Stremersch, S. (n.d.). Understanding and Managing International Growth of New Products. Retrieved January 6, 2023, from <https://papers.ssrn.com/abstract=904138>

Vermeulen, F., Journal, H. B.-S. M., & 2002, undefined. (2002). Pace, rhythm, and scope: Process dependence in building a profitable multinational corporation. *Wiley Online Library*, 23(7), 637–653. <https://doi.org/10.1002/smj.243>

Weerawardena, J., Mort, G. S., Liesch, P. W., & Knight, G. (2007). Conceptualizing accelerated internationalization in the born global firm: A dynamic capabilities perspective. *Journal of World Business*, 42(3), 294–306. <https://doi.org/10.1016/J.JWB.2007.04.004>

Westhead, P., Wright, M., & Ucbasaran, D. (2001). The internationalization of new and small firms: A resource-based view. *Journal of Business Venturing*, 16(4), 333–358. [https://doi.org/10.1016/S0883-9026\(99\)00063-4](https://doi.org/10.1016/S0883-9026(99)00063-4)

Yavuz, R. I. (2021). Founders' education, social capital, and their interplay in the intensity of new-venture internationalization. <https://doi.org/10.1080/00472778.2021.1913596>.

<https://doi.org/10.1080/00472778.2021.1913596>

You, Y., Wang, C., & Xu, D. (2019). The Impact of Resources of China's SMEs on Their Internationalization Performance. 308–312. <https://doi.org/10.2991/ICPCS-19.2019.68>

Zahra, S. A., & Garvis, D. M. (2000a). International corporate entrepreneurship and firm performance: The moderating effect of international environmental hostility. *Journal of Business Venturing*, 15(5–6), 469–492. [https://doi.org/10.1016/S0883-9026\(99\)00036-1](https://doi.org/10.1016/S0883-9026(99)00036-1)

Zahra, S. A., & Garvis, D. M. (2000b). International corporate entrepreneurship and firm performance: The moderating effect of international environmental hostility. *Journal of Business Venturing*, 15(5–6), 469–492. [https://doi.org/10.1016/S0883-9026\(99\)00036-1](https://doi.org/10.1016/S0883-9026(99)00036-1)

Zwick, T. (2006). The Impact of Training Intensity on Establishment Productivity. *Industrial Relations: A Journal of Economy and Society*, 45(1), 26–46. <https://doi.org/10.1111/J.1468-232X.2006.00412.X>

Proposed Business Strategy to Increase Cake Sales for Small Bakeries in Jakarta: Case Study of SBS Cake



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Abstract: Indonesia's cake industry is a red ocean, with 639 companies being registered in the baking industry and 68% of them being SMEs. With the cake industry expected to grow above 10% per year, it's inevitable that small bakeries will face stiffer competition year after year. SBS Cake is currently facing this challenge, where its cake sales have declined to an average of less than 20 cake orders per month. Hence, SBS Cake needs to find a new business strategy to increase its sales volume and profit. This paper has three research objectives: to understand SBS Cake's internal and external conditions, to identify SBS Cake's competitive advantage, to develop a business strategy plan. VRIO, PESTLE, Porter's Five Forces, 7P, STP, semi-structured interview, and ghost shopping were used to gather information about SBS Cake, its competitors, and the cake industry. Then, Jakarta's cake industry was segmented into six market segments using a potential area map, which are B2B Commercial Market (small and big), B2B Institutional Market (small and big), B2B Party and Event Market, and B2C Market. 14 people participated in the research, with three of them being interviewed using the ghost shopping technique. The interview questions were formed based on fourteen variables. From the findings, the business strategy was designed using SWOT-TOWS Matrix, Strategy Diamond Framework, and Business Model Canvas. Two hypotheses were formulated from the literature review. First, cake design is the most critical factor when deciding which custom cake store to buy from. Second, social media is an effective channel for selling custom cakes. From the research, we rejected the first hypothesis as cake design wasn't the most important factor when purchasing cakes and accepted the second hypothesis as social media is an effective channel for selling custom cakes. However, note that the second hypothesis only applies to custom cake sales to B2C customers. We also found that intrinsic cues, extrinsic cues, and sellers play an important role in a buyer's decision-making process for both B2C and B2B customers. Research also found that B2B Party and Event Planners Market has highest future profit potential among all segments. To target this market segment, we recommend using its existing cake menu and crafting a new hampers menu. However, it's also recommended not to let go of the B2C market segment due to its new and existing customers that place cake orders from SBS Cake.

Keywords: Cake Industry, Bakeries, Business Strategy, Cake Sales

I. Introduction: I.1. Background: The cake industry in Jakarta is a red ocean industry. In 2019, the bakery industry earned Rp85, 697,400,000,000 (or US\$6 billion), growing above 10% per year (EIBN, 2019). Furthermore, in 2015, there were 639 registered companies in Indonesia's bakery industry, which included medium and large companies (EIBN, 2019). The competition is even tighter among SMEs, with 68% of the bakery industry in Indonesia made up of SMEs (Elliott et al., 2019). With Indonesia's online shopper population predicted to increase by 45 million (to 65 million) in 2022, the

bakery industry is expected to become competitive in both offline and online channels (Nurhayati-Wolff, H., 2020). This is because baked goods have become a part of people's lifestyles, with most Indonesians preferring to eat snacks throughout the day and no longer having time to eat proper meals (Harsono, 2019). Consumption of baked goods per person in Indonesia is also expected to rise from 4.7 kilograms in 2019 to 6.6 kilograms in 2030 (Elliott et al., 2019). Thus, people prefer to gift customized cakes during special occasions as they can satiate the recipient's snacking needs and are more heartfelt. And with a huge population in Jakarta, a great number of people celebrate some special occasion every day – increasing the demand for cakes. Stores selling other types of food, like noodles and snacks, are also selling cake variants using their products, thus further increasing competition among cake producers.

I.2. Business Issue: SBS Cake is a small online-based cake store selling custom cakes, which include Korean cakes, letter cakes, and wedding cakes. SBS Cake has been experiencing a drop-in sales volume in 2022 to pre-pandemic levels despite seasonal specials and marketing efforts like launching Shopee and Instagram ads and social media updates. The economic downturn may have caused demand for cakes to decrease, but another possible stronger reason for this decline is that new custom Korean cake stores are now available near their houses, which allows them to pay cheaper delivery fees. But with the average cake sales at around Rp250,000 per cake, this means that receiving even as many as 20 cake orders would only earn SBS Cake Rp5 million. With COGS at around 40%, this means that SBS Cake will only earn Rp3 million in profit – which is even lower than the minimum wage and not enough to sustain even one person's living. Thus, SBS Cake needs to find a business strategy that can increase sales orders and, consequently, its revenue.

I.3. Research Questions & Objectives: With sales volume declining for SBS Cake, especially in 2022, the main purpose of this paper is to design the right business strategy that can boost SBS Cake's cake sales. To answer the main problem, there are several research questions and objectives that will be discussed in this paper.

I.3.1. Research Questions: Several questions that will be answered through this paper are as follows.

1. How to segment Jakarta's cake and dessert industry? 2. What segment should SBS Cake enter to increase its cake sales? 3. What are the current internal and external conditions of SBS Cake? 4. How does SBS Cake fare in comparison to its competitors in Jakarta? 5. How do co-creation stakeholder activities influence innovation in SBS Cake? 6. How are decisions being made in SBS Cake? 7. What business strategies should SBS Cake adopt to increase cake sales?

I.3.2. Research Objectives: The research questions, which are listed above, correspond to the following research objectives: 1. To understand the internal and external conditions of SBS Cake. 2. To identify and strengthen SBS Cake's competitive advantage in Greater Jakarta. 3. To develop a business strategy plan that allows SBS Cake to increase cake sales volume.

II. Literature Review: II.1. Theoretical Foundation: Integrating personal interaction with online shopping, better known as social commerce, is a phenomenon that is becoming more prevalent in recent years. For Lu, one main reason why social commerce is gaining traction is because of its capability to establish trust and emotional connection, as explained by the Social Presence Theory (Calefato et al., 2010; Lu et al., 2016; Yonathan, 2021). According to the theory, the ability to communicate with the seller virtually allows the buyers to feel satisfied and, in return, trust the sellers (Calefato et al., 2010). This is supported by the Media Richness Theory by Daft and Lengel which states how online communication allows the sellers to communicate and respond immediately to buyers, enabling sellers to build their presence online and consequently cause buyers to trust them (Calefato et al., 2010). That's why online shopping doesn't just occur on e-commerce platforms like Shopee and Tokopedia but also on social networking sites (SNS) like Instagram and WhatsApp where buyers can directly communicate with sellers. The cue utilization theory also explains how online shopping provides intrinsic cues (physical aspects of the product) and extrinsic cues (non-physical product features) that are critical to online shoppers' decision-making process (Olson and

Jacoby, 1972; Burnkrant, 1978; Karaatli and Veryzer, 2012). According to several studies, intrinsic cues like flavor (Wang et al., 2022) and visual appearance (Sriram et al., 2022) as well as extrinsic cues like price (Sriram et al., 2022), product review (Wang et al., 2016; Maia et al., 2022), and brand reputation (Maia et al., 2022) can influence one's purchasing decision. In the case of online purchases, since customers aren't able to physically evaluate the product quality, people will rely more on extrinsic cues to do so (Zeithaml, 1988). In fact, a study found that a high online rating can minimize the effect of price, and product ratings positively influence people's decision to buy the goods more frequently despite never personally seeing the items (Wang et al., 2016; Tang and Song, 2019). But with so many online sellers selling similar things, it becomes difficult for one to stand out. That's why other than trust, other factors like convenience and customer satisfaction are critical for online-based sellers (Banupriya & Rosita, 2022; Demirel, 2022). By selling products on platforms buyers prefer to shop on, customers will become more willing to shop from your store – which is why many brands tend to open online stores on many platforms. For example, you can shop Holland Bakery online via their own website as well as on GoFood, GrabFood, and Shopee Food. For smaller brands, selling on many platforms may not be enough. One thing that differentiates small or no-name brands from big brands like Holland Bakery is that people are unaware of the store – even if the sellers are contactable online and their products are available everywhere, buyers may still not opt to purchase from them. According to the Social Impact Theory, this can be overcome by external influence (Latané, 1981). This means enlisting influencers or consumers to share the products on their social media pages like Instagram and TikTok so that their followers, friends, or family are persuaded to buy (Bilgihan et al., 2014; Onofrei et al., 2022). Contrariwise to these theories and studies, Ko disagrees with the effectiveness of using social media for business purposes (Ko, 2018). According to Ko, unless users have the mindset of conducting transactions over social media, they'll be less likely to be influenced by posts or shares about products or brands (Ko, 2018). Hence, even if social commerce builds trust among sellers, social commerce may not be the best strategy for small businesses. But for most online-based cake stores in Indonesia, sales are usually conducted over Instagram and/or WhatsApp. Thus, it still needs to be analyzed if social media is an effective strategy for online-based cake businesses. Like other online businesses, customer satisfaction is also an essential aspect of online food delivery (Sidharta et al., 2021). The quality, service, and promotions provided by the online food business as well as the taste ratings and hygiene ratings given by customers will help potential customers decide whether or not to buy from the store (Sidharta et al., 2021; Wang et al., 2022). However, unlike regular online food businesses, a custom cake store sells not only the cake itself but also the design of the cake. Therefore, it still needs to be researched if the design is the most important factor for customers when choosing a custom cake store.

II.1.1. Hypothesis: From the literature review, several hypotheses will be tested out are: 1. Cake design is the most important factor when choosing a custom cake store. 2. social media is an effective channel for selling custom cakes.

II.1.2. Conceptual Framework: This paper builds on four theories, namely the social impact framework, social presence theory, media richness theory, and cue utilization theory, to explain customer behavior toward their decision journey, perception, and attitude toward online custom cake brands. According to the social presence theory, media richness theory, and cue utilization theory, custom cakes have three factors that can convince consumers to purchase them online – internal and external cues and the seller of the brand. In this case, internal cues are the cake designs. External cues include price, brand reputation (or the number of followers on social media), taste rating, and hygiene rating. While internal and external cues can sway buyers' purchase desire, sellers can convince customers to buy the custom cake online as they swiftly respond to the buyers and cause buyers to feel satisfied. After receiving the custom cake, people like to share their purchases or experience online (Bilgihan et al., 2014). The social impact framework states this external influence can convince people around them to buy custom cakes from the same brand, increasing

cake sales for the brand.

III. Research Methodology: III.1. Research Design: This paper uses a combination of internal and external analysis tools to answer the research questions and objectives and ultimately craft a new business strategy for SBS Cake. To understand the internal conditions of SBS Cake, we'll assess the core competencies of SBS Cake by analyzing its current resources using the VRIO framework – this framework will be able to inform us whether or not SBS Cake's resources provide them a sustainable competitive advantage. We'll also analyze SBS Cake using 7P to understand how decisions are being made and how co-creation stakeholder activities influence innovation in the business. To discover the external conditions of SBS Cake, we'll use PESTLE to understand how the conditions in Indonesia affect SBS Cake. PESTLE consists of political, economic, sociocultural, technological, legal, and ecological factors. Then, we'll use Porter's five forces to understand the business environment and competition related to SBS Cake, including its customers, competitors, suppliers, and the cake industry. We'll also dig further into SBS Cake's competitors by conducting a competitor analysis using STP and 7P. The results from the competitor analysis will be analyzed to discover their strengths and weaknesses, allowing us to take note what strategies worked for them, in which aspects we're still lacking in, and what aspect of SBS Cake are advantageous over the competitors. For consumer analysis, we segmented our potential customers into six segments. The segments are institutional market segment (food is usually sold for people in their organization), commercial market segment (businesses or organizations that buy baked goods to resell), party/event segments (businesses or organizations that partner with other businesses to create an event together and sell to other people), and regular customers (B2C). After knowing the segments, we conducted semi-structured interviews with potential consumers to understand their purchasing behavior toward custom cakes and desserts and if there are any business opportunities with that customer segment. These interviews will be analyzed using content analysis in order for us to gain insights into their decision-making behavior. However, for segments where we couldn't get enough samples to interview, we used ghost sampling to collect our data. Doing so allows us to receive some insight into the potential opportunities in that group, although not as in-depth as an interview, and collect data objectively. Furthermore, since it's less intrusive than interviews, the subject may be more willing to open up. From all the findings, we'll also use the TOWS Matrix, Strategy Diamond Framework, and Business Model Canvas to develop SBS Cake's new business strategy. The TOWS Matrix will first be used to determine what are SBS Cake's strengths, weaknesses, opportunities, and threats and what combination can be formed to boost SBS Cake's sales. Then, after deciding on a strategy, the Strategy Diamond Framework – consisting of arenas, vehicles, differentiators, staging, and economic logic – will be used to create a more comprehensive business strategy. Lastly, the business strategy plan will be completed by creating a new Business Model Canvas that aligns with the proposed business strategy and the implementation plan for the business strategies.

III. 2. Data Collection: This paper will adopt a qualitative method, namely interview and ghost shopping, to understand the opportunities available for SBS Cake in Pluit and its surrounding areas and create a business strategic plan. To know who to interview, we've first created a potential area map with the pickup points as the epicenters. In this case, there are two epicenters – at Pluit, Jakarta and Tangerang – because there are two delivery and pickup points. From this epicenter, a circle of 17 km in radius is drawn on Google Maps to discover potential customers for SBS Cake. 17 km is selected in order to include SBS Cake's customers that are located as far as 17 km away, for instance those in BSD and South Jakarta. After the potential area map has been made, the potential customers are segmented in three levels. The first level is determined based on the type of organization or business based on their customer types. Here, we got B2B (Business to Businesses) and B2C (Business to Customers). The second level is segmented by services types, which is applicable for B2B. Here, we got Institutional Market, Commercial Market, and Party and Event Planners. - Institutional Market consists of businesses or organizations that have a lot of people in their organization, where

baked goods are bought for people in their organization. - Commercial Market consists of businesses or organizations that buy baked goods or partner with baked goods brands to resell to their customers. - Party and Event Planners consists of businesses or organizations that partner with other businesses to create an event together and sell to other people. The third level is segmented based on the size of the organization or business, which are categorized as small and big. Small are those that have customers less than 500 people. Big are those whose customers are greater than 501 people. This level is only applicable to Institutional and Commercial Market because businesses in these categories are varied according to its population and business size. On the other hand, Party and Event Planners work with various people of different event or party sizes, depending on the requirements from the customers. This segmentation process created 6 segments – Institutional Market (small and big), Commercial Market (small and big), Party and Event Planners, and regular B2C customers. Each segment is represented by two to three businesses, organizations, or individuals. Then, we interviewed B2C and B2B customers to understand their behavior when purchasing snacks, desserts, and cakes and see if any of the nine dependent variables – taste rating, hygiene rating, price, recommendation (external influence), the responsiveness of seller (trust), cake design, reputation, convenience, and social media – affect their purchasing decision, and ultimately, cake sales (independent variable). For some of the B2B segments, some of the businesses weren't open to be interviewed. Therefore, ghost shopping was used to gather information from these segments, namely Commercial Market (big) and Party and Event Planners. As many businesses tend to want to keep their information secretive, most are unwilling to participate in an interview. To bypass this hurdle, ghost shopping will allow us to gain some insight into their behavior towards desserts and custom cakes without them realizing that we're gathering information. Furthermore, this can also increase the validity of our data because it's more objective. Data was collected from 8 to 30 November, sampling 13 respondents from B2C and B2B segments located within SBS Cake's potential area. Convenience sampling was used to collect data. Interviews were used for 10 of them, while the other three used ghost shopping as the data collection method.

VI. Results and Discussion: Based on the interviews and ghost shopping conducted with B2B and B2C customers to understand their purchasing needs, expectations, and other behavior, we were able to categorize the questions into 14 categories. From these categories, we found that the categories that makes most sense for SBS Cake to target are B2B Commercial Market (small), B2B Commercial Market (big), and Party and Event Planner. The B2B Commercial (small) market segment can be considered because they require baked goods, for example custom cakes, brownies, and croissant – things that are in line with what SBS Cake is currently selling. These snacks, desserts, and cakes are usually used to be sold to their own customers or given to their customers as an appreciation gift. One thing that must be noted is that this market segment doesn't have a high budget for these food items. While cafes sell their baked goods for Rp25,000-35,000 per piece, other businesses that want to give custom cakes as a gift only have a budget of Rp100,000 per cake. This market segment also prefers to do consignment (with profit sharing for every good sold) or one-off purchase, with suppliers usually only sending 9 items every five to seven days. Any items that are unsold will be returned to the suppliers (for consignment goods). Even though the budget isn't high, but because they're selling food items that SBS Cake are quite familiar with, it's not very difficult for SBS Cake to adjust the raw materials used to meet the budget. Similarly, we recommend SBS Cake to consider targeting the B2B Commercial (big) market segment because this market requires desserts, snacks, and cakes that SBS Cake can produce and offer, for example cakes, whole cakes, grilled toasts, and fried fritters. These snacks, desserts, and cakes are used to be sold to their own customers so that more people want to visit their store and buy various products sold in their store, enabling them to meet their sales target. Furthermore, the price range for these food items vary, depending on what are being sold and where they're sold. For example, sliced brownies costs Rp16,000 per piece while an 18cm cake costs Rp399,000. This allows SBS Cake more flexibility to

create and offer products in various price range as they can focus on producing products using quality ingredients. Note that small businesses like SBS Cake would only be able to enter premium supermarkets and food courts because convenience stores only seek for big to medium sized brands that are able to maintain their products' quality and produce in big quantities. Premium supermarkets and food courts operate on a smaller scale. The B2B Party and Event Planner market segment, specifically the online-based party planners, can also be considered because they require desserts, snacks, and cakes that SBS Cake can produce and offer. Customers of these party planners sometimes need souvenir cakes to gift the people who come to their event, but they don't want to personally find the souvenirs themselves. Thus, the party planners would help their customers by accepting their cake orders and becoming the middleman between them and a cake store. The price range for these cakes vary, depending on the type of cake. For example, custom dessert box costs Rp120,000 per box at a minimum order of 10 boxes whereas chiffon cake hampers costs Rp50,000 per box at a minimum order of 12 boxes. Within the B2B Party and Event Planner market segment, we don't recommend targeting event planners because joining an event is like selling to B2C customers. Whether or not the customers will purchase our product depends on whether or not they are attracted to our products or if there are any promotions that stimulate their urge to buy. Furthermore, joining events require an upfront joining fee, with no guarantee of sales when the event commences. On the other hand, collaborating with party planners ensures that you'll get a cut of the sales, even if the profit per item may be much less, as orders that are accepted are confirmed and usually non-refundable. From these three market segments, to decide which one makes most sense to target, we drew a radius of 1km from the pickup points to see how many businesses or organizations were under the B2B Commercial Market (small), B2B Commercial Market (big), and Party and Event Planner. Then, based on the revenue based on the interview and growth assumption, we were able to come up with the expected revenue for each business segment. From here, out of the three market segments, we found that focusing on the B2B Party and Event Planner market segment makes most sense. As the nature of the party planner business is online-based and the location of the venue depends on where the party planner's customers will hold their event, we're unable to count the number of party planners in Jakarta. But if we get to work with at least one of the party planners out there, if 15 customers order cake souvenirs each month at a minimum order of 10 pieces at Rp100.000 per piece, we'll be able to get 150 pieces of souvenir cakes per month. Or in other words, we'll be able to earn Rp15 million per month. Even if this works in a consignment method at 70:30 (70% of revenue is for SBS Cake, 30% is for the event planner), this is still much greater than the forecasted Rp2 million and Rp3 million for B2B Commercial Market (big and small). To compare, for the B2B Commercial market segment (small), in a radius of 1km, we found that there are 28 similar businesses. Assuming that out of 28 businesses, we can work with 10% of them (or 2 businesses), then we'll earn an average of Rp1,035,000 per store, or Rp2,070,000 per month. As for the B2B Commercial market segment (big), in a radius of 1km, we found that there are 9 similar businesses. Assuming that out of 9 businesses, we can work with 10% of them (or 1 business), then we'll only earn an average of Rp3,025,000 per month. There are several reasons why we don't recommend SBS Cake to enter the B2B Institutional market segment (small), B2B Institutional market segment (big), and B2C market segment. These include budget, purchase intention, frequency of purchase, and mismatch of current and expected skills. For the B2B Institutional market segment (small), organizations in this market segment buy desserts and snacks either to satiate the hunger of people in their organization or to celebrate a birthday. As such, they prefer to purchase traditional Indonesian snacks and light snacks at a low budget of Rp10,000 per piece as they're things that Indonesians are familiar with and enjoy eating. This includes snacks like risolles, eclairs, and dry snacks like potato chips. Businesses in this market purchase snacks and desserts quite often and sometimes in big quantities, but they never partner with any dessert, snack, or cake suppliers so that they can change suppliers or stores easily. In the case of the Faculty of

Business (graduate program) in SBM ITB, although they spend Rp100 to 120 million per month (includes lunch, which costs 5 times the price of snacks) due to the large quantity of snacks they buy in a month, they only rebuy from a particular store every two to three months. Thus, even if SBS Cake tries producing traditional snacks, it's not worth the investment because the organizations in this market segment prefers to buy from a specific business or brand only once in a while. What's more, SBS Cake currently doesn't have the skills to produce these snacks, thus it would be difficult to compete with other established businesses that are already skilled in making traditional snacks and desserts. Similarly, entering the B2B Institutional market segment (big) isn't recommended because not only are their budget for snacks very low at less than Rp20.000 per piece, with an additional delivery budget of Rp10,000 to Rp20,000, but they also prefer to purchase traditional Indonesian savory and sweet snacks like risolles and pie susu. Customers in this market segment also like to repurchase desserts, snacks, or cakes from a particular seller because people in their organization are satisfied and approve of the taste of the food items from the specific supplier and they want to make sure those difficult-to-satisfy people in their organization are always satisfied. Thus, they're only willing to change if other stores are able to produce items with the same taste, have terms of payment, and accept sudden orders. But these snacks are bought only when the organization has a meeting, which happens only once to three times a month. Thus, even if SBS Cake tries producing traditional snacks, it's not worth the investment because the organizations in this market segment don't spend much on snacks each month. We also don't recommend SBS Cake to focus solely on the B2C market segment because customers in this market segment aren't loyal to a brand and like to try new things. As such, they either don't return to buy from the store anymore if the dessert didn't impress them they'll only come back to repurchase after several weeks or months. Furthermore, they like to eat a wide variety of desserts, snacks, and cakes. Other than cakes, customers in this market segment desire savory and sweet desserts, snacks, and cakes as an afternoon snack so they don't get hungry in the afternoon, as something people can share with others, and as a gift for other people. The budget itself varies, depending on what they're buying, who they're buying the items for, and what's their purpose of buying. For example, they may buy snacks that cost Rp20,000 to Rp40,000 at one time, and then splurge for desserts at another time if they deem the dessert to be very interesting and they're curious about the taste. They usually spend around Rp500,000 for snacks each month. Thus, even though this market segment has a large market size, it's very hard to compete and win customers in this market segment due to the irregular purchase habits and preference to buy from different brands.

V. Conclusion and Recommendation: V.1. Conclusion: After segmenting the cake industry in Jakarta based on the type of customers and size, we found that there are six market segments. Out of these six segments, we recommend SBS Cake to target the B2B Party and Event Planner market segment to increase its cake sales. Furthermore, Indonesia is expected to face economic problems in 2023, which may potentially decrease people's purchasing power and spending on non-essential items like desserts and snacks. Therefore, it's critical for SBS Cake to enter new markets in order to expand its customer base and gain new revenue streams. Based on the findings from the interview, as well as results from other internal and external analysis tools, we recommend SBS Cake to adopt a focused differentiation strategy, specifically targeting party planners in the B2B Party and Event Planner market segment, to increase its cake sales. Currently, SBS Cake has sustained competitive advantage due to three of their resources and capabilities – cake designs and menu, baking and decorating skills, and pickup and delivery points located at Jakarta and Tangerang. However, these resources and capabilities must constantly be maintained and developed lest they become obsolete due to competitors catching up to them and having the same competitive advantage as SBS Cake. From 7P, we also discovered that co-creation stakeholder activities influence innovation in SBS Cake. Specifically, the actions by customers, baking suppliers, and competitors have allowed SBS Cake to develop its cake offerings and designs. This is possible because the decision maker for everything

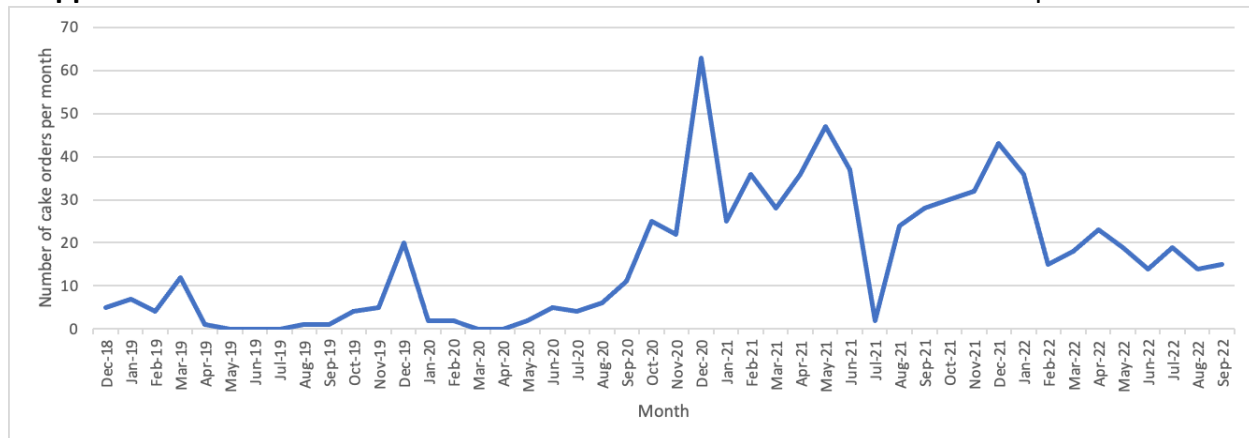
related to cake production is made by one person, Maria. Although Maria discusses her decision with her two other partners, Grace and Stella, the final decision still remains with Maria. This is possible since SBS Cake is still small, so even though each person in the team has their own responsibilities, communication still occurs within the team. However, the final decision still lies on the person in charge of the task. After analyzing the STP and 7Ps of SBS Cake's competitors, comparing SBS Cake's SWOT with its competitors' strengths and weaknesses, and mapping SBS Cake and its competitors on a perceptual map and performance expectation matrix, we found that SBS Cake isn't faring so well compared to its competitors. Its competitors have found their own niche and customer base and create a strong brand image despite having a smaller menu compared to SBS Cake. Furthermore, many of them now accept same day orders, just like SBS Cake. In comparison, SBS Cake's branding is still messy and unclear. In the case of custom cakes, regarding the two hypotheses made in Chapter 2, our findings show that cake design isn't the most important factor when choosing a custom cake store and social media is an effective channel for selling custom cakes for B2C customers. The first hypothesis was proven untrue because cake designs for custom cakes are usually requested by B2C customers. Rather than the cake design, we discovered getting other people's recommendation is a more important factor when deciding which custom cake store to order from. Even for B2B customers, the cakes sold by cake stores for these B2B customers usually already have a fixed design, or in other words, you can't customize the design. Thus, other than the appearance of the product, they'll pay attention to other aspects such as the type of cake (product variety), price, and taste. In the case of cake (product) variety, people may opt to choose bolu jadul (sponge cake), single cupcakes, or other type of desserts instead of a bento cake or dessert box as their party souvenir. The second hypothesis was proven true for B2C customers, B2B Party and Event Planner market segment, and B2B Commercial (small) market segment as they usually get recommendations about custom cakes from social media, such as from ads or other people's stories or posts. But for the other B2B customers market segments, they don't get inspired to purchase a certain product from social media. Thus, approaching them would be a better strategy to attract those customers. From the interview, we also found that intrinsic cues, extrinsic cues, and the seller all play a factor in the buyer's decision-making process, whether it's for B2B or B2C customers. Specifically, intrinsic cues like the taste and cake designs, external cues like the price and reviews, and the ease of working with a seller plays a big factor when deciding which store to buy cakes, desserts, and snacks from. V.2. Recommendation: To adopt a focused differentiation strategy, we recommend SBS Cake to use its existing cake menu offerings as well as creating a new hampers menu to target the B2B Party and Event Planners market segment. Assuming that SBS Cake receives 15 customers in one month from this partnership, with each customer ordering ten cake souvenir boxes (at Rp100.000 per piece), it will be able to guarantee at approximately Rp15 million each month, or around Rp10.5 million, if they're on a consignment contract with 30% of the sales given to the Party and Event Planner. Therefore, in terms of profitability as well as market size, it's more profitable for SBS Cake to enter this market segment. We also recommend SBS Cake to not let go of the B2C market segment because there are existing and new customers that places cake orders with SBS Cake. Instead, this market segment should continue to be served on the side. As such, it's important for SBS Cake to stay relevant on social media by uploading content on Instagram and TikTok on a daily basis. Surprisingly, many big Korean and Custom Cake brands that are on Instagram aren't on TikTok yet, despite TikTok being Indonesia's favorite short video platform. Therefore, there might still be a chance for SBS Cake to attract B2C customers and increase its cake sales using TikTok. Acknowledgement: I thank Dr. Ir. Mustika Sufiati Purwanegara (Bandung Institute of Technology) for her guidance and insights during the development and writing of this paper, all the interviewees that agreed to be interviewed and shared their insights, and my family for their unwavering support.

References: Banupriya, S., & Rosita, S. (2022). A STUDY ON CUSTOMER SATISFACTION TOWARDS ONLINE SHOPPING IN TIRUNELVELI CITY. *International Journal on Global Business Management &*

Research, 11(1), 40-42. <https://www.proquest.com/scholarly-journals/study-on-customer-satisfaction-towards-online/docview/2674462377/se-2> Bilgihan, A., Cheng, P., & Kandampully, J. (2014). Generation Y's dining information seeking and sharing behavior on social networking sites: An exploratory study. *International Journal of Contemporary Hospitality Management*, 26(3), 349-366. doi: <https://doi.org/10.1108/IJCHM-11-2012-0220> Burnkrant, R. E. (1978). Cue Utilization in Product Perception. NA - Advances in Consumer Research Volume 05, eds. Kent Hunt, Ann Arbor, MI: Association for Consumer Research, Pages: 724-729. Calefato, Fabio & Lanubile, Filippo. (2010). Chapter 6 - Communication Media Selection for Remote Interaction of Ad Hoc Groups. *Advances in Computers*. 78. 271-313. 10.1016/S0065-2458(10)78006-2. Demirel, D. (2022). The effect of service quality on customer satisfaction in digital age: Customer satisfaction-based examination of digital CRM. *Journal of Business Economics and Management*, 23(3), 507-531. doi: <https://doi.org/10.3846/jbem.2022.15328> EIBN - German-Indonesian Chamber of Industry and Commerce. (2019). EIBN Sector Reports – Bakery Ingredients. https://madeinindonesia.com/images/minisite/itpc_uae/2019_EIBN_Report__Sector_Bakery_Ingredients.pdf Elliott, P., Kingwell, R., & Carter, C. (2019). The growing consumption of bread and baked goods in Indonesia: an opportunity for Australian wheat. *aegic*. <https://aegic.org.au/wp-content/uploads/2021/03/AEGIC-Bread-and-baked-goods-in-Indonesia.pdf>. Karaatli, G., & Veryzer, R. W. (2012). The effects of electronic decision aids on consumers' cue utilization in product evaluations. *Journal of Marketing Development and Competitiveness*, 6(1), 74-80. Ko, Hsiu-Chia. (2018). Social Desire or Commercial Desire? The Factors Driving Social Sharing and Shopping Intentions on Social Commerce Platforms. *Electronic Commerce Research and Applications*. 28. 10.1016/j.elerap.2017.12.011. Latané, B. (1981). The psychology of social impact. *American Psychologist*, 36(4), 343–356. <https://doi.org/10.1037/0003-066X.36.4.343> Lu, B., Fan, W., & Zhou, M. J. (2016). Social presence, trust, and social commerce purchase intention: An empirical research. *Computers in Human Behavior*. 56. 225-237. 10.1016/j.chb.2015.11.057. Maia, C. R., Lunardi, G. L., Dolci, D., & Añaña, E., da Silva. (2022). The effects of brand and online reviews on consumer trust and purchase intentions in developing countries: The case of the online travel agencies in brazil. [Os efeitos da marca e das avaliações online na confiança e na intenção de compra dos consumidores em países em desenvolvimento: o caso das agências de viagens online no Brasil] *Brazilian Business Review*, 19(3), 288-308. doi: <https://doi.org/10.15728/bbr.2022.19.3.4>. en Nurhayati-Wolff, H. (2020, April 20). Indonesia: Number of online shoppers 2017-2022. Statista. <https://www.statista.com/statistics/971411/indonesia-number-online-shoppers/> Olson, J. C., and Jacoby, J. (1972). Cue Utilization in the Quality Perception Process: A Cognitive Model and An Empirical Test. Ph.D. thesis. Indiana: Purdue University Onofrei, G., Filieri, R., & Kennedy, L. (2022). Social media interactions, purchase intention, and behavioural engagement: The mediating role of source and content factors. *Journal of Business Research*, 142, 100–112. <https://doi.org/10.1016/j.jbusres.2021.12.031> Sidharta, S. M., Adityo, D. B., Iqbal, P. M., & Gunadi, W. (2021). Customer loyalty analysis on online food delivery services. *Turkish Journal of Computer and Mathematics Education*, 12(3), 4003-4013. <https://www.proquest.com/scholarly-journals/cstomer-loyalty-analysis-on-online-food-delivery/docview/2623049397/se-2> Sriram, R., Arulsamy, S., & Rajagopalan, S. (2022). Influence of social cues on consumer choices in retailing: A study on food and grocery retail in select districts of India. *South Asian Journal of Management*, 29(2), 113-137. <https://www.proquest.com/scholarly-journals/influence-social-cues-on-consumer-choices/docview/2705454599/se-2> Tang, X. & Song, Z. (2019). Neurological effects of product price and evaluation on online purchases based on event-related potentials. *Neuroscience Letters*, 704, 176–180. <https://doi.org/10.1016/j.neulet.2019.04.019> Yonathan, D. H. (2021). Social experience vs. social technology in enhancing the intention to use social commerce: A case study of Indonesia. *Journal of Enterprise Information Management*, 34(3), 860-883. doi: <https://doi.org/10.1108/JEIM-01-2020-0013> Wang, C., Li, Y., Luo, X., Fu, H., Ye, Z., & Deng, G. (2022). How are consumers affected

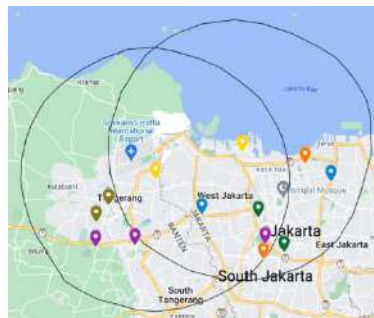
by taste and hygiene ratings when ordering food online? A behavioral and event-related potential study. *Frontiers in Neuroscience*, doi: <https://doi.org/10.3389/fnins.2022.844027> Wang, Q., Meng, L., Liu, M., Wang, Q., Ma, Q. (2016). How do social-based cues influence consumers' online purchase decisions? An event-related potential study. *Electronic Commerce Research*. 16. 1-26. 10.1007/s10660-015-9209-0. Zeithaml, V. (1988). Consumer Perceptions of Price, Quality and Value: A Means-End Model and Synthesis of Evidence. *Journal of Marketing*. 52. 2-22. 10.1177/002224298805200302.

Appendix: 1. Number of cake orders for SBS Cake from December 2018 to September 2022.



(Note: The store was closed in Jul 2021 (for 1 month) and Sep 2022 (for 2 weeks). Sales in SBS Cake in Oct 2020 picked up due to the introduction of Korean Mini Cake (launched in Aug 2020).)

2. Potential Area Map for SBS Cake:



(Note: Businesses under the Party and Event Planner Market segment aren't included here because they're online-based businesses. The yellow pinpoints are SBS Cake's two delivery/pickup points.).

3. Interview Questions:

No	Variables	Indicators
1	Need	<ul style="list-style-type: none"> General reasons for purchasing snacks or desserts General reasons for partnering with snack or dessert brands
2	Want (seller/ internal cues/ external cues)	<ul style="list-style-type: none"> Criteria Expectations
3	Demand (seller/ internal cues/ external cues)	<ul style="list-style-type: none"> Reasons for purchasing a specific snack or dessert Reasons for partnering with a specific snack or dessert brand
4	Dissatisfactions	<ul style="list-style-type: none"> Dislikes

	(seller/ internal cues/ external cues)	<ul style="list-style-type: none"> Complaints No repurchase intentions
5	Purchase Channel	<ul style="list-style-type: none"> Online or offline stores Approach or being approached by suppliers or brands
6	Current Buys	<ul style="list-style-type: none"> Type of items bought, sold, or offered
7	Budget (External cues)	<ul style="list-style-type: none"> Expenditure per snack or dessert Price per snack or dessert
8	Frequency of Purchase	<ul style="list-style-type: none"> Number of purchases per month
9	Total Purchase	<ul style="list-style-type: none"> Total expenditure for snacks or desserts
10	Partnership History	<ul style="list-style-type: none"> Current or previous partnerships with snack or dessert brands and suppliers
11	Promotions (External cues)	<ul style="list-style-type: none"> Discounts Giveaways
12	Online Purchase Behavior (seller/ internal cues/ external cues)	<ul style="list-style-type: none"> Type of snacks or desserts bought online Total expenditure on online channels Online purchasing channel Frequency of purchase online Reasons for purchasing online
13	Inspiration (seller/ internal cues/ external cues)	<ul style="list-style-type: none"> Online or offline channels Urge to buy
14	Type of Customers or Consumers	<ul style="list-style-type: none"> Characteristics of customers or consumers

4. Desserts and cakes from different bakeries sold at Kem Chicks PIK (B2B Commercial Market (big)):



5. Price of Desserts Sold by Lee's Bakery and beyond Treats at Kem Chicks PIK (B2B Commercial Market (Big)):



6. Example of SBS Cake's souvenir cakes supplied for a Christmas party event in December 2022:



7. Example of SBS Cake's cakes bought by the B2C market segment



Multinational Enterprise Strategies towards International Market: A Study Case on How Foreign Bank Companies Survive Throughout Indonesian Market



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Abstract: The banking sector has contributed significantly to financial industry growth for decades and supports modern societies' essential needs. Through globalization, banks competitively expand their business to new markets, benefiting them enormously. In making foreign investment decisions, companies must acknowledge the divergent benefits in different countries, including emerging

markets, which have significant growth and have attracted foreign companies' investment. However, the liability of foreignness problems may arise when firms expand to other countries. Much international business literature presented limited findings on how foreign companies survived in emerging markets, particularly Indonesia. After assessing the strategies of foreign bank companies in Indonesia using a qualitative approach, they developed an extra effort to reduce the effect of the liability of foreignness. They created a new business model called the "global subsidiary model" that merged their asset of foreignness and asset of multinationality and positioned themselves to not compete directly with local banking firms. This strategy benefits them much when operating in foreign countries as an addition to traditional strategies to overcome the liability of foreignness problem. Finally, this paper aims to guide foreign firms in reducing the liability of foreignness by learning from well-established foreign bank firms in Indonesia.

Keywords: Liability of Foreignness, Asset of Foreignness, Foreign Bank Firms, Asset of Multinationality, Global Subsidiary Model, Indonesia

Introduction: The financial industry has become the world's most significant industry for years. The sector that first aims to help people manage their economic condition has grown into a broader definition nowadays (Miller, 1999). Most people in this new modern world need financial services to assist their daily lives. Financial services have many variants, including the banking sector. The banking sectors benefit most people in every aspect, individually and collectively, since they directly relate to human activities and life by providing financial services to their customers (World Bank, 2022). On the other hand, globalization has also become a prominent issue in the last few decades. This phenomenon aims to connect every aspect of this world (Ritzer, 2007). As an effect of globalization, the term "internationalization" was born. This term refers to an act of individuals, groups, or social institutions that cross the national border to gain social, economic, cultural, or political benefits (Cuadra-Montiel, 2012). In the economic sector, the primary phenomenon of internationalization is where firms expand their business overseas to seek a larger market and capitalize on their company. This practice creates more benefits and challenges for firms that want to expand their business overseas, including banking firms (Marques et al., 2017). The right strategy that firms choose is needed to exploit their advantage in the international scope successfully. As the world becomes more globalized and advanced over time, firms have set up several strategies for them in order to internationalize. The world has become increasingly competitive from time to time for local and international firms (International Institute for Management Development, 2022). As a result of globalization and internationalization, firms may encounter some challenges in doing business internationally. The difficulties mainly include the firms' capabilities to adjust to the new business environment since different countries may have different cultures. This condition is where the term Liability of Foreignness (LoF) arises. This term refers to the cost firms need to pay to learn about other countries' conditions, so foreign firms can compete with local firms and exploit their advantages overseas (Eden & Miller, 2004). These terms become relatively common considerations when firms decide to internationalize. However, unconsciously foreign firms may also have generated their unique value due to their foreignness issue in the host market. Such a condition is called an Asset of Foreignness (AoF) (Lee et al., 2021). Different countries may have their own AoF and LoF depending on how the market perceives the business and company. Levich (2001) has shown that emerging markets show remarkable growth and may bring an essential contribution to the world economy in present times. One of the advantages he highlighted of emerging markets is that the financial market may have a more substantial potential to encourage policies to support capital markets. He also assumes that the importance of emerging economies will grow over a long-term period. This condition makes countries in emerging markets have exceptional capabilities and thus will attract investors overseas to establish a business there. On the other hand, Indonesia has an attractive market for financial services, especially banking industries. Indonesia is known as the country with the largest economy in Southeast Asia (World Bank, 2022). A large economy needs a

financial service to help many parties manage their economy (Jung, 1986). This reason makes Indonesia an attractive country to establish banking firms, both from inside and outside the country. However, establishing banking firms requires a high understanding of the countries' business environment. It requires a significant cost in giving services to the customers, therefore making it have a high level of commitment (Johanson and Vahlne, 1977). Indonesia also has its own culture that is different from other countries and may affect investments in Indonesia. In addition, the political conditions in Indonesia also become the main challenge. They are more likely to fluctuate due to corruption issues (Gerdt et al., 2022) and create challenging investments for foreign banking firms in Indonesia; for instance, the Royal Bank of Scotland closed its operation in Indonesia in 2017 due to the competition between the banking firms. The main problem that firms need to address is the liability of foreignness that may occur if firms choose to establish firms overseas. If the firms have a liability of foreignness and cannot overcome it when they expand, it may affect their business. In banking firms, it may affect both the short-term and long-term since it needs a high level of commitment to invest. However, many foreign banking companies still operate in Indonesia and have become one of the big banking firms used by many parties in Indonesia, for example, HSBC, Standard Chartered, Etc. Otoritas Jasa Keuangan (firms that functioned to secure the economic flow in Indonesia) recorded eight foreign banks operating in Indonesia in their report. It can be interpreted from those numbers that there are still many foreign banks that survived throughout Indonesia's fluctuating conditions. Much literature has covered how foreign firms can turn their LoF into AoF in certain countries. However, there are limited resources that discuss the strategies to generate AoF and use it in South East Asian countries, especially Indonesia. Most worldwide papers mainly discuss value creation, exploitation, and strategies towards the United States, Europe, and China. This paper will study the strategies used by foreign bank firms in generating AoF and its implementation in the Indonesian market, how they distinguish between their LoF and AoF, and how to exploit their values by selecting the decision based on their company information. In order to find an answer regarding the topic, several considerations need to decide since the company may have an internal strategy to overcome such challenges and thus generate research questions such as:

- How do foreign banking firms in Indonesia distinguish between AoF and LoF that they have?
- What AoF do foreign banking firms in Indonesia have to survive in the industry in Indonesia?
- How do foreign banking firms exploit the AoF that can turn them into advantages when operating in Indonesia?

Literature Review: The motives of internationalization should explain first to explain the problems that may appear as an effect, such as liability of foreignness and asset of foreignness (Denk et al., 2012). Qian & Delios (2007) studied the factors that influence the decision of a firm to expand its business internationally. It aims to explain the ongoing phenomenon of globalization and the internationalization of firms. After assessing Japanese banks, they found out that the main factors that strongly influence their decision to expand are their strategy to follow their clients and to exploit their intangible assets by applying them to the international market. However, the company's experience also determines the strength of the motives. After finding a compelling motive, entry modes strategies have been one of the most discussed topics when firms choose to internationalize since it has high significance to firms' performance, either in the short-term or long-term (Brouthers, 2002). Entry modes also become the critical factor in determining a firm's success when doing an internationalization, taking into account several factors, such as level of commitment and market characteristics (Nisar et al., 2018). However, Chang et al. (2012) mentioned that the entry mode choice also differs based on the country's culture. Firms will prefer to take complete control of their firms (wholly owned subsidiaries) when the country has poor governance quality and a high risk of collaborating with local firms. When a country has good quality of governance and low risk of opportunistic behavior of local firms, creating alliances or ventures will be preferred. Similar studies conducted by Taylor et al. (2000) discussed the motives that affect the entry mode strategy of Japanese multinational companies. They found that five main drivers influence the control level of

such firms, such as the attractiveness of the country, the risk of doing business, resource commitments, government restrictions, and the need for local contribution. However, when firms internationalize, the liability of foreignness problem will also arise, and create disadvantages for foreign firms over local firms. Such problems may occur from the initial internationalization stage due to the entry mode that firms have selected. Panibratov et al. (2018) concluded that firms may have experienced liability of foreignness problems due to their business knowledge and other countries' institutional factors after researching the effectiveness of Russian firms' entry mode to the liability of foreignness. The effects may vary according to the entry modes that foreign firms selected (equity and non-equity). Chen et al. (2006) also conducted similar studies by analyzing the influence of the liability of foreignness on the entry mode selection. The paper analyzes joint ventures in manufacturing sectors in China and has found that firms with less liability of foreignness may imply resource-seeking strategies to exploit the labor-intensive competitive advantage that they have in comparison with firms with a high liability of foreignness. In contrast, firms with a high liability of foreignness tend to embed market-seeking strategies and take greater control of their firms than firms with a low liability of foreignness. Foreign firms may overcome this problem and generate values that can lead firms to have certain advantages over local firms due to the 'foreignness' that they have. This term is known as an asset of foreignness. Nachum (2010) researched factors that determine the significance of liability of foreignness and asset of foreignness to the performance of foreign firms. The research includes 11 foreign and local financial services firms in London and discusses whether the foreignness may create liability and thus bring disadvantages for the firms. The paper also discusses what circumstances in foreignness may be an asset and benefit the foreign company. The result shows that foreign firms may have an exceptional advantage over local firms and outperform local firms. The results also depend on foreign firms' network level and ownership level. Foreign firms may take advantage of resources and information they possess based on their experience, therefore generating a better risk assessment. The cost that becomes the main reason for foreign firms' liability of foreignness also does not seem to impact the companies' performance significantly. The main factor affecting foreign firms' performance is how firms integrate their global knowledge and interpret it as a strategy to operate in host countries. In real-life practice, Lee et al. (2021) also show that foreign companies can turn their liability of foreignness into an asset of foreignness that they can exploit in host countries. In their paper, they tried to examine the companies in Korea when they manage their weaknesses and turn them into unique values. The research found that to overcome foreignness, firms need to implement two kinds of strategy: a reactive and a proactive strategy. Reactive strategy refers to the firm's effort to minimize the effect of liability of foreignness by looking at how local firms work in the host country, and then firms will imitate their workflow. The proactive strategy refers to foreign firms' capabilities to encounter host countries' business climates. Local firms usually sit on the cycle where they have the responsibility to follow specific rules and culture, resulting in lower performance. Foreign companies, however, could have more control over such a dilemma due to their foreignness. They have fewer expectations than local firms, and it may assist them in turning the liability of foreignness into an asset of foreignness. Liability of foreignness also can be eliminated by the level of commitment to learning about the foreign business environment (Peterson & Pederson, 2002). In his research that study 494 firms from Sweden, Denmark, and New Zealand, firms with higher learning engagement to the host countries will lessen the effect of liability of foreignness. Moustafa Haj Youssef and Da Teng (2021) also researched the entry mode strategies for foreign firms. The research discusses how foreign companies enter Middle East countries without using a traditional entry mode, such as exporting, licensing, joint venture, Etc. in order to eliminate the liability of foreignness problem, The research found out that even though companies conduct extensive research regarding the counties that they want to enter, the field condition tends to show that the plan that the companies did in the first place will have several changes to adapt to the target

countries. However, if the company can select the right strategy to adopt in foreign markets, it will benefit them in reaching its goals. After conducting interviews with several foreign companies, they found that little-to-none foreign companies do any ventures with the local companies. Instead, they select the 'sponsor' as a bridge for them to enter the Middle East market. Sponsors mean that collaborations with individuals are preferred over companies to overcome regulations in a particular country. Choosing the right local sponsors may also be confusing since they must select a sponsor with a solid local network. The foreign companies also agreed that selecting the right sponsor positively influences the company's performance and helps them eliminate the liability of foreignness problem. In order to generate value in host countries, firms also need to consider the difference in culture that exist in different countries. Many frameworks have been made to determine the cultural difference between a country and its importance, for example, Hofstede's Cultural Dimension and GLOBE Model (Shi & Wang, 2011). Luomala et al. (2014) conducted research that studies different behavior and emotions among individualistic and collectivist cultures in doing business practice. The paper tries to examine how those tendencies can affect the negotiation process, both before and after the practice. After comparing business behavior from individualistic and collectivist countries, they concluded that collectivist culture generates more positive behavior when doing unsuccessful cross-culture business negotiations. Individualistic cultures, in contrast, tend to have negative behavior when experiencing the same issues. These results also explain the perspective-taking ability's effect on emotional volatility, where collectivists are superior to individualists. The paper inferred that collectivist culture might have a relatively more positive business practice, making them more attractive business colleagues. To support this argument, Tan et al. (2018) generates a new index for assessing the ease of doing business at the sub-national level. In their case, they examine Indonesia (which consists of 33 provinces) to create a new measurement to ease of doing business by including ABC dimensions, which stands for attractiveness for investors, business friendliness, and competitive policies. The research found that ABC dimensions have a positive relationship with ease of doing business, with attractiveness for investors and business friendliness playing a more prominent role in determining the ease of doing business. Although it is not mentioned explicitly in the paper, it can be inferred from the graphs and tables that most of the areas in Indonesia have an attractive business environment for investors, thus creating more ease in doing business there. Moreover, Jakarta is still the most attractive area for investors, where most foreign banks operate. The papers show that there is already research that studies firms' internationalization phenomenon and how foreign companies are able to enter a new international market and overcome the liability of foreignness problem in a real-life setting, rather than referring to traditional frameworks. However, there is little research on how to implement such strategies in the Indonesian market. Indonesia has a large economy with much potential in it, and it makes Indonesia one of the countries that have enormous attractiveness in terms of foreign investment. Studying Indonesia's business environment and learning from foreign firms already settling there is crucial to successfully establishing foreign firms there. This paper expects to benefit foreign firms and Indonesia by studying such problems. Foreign firms can learn to be successful in expanding their business, while at the same time benefiting Indonesia by giving investment to the country, which will undoubtedly increase the economy. **Methodology:** In this paper, Indonesia will be selected as the research sample. This selection is because Indonesia became one of the world's largest economies and the largest economy in Southeast Asia. Indonesia also has maintained a high level of foreign investment and attractiveness to foreign investors. However, Indonesia has a strong culture while having unstable political conditions, which may influence foreign investments there. Having such conditions may bring down the level of investments in Indonesia. However, it managed to attract foreign investors (for example, Tesla has agreed to establish a Nickel company in Indonesia to manufacture the batteries for its cars) and has a higher level of foreign investment than neighboring countries. Indonesia has fluctuating conditions with many positive and negative aspects. However,

compelling findings may arise regarding the strategies used to turn the banking firm's liability of foreignness into an asset of foreignness and exploit such values. Data Collection: Primary data will be gathered through this research by doing interviews with several foreign banking firms in Indonesia. Using interviews can help enrich the information regarding the strategies and decision-making that foreign banking firms consider. In addition, the questions asked to the interviewees will align with the research questions mentioned above. The interview will include the samples that have already been sorted out based on the research objective using purposive sampling by selecting specific banking firms from foreign countries. Using purposive sampling, that classified as non-probability sampling, suitable samples can be chosen and generate more accurate results (Acharya et al., 2013). The research process started by selecting the foreign banking firms that operate in Indonesia and conducting interviews with them. Finally, the result of the interviews will be analyzed and generate an outcome to answer the research questions. Through personal networks, we are able to get direct contact with credible resources from foreign banking firms in Indonesia, thus may generate an accurate interview answer. The interview will consist of 12 questions to be answered by foreign banking firms in Indonesia. The interview will have conducted in an online setting due to the time limit and our inability to go to Indonesia and do face-to-face interviews. The questions will center around the effort to distinguish between LoF and AoF, how they generate value through Indonesia's business conditions, and lastly, how they exploit their AoF.

Data Analysis: A qualitative case study, precisely a case study approach, will be conducted to analyze foreign bank firms' strategies when entering the Indonesian market. This approach will benefit in terms of the depth and clarity of explaining complex issues in real-life settings (Crowe et al., 2011). Studying the concept of asset of foreignness and liability of foreignness and using the case study approach, it is expected that a deeper understanding of strategies used by banking firms in real-life situations can be explored and how it influences their decision-making in investments in Indonesia. The process of doing the analysis will continue until the topic is inferred correctly to draw the findings. One of the problems in analyzing qualitative data is the limited technique to analyze the findings. To overcome such problems, we found that thematic analysis will be the most appropriate technique to generate a clear outcome. This technique includes generating themes based on qualitative data, making the findings easier to interpret (Hayes, 1998). In order to make the analysis simpler to understand, the interview will be designated into three main themes. Each theme has its question, so the interview result can be grouped immediately and help the thematic analysis process. By assessing the interview by interpreting the thematic analysis technique, this research will likely be able to answer the research questions.

FINDINGS AND DISCUSSION: The research findings are written following the different themes asked during the banking firms' interview process. The different themes were assigned as guidance in answering the research questions of this study and also help the readers understand the interview answer from the respondents. The interview themes are classified according to the research questions consecutively. Throughout the research, two respondents were asked, representing different companies. For privacy reasons, information regarding the respondents and the company will be described in the table below to keep confidentiality.----- Insert Table 1 about here----- Moreover, main findings regarding the interview result can be seen in the table below, and the detailed result will be presented afterward. ----- Insert Table 2 about here -----

Distinguishing AoF and LoF of The Company: Both respondents have agreed that the main factor influencing their ability to distinguish between AoF and LoF is the market knowledge present in their company. Being an international company brings many benefits for them in terms of managing information from global perspectives and adapting to different countries. Both companies also stress their capabilities to be responsive to local needs by including their headquarters to discuss the applied strategy. They have a high level of commitment due to Indonesia's substantial potential for

economic growth and may benefit the companies. From their perspective, Indonesia has a huge market that can support their business and will keep growing for a long-time frame. It is supported by non-economic factors that also become their consideration when investing in Indonesia, such as solid market consumption and competitive human resources. This reason also differentiates Indonesia and other Asian countries from Europe and America region, where the growth seems stagnant. Due to Indonesia's potential, both respondents agreed that their level of commitment is increased towards the Indonesian market and resulting in increasing market knowledge to compete with local firms. Both respondents also recognize the presence of liability of foreignness in their company. The primary liability of foreignness that may affect them is the lack of connection and accessibility to larger areas in Indonesia, where local banks may be superior to them. In terms of capital and firm size, foreign bank firms in Indonesia may be inferior compared to local banks in Indonesia. This position resulted in their inability to reach every customer in Indonesia. A1R1 stated that their bank only presented in 6 cities, which is still tiny compared to the overall number of local bank firms. However, with the market knowledge they possessed, they could focus more on generating advantages over local banking firms due to their foreignness, thus eliminating the liability of foreignness. With such a strategy, they have been able to maintain a strong position in the market, while emphasizing exploiting their asset of foreignness. They even can generate a new business model, which significantly benefits them. It will be discussed in the next section.

Generating Asset of Foreignness of the Company: In terms of the value generated by the company represented, both said that factors that support them in generating their asset of foreignness are their connection to the international market and relationship to other foreign companies due to their company's experiences. They have created a new business model by combining market knowledge and the factors mentioned before. According to A1R1, this business model is called the "global subsidiary model." This model explains the ability of foreign bank firms to connect foreign firms from different segments (e.g., firms from the manufacturing sector or food and beverage sector) that want to establish a subsidiary in Indonesia and need financial support. "A newly established company in a new country would normally have a weak financial position. They will have difficulty obtaining financial support from financial institutions due to their weak financial position. In this case, they can leverage their parent relationship with the existing lender in the parent's country where the foreign bank is domiciled. The foreign bank would facilitate the financing needs of that newly established subsidiary on the back of the support from their parent. The foreign bank will provide the facility in the subsidiary domicile," A1R1 stated. For instance, Chinese companies want to invest in Indonesia and have an excellent financial relationship with the foreign bank's subsidiary in China. The foreign bank's subsidiary in Indonesia can give them financial support in establishing a company in Indonesia. In other words, this business model can make an international link with foreign companies. It is a business model with low risk but a very high return, which is one of the unique values of foreign banks. In the interview, they said this business model is very profitable. Another advantage they may use to survive throughout the competition is to serve higher-class customers and form business-to-business (B2B) transactions. Higher-class customers tend to need more access to the international market, which foreign banks can facilitate (for example, giving access to use bank products and services in other countries than Indonesia due to branches that foreign bank firms have around the world) and will be superior over a local bank. The B2B transactions are mainly conducted to gain a higher return rather than serving B2C transactions, which local banks may be superior to foreign banks. Another thing they mentioned in differentiating foreign banks from local banks is creating sustainable financing. This term is created due to the global strategy implemented in their headquarters to support a sustainable environment. In their opinion, this term is still new in developing countries. As a result, it gives them more opportunities to exploit this value to companies in Indonesia due to the image that they are coming from developed countries where sustainability term is common. The goal of this term is to reduce environmental pollution and can attract more

markets to use the foreign bank's services.

Exploiting Asset of Foreignness of The Company: In order to exploit foreign bank firms' assets of foreignness, there are some strategies that each company has. The strategy mainly used to assist the global subsidiary business model is to finance more foreign companies from another sector that want to invest in Indonesia. According to the respondents, this strategy may have a win-win solution for both parties. Foreign companies may have opportunities to invest in Indonesia without worries about financial support, while foreign banks will benefit from financing the foreign companies. By exploiting their relationships with foreign companies, they have been able to gain enormous profits throughout this model. The other strategy is to maintain their specialization while keep building a reputation with external partners, such as the government, local market, and other banks. Both of the respondents are aware of their strengths and weaknesses, so instead of imitating the local bank's specialization, they tried to emphasize their advantage over local banks. Both respondents also stated that they implement strict rules for their sustainable financing program to maintain their reputation in the market. If their client doesn't align with these goals, foreign banks will cut their financial support for them. This strategy, however, may change over time by considering several factors, such as regulation, recession, and political changes. Each respondent was also aware of the timing to stop their operation in Indonesia and already set some standards as a benchmark for their performance evaluation, for example, return on tangible equity (ROTE) or cost of capital. Many papers have examined the importance of creating assets of foreignness and exploiting them for foreign firms in the international market (Nachum, 2010). Several papers also give an example of how to turn the liability of foreignness into an asset of foreignness in a specific country (Sethi & Guisinger, 2002). However, the results obtained from the interview have amusing perspectives that may differ itself from the previous literature mentioned before. Instead of setting up a strategy at the first stage of investment overseas (e.g., choosing the proper entry mode or doing extensive research of country analysis risk), through their market knowledge, they generated a new business model that benefits them much. This result has introduced an approach to reducing the effect of liability of foreignness and creating a new asset of foreignness based on the knowledge that they have. Most importantly, this research also reveals the "global subsidiary business model" as an advantage foreign bank firms have to overcome the liability of foreignness and compete with the local market. This business model provides insights for foreign bank firms to exploit their asset of foreignness (in this case, the relationship with the international market and foreign companies from different business industries) and extend the advantages even more by providing a strategy with low risk but high return. Moreover, this business model also introduces the capability of foreign banking firms to use its connection to the subsidiaries globally to manage information and apply it to gain profit and maintain a strong position in the market. This term is also known as multinationality (Kirca et al., 2011). The increasing level of multinationality resulted in increased benefits for the firm and contributed positively to the performance of the firm (Gomes & Ramaswamy, 1999). The multinationality that firms possess will also positively influence the firm's performance with a high level of conformity (Giachetti & Spadafora, 2017), which is explained by the answers of A1R1. In some cases, the advantages that resulted from multinationality also recognized as an asset of multinationality (Sethi & Judge, 2009), which relates to the asset of foreignness. Both terms positively influence the company's benefit and result in better performance. The business model that company A1 implemented has successfully brought benefits for the company by combining assets of foreignness (relationship and reputation with foreign markets and foreign companies) and assets of multinationality that firms possess, which differentiates the company from local banking firms. This business model also is consistent with the regulations in Indonesia and helps foreign banks much in gaining profit. It also could reduce the uncertainty that foreign banks face since giving a credit loan to customers may have risk when the debtor is unable to return the loan. In addition, the awareness and knowledge of a firm's strengths and weaknesses also help them understand the

market better, resulting in better strategic decision-making in surviving though the competitive market in a growing emerging market. Both of these insights are important for Indonesia's case since the current condition of Indonesia may attract more investors, bringing more competitiveness for the country and affecting the foreign bank's current position.

CONCLUSIONS AND LIMITATIONS: This research has examined the liability of foreignness that foreign bank firms possess and strategies to overcome it and generate an asset of foreignness that will benefit them throughout Indonesia's fluctuating and competitive condition. The limited paper has already determined the practical strategy that foreign firms can use when competing in the Indonesian market. This research provides insights from a well-established foreign bank in exploiting its asset of foreignness, thus establishing a solid position in the market. The market knowledge of a country that foreign bank own be the main factor in distinguishing the AoF and LoF that they have. Such capabilities are essential to determine the strategic decision and their position in the market. After assessing their own company and the market, they can generate additional unique value according to their company to attract the market and gain more profit. Foreign bank firms could generate a new business model called the "global subsidiary model," which combines the benefit from an asset of foreignness and the asset of multinationality. This business model also leverages them in surviving through Indonesia's business environment without competing directly with their competitors (local banking firms). This research aims to provide guidance and information for foreign firms to invest in Indonesia. Indonesia has a potential and promising market. Some papers examine Indonesia's attractiveness and conclude that Indonesia has a high attractiveness since Indonesia has several factors that may help the investment process (Tan et al., 2018). Such factors attract many foreign companies to establish a business in Indonesia, and it's proven by the current condition where many foreign firms from different sectors enter the Indonesian market. This attractiveness, however, also has a disadvantage for every company in Indonesia. The business climate will become more competitive, and firms need to generate unique value that differentiates them from their competitors. Generating value also becomes a challenge for a firm since it needs the capability to create and implement it in real-life settings to overcome the competitiveness that firms may face. Other than that, this situation can be even more difficult for foreign firms since they need to adjust to the local culture. It does not sound as easy as studying the culture and the risk of conducting business in a particular country. They need to implement their strategy in real-life positions, to know whether their study was successful, unlike local firms that may have more knowledge than foreign firms. This paper also would give insights for managers and decision-makers to carefully asses their company operating in the foreign markets and combine advantages that their company has to generate enormous benefits for the company. This paper also acknowledges some limitations throughout the research process, which can be solved in the future. The first problem is regarding the number of respondents in the research. This research only gathered two respondents out of eight total foreign banking firms in Indonesia. Due to the information confidentiality of foreign bank firms, this research could only gain a few respondents. This research's relatively short time frame also becomes a barrier since a long bureaucracy is needed for foreign banking firms to disclose such information. Another area for improvement would be the concentration of this research. This research focuses on studying the foreign bank's strategies under Indonesia's business climate, which may make the information unable to be used in other business environments or countries. Future research is needed to overcome such limitations and provide more insights from other foreign firms in Indonesia, thus giving readers more accurate outcomes. This problem can be done in several ways. More respondents from different foreign bank firms are needed to gain more insights, thus giving more apparent outcomes for the research results. A longer time frame is also needed to conduct this research to overcome the number of respondent problems. A comparative study would also complement this study by comparing another country with this paper to give readers a broader insight into eliminating the liability of foreignness and competing with local firms in a particular

country.

REFERENCES: Acharya, A. S., Prakash, A., Saxena, P., & Nigam, A. 2013. Sampling: Why and how of it? *Indian Journal of Medical Specialities*, 4(2): 330–333. Brouthers, K. D. 2002. Institutional, Cultural and Transaction Cost Influences on Entry Mode Choice and Performance. *Journal of International Business Studies*, 33(2): 203–221. Chang, Y.-C., Kao, M.-S., Kuo, A., & Chiu, C.-F. 2012. How cultural distance influences entry mode choice: The contingent role of host country's governance quality. *Journal of Business Research*, 65(8): 1160–1170. Chen, H., Griffith, D. A., & Hu, M. Y. 2006. The influence of liability of foreignness on market entry strategies. *International Marketing Review*, 23(6): 636–649. Crowe, S., Cresswell, K., Robertson, A., Hubby, G., Avery, A., et al. 2011. The Case Study Approach. *BMC Medical Research Methodology*, 11(1): 1–9. Cuadra-Montiel, H. 2012. Globalization: education and management agendas / monograph. Rijeka, Croacia: Intech. Denk, N., Kaufmann, L., & Roesch, J.-F. 2012. Liabilities of Foreignness Revisited: A Review of Contemporary Studies and Recommendations for Future Research. *Journal of International Management*, 18(4): 322–334. Dietz, M., Seshadrinathan, A., Kincses, A., & Yang, D. 2021. McKinsey's Global Banking Annual Review. McKinsey. McKinsey Global Banking Practice Publishing Team. <https://www.mckinsey.com/~media/mckinsey/industries/financial%20services/our%20insights/global%20banking%20annual%20review%202022%20banking%20on%20a%20sustainable%20path/global%20banking%20annual%20review%202022%20banking%20on%20a%20sustainable%20path.pdf?shouldIndex=false>. Eden, L., & Miller, S. R. 2004. DISTANCE MATTERS: LIABILITY OF FOREIGNNESS, INSTITUTIONAL DISTANCE AND OWNERSHIP STRATEGY. *Advances in International Management*, 16: 187–221. European Central Bank. 2010. Monthly Bulletin October. European Central Bank. Frankfurt am Main: European Central Bank. <https://www.ecb.europa.eu/pub/pdf/mobu/mb201010en.pdf>. Gerdtts, I., Izquierdo, I., & León, I. B. 2022. Indonesia Political Risk Report. University of Navarra. Madrid: University of Navarra. https://www.unav.edu/documents/16800098/38256567/Indonesia_PRR_2022_ILGerdtts-Ilzquierdo-ILeon.pdf. Giachetti, C., & Spadafora, E. 2017. Conformity or Nonconformity in Multinationality? Performance Implications for the Italian Ceramic Tile Manufacturers. *Management International Review*, 57(5): 683–715. Gomes, L., & Ramaswamy, K. 1999. An Empirical Examination of the Form of the Relationship Between Multinationality and Performance. *Journal of International Business Studies*, 30(1): 173–187. Haj Youssef, M., & Teng, D. 2021. Market entry strategies in the Middle East: unveiling the sponsorship strategy. *International Studies of Management & Organization*, 51(3): 1–23. Hayes, N. 1998. *Doing qualitative analysis in psychology*. Hove: Psychology Press. Johanson, J., & Vahlne, J.-E. 1977. The Internationalization Process of the Firm—A Model of Knowledge Development and Increasing Foreign Market Commitments. *Journal of International Business Studies*, 8(1): 23–32. Jung, W. S. 1986. Financial Development and Economic Growth: International Evidence. *Economic Development and Cultural Change*, 34(2): 333–346. Kirca, A. H., Hult, G. T. M., Roth, K., Cavusgil, S. T., Perry, M. Z., et al. 2011. Firm-Specific Assets, Multinationality, and Financial Performance: A Meta-Analytic Review and Theoretical Integration. *Academy of Management Journal*, 54(1): 47–72. Lee, J. M., Paik, Y., Horak, S., & Yang, I. 2021. Turning a liability into an asset of foreignness: Managing informal networks in Korea. *Business Horizons*, 65(3): 351–364. Levich, R. M. 2001. The Importance of Emerging Capital Markets. *Brookings-Wharton Papers on Financial Services*, 2001(1): 1–45. Luomala, H. T., Kumar, R., Singh, J. D., & Jaakkola, M. 2014. When an Intercultural Business Negotiation Fails: Comparing the Emotions and Behavioural Tendencies of Individualistic and Collectivistic Negotiators. *Group Decision and Negotiation*, 24(3): 537–561. Marques, J. C., Lupina-Wegener, A., & Schneider, S. 2017. Internationalization strategies of emerging market banks: Challenges and opportunities. *Business Horizons*, 60(5): 715–723. Miller, M. H. 1999. The History of Finance. *The Journal of Portfolio Management*, 25(4): 95–101. Morschett, D., Schramm-Klein, H., & Swoboda, B. 2010. Decades of research on market entry modes: What do we really know about external antecedents of entry mode choice? *Journal of International*

Management, 16(1): 60–77. Nachum, L. 2009. When Is Foreignness an Asset or a Liability? Explaining the Performance Differential Between Foreign and Local Firms. *Journal of Management*, 36(3): 714–739. Nisar, S., Boateng, A., & Wu, J. 2018. The entry mode strategy and performance of SMEs: Evidence from Norway. *Research in International Business and Finance*, 45: 323–333. Otoritas Jasa Keuangan. 2022. Statistik Perbankan Indonesia. Otoritas Jasa Keuangan. Jakarta: Departemen Perizinan dan Informasi Perbankan Otoritas Jasa Keuangan. <https://www.ojk.go.id/id/kanal/perbankan/data-dan-statistik/statistik-perbankan-indonesia/Documents/Pages/Statistik-Perbankan-Indonesia---Agustus-2022/SPI%20Agustus%202022.pdf>. Panibratov, A., Ribberink, N., & Nefedov, K. 2018. Entry Modes and Liability of Foreignness Effects: Evidence from Russian Firms on the German Market. *Organizations and Markets in Emerging Economies*, 9(1): 106–122. Petersen, B., & Pedersen, T. 2002. Coping with liability of foreignness. *Journal of International Management*, 8(3): 339–350. Qian, L., & Delios, A. 2007. Internalization and experience: Japanese banks' international expansion, 1980–1998. *Journal of International Business Studies*, 39(2): 231–248. Ritzer, G. 2007. *The Blackwell Companion to Globalization*. West Sussex, UK: Willey Blackwell. Sethi, D., & Guisinger, S. 2002. Liability of foreignness to competitive advantage. *Journal of International Management*, 8(3): 223–240. Sethi, D., & Judge, W. 2009. Reappraising liabilities of foreignness within an integrated perspective of the costs and benefits of doing business abroad. *International Business Review*, 18(4): 404–416. Shi, X., & Wang, J. 2011. Interpreting Hofstede Model and GLOBE Model: Which Way to Go for Cross-Cultural Research? *International Journal of Business and Management*, 6(5). <https://doi.org/10.5539/ijbm.v6n5p93>. Tan, K. G., Amri, M., & Merdikawati, N. 2018. A new index to measure ease of doing business at the sub-national level. *Cross Cultural & Strategic Management*, 25(3): 515–537. Taylor, C. R., Zou, S., & Osland, G. E. 2000. Foreign market entry strategies of Japanese MNCs. *International Marketing Review*, 17(2): 146–163. The World Bank Group. 2022. Overview. World Bank. <https://www.worldbank.org/en/topic/financialinclusion/overview#:~:text=As%20accountholdrs%2C%20people%20are%20more>. World Bank. 2021, April 6. The World Bank in Indonesia. World Bank. <https://www.worldbank.org/en/country/indonesia/overview#1>.

APPENDIX: Table 1 Information of the Respondents:

Company	Country of Origin	Number of Employees	Year Founded	Respondent Title	Respondent ID
A1	London	1600	1859	Head of Corporate Affairs	A1R1
A2	France	200	1989	Public Relation Manager	A2R1

Table 2 Summary of the Findings:

Themes	Main Findings
Distinguishing AoF and LoF	Both respondents agreed that the ability to distinguish LoF and AoF is mainly caused by the market knowledge and how long does the company present in Indonesia.
Generating AoF in Host Country	According to A1R1, the company has successfully generated a new business model called the “global subsidiary model” which taking an advantage of the foreignness that they have. A2R1, in comparison, are focusing more on providing niche banking services such as serving higher-

	class consumer and conducting business-to-business (B2B) transactions. Both respondents also conduct “sustainable finance,” which the term is still lacking in developing countries.
Exploiting AoF in the Host Country	A1R1 state that financing more foreign companies that want to invest in Indonesia will help them exploit their business model. A2R1, compared to A1R1, said that they will keep on specializing in their unique value without interfering with the competition with local bank firms. Both respondent also apply strict regulation to their sustainable financing program, in order to maintain their brand image.

Generation XYZ’s Brand Attitude and Purchase Intention in Response to International Fashion Brands: Udonthani, Thailand



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Abstract: The purpose of this study is to compare generation X, Y and Z (Gen XYZ) in relation to their brand attitude and purchase intention towards international fashion brands and also to use independent and interdependent self-construal to investigate the influence of cultural differentiation on brand attitude and purchase intention in response to international fashion brands. An online survey was carried out with quota sampling and 400 valid surveys were collected in Udonthani. The results reveal that generations (X vs Y vs Z) have an insignificant influence on brand attitude in response to international fashion brands in that generations X vs Y and X vs Z are different in terms of purchase intention while generation Y vs Z are not. Self-construal (independent and interdependent) also has significant influence on brand attitude and purchase intention. As a consequence, marketers and retailers of international fashion brands should pay attention to Gen XYZ consumers and those with different self-construal as they are unique in terms of international fashion brand consumption.

Keywords: Fashion Branding, International Branding, Brand Attitude, Purchase Intention, Generation XYZ, and Self-construal

1. Introduction: As the world is evolving, people’s values, living standard, globalization, technology and fashion also does. Fashion is an esthetic expression in a particular time, location and precise context of shoes, ways of living, makeups, hairstyles, accessories, clothes as well as body sizes

(Kaiser, 2018). Fashion is a huge competitive market, creative and critical business as well as a significant expression of every generation's dream and anxiety. It is significant to understand the consumers and the market. To be successful and competitive within the fashion industry, it is important to effectively execute marketing activities (Bengtsson & Vilic, 2012). International fashion brands are brands produced in a particular country but marketed in other countries like Thailand with the same brand name. Examples are: Chanel, Louis Vuitton, Gucci, Zara, Topshop, Hennes & Mauritz (H&M), Forever 21, Dior and Mango. International fashion brands have cheaper, affordable and expensive brands. Fashion has evolved and charmed many consumers from different generations like generation XYZ (Gia Vuong & Tan Nguyen, 2018). The main participants of this research are Gen XYZ. Gen X accounted for 27 % of Thai population while Gen Y was 28% (SCB, 2021). According to George Masnick of the Harvard Joint Center for Housing Studies, Gen X begins from 1965 to 1979 (Bump, 2014). Gen X are selective and include their mental capacity, emotions and their capability before making a purchase decision (Fan, 2018). Generation Y or Millennial by Howe & Strauss, (2000) are those born between 1980 and 1994. Generation Y are preoccupied with fashion brands and they are a significant group for purchasing fashion items (Valaei & Nikhashemi, 2017). Generation Z are born from 1995 to 2010 (Priporas et al., 2020) are the youngest and most populated consumer sector with regards to other generation from 2017 through to 2030. Gen Z views consumption as a crucial matter and an access instead of asset (Francis & Hoefel, 2018). This study will examine whether or not there is a comparison among Gen XYZ in relation to their brand attitude and purchase intention towards international fashion brands. Attitude and purchase intention play a vital role in the marketing sector. An extended review of literature shows that there have been no previous studies pertaining to Gen XYZ's brand attitude and purchase intention in response to international fashion brands in Udonthani, Thailand. So, this research attempts to contribute to the literature in the international fashion brands by studying Gen XYZ brand attitude and purchase intention in Udonthani, Thailand. The result will provide some insight for fashion brand marketers and retailers on which generation to target more in Udonthani. It will equally contribute to international fashion brand marketers who want to penetrate the market in Udonthani and who is already present in the market and also wants to maintain the loyalty of Gen XYZ their customers. Finally, the structure of this research starts with a background information of the content. Then, the literature in the areas of fashion brands, international branding, brand attitude, purchase intention, generation and self-construal is reviewed. After that we have the research methodology followed by data analysis. Finally, results, discussion, implications, limitations, suggestions for future research and conclusion

2. Literature Review: Fashion branding: Fashion is a part of our society though the trends always change (Bengtsson & Vilic, 2012). Okonkwo, (2016) also states in his article that fashion is not just about clothes and accessories but equally significant in shaping the lifestyle, culture and identity of a nation. According to Hancock, (2009), fashion branding is the process by which designers, distributors, consumers, producers, strategists, creative directors, retailers and fashion sellers form campaigns and give fashion attires a distinctive identity. **International branding:** International branding is an example of international communication among marketers and consumers from diverse cultures (Li, 2001). A broad definition of international branding is "the process of developing a firm's brand equity which leads to overseas customers' positive attitudes about the brand use (Melewar et al., 2007). For brands to move from one country to another, international fashion brand entrepreneurs should explore the religion, culture, value, belief and lifestyle of the target audience (Chanitphattana, 2017). International entrepreneurs are required to adopt the 7Ps (product, price, place, promotion, people, process and physical evidence) principle and use it as a framework for building a booming marketing strategy that envelops every step involve in the buying process.

Brand attitude: Fishbein & Ajzen, (1977) argued that attitude is the volume of influence for or against some object. Attitude toward the brand is an "individual's internal evaluation of the brand. Attitude

is a renowned research topic in advertising/marketing studies for two purposes. Firstly, it is significant in predicting consumer behavior and secondly, a lot of theoretical frameworks based on the research of attitudes are accessible from social psychology researchers (Spears & Singh, 2004). Previous studies have discovered that Thai consumers from generation XYZ had favorable attitudes toward international products and world brands. Sae-jiu, (2007) research entitled “Thai consumer perception and attitude towards foreign versus domestic apparel” suggested that Thais view international clothing brands as long lasting, highly attractive, stylish, trending, and high-quality owing to the point that they come from high-tech, developed nations (Ponbamrungwong & Chandsawang, 2009). For this reason, Thai generation XYZ consumers may possess a huge drive to purchase international fashion brands. **Purchase intention:** According to Warshaw & Davis, (1985), purchase intention occurs when a consumer plans in advance to buy some particular products or services in the future which might or might not be accomplished based on the individual’s ability to carry it out (Gia Vuong & Tan Nguyen, 2018). Intention is an important construct in marketing literature and companies use it to determine the sales of new products or the repurchase of existing products (Curvelo et al., 2019). Cronin Jr et al., (2000) suggested that intention influences consumers to purchase products or services and also share their experience with family and friend (Curvelo et al., 2019). By studying Gen XYZ’s purchase intentions, marketers can better understand and determine their purchasing behavior (Haque et al., 2015).

Generation: Generation can be defined biologically as the average gap of time between the birth of parents and their off springs (McCrindle & Wolfinger, 2010). A generation is a group of people who were born within the same period, have approximately the same age, life style and are shaped by specific events, trends and developments (McCrindle & Wolfinger, 2010). Generations can be grouped into Builders, Baby Boomers, X, Y and Z (McCrindle & Wolfinger, 2010). Gen X was born from 1965-1979 (McCrindle & Wolfinger, 2010). Members of this generation are pessimistic, enterprising and independent. In terms of consumer behaviors, generation X purchases fast fashion depending on the product’s quality, price, location and promotion (Fan, 2018). Generation Y also called Millennial by Howe and Strauss (2000) are those born between 1980-1994 (McCrindle & Wolfinger, 2010). They are relatively fashion conscious, less price conscious, enthusiastic to word – of – mouth reviews, passionate to test new things and is ready to spend two-thirds of their income on fashion goods (Gia Vuong & Tan Nguyen, 2018). Gen Y has a large market size with a huge buying power now and in the coming future (Knittel et al., 2016). Gen Z is principally born from 1995-2010 (McCrindle & Wolfinger, 2010). This generation is the youngest and most populated consumer sector across all the generations from 2017 until 2030 (Priporas et al., 2020). They care about the cost and its value and will even go as far as researching before spending on any product or service (Bump, 2021). H1: Generation influences brand attitude towards international fashion brands. H2: Generation influences purchase intentions towards international fashion brands.

Self-construal: Self-construal (SC), according to Singelis, (1994), refers to “an individual's thoughts, feelings, and actions concerning relationships to others as well as the self as distinct from others” (Polyorat & Alden, 2005). Markus & Kitayama, (1991) point out two self-construal which are independent and interdependent. They stated that Europeans and Americans can be considered as independent self-construal (INDSC) individuals since they make meaning of the self as individual and separate from others. On the other hand, East Asians are seen as interdependent self-construal (INTDSC) individuals because they show the self as connected to others and are determined by relationships with others (Cross et al., 2011). According to Wang & Chan, (2001), a person with INDSC is more concerned with the practical than the symbolic advantages of the brands. However, this is different with individuals with INTDSC. Escalas & Bettman, (2005) highlighted that the symbolic benefit of the brand is significant for individuals with INTDSC. From this regard, the theory of independent and interdependent self-construal is an important strategy to understand consumers’ attitude towards purchasing international fashion brands (Kim & Zhang, 2015). H3: Self-construal

influences brand attitude towards international fashion brands. H4: Self-construal affects purchase intentions towards international fashion brands.

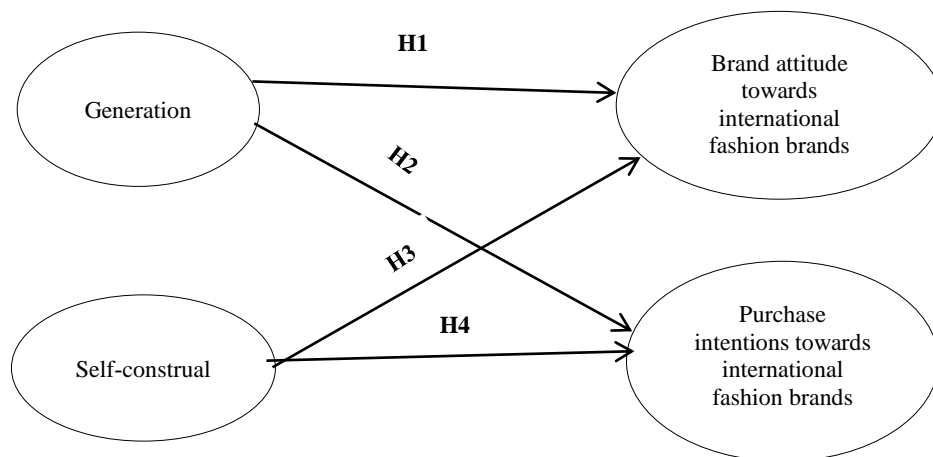


Figure 1. Proposed Conceptual Model

2.1 Problem statement: The research goal is to use Markus & Kitayama, (1991) theory of independent and interdependent self-construal to investigate the influence of cultural differentiation between Gen XYZ's brand attitude and purchase intention in response to international fashion brands.

3. Method: A survey was carried out to determine the connection between dependent variables (brand attitude and purchase intention) and independent variables (Generation XYZ, and self - construal). After some reliability measures were ascertained, ANOVA and regression analyses were done to test the hypotheses. The time period of the data collection started from March to April 2022.

3.1 Materials: Data was collected from the Gen X Y Z fashion consumers in Udonthani by using online self-administered questionnaire (Google forms) and sent the link through social media platforms like Facebook, Instagram and Line groups. The sample was drawn from four hundred respondent such as students, teachers, famers, government and private personnel in the major city, by using a quota sampling. The 7-point Likert-type scales was used to measure the second part of the survey ranging from strongly disagree (1) to strongly agree (7) (Bryman & Bell, 2011).

3.1.1 Samples: Sample data collected through online self-administered questionnaire (Google forms) by using quota sampling method with students, teachers, famers, government and private personnel in Udonthani, Thailand from March to April. The sampling formula of Yamane, (1960) was used to determine the sample size of the research. This populations are considered to be appropriate because they cover all the three generations in this study. Gen X is the third largest generation and has more spending power than other generations (Fan, 2018). Gen Y was suggested to be the largest demographics spending on fashion apparels and electronic gadgets (Fibre2Fashion, 2014). Gen Z consumers aged 16 and above most likely spend their money on clothes, beauty products, car expenses, groceries, experiences, and eating out as it is the case of most students and staff. Gen Z possesses higher spending power as compared to other generations (Autumnfair, 2022).

3.1.2 Site: The study population were people in Udonthani in Thailand and the sample was drawn from those in the major city. Udonthani is an area of economic opportunity located next to a neighboring country (Lin & Jutaviriya, 2017). It is also the third highest economic growth province in the northeastern region of Thailand. No studies have been done on this topic pertaining directly to Udonthani based on our findings.

3.1.3 Procedures: First the researcher started by writing a letter requesting the permission to conduct the study in advance before going to do the pre-test and the posttest. Next the researcher did a pre-test with five people from each generation to check for the clarity and understandability

of the questionnaire. Then Cronbach Alpha was used to determine the reliability of questionnaires. After the validity and reliability of questionnaires were checked properly, the researcher administered the questionnaire to Gen XYZ in Udonthani in the main study. A proper research procedure was pursued before, during, and after the main survey (Priporas et al., 2020).

3.2 Measurement: All the original scales in English were translated to the participants' native language. The researcher divided the questions in the main survey into two parts. The first part consisted of demographic information and the second part asked questions about the focal variables in the survey. The researcher used the 7-point Likert-type scales to measure the variables in the second part, ranging from strongly disagree (1) to strongly agree (7) (Bryman & Bell, 2011). The resulting scores were analyzed, averaged and interpreted from the average opinion level of all samples by dividing the scores into equal intervals ranging from 1-7 points in 7 level, with a width of 0.86 score (Bryman & Bell, 2011). Scales measuring these variables were adapted from previous studies, as follows: first the scale item of Self-construal which taps two elements; INDSC (5 items) and INTDSC (4 items) adapted from Polyorat et al., (2013). Secondly, six scale items of brand attitude were adapted from Ajitha & Sivakumar, (2019) in order to measure self-expression attitude and self-presentation attitude. For purchase intention, four items were adapted from the study of Hussain et al., (2021).

3.3 Data Analysis: The researcher administered statistical analyses using the statistical software IBM SPSS Statistics. ANOVA and regression analysis were used to analyse the influence of independent variables (Generation XYZ, and self - construal) on the dependent variables (brand attitude and purchase intention) (Utbys Nerac & Niemi, 2021). ANOVA was used because it shows if there are any statistical differences between the means of three or more independent groups. And regression analysis was used to indicate which variable is important and how it can influence one another.

3.3.1 Validity and Reliability: The questionnaire was presented to experts for suggestions and improvement as a way of testing its validity. The reliability value was calculated by using Cronbach's alpha, to check the internal consistency within the questionnaire items. The result of the pretest reviewed that INDSC scale with five items ($\alpha = .826$) and INTDSC scale with four items ($\alpha = .833$) were found reliable. Similarly, brand attitude scale with six items ($\alpha = .915$) and purchase intentions scale with four items ($\alpha = .958$) were equally found reliable. Then, the researcher continued to collect the real data for 400 respondents excluding those from the pretest

4. Results and Discussion:

4.1 Results: 4.1.1 Demographic and Respondents Characteristics: The result shows that, most respondents were females with 74.2 %. Generation Y and Z had an equal percentage of 37.5. The highest respondents were those with a bachelor degree (50.7%). The most respondents were teachers (35.3%). An overall value of the level of interests in fashion from 400 respondents shows a mean value of 5.35 meaning their level of interest is high.

Table 1: Demographic Characteristics

<i>Items</i>	<i>Categories</i>	<i>Frequency</i>	<i>Percentage (%)</i>
Gender	Male	103	25.8
	Female	297	74.2
Year of birth	Gen X	100	25.0
	Gen Y	150	37.5
	Gen Z	150	37.5
Education	Junior high school	10	2.5
	High school	42	10.5
	Vocational certificate	25	6.3
	High vocational certificate	80	20.0
	Bachelor's degree	203	50.7
	Master's degree	39	9.8
	Professional degree	1	0.3

Occupations	Certificate student	5	1.3
	Diploma student	90	22.5
	Bachelor's degree student	26	6.5
	Teacher	141	35.3
	College personnel	57	14.2
	Agriculture	8	2.0
	Private sector	36	9.0
	Government official	37	9.3

4.1.2 Descriptive Statistics and Reliability: Means, standard deviations, reliabilities and results in the form of Cronbach's alpha are summarized in table 2. The reference reliability accepted with Cronbach's alpha is greater than .70 (Hair et al., 2019). All the scales showed Cronbach's alphas higher than .70 suggesting acceptable reliability.

Table 2: Descriptive statistics and reliability

Constructs	No. of items	Alpha (α)	Mean	SD
Independent self-construal	5	.797	5.82	.93
Interdependent self-construal	4	.832	4.72	1.38
Brand attitude	6	.919	4.43	1.56
Purchase intentions	4	.960	4.51	1.75

4.1.3 Hypotheses Testing: H1: Generation influences brand attitude towards international fashion brands.

The hypothesis tests if generation influences brand attitude towards international fashion brands. The one-way analysis of variance (ANOVA) was used to determine whether there were significant differences among the means of the three generations (Gen XYZ) in term of brand attitude towards international fashion brands. The differences among Gen XYZ were not statistically significant as demonstrated by one-way ANOVA ($F(2,397) = 1.555, p = .212$). Table 3 summarizes One-way ANOVA results. Hypothesis 1 is rejected.

Table 3: Impact of Generation - One-way ANOVA - Independent variable

Dependent Variable	Gen X		Gen Y		Gen Z		F	Sig.
	Mean	SD	Mean	SD	Mean	SD		
Brand attitude	4.21	1.67	4.46	1.46	4.56	1.58	1.555	0.212
Purchase intention	4.00	1.88	4.56	1.61	4.79	1.73	6.416	0.002

*Significant at $p < 0.05$,

Table 4: LSD of generation XYZ to purchase intention

GROUP	Gen X	Gen Y	Gen Z
Gen X			
Gen Y	.55417* (.013)		
Gen Z	.79083* (.000)	.23667 (.235)	

H2: Generation influences purchase intention towards international fashion brands. To test this hypothesis, ANOVA was used to determine whether there were significant differences among the means of Gen XYZ in relation to their purchase intention towards international fashion brands. The results ($F(2,397) = 6.416, p < .002$) on table 3 reveal a statistically significant difference among Gen

XYZ. Post hoc comparisons with LSD test were used to analyse pairwise differences among group means. The test indicates that the result of purchase intention level of Gen X is statistically lower than Gen Y and Gen Z with mean difference value .554 and .791 respectively as seen on table 4. However, no significant differences were detected between Gen Y and Gen Z. Therefore, hypothesis 2 is accepted. H3: Self-construal influences brand attitude towards international fashion brands. Self-construal influences brand attitude towards international fashion brands (H3). To test this hypothesis brand attitude for international fashion brands is regressed on INDSC and INTDSC. As seen in Table 5, these two types of self-construal: independent self-construal ($\beta = 0.166$, $t = 3.709$, $P < .01$) and interdependent self-construal ($\beta = 0.421$, $t = 9.418$, $P < .01$) significantly influence brand attitude. Hypothesis 3 is accepted. Table 5 Multiple Regression Results

Dependent Variable				
	(1) Brand attitude		(2) Purchase Intention	
Independent Variable	β	t -value	β	t -value
Independent self-construal	0.166	3.709	0.169	3.485
Interdependent self-construal	0.421	9.418	0.212	4.38

Note: $p < .05$; $p < .01$; $p < .001$ (1): $F(2, 397) = 57.175$; $p < .001$; $R^2 = .224$; Adjusted $R^2 = .220$. (2): $F(2, 397) = 18.129$; $p < .001$; $R^2 = .084$; Adjusted $R^2 = .079$. H4: Self-construal affects purchase intentions towards international fashion brands. To test if self-construal also affects purchase intention towards international fashion brands (H4), purchase intention is regressed on INDSC and INTDSC of international fashion brands. Table 5 reveals that independent self-construal ($\beta = 0.169$, $t = 3.485$, $P = .01$) and interdependent self-construal ($\beta = 0.212$, $t = 4.38$, $P < .01$) influence purchase intention. Hypothesis 4 is accepted.

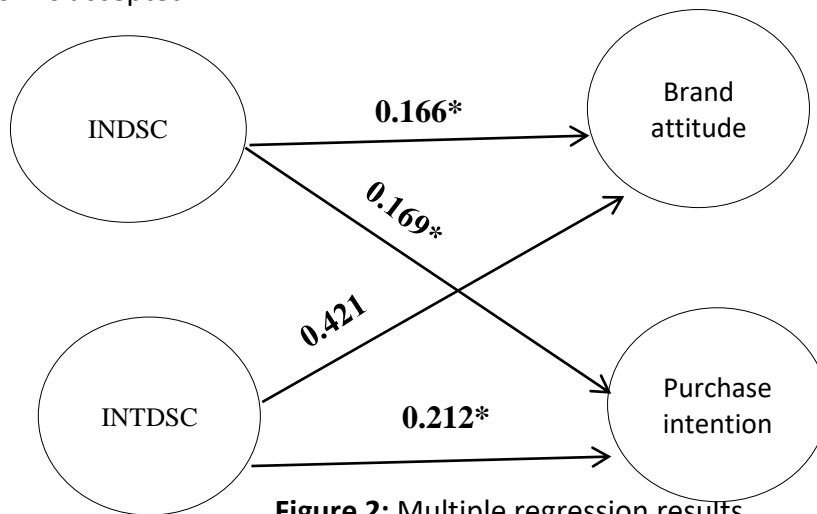


Figure 2: Multiple regression results.

4.2 Discussion: The results indicate that, for international fashion brands in Udonthani, generations (X vs Y vs Z) have an insignificant influence on brand attitude. On the other hand, generations X vs Y and X vs Z have significant influences on purchase intention while generation Y vs Z do not. This means that Gen Y and Z have the same intention to purchase international fashion brands as compare to Gen X. Self-construal (INDSC and INTDSC) also has significant influence on brand attitude and purchase intention. Our H1 states that generation influences brand attitude towards international fashion brands. But our findings show an insignificant result. This implies that, Gen XYZ consumers in Udonthani did not show different attitudes towards international fashion brands and they perceived it positively. The result thus suggests that international fashion brands are a symbol of social status to Thais and this is supported in the existing literature (Masayavanij, 2007; Ponbamrungwong & Chandsawang, 2009; Sae-jiu, 2007). Businesses could spend budget on the same strategy among Gen XYZ in Udonthani. Therefore, businesses should still be marketed based on generation in order to boost the purchase intentions among these groups. H2 which predicted that Generation XYZ influences purchase intention of international fashion brands was supported

partially by the findings. Generations X vs Y and X vs Z have an influence on purchase intention. Based on the result, Gen Y and Z has a higher difference on purchase intention for international fashion brands than Gen X. This could be because Gen Z has a higher spending power as compared to other generations (Autumnfair, 2022). They also spend their money on clothes, beauty products and experience as supported by Autumnfair, (2022). Gen Y shopping is considered as an entertainment and a nice leisure activity (Petra, 2016). So, a non-skippable video advertisement is the most essential advertising style for Gen Z. Promotion such as discount may be effective for both Gen Y and Z. For H3 and H4 in this study, independent self-construal and interdependent self-construal were significant factors that influence brand attitude and purchase intentions towards international fashion brands. From the analysis, INTDSC has a higher impact. This could be because most Thai people are INTDSC that is, they are more likely to be with group and relationship. The result supports (Sae-jiu, 2007) study that Thai consumers had an overall positive attitude toward foreign brand apparel. The researcher therefore suggests fashion brand marketers to market with INTDSC as the main target because they have higher attitude and intention to buy. The fashion brand should plan strategy by communicating them with social appeal, relationship appeal to increase their intention to buy. Theoretical implication: This research provides theoretical and managerial contributions to the areas of international fashion marketing. Based on theoretical implications, generations have different motivations, decision making, shopping habits, consumer behaviours, traits and lifestyle and this study supports this view. The study of Cornelius II, (2018) also indicates that these generations are different from each other. The result also found that Gen XYZ have the same attitude towards international fashion brands and this is related to the study of Masayavanij, (2007) that Thai consumers from generation XYZ had favorable attitudes toward international products and world brands. This study of Gen XYZ is needed and it will contribute to business and marketing theories and practices especially in terms of market segmentation and targeting. This study has added to the cross-cultural consumer behavior sector by using Markus and Kitayama's theory of INDSC and INTDSC to study Gen XYZ brand attitude and purchase intention in responds to international fashion brands in Udonthani. Both INDSC and INTDSC influence brand attitude and purchase intention of international fashion brands but INTDSC shows a higher beta value as compared to INDSC. This implies that, they purchase international fashion brands because they want to be linked to others and accepted with others meaning enhance connectedness as supported by the study of Cross et al., (2011) and Polyorat & Alden, (2005). This research also supports the study of Escalas & Bettman, (2005) who stated in his study that the symbolic benefit of the brand is significant for individuals with INTDSC and our result shows that international fashion brand is a symbol of social status for Gen XYZ. This study also identified the new research area of generation, self-construal, attitude and purchase intention in the contexts of international fashion brands and contribution in the context of expansion to Udonthani. Managerial implication: This study shows marketers significant information about Gen XYZ and self-construal. A distinct customer profile can be addressed, generating a better economic performance of the fashion company. According to the research results, the customer profile to target more should be Gen Y and Z because of their high perspective and desire to purchase international fashion brands. These study results provide important implications to international fashion brand retailers by showing that one generation does not fit all and one strategy does not fit all markets. Marketers should add messages like "promo" or "discount" in their advertising for Gen X. Since Gen Y and Z have the similar purchase intentions, marketers may set up a campaign of product trying, or use statements like "Try our products and be a smart person". This study helps international fashion brand marketers to understand the similarities and differences of consumer values in different generations and formulate marketing strategies to boost revenue. The results show Thais are more INTDSC and so they will more likely prioritize to be with group and relationship. The researcher will design marketing strategy like advertisement under the theme of relationship and group to improve the sales revenue. Limitations and recommendations: The limitations of this

research can be seen as a foundation for future studies. The findings in this study provide an excellent starting point for further scientific research. This research only studied the brand attitude and purchase intention in the international fashion brand context, Future studies could expand in the knowledge of brand image or brand communication. More so, other types of research methods like focus group and qualitative research could also be used especially interviewing the target group in order to gain a better understanding of the subject matter. Further research could also be done in comparison between some other countries' consumers in which they are seen to have significant influence on the consumption of international fashion brands.

5. Conclusion: This study reveals that, generations (X vs Y vs Z) have an insignificant influence on brand attitude. Generations X vs Y and X vs Z significantly influence purchase intention while generation Y vs Z do not. Therefore, Gen Y and Z have the same intention to purchase international fashion brands as compare to Gen X. Self-construal (INDSC and INTDSC) also has significant influence on brand attitude and purchase intention. Even though this study provides theoretical and managerial implications, future research is recommended to reapprove and expand the study.

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Reference: Ajitha, S., & Sivakumar, V. J. (2019). The moderating role of age and gender on the attitude towards new luxury fashion brands. *Journal of Fashion Marketing and Management: An International Journal*, 23(4), 440–465. <https://doi.org/10.1108/JFMM-05-2018-0074> Autumnfair. (2022). Generation Z characteristics and buying behaviour. Autumnfair. <https://www.autumnfair.com/news/generation-z-characteristics-and-buying-behaviour> Bengtsson, F., & Vilic, M. (2012). The art of fashionable branding - the success of the Swedish fashion brand COS - [University of Gothenburg]. https://gupea.ub.gu.se/bitstream/2077/29371/1/gupea_2077_29371_1.pdf Bryman, A., & Bell, E. (2011). *Business research methods* 3rd ed. New York. Oxford Press. Bui, K. VT (2002). First-generation college students at a four Bump, P. (2014). Here is when each generation begins and ends, according to facts. The Atlantic. <https://www.theatlantic.com/national/archive/2014/03/here-is-when-each-generation-begins-and-ends-according-to-facts/359589/> Bump, P. (2021). 5 things Gen Z will spend money on & why marketers need to care. HubSpot. <https://blog.hubspot.com/marketing/what-gen-z-spends-money-on> Chanitphattana, A. (2017). *International marketing communication: A case study of Thai spa products and services in the United Arab Emirates*. National Institute of Development Administration. Cornelius II, A. D. (2018). *Strategies for motivating a multigenerational workforce*. Walden University. Cronin Jr, J. J., Brady, M. K., & Hult, G. T. M. (2000). Assessing the effects of quality, value, and customer satisfaction on consumer behavioral intentions in service environments. *Journal of Retailing*, 76(2), 193–218. Cross, S. E., Hardin, E. E., & Gercek-Swing, B. (2011). The what, how, why, and where of self-construal. *Personality and Social Psychology Review*, 15(2), 142–179.

Curvelo, I. C. G., Watanabe, E. A. de M., & Alfinito, S. (2019). Purchase intention of organic food under the influence of attributes, consumer trust and perceived value. *Revista de Gestao*, 26(3), 198–211. <https://doi.org/10.1108/REGE-01-2018-0010>

Escalas, J. E., & Bettman, J. R. (2005). Self-construal, reference groups, and brand meaning. *Journal of Consumer Research*, 32(3), 378–389.

Fan, Y. (2018). Buying behaviours of generation X women on fast fashion products: A mixed methods study [University of Nebraska - Lincoln]. In University of Nebraska. <http://digitalcommons.unl.edu/textilesdiss/11>

Fibre2Fashion. (2014). Fashion retailers tapping new market segments. *Fibre2Fashion*. <https://www.fibre2fashion.com/industry-article/7358/fashion-retailers-tapping-new-market-segments>.

Fishbein, M., & Ajzen, I. (1977). Belief, attitude, intention, and behavior: An introduction to theory and research. *Philosophy and Rhetoric*, 10(2).

Francis, T., & Hoefel, F. (2018). True Gen': Generation Z and its implications for companies. McKinsey & Company, 12.

Gia Vuong, H., & Tan Nguyen, M. (2018). Factors influencing millennials' purchase intention towards fast fashion products: A case study in Vietnam. *International Journal of Social Science and Humanity*, 8(8), 235–240. <https://doi.org/10.18178/ijssh.2018.v8.967>

Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to use and how to report the results of PLS-SEM. *European Business Review*, 31(1), 2–24.

Hancock, J. (2009). *Brand/story: Ralph, Vera, Johnny, Billy, and other adventures in fashion branding*. Fairchild Books.

Haque, A., Anwar, N., Yasmin, F., Sarwar, A., Ibrahim, Z., & Momen, A. (2015). Purchase intention of foreign products: A study on Bangladeshi consumer perspective. *SAGE Open*, 5(2), 1–12. <https://doi.org/10.1177/2158244015592680>

Howe, N., & Strauss, W. (2000). Millennials rising: The next great generation. Vintage.

Hussain, S., Li, Y., & Li, W. (2021). Influence of platform characteristics on purchase intention in social commerce: mechanism of psychological contracts. *Journal of Theoretical and Applied Electronic Commerce Research*, 16(1), 1–17. <https://doi.org/10.4067/S0718-18762021000100102>

Kaiser, S. B. (2018). *Fashion and cultural studies*. Bloomsbury Visual Arts.

Kim, J. H., & Zhang, B. (2015). Attitude and purchase Intent for luxury fashion goods : Cultural differences between Americans and Chinese. *International Journal of Costume and Fashion*, 15(1), 19–37. <https://doi.org/10.7233/ijcf.2015.15.1.019>

Knittel, Z., Beurer, K., & Berndt, A. (2016). Brand avoidance among generation Y consumers. *Qualitative Market Research*, 19(1), 27–43. <https://doi.org/10.1108/QMR-03-2015-0019>

Li, Z. (2001). Cultural impact on international branding: A case of marketing Finnish mobile phones in China (Issue 13). University of Jyväskylä. <http://urn.fi/URN:ISBN:951-39-1171-3>

Lin, L., & Jutaviriya, K. (2017). The transnational migration process of new Chinese migrant traders in Bobae Market, Udon Thani, Thailand. *Journal of Mekong Societies*, 13(2), 45–64.

Markus, H. R., & Kitayama, S. (1991). Culture and the self: Implications for cognition, emotion, and motivation. *Psychological Review*, 98(2), 224–253.

Masayavanij, P. (2007). An investigation into how consumer perceive domestic brands and global brands: Thai footwear (trainer) industry. University of Nottingham.

McCrindle, M., & Wolfinger, E. (2010). Generations defined. *Ethos*, 18(1), 8–13.

Melewar, T., Small, J., Whitelock, J., & Fastoso, F. (2007). Understanding international branding: Defining the domain and reviewing the literature. *International Marketing Review*, 24(3), 252–270. <https://doi.org/10.1108/02651330710755285>

Okonkwo, U. (2016). *Luxury fashion branding: trends, tactics, techniques* Springer. https://books.google.co.th/books?id=a_6CublRtYwC&lpg=PR7&ots=9dgimAoig9&dq=Luxury Fashion Branding Trends%2C Tactics%2C Techniques&lr&pg=PP1#v=onepage&q=Luxury Fashion Branding Trends, Tactics, Techniques&f=false

Petra, K. K. (2016). Generation Y attitudes towards shopping: A comparison of the Czech Republic and Slovakia. *Journal of Competitiveness*, 8(1), 38–54. <https://doi.org/10.7441/joc.2016.01.03>

Polyorat, K., & Alden, D. L. (2005). Self-construal and need-for-cognition effects on brand attitudes and purchase intentions in response to comparative advertising in Thailand and the United States. *Journal of Advertising*, 34(1), 37–48. <https://doi.org/10.1080/00913367.2005.10639179>

Ponbamrungwong, A., & Chandsawang, S. (2009). The impact of brand on Thai female consumer in purchase decision of foreign makeup product. June, 1–53. <http://mdh.diva-portal.org/smash/get/diva2:236236/FULLTEXT01>

Priporas, C. V., Stylos, N., &

Kamenidou, I. (Eirini). (2020). City image, city brand personality and generation Z residents' life satisfaction under economic crisis: Predictors of city-related social media engagement. *Journal of Business Research*, 119(December 2018), 453–463. <https://doi.org/10.1016/j.jbusres.2019.05.019>

Sae-jiu, S. (2007). Consumer perception and attitude towards foreign versus domestic apparel in Thailand. University of Nottingham. SCB. (2021). Is it true that Gen Y has more debts than other generations? The Siam Commercial Bank. <https://www.scb.co.th/en/personal-banking/stories/geny-more-debts.html#:~:text=Gen Y accounted for 28, but also has independent thinking>.

Singelis, T. M. (1994). The measurement of independent and interdependent self-construals. *Personality and Social Psychology Bulletin*, 20(5), 580–591. <https://doi.org/10.1177/0146167294205014>

Spears, N., & Singh, S. N. (2004). Measuring attitude toward the brand and purchase intentions. *Journal of Current Issues and Research in Advertising*, 26(2), 53–66. <https://doi.org/10.1080/10641734.2004.10505164>

Utbys Nerac, A., & Niemi, V. (2021). I would not buy from that brand! A comparative study of generation X, Y, and Z's brand avoidance behaviours towards fast fashion brands [Jönköping University, Jönköping International Business School.]. <http://urn.kb.se/resolve?urn=urn:nbn:se:hj:diva-53033>

Valaei, N., & Nikhashemi, S. R. (2017). Generation Y consumers' buying behaviour in fashion apparel industry: a moderation analysis. *Journal of Fashion Marketing and Management*, 21(4), 523–543. <https://doi.org/10.1108/JFMM-01-2017-0002>

Wang, C. L., & Chan, A. K. K. (2001). A content analysis of connectedness vs. separateness themes used in US and PRC print advertisements. *International Marketing Review*.

Warshaw, P. R., & Davis, F. D. (1985). The accuracy of behavioral intention versus behavioral expectation for predicting behavioral goals. *The Journal of Psychology*, 119(6), 599–602. <https://doi.org/10.1080/00223980.1985.9915469>

Yamane, T. (1960). *Statistic: An introductory analysis* (3rd ed.). Singapore: Harper international edition.

Food Inflation During the Pandemic. A Comparison Between Brazil and Thailand

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Abstract: Thailand and Brazil are prominent food producers, and the two countries suffered a huge decrease in DGP during the Covid-19 Pandemic. Despite these similarities, Thailand and Brazil had different outcomes related to controlling domestic food inflation. For example, in 2020, the annual food inflation in Brazil was 14, 11%, and Thailand's was 1.37%. Therefore, this study aims to contribute to the literature by filling the information gap about food inflation dynamics, in those two countries, during the Covid-19 Pandemic. This article assesses the reasons for the massive discrepancy between Brazil and Thailand regarding how food inflation evolved. The Autoregressive Distributed Lag methodology was applied to build two time-series models - one for each country. The capability of two macroeconomic variables (energy inflation and exchange rate) to explain the food inflation variation was tested. The two explanatory variables showed statistical relevance for both models, and the null hypotheses were rejected. In conclusion, the stability of the domestic energy inflation and the exchange rate in Thailand during 2020 and 2021 prevented the increase in food prices level in this country.

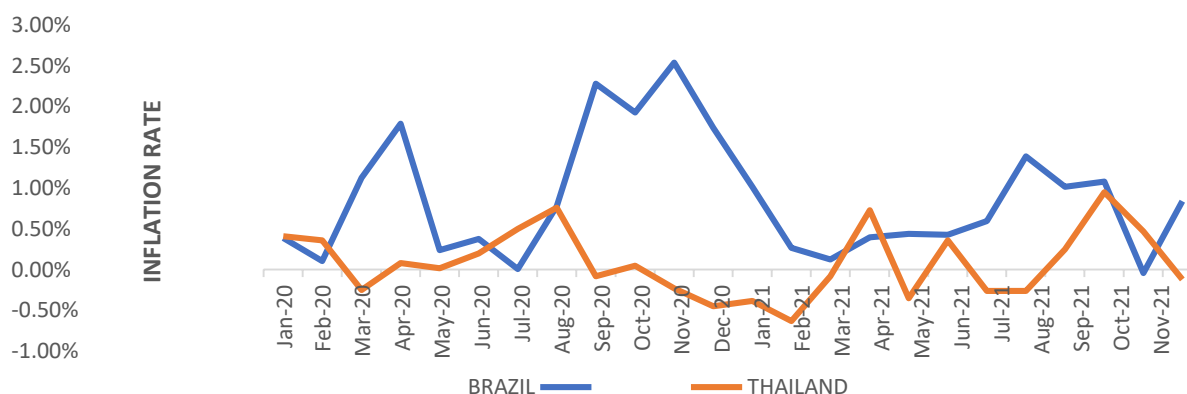
Keywords: Food inflation, Thailand, Brazil, ARDL, Pandemic

1. Introduction: Thailand and Brazil are one of the larger net food-exporting countries. Moreover, both economies count with vast and well-developed food and beverage industries. Thailand, due to its abundant natural resources, is considered “one of the largest net food-exporting countries globally and has become the third food exporter in Asia after the big giants, China and India.”

(WANG et al., 2020, pg. 02). In Brazil, the domestic industry processes more than 50% of the total agricultural production. (ARISSETO-BRAGOTTO et al., 2017). Besides, even during the Covid-19 Pandemic, Thailand and Brazil had an expressive net trade balance in food and agricultural goods. According to the ITC (2022), Brazil and Thailand occupy the fourth and 5th positions regarding net exports of Food and Agri-based products. In 2020, these economies were impaired by Covid in comparable magnitudes – Brazilian GDP shrunk by around 4%, while Thailand decreased by 6%. Although these two countries share many similarities regarding food capacity, food inflation responded differently in these two economies during the 166haviou period. In January 2020, as shown in figure 01, the food and beverage (F&B) inflation was 0.39 and 0.41% in Thailand and Brazil, respectively. However, Brazilian food inflation started to increase, reaching, by the end of the year, the accumulated value of 14, 11%, whereas Thailand performed only 1.37% of annual food inflation. For the year 2021, the gap persists. Looking at the data from January until December, the Brazilian food inflation was 7.94%, while Thailand’s was 0.67%, as shown in figures 01 and 02. Therefore, the main aim of this study is: why could Thailand control F&B inflation while Brazilian inflation is high and above the target?

Figure 1

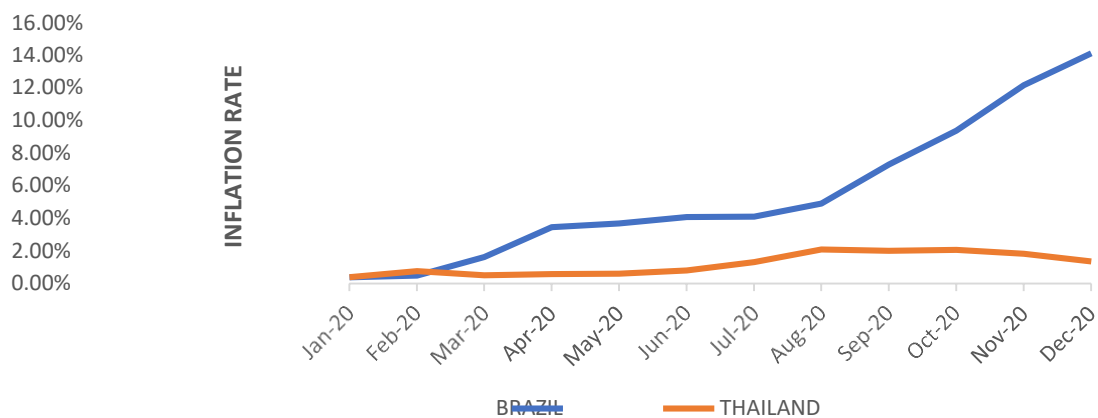
F&B Monthly Inflation 2020 – 2021



Note: a) Thailand’s monthly data was extracted from the Bureau of Trade and Economic Indices – Minister of Commerce. Retrieved from: <http://www.price.moc.go.th/>
b) Brazilian’s data was extracted from table 6070 of the System of Automatic Retriever (SIDRA) of the Brazilian Instituto of Geography and Statistics (IBGE).

Figure 2

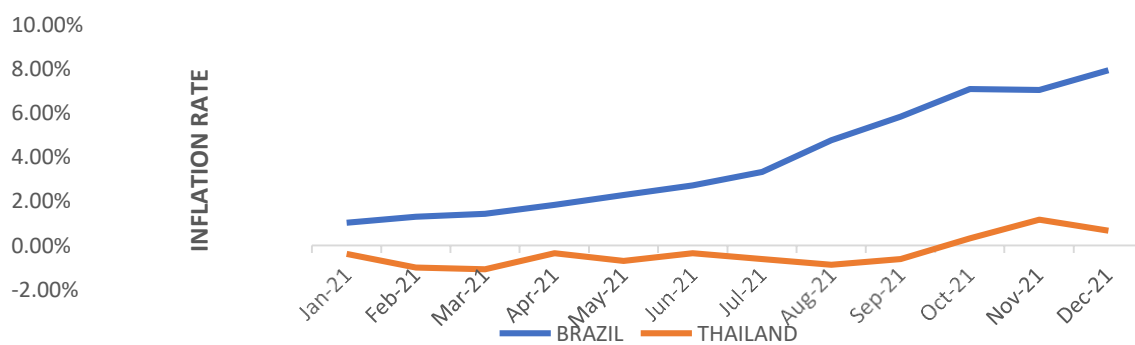
F&B Accumulated Inflation 2020



Note: a) Thailand's monthly data was extracted from the Bureau of Trade and Economic Indices – Minister of Commerce. Retrieved from: <http://www.price.moc.go.th/>
b) Brazilian's data was extracted from table 6070 of the System of Automatic Retriever (SIDRA) of the Brazilian Instituto of Geography and Statistics (IBGE).

Figure 3

F&B Accumulated Inflation 2021



Note: a) Thailand's monthly data was extracted from the Bureau of Trade and Economic Indices – Minister of Commerce. Retrieved from: <http://www.price.moc.go.th/>
b) Brazilian's data was extracted from table 6070 of the System of Automatic Retriever (SIDRA) of the Brazilian Instituto of Geography and Statistics (IBGE).

The present theme is socially relevant because food price stability in developing economies is a critical macroeconomic variable. In these countries, food and beverage have an expressive proportion of the consumption basket. In Brazil, the F&B ratio in IPCA (Extended National Consumer Price index) represents 18.99% of the total price index, while Thailand's F&B accounts for around 40%, according to their respective National Statistics Offices. However, during the Covid-19 Pandemic, the proportion of food in the consumption basket has amplified in many countries. Moreover, it is well-known that high inflation contributes to rampant inequality. Food inflation for the households at the lowest percentile of the income distribution leads these families to a food insecurity situation. Academically, the present study is justified by the void of journal articles contrasting those two emerging economies and the incipient scientific investigation about food inflation during Covid-19. Therefore, this paper aims to contribute to understanding the food price dynamics during the Pandemic. Due to this study's recent object and the relative food price stability during the previous years, few articles were published about food price hikes. Regarding overall inflation during the Covid-19 Pandemic, HA et al. (2021) identified a reduction of around 0.6% on average, considering the developed economies. The food price spike was offset by the oil price slump for the first four months of 2020. However, for these scholars, after the outbreak, global disinflation was the most short-lived inflation downturn aftershock in the last 50 years. KWON & KOO (2009) studied the food price behaviour in the United States from 1985 to 2001 and 2002 to 2008. These scholars found a strong relationship between the exchange rate and retail prices during the first period. Conversely, any link between that monetary variable and food inflation during the second period was not found. On the other hand, for developing economies, the monetary stance has a statistically relevant role. However, the direction of this impact cannot be easily forecast. Many scholars advocate that a tightening in the monetary policy leads to a negative effect on food inflation by the appreciation in the exchange rate. Nevertheless, BHATTACHARYA & JAIN (2020) pointed out that a rise in the interest rate impacts the supply side by increasing production costs and working capital. Additionally, the negative effect of the interest rate related to aggregated demand is more than outweighed by the increase in production cost. Policymakers must consider the positive and negative impact of a monetary tightening on food inflation to figure out the optimum level to promote food price stabilization (Iddrisu, 2021). For example, regarding Brazil, the analysis done by IDDRISU (2021) showed that the marginal change in monetary policy leads to a 1.134%, 1.088%, and 1.183% change, in the same direction, in food inflation for the 25th, 50th, and 75th quantiles, respectively, with a lag between 16 and 32 months. For Thailand, according to SIREGAR & RAJAGURO (2005), the exchange rate and the domestic interest rate are found to be significant in causing price changes. The studies of GONGSIANG & AMATYAKUL (2020) encompassed the pre-pandemic period. The scholar applied quantile regression and regressed the raw food inflation against the Nominal Effective Exchange Rate (NEER) as an explanatory variable. The findings revealed a negative relationship between this explanatory variable and the variable of interest. This relationship direction is in line with the main theories. For Thailand, contrarily to Brazil, an increase in NEER refers to the baht appreciation against Thailand's major trading partners and competitors. Hence, the higher the NEER value, the smaller the raw food inflation. Concerning the present study's limitations, along with literature scarcity, the time series length – 24 observations – is another constraint to be highlighted. Nevertheless, to reach the statistical requirements for estimator reliability, the data set will encompass from January 2018 until December 2021. Furthermore, the methodology used, ARDL – Autoregressive Distributed Lag, is adequate for small samples: "the ARDL procedure is statistically more valid in small samples" (Battha et al., 2020).

2. Methodology: The data set was retrieved from the statistics national institutes of Thailand and Brazil and their respective central banks (BOT and Bacen). The data will be time series encompassing Thai and Brazilian macroeconomics variables from January 2018 to December 2021. All variables will be monthly frequency. The variable of interest is the monthly food and beverage inflation, and the explanatory variable will be energy inflation and the exchange rate. The time frame of interest encompasses the acute stage of the Pandemic - January 2020 until December 2021. However, to meet methodologic requirements, the time series length will be from January 2018 to December 2021. The methodology chosen was the Autoregressive Distributed Lag (ARDL) due to it being suitable for short time series. One advantage of the ARDL is that it can handle different levels of integration, as long as there is no presence of variables integrated by 2 – I(2). Therefore, it was imperative to assess if the variables are stationary – Integration equals zero and mean and standard deviation constant or nonstationary – containing unit roots and the mean and standard deviation vary along with the time. One important characteristic of time series is that each observation contains relevant information with a dynamic relationship. Furthermore, a dependent variable can be a function of its current and past variables; therefore, a contemporary explanatory variable impacts the dependent variable now and in the future. This dynamic is known as a distributed lag model (Hill et al., 2011). In other words, the previous value of the dependent variable works as an explanatory variable. The first step consisted of gathering the data for both countries. Contrarily to Brazil, the Thai inflation data, made available by the Ministry of Commerce, utilizes the CPI average to calculate inflation rates. For the sake of standardization, the inflation for Thailand was calculated by the monthly variation of the CPI. Moreover, the compounding method will compute the annual inflation rate to ensure rigorous isonomic handling between the two treated groups. Second, all variables were tested for unit roots to apply the Augmented Dickey-Fuller test in the variables at level, at the first difference, and log-transformed forms. Note that the controlling variables can be used to assure the model stability and variable endogeneity. Moreover, the controlling variable was tested for correlations against the variables of interest to avoid multicollinearity. The maximum lag was defined by the AIC (Akaike Information Criteria). The AIC is based on the balance between the number of terms and the log-likelihood (how well the model is fitted).

$$AIC = N * \ln (SSE / N) + 2K$$

Forth, the ARDL was applied to the variables. The ARDL model was proposed by Pesaran and Shin (1995). According to this model, a singular equation can tackle the short and long run. Since this study aims to analyze the two years of the Pandemic, the long-run part was neglected. For its turn, the short-run part can be split into short-run autoregressive and short-run distributed lags. Considering this, the ARDL is a p & q model, being that "p" stands for the lag of the dependent variable and "q" stands for the lag of the independent variable, the short run can be mathematically expressed as follow:

$$Y_t = \delta + \theta_1 Y_{t-1} + \dots + \theta_p Y_{t-p} + \delta_0 X_t + \delta_1 X_{t-1} + \dots + \delta_q X_{t-q} + v_t \quad \text{eq. 01}$$

$$\delta + \theta_1 Y_{t-1} + \dots + \theta_p Y_{t-p} \quad \text{Autoregressive Component}$$

$$\delta_0 X_t + \delta_1 X_{t-1} + \dots + \delta_q X_{t-q} \quad \text{Distributed Lag Component}$$

Fifth, the robustness of the models was tested to assess whether they hold the assumptions for normality, homoscedasticity, autocorrelation, and multicollinearity. The following tests were performed: i) Jarque-Bera Test for normality; ii) Q-statistic for autocorrelation; iii) Breusch-Godfrey and LM test for serial correlation; iv) Breusch-pagan-Godfrey for heteroskedasticity; v) the Variance Inflation Factor for multicollinearity; vi) and cumsum test for stability.

3. Results: It is important to stress that all statistical calculations were done on Eviews v.12 software, and the statistical significance adopted in this study was 0.05%.

Brazilian Model

$$BF_BNINF = \delta_0 + \delta_1 BF_BINF_{t-1} + \delta_2 BENINF_{t-2} + \delta_3 \Delta \ln BNEER_{t-7} + \epsilon_t \quad (02)$$

Thai Model

$$TF_BNINF = \delta_1 TF_BINF_{t-1} + \delta_2 \Delta \ln TAPROD_{t-1} + \delta_3 \Delta TENINF + \delta_4 \Delta TENINF_{t-1} + \delta_5 \Delta TENINF_{t-2} + \delta_6 \Delta TERT_{t-1} + \epsilon_t \quad (03)$$

Table 01

Table of abbreviation

BF_BNINF	Brazil's Food and Beverage inflation
BENINF	Brazil Energy Inflation
$\Delta \ln BNEER$	First Difference of the Logarithm of Brazil's Nominal Effective Exchange Rate
TF_BNINF	Thailand Food and Beverage Inflation
$\Delta \ln TAPROD$	First Difference of the Logarithm of Thailand Agricultural Production
$\Delta TENINF$	First Difference of Thailand Energy Inflation.

3.1. Brazilian Model

As seen in table 02, the energy inflation was used in its raw form, and the Nominal Effective Exchange Rate was used in its logarithmic form. Afterward, the first differencing was applied. The coefficients statistically significant had a positive sign, which aligns with the theory. The Adjusted R-squared was 0.35, which means that the model can explain 35% of the variation on the independent variable. In turn, the F-statistics of 0.04 allows us to reject the null hypothesis. In other words: the presented model has a better fit than an alternative model with no variables.

Table 02

Brazilian Model Statistical Summary

Unrestricted model	0.043230	Unrestricted model	1.082813
Restricted model	0.043230	Hannan-Quinn criter.	0.030591
Log likelihood	-31.80410	Schwarz criterion	0.145453
Sum of squared residuals	0.000510	Akaike info criterion	0.030592
S.E. of residuals	0.000510	S.D. dependent var.	0.030592
Adjusted R-squared	0.023200	Mean dependent var.	0.030592
C	0.030592		
DLEGBNINF(-1)	0.030592		
DLEGBNINF(-2)	0.030592		
DLEGBNINF(-3)	0.030592		
DLEGBNINF(-4)	0.030592		
DLEGBNINF(-5)	0.030592		
DLEGBNINF(-6)	0.030592		
DLEGBNINF(-7)	0.030592		
DLEGBNINF	0.030592		
BEINF(-1)	0.030592		
BEINF(-2)	0.030592		
BEINF(-3)	0.030592		
BEINF(-4)	0.030592		
BEINF(-5)	0.030592		
BEINF(-6)	0.030592		
BEINF(-7)	0.030592		
BEINF	0.030592		
BE_INF(-1)	0.030592		
BE_INF(-2)	0.030592		
BE_INF(-3)	0.030592		
BE_INF(-4)	0.030592		
BE_INF(-5)	0.030592		
BE_INF(-6)	0.030592		
BE_INF(-7)	0.030592		
BE_INF	0.030592		
Variable	Coefficient	Std. Error	t-Statistic
Note: Final equation sample is larger than selection sample			
Selected model: ARDL (5, 1, 1)			
Number of models estimated: 354			
Fixed regressors: C			
Dynamic regressors (8 lags, automatic): BEINF DLEGBNINF			
Model selection method: Akaike info criterion (AIC)			
Maximum dependent lags: 4 (Automatic selection)			
Included observations: 40 after adjustments			
Sample (adjusted): 2018/01/01 to 2021/01/01			
Date: 01/01/2018 Time: 11:10			
Model: ARDL			
Dependent Variable: BE_INF			

3.2. Thailand's Model

For Thailand, the model required the insertion of a control variable. It was chosen Agricultural Production (log-difference) as the control variable to meet the main regression assumptions: multivariate normality, no or little multicollinearity, no auto-correlation, and homoscedasticity. The sign of all coefficients returned as expected. The regressive part was positive, meaning that the previous inflation affects the present inflation. The agricultural production variable had a negative sign and was statistically significant for one month of lag, which means that inflation tends to decrease when production rises. Energy inflation was positively significant for the contemporaneous result and for one, two, and three months of lag. The one-month lag of the exchange rate was positively related to inflation; recalling that a rise in the exchange rate means depreciation, then an increase in the exchange rate tends to pull the inflation up. The adjusted R-square indicates that the predictor variables can explain approximately 30% of the variance in the response variables. The F-test of 3.09 shows an overall significance of 1%; therefore, the model provides a better fit than a model with no independent variables.

Table 03
Thailand's Model Statistical Summary

Dependent Variable: TF_BINF
Method: ARDL
Date: 10/20/22 Time: 14:35
Sample (adjusted): 2018M05 2021M12 Included
observations: 44 after adjustments
Maximum dependent lags: 4 (Automatic selection) Model
selection method: Akaike info criterion (AIC)
Dynamic regressors (4 lags, automatic): DIFLNTAPROD
DIFTER
Fixed regressors: C
Number of models evaluated: 500
Selected Model: ARDL(1, 1, 3, 1)

Variable	Coefficient	Std. Erro
TF_BINF(-1)	0.302778	0.1
DIFLNTAPROD	-0.065121	0
DIFLNTAPROD(-1)	-0.362898	
DIFTENINF	0.030326	
DIFTENINF(-1)	0.022944	
DIFTENINF(-2)	0.0381	
DIFTENINF(-3)	0.02	
DIFTER	-0.	
DIFTER(-1)		
C		

R-squared Adjusted R-
squ
S.E. of regresSum
squar Log like
F-staPro

3.3. Robustness

For the Brazilian model, a well-behaved residual warrants the coefficient's reliability. The Jarque-Bera test for normality resulted in a 0.27 probability, which is not significant to reject the normality hypothesis. Likewise, the Q-statistic test, the Breusch-Godfrey Serial Correlation LM test results for all variables, and their lags were insufficient to reject the hypothesis of no serial correlation. Moreover, there is no sign of multicollinearity among the variables; and the model was stable and did not show any structural break. The summaries can be found in Appendix, table 1. Thailand's model displayed stability, according to the CUSUM test result. The coefficients are reliable, with error terms normally distributed (Jarque-Bera 0.59). Besides, we failed to reject the hypothesis of heteroskedasticity, autocorrelation, and multicollinearity, as shown in Table 2.

4. Discussion and Conclusion: Based on the ARDL methodology, Brazil's and Thailand's models with their respective coefficients will be depicted as follows:

$$BF_BNINF = 0.67BF_BINF_{t-1} + 0.14BENINF_{t-1} + 0.12BENINF_{t-7} + 8.94\Delta \ln BNEER_{11t-7} + et \quad (04)$$

$$TF_BNINF = 0.3TF_BINF_{t-1} - 0.36\Delta \ln TAPROD2_{t-1} + 0.03\Delta TENINF + 0.02\Delta TENINF_{t-1} + 0.03\Delta TENINF_{t-2} + 0.02\Delta TENINF_{t-3} + 0.2\Delta TER3_{t-1} + et \quad (05)$$

There was no intercept for the Brazilian and Thai models. The autoregressive coefficient of the Brazilian model has twice the magnitude of its equivalent in Thailand's model. In Brazil's model, each unit change of the previous inflation adds 0.67 units to the current one. The expressive size of that coefficient suggests a higher level of the stickiness of Brazilian inflation if compared to Thailand's. Related to the energy regressor, the findings align with the literature review for both countries. The Brazilian equation displays that each unit of positive change adds 0.14 and 0.12 to food inflation with one and seven months of lags, respectively. The model developed depicted that, in Brazil, the first impact of energy inflation reaches the price variation after one month, and the second wave happens seven months later. Considering that inflation means a percentual change in the price level, the relation between food and energy inflation can be read in terms of elasticity. Therefore, for each percentage change in Brazilian energy price, the Brazilian food price changes in the same direction, 0.14 and 0.12%, with one and seven months of lags, respectively. For Thailand, the impact was contemporaneous and also diluted over three months. This key variable was regressed in Thailand's model using the first differences to meet statistics reliability requirements. Therefore a direct confrontation between the magnitude of Brazilian and Thai energy impact on food inflation is not attainable. Each unit of positive (negative) variation in Thailand's energy inflation growth leads to 0.02 or 0.03 units of increase (decrease) in food inflation.

1) Brazilian's monthly data (COD. 20360) were extracted from dataset of time-series management System. Central Bank of Brazil (BACEN).

2) Thailand's Producer Index and Price Index can be found at table 01 and 02 respectively. Source: Office of Agricultural Economics, Ministry of Agriculture and Cooperatives. Retrieved from: Price and output indices (oae.go.th)

3) Thailand's exchange rate (domestic currency per us dollar). Source: International Financial Statistics of the International Monetary Fund.

Unlike Brazil, Thailand took advantage of the slump in international oil prices during the first

quarter of 2020. As depicted in figure 05, Thailand's cumulative energy inflation curve remained, throughout 2020, in the negative part of the Y-axis. For the Asian country, the cumulative energy inflation in 2020 was 6.7%, while in Brazil, this variable reached 8.8%. In 2021, Thailand's energy inflation only accelerated after the third quarter. Even with this acceleration, at the end of that year, Brazilian energy inflation surpassed Thailand's by around 10 points. The Thai government kept the domestic energy price low, which helped cool down price pressures.

Note: a) Thailand's monthly data refer to "energy (Cod 9200)", extracted from the Bureau of Trade and Economic Indices – Minister of Commerce. Retrieved from: <http://www.price.moc.go.th/>

b) Brazilian's data was extracted from table 6070 of the System of Automatic Retriever (SIDRA) of the Brazilian Instituto of Geography and Statistics (IBGE).

Regarding monetary policy, it was not possible to use the same index for both countries. While Brazil's model showed statistical significance to the Nominal Effective Exchange Rate (NEER), the Exchange Rate index fitted Thailand's model better. Therefore, in the Brazilian model, the coefficient of NEER shows that each 1% change in BNEER growth adds 2.19 (ln 8.98) units in food inflation seven months later. For Brazil, the NEER coefficient showed a large size and significance in explaining the food inflation variation. For Thailand, each unit of positive (negative) variation in the rate at which the Thai Baht increases leads to a rise (decrease) of 0.2 units in food inflation for the next month. As stated by many scholars, the interest rate, by the exchange rate channel, is a powerful tool to cope with price hikes. The Thai Baht remained stable during the Pandemic, whereas the Brazilian Real depreciated by 30%; Thailand's currency depreciated by only 7%. From January 2020 to December 2021, the BNEER depreciated by 31.50%. The most prominent devaluation occurred in Q1/2020 – 15%, and the highest peak of Brazilian food inflation for the pandemic period occurred during Q.4/2020; this is consistent with the model, which forecasted that the impact of NEER devaluation occurs around seven months later, as can be seen in Figure 01. The Thai currency had a moderated appreciation in Q.4/2020, and food prices in Thailand had a negative variation during the next quarter. This negative relationship is in line with the model represented by equation 05. Therefore, the exchange rate stability proved statistically significant in explaining the food price variation for the studied period. The theory and the model presented by equations 04 and 05 predict the peaks and downturns in Brazilian and Thai food inflation with consistency. Moreover, having kept energy inflation at a low level contributed to food deflation in Thailand. The Brazilian energy coefficient demonstrated effectiveness in curbing food inflation; however, this powerful tool was not used due to the absence of a more aggressive reduction in domestic energy prices during the Pandemic.

5. References: Ariseto-Bragotto, A. P., Feltes, M. M. C., & Block, J. M. (2017). Food quality and safety progress in the Brazilian food and beverage industry: chemical hazards. *Food Quality and Safety*, 1(2), 117-129.

Baldasso, G. (2022). Comportamento do consumidor brasileiro de alimentos na pandemia de covid-19: um estudo via mineração de texto.

Banerjee, R. N., Mehrotra, A., & Zampolli, F. (2020). *Inflation at risk from Covid-19* (No. 28). Bank for International Settlements.

Baumeister, C., & Kilian, L. (2014). Do oil price increases cause higher food prices? *Economic Policy*, 29(80), 691-747.

Bhattacharya, R., & Jain, R. (2020). Can monetary policy stabilize food inflation? Evidence from advanced and emerging economies. *Economic Modelling*, 89, 122-141.

Bhatta, S. R., Adhikari, P., & Byanjankar, R. (2020). Choice of Regression Models in Time Series Data. *Economic Journal of Development Issues*, 101-129.

- Cavallo, A. (2020). *Inflation with Covid consumption baskets* (No. w27352). National Bureau of Economic Research.
- Chand, R. (2010). Understanding the nature and causes of food inflation. *Economic and Political Weekly*, 10-13.
- Claeys, G., & Guetta-Jeanrenaud, L. (2021). How has COVID-19 affected inflation measurement in the euro area? *Bruegel-Blogs*, NA-NA.
- Day, F. C. S. K. (2011). Energy-smart food for people and climate. *FAO, Rome*.
- Del Negro, M., Lenza, M., Primiceri, G. E., & Tambalotti, A. (2020). What's up with Inflation and the Business Cycle in the COVID-19 Shock?
- Dillon, B.M. and Barrett, C.B., 2013. The impact of world oil price shocks on maize prices in East Africa. University of Melbourne, Melbourne.
- Food Export Association of the Midwest USA and Food Export USA – Northeast (n.d.). Thailand Country Profile. Retrieved March 23, 2022, from: <https://www.foodexport.org/export-insights/market-and-country-profiles/thailand-country-profile>
- Gómez, M. I., González, E. R., & Melo, L. F. (2012). Forecasting food inflation in developing countries with inflation targeting regimes. *American Journal of agricultural economics*, 94(1), 153-173.
- Gongsang, M., & Amatyakul, P. (2021). *Inflation at risk in Thailand* (No. 151). Puey Ungphakorn Institute for Economic Research.
- Ha, J., Kose, M. A., & Ohnsorge, F. (2021). Inflation during the Pandemic: What happened? What is next?
- Hahn, Robert W., and Robert D. Metcalfe. 2021. "Efficiency and Equity Impacts of Energy Subsidies." *American Economic Review*, 111 (5): 1658-8\
- Higgins, M. (2021). Investors Can Temper Their Inflation Fears: Post-COVID Inflation is Unlikely to Resemble the Great Inflation of 1968 to 1982. Available at SSRN 3907668.
- Hill, C. R., Griffiths, W. E. & Lim, G. C. (1995). *Principles of econometrics* (4th ed.). John Wiley & Sons, Inc.
- IBGE. (2020.) Sistema Nacional de Índices de Preços ao Consumidor-métodos de cálculos. *Serie Relatórios Metodológicos*, 14.
- IBGE. (2020b). Pesquisa de Orçamentos Familiares 2017-2018 – Análise do consumo alimentar pessoal no Brasil.
- Iddrisu, A. A., & Alagidede, I. P. (2022). Monetary Policy and Food Inflation in Emerging and Kaur, S. (2021). A Decade of Impact of Monetary Policy on Food Inflation: An Overview and Future Direction. *Vision*, 09722629211015603.
- Kwon, D. H., & Koo, W. W. (2009). Price transmission mechanisms among disaggregated processing stages of food: Demand-pull or cost-push? (No. 319-2016-9929).
- MAPA, I. (2022). Agrostat – Importação e Exportação. Retrieved from: <https://indicadores.agricultura.gov.br/agrostat/index.htm>
- Mushtaq, R. (2011). Augmented dickey fuller test.
- Naraghi, N., Moghaddasi, R., & Mohamadinejad, A. (2021). Nexus between Energy Consumption and Agricultural Inflation: an Iranian Experience. *International Energy Journal*, 21(1).
- NESDEC. (2020b). NESDEC Economic Report. Thai Economic Performance in Q2 and Outlook for 2020.
- NESDEC. (2020c). NESDEC Economic Report. Thai Economic Performance in Q3 and Outlook for 2020.
- NESDEC. (2020d). NESDEC Economic Report. Thai Economic Performance in Q4 and Outlook for 2020.
- NESDEC. (2021). NESDEC Economic Report. Thai Economic Performance in Q1 and Outlook for

2021.

NESDEC. (2021a). NESDEC Economic Report. Thai Economic Performance in Q2 and Outlook for 2021.

NESDEC. (2021b). NESDEC Economic Report. Thai Economic Performance in Q3 and Outlook for 2021.

NESDEC. (2021c). NESDEC Economic Report. Thai Economic Performance in Q1 and Outlook for 2021.

Newbold, P., & Granger, C. W. J. (1974). Experience with Forecasting Univariate Time Series and the Combination of Forecasts. *Journal of the Royal Statistical Society. Series A (General)*, 137(2), 131–165.

Nkoro, E., & Uko, A. K. (2016). Autoregressive Distributed Lag (ARDL) cointegration technique: application and interpretation. *Journal of Statistical and Econometric methods*, 5(4), 63–91.

Pesaran, M. H., & Shin, Y. An Autoregressive Distributed Lag Modelling Approach to Cointegration Analysis.

Shrestha, M. B., & Bhatta, G. R. (2018). Selecting appropriate methodological framework for time series data analysis. *The Journal of Finance and Data Science*, 4(2), 71–89.

Silva Filho, O. J. D., & Gomes Júnior, N. N. (2020). The future at the kitchen table: COVID-19 and the food supply. *Cadernos de Saude Publica*, 36, e00095220.

Walsh, M. J. P., & Yu, J. (2012). *Inflation and Income Inequality: Is food inflation different?* I international Monetary Fund.

Zafar, R. F., Qayyum, A., & Ghouri, S. P. (2015). Forecasting inflation using Functional Time Series Analysis.

6. Appendix

Table 1
Brazilian Model: Residual's diagnostics and coefficient stability

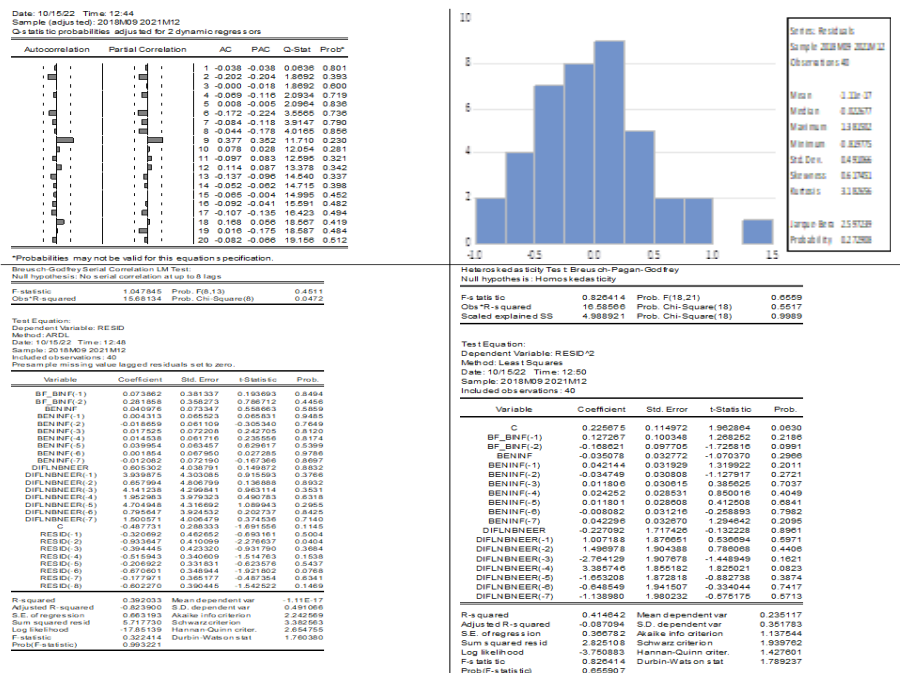


Table 1

Brazilian Model: Residual's diagnostics and coefficient stability



Variance Inflation Factors
Date: 10/15/22 Time: 12:53
Sample: 2018M01 2021M12
Included observations: 40

Variable	Coefficient	Uncentered VIF	Centered VIF
BF_BINF(-1)	0.033522	3.537395	2.128389
BF_BINF(-2)	0.031779	3.354412	2.026431
BENINF	0.003575	1.954664	1.749517
BENINF(-1)	0.003394	1.854034	1.661243
BENINF(-2)	0.003160	1.815540	1.608024
BENINF(-3)	0.003120	2.097878	1.826533
BENINF(-4)	0.002710	1.657271	1.459149
BENINF(-5)	0.002724	1.657271	1.465711
BENINF(-6)	0.003244	1.628952	1.476138
BENINF(-7)	0.003553	1.754401	1.607983
DIFLNBNEER	9.818950	1.258203	1.226862
DIFLNBNEER(-1)	11.72400	1.499506	1.463812
DIFLNBNEER(-2)	12.07313	1.544030	1.506681
DIFLNBNEER(-3)	12.11488	1.506115	1.476956
DIFLNBNEER(-4)	11.45729	1.447976	1.412668
DIFLNBNEER(-5)	11.67616	1.507513	1.463939
DIFLNBNEER(-6)	12.54835	1.617740	1.572240
DIFLNBNEER(-7)	13.05392	1.604955	1.528913
C	0.044004	3.930346	NA

Table 2

Thailand's Model: Residual's diagnostics and stability

Date: 10/20/22 Time: 14:45

Sample (adjusted): 2018M05 2021M12

Q-statistic probabilities adjusted for 1 dynamic regressor

F-statistic

Autocorrelation

Scaled explained SS

Partial Correlation

AC

PAC

Q-Stat

Prob*

. .	. .	1	0.011	0.011	0.0054	0.941
. .	. .	2	-0.160	-0.160	1.2351	0.539
. .	. .	3	0.075	0.081	1.5119	0.680
. .	. .	4	-0.122	-0.155	2.2638	0.687
. .	. .	5	-0.016	0.018	2.2776	0.810
. .	. .	6	0.146	0.097	3.4097	0.756
. .	. .	7	-0.013	-0.001	3.4196	0.844
. .	. .	8	0.108	0.142	4.0761	0.850
. .	. .	9	0.023	-0.009	4.1062	0.904
*** .	*** .	10	-0.387	-0.339	13.015	0.223
. .	. .	11	0.052	0.076	13.180	0.282
. .	. .	12	0.017	-0.114	13.199	0.355
. .	. .	13	-0.170	-0.113	15.089	0.302
. .	. .	14	0.119	0.028	16.039	0.311
. .	. .	15	0.052	0.007	16.227	0.367
. .	. .	16	-0.067	0.045	16.556	0.415
. .	. .	17	0.123	0.120	17.683	0.409
. .	. .	18	-0.038	0.032	17.798	0.469
. .	. .	19	-0.147	-0.093	19.550	0.422
. .	. .	20	-0.010	-0.192	19.560	0.486

R-squared

*Probabilities may not be valid for this equation specification.

S.E. of regression

Sum squared resid

Log likelihood

F-statistic

Prob(F-statistic)

Heteroskedasticity Test: Breusch-Pagan-Godfrey

Null hypothesis: Homoskedasticity

Obs*R-squared

1.401873

Prob. F(9,34)

0.2261

11.90860 Prob. Chi-Square(9)

0.2185

5.610512 Prob. Chi-Square(9)

0.7782

Test Equation:

Dependent Variable: RESID^2

Method: Least Squares

Date: 10/20/22 Time: 18:13

Sample: 2018M05 2021M12

Included observations: 44

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.088231	0.016122	5.472728	0.0000
TF_BINF(-1)	-0.038751	0.042062	-0.921284	0.3634
DIFLNTAPROD	-0.030770	0.052270	-0.588676	0.5600
DIFLNTAPROD(-1)	-0.134014	0.054079	-2.478130	0.0183
DIFTENINF	-0.002342	0.003013	-0.777333	0.4423
DIFTENINF(-1)	0.000453	0.002971	0.152419	0.8798
DIFTENINF(-2)	0.001749	0.003123	0.559900	0.5792
DIFTENINF(-3)	0.001293	0.003041	0.425141	0.6734
DIFTER	-0.030883	0.025519	-1.210203	0.2345
DIFTER(-1)	0.027284	0.026329	1.036241	0.3074

Adjusted R-squared

0.270650

Mean dependent var

0.081519

0.077587

S.D. dependent var

0.103588

0.099488

Akaike info criterion

-1.580836

0.336530

Schwarz criterion

-1.175339

44.77840

Hannan-Quinn criter.

-1.430458

1.401873

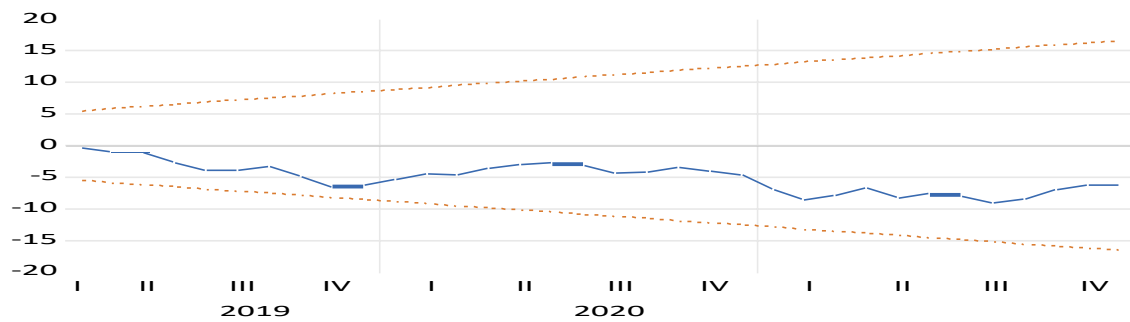
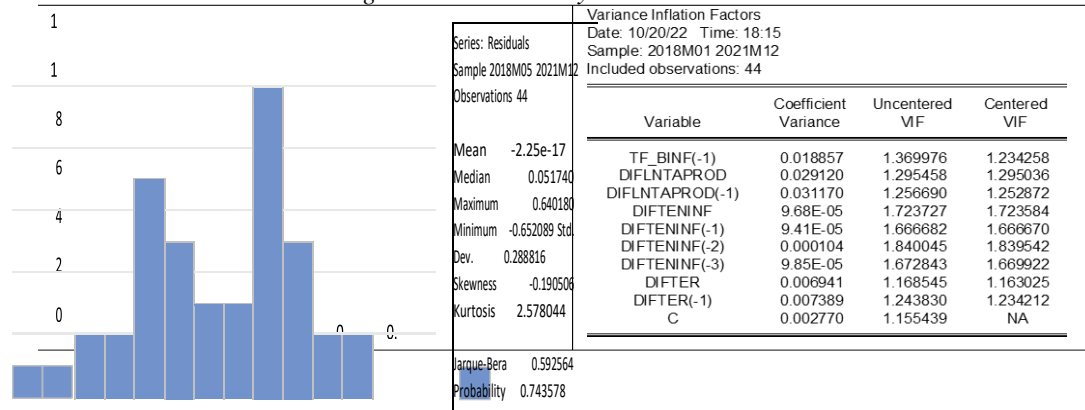
Durbin-Watson stat

1.662676

0.226058

Table 2

Thailand's Model: Residual's diagnostics and stability



Internationalization of Companies: Asset of Foreignness in Singapore's Unique Context

Lee Keng Ng

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Abstract: International companies expanding to foreign markets risk being challenged by liability of foreignness (LOF) that are manifested in the differences in regulatory, cognitive, and normative institutions (North, 1991) between home- and host-countries. Sources of LOF are attributable to unfamiliarity, discrimination and relational hazards (Eden and Miller, 2004). The tiny nation of Singapore, lacking in natural resources, has depended on successfully inviting international companies to their shore that could lead to the creation of assets of foreignness. This paper explores the trajectory of the regulatory framework, the ensuing pillars to enhance the quality of workforce (cognitive) and the essential socio-cultural norms (relational). Singapore's success over the years, can be attributed to providing a necessary infrastructure as well as conditions that help mitigate risks for foreign investors.

The Relationship between Cause Marketing and Firm Performance of Listed Companies in China

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Abstract: In China, the ESG investment market, though relatively smaller than global investment market, has grown rapidly in recent years, indicating a great development potential. Cause marketing just belongs to the social aspect, highlighting the linkage between the company and society. However, the issue of the internal relationship between cause marketing and firm performance has not been studied much, especially in developing countries. Therefore, this study examines whether the cause marketing strategy has a positive impact on firm performance in China. We collect 389 listed companies' charitable donation to measure the degree on implementing cause marketing, collect their ROA, ROE, EPS to measure the firm performance, which are all from WIND Economic database. The sample period is from 2016 to 2021(three years before and after COVID-19). By regression analysis and grouped regression, we find that the implementation of Cause marketing has positive impacts on corporate performance, and this positive influence is stronger during the COVID-19. As robustness checks, the result holds for Granger Causality and two-stage least square regression. Through Reverse causality, we also find that the strong profitability of enterprises is also conducive to improving their investment in cause marketing. We use the 2SLS model to address the endogeneity problem at the same time. The finding of this study provides new insights into the creation of the firm's future business strategy, draws entrepreneurs' attention to cause marketing or public welfare undertakings. It also fills a gap in the literature on the impact of cause marketing on firm performance in China.

Keywords: Cause Marketing, Charitable Donation, Social Responsibilities, Firm Performance, Stock Price, China

Government Subsidies and Performance in The New Energy Vehicle Industry During the Post-Subsidy Era in China



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Abstract: As the new energy vehicle industry matures, the Chinese government has gradually reduced government subsidies for new energy vehicle enterprises since 2017. This study focuses on the impact of government subsidies on the performance of new energy enterprises in China during the post-subsidy era, which is the period previous literature did not cover. Our research relies on new energy vehicle enterprises' panel data from 2017 to 2022. The results show that the relationship between government subsidies and new energy vehicle enterprise performance is inverted U-shaped. Also, compared with state-owned enterprises and enterprises in developed regions, non-state-owned enterprises and enterprises in underdeveloped regions have a higher dependence on new energy subsidies. Moreover, the impact of government subsidies on new energy vehicle enterprises is realized through R&D as an intermediary effect. The robustness test shows that this result is stable and reproducible when considering the subsidies' lag. The study draws attention to government subsidy utilization efficiency, significantly when new energy vehicle subsidies decline.

We Want You! – Egyptian Songs Supporting ‘Abd Al-Fattāḥ As-Sīsī in 2013-2014



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Abstract: When millions of Egyptians took to the streets in 2013, there was no sure sign in which direction the country would go. The most important person thrust forward to lead was the former head of the Egyptian Armed Forces and Defense Minister, ‘Abd al-Fattāḥ as-Sīsī. The author of this research was living in Egypt during this time and she observed the events, media and society. During the conference, she will present the results of her research on the Egyptian patriotic songs which were released in 2013 and 2014 and which are more or less directly focused on the person of ‘Abd al-Fattāḥ as-Sīsī.

Correlates of Caregiving Burden Among Bedouin-Muslim Mothers of Children

Diagnosed with Epilepsy

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Abstract: Background: A paucity of research exists on caregiving burden (CB) and the factors associated with it among minority groups, such as Bedouin mothers of children diagnosed with epilepsy (CDE). The aim of this study was to explore associations between CB and care-recipients' characteristics, contextual factors, and caregivers' characteristics among those mothers.

Methods: A total of 50 mothers completed self-report questionnaires while visiting paediatric neurology outpatient clinic centres, using valid and reliable measures.

Results: Bivariate associations were found between social support, number of medications, and CB. General self-efficacy and place of residence emerged as significant predictors of caregiver burden.

Conclusions: These findings provide health professionals with a better understanding of the factors that should be assessed in order to address caregiver burden among Bedouin mothers of CDE. Understanding the unique characteristics and culture of the Bedouin community can help professionals in targeting caregivers with a lower sense of self-efficacy, and those that reside in Bedouin cities, in order to reduce their caregiving burden.

The Use of Artifacts in Making Meaning out of Peacekeeping Experiences: The Understanding Gained by Officers from Ecuador



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Abstract: United Nations peacekeeping duties have shift in recent decades from soldiers from Western nations, particularly Canada, the United States of America, and from countries of the European Union to developing nations of the global south. Very little research has looked at the lived experiences of peacekeeping through the lens of these soldiers. In conjunction with a phenomenological study on the experiences of officers from Ecuador, the 12 participants were invited to bring an artifact to the interview which represented some aspect of the experience and held personal significance. Of the 12 interviews, nine were held in person in Ecuador and three

were done via a digital platform due to time and distance constraints. Some officers offered multiple artifacts. These were divided into three categories, physical objects, often gifts from soldiers from other countries, photographs which depicted something specific about the mission, and awards which were bestowed by the military in order to commemorate the work and sacrifice of the officer. The artifacts and their sense making capabilities added rich information and context to the narratives supplied by the participants. The use of artifacts in social science research provides a bridge for informants to add depth to their provision of information and can shed light on thoughts and ideas which had previously remained unarticulated.

Keywords: Peacekeeping, Artifacts, Sense-Making, Ecuador

The Influence of Education on Well-Being Status: A Literature Review



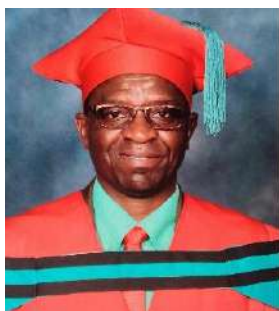
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Abstract: Human well-being is a multifaced concept which is understood differently in various contexts. Many researchers have highlighted the need to investigate the influence of education on human well-being. Especially due to the fact that education is understood as a very important factor that can improve human well-being and welfare. The influence of educational attainment on human well-being has become an interesting area of study in the past few decades. The aim of this review was to find out the extent to which educational attainment influences human well-being in numerous educational contexts. A systematic review was conducted using the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines through the following databases: SAGE, Taylor and Francis, Springer, Wiley and Science Direct. This study identified eighteen articles for review and analysis. The main findings show that educational attainment in different contexts enhanced human well-being. The general trend within different contexts suggested that well-being is positively associated with educational attainment. The findings further revealed that lack of education contributes to lower well-being status and yields poverty. Among the conclusions, include interventions and the need to promote and ensure inclusive education in least developed countries and small island developing states.

Keywords: Education, Educational Attainment, Well-being, Welfare, Poverty, Review, Developing Countries

Heritage Based Education and What It Means to Private Universities in Zimbabwe



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Abstract: Zimbabwe's heritage, tangible or intangible, is fundamental to its sustainability. Driven by Education 5.0, an educational framework underpinned by Heritage based Education, Zimbabwe sought to harness its heritage for it to have a middle-income economy by 2030 through Education 5.0 subscribed universities focusing on five pillars of education involving, teaching, research, community service, innovation and industrialisation. Zimbabwe has ten State Universities and five private universities. The study was informed by the transformative continuity theory and the qualitative approach to gather data from lecturers in private universities on Heritage based Education and what it means to them. Document analysis and a questionnaire were used as instruments of data collection. Four research questions were formulated: How are private universities raising lecturers' awareness of resource availability in their areas of jurisdiction? How are module outlines in private universities aligned for the value addition of available local resources? Are private universities acting as local industry solution providers? What interventions can be put in place to ensure Zimbabwean private universities are capacitated to subscribe fully to Education 5.0? A multiple case study design was used to inform the study. Three private institutions participated in the study. The researchers selected google forms questionnaires requiring participants to freely complete them on line and explaining their views robustly, representing their thoughts through intense and deep explanations. Document analysis was also used to gather data.

Key terms: Heritage, Heritage Education, Heritage-Based Education, Education 5.0, Private University, Zimbabwe

The Relationship between Margin Trading Balance and Stock Liquidity: Evidence from China

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Abstract: There is still debate about the impact of margin trading on stock liquidity. Through regression analysis, this study focuses on 4,739 Chinese A-share stocks in the margin trading system. It collects margin trading balance and ILLIQ Indicator and related data from China Stock Market & Accounting Research Database between 2010 and 2021. As robustness checks, results are applied to sub periods test, alternative test and two-stage least squares regression. We find that margin trading balance exhibits a significant negative signal to ILLIQ Indicator, indicating that an increase in margin trading balance has a significant positive effect on stock liquidity. The above correlation shows that the stock becomes more liquid with more margin trading balance. We also address issues of endogeneity and reverse causality. The findings of this study provide insightful guidance for retail investors in making investment decisions and support the hypothesis that active fund management adds value. The results of this study provide more possibilities for analyzing the impact of margin trading on the stock market, and help individuals or companies better understand and use margin trading and the government's supervision and management of margin trading.

Keywords: Margin Trading, Stock Liquidity, China

James Ramsay MacDonald and the Economic Crisis (1929-1935)

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Abstract: The election of 1929 brought victory to the Labour party under James Ramsay MacDonald for the second time. Immediately after taking office, MacDonald had to encounter the economic crisis of 1929, which affected

Britain and was considered the main event, which menaced the second Labour government. Though he failed to deal with such a crisis during his short government (1929-1931), MacDonald was able to improve the economic situation during his leadership of the national government by adopting many measures. The objective of this paper is to examine MacDonald's economic policy between 1929 and 1935 focusing on the measures which helped Britain to recover from the economic crisis.

A Study of Leisure Motivation and Leisure Benefits of Cyclists Leisure Satisfaction



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Abstract: This study mainly discusses the correlation between leisure motivation, leisure benefits and leisure satisfaction of cyclists, and proposes effective improvement strategies and management policies through data analysis. A total of 250 questionnaires were distributed in this study, 236 valid questionnaires, and the effective recovery rate was 94.4%. This study mainly explores whether the demographic background of different tourists has differences in their leisure motivation, leisure benefits and leisure satisfaction; and explores the influence of leisure motivation and leisure benefits on leisure satisfaction. The results of the variance analysis found that the leisure satisfaction dimension - humanistic style has differences in genders (women are better than men); the leisure motivation dimension - health and physical and mental release, the leisure benefit dimension - physiological and social benefits, leisure satisfaction dimension Facet-Relaxation and Health, Leisure Satisfaction Facet-Environment and Design and Leisure Satisfaction Variables have differences in different marital status (married is better than unmarried). In addition, there are also differences in the aspects of leisure activities-health and physical and mental release among different educational backgrounds (high school vocational education is better than graduate school education). In addition, the correlation analysis found that "leisure motivation", "leisure benefits" and "leisure satisfaction" were all significantly positively correlated. The results of regression analysis show that leisure motivation has an impact on leisure satisfaction ($R^2 = 0.557$), and leisure benefits have a higher impact on leisure satisfaction ($R^2 = 0.642$).

Keywords: Leisure Motivation, Leisure Benefits, Leisure Satisfaction

The Effects of Core Self-Evaluations and Conscientious on Work-Related Burnout: The Mediating Roles of Thriving at Work

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Abstract: In the conceptualization of thriving at work, it is emphasized that employees' learning and vitality are both important components of thriving. In this study, we examined the mediating effect of thriving at work on the relationship between two personalities (core self-evaluations and conscientiousness) and work-related burnout. Data was collected through a questionnaire survey from 216 Taiwanese employees. The results of the

study indicate that the indirect effects of conscientiousness on work-related burnout are mediated by both learning and vitality, whereas indirect effects of core self-evaluations on work-related burnout are mediated by vitality. In addition, our findings also show that in order to reduce employees' burnout, the management can conduct education training to enhance employees' sense of responsibility or confidence, so that employees can understand the expectations they are given at work and increase employees' emotional stability.

Keywords: Thriving, Work-Related Burnout, Core Self-Evaluations, Conscientious

Intention to Participate in Tax Evasion: A Survey of Accounting and Non-Accounting Background Employees



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Abstract: Tax evasion is still justified by Malaysian citizens as being tolerable and acceptable, as seen by the greater number of tax evasion cases and rise in unpaid tax figures in the country. This study examines the relationship between attitude, perceived behaviour control and subjective norms towards tax evasion behaviour among the accounting and non-accounting background employees. The focus of this study is on Malaysian individual taxpayers who file income tax returns on a regular basis and are salaried or wage earners. The sampling method used for this investigation will be non-probability sampling. This study adopts a quantitative methodology by using primary data. The results indicate that employees with accounting backgrounds behave differently than those without an accounting background in terms of their aim to evade taxes. All variables show a significant relationship with tax evasion behaviour for employees with non-accounting backgrounds. However, among workers with accounting backgrounds, only subjective norms show a significant relationship. The findings of this study may help employers prevent unintended tax evasion by educating employees on handling their tax returns. Additionally, this outcome will add value to the new knowledge in this area, particularly in the literature on tax compliance.

Keywords: Attitude, Perceived Behavioural Control, Subjective Norm, Tax Evasion, Theory of Planned Behaviour

The Sustainability Development in Islamic Finance



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Abstract: The present research paper focuses on the sustainability in Islamic finance. In the current business and economic context, Islamic finance, business operations and financial activities are moving towards a greater emphasis on initiatives related to sustainability which includes environmental, social and governance (ESG), sustainable developmental goal (SDG) and value-based intermediation (VBI). Furthermore, the direction of the IFI through its Board of Directors (BOD) provides a great concern and consideration for such priorities. Such approach and trend have been strengthened in the context of Islamic finance due to the fact that all these initiatives are within the concept of Maqasid (objective) of Shariah, which prioritize society, environment and public interest over profit and commercial consideration. The present research shows through its methodology based on qualitative research that, the global economy, especially the Halal economy and Islamic finance industry globally through its various sectors started a while ago to re-shape/ revise the equation of profit and readjust its priorities and practices through the promotion of the public interest in its economy and financial activities. The appeal to prioritize the environment and society become more relevant at the global level, particularly through the United Nation, which promotes the SDG, as universal call for action in parallel with the Maqasid al Shariah initiatives.

Keywords: Sustainably, Islamic Finance, ESG, SDG, Maqasid al Shariah

1. Introduction: In September 2015, the General Assembly of the United Nations adopted the 2030 Agenda for Sustainable Development. This includes 17 Sustainable Development Goals (SDGs). The goals build on the vital principle of “leaving no one behind” and emphasizes a holistic approach to achieving sustainable development for all. Such initiative has drawn the path to the future direction of the world, where such goals and targets will change the landscape of economic and trade, this is including the financial regulated market under the supervision of the central bank and the securities commission, which is applicable to Islamic finance as well.

2. Definition of sustainability development Goals: According to the United Nation, the Sustainable Development Goals (SDGs), also known as the Global Goals, were adopted by the United Nations in 2015 as a universal call to action to end poverty, protect the planet, and ensure that by 2030 all people enjoy peace and prosperity. The 17 SDGs are integrated—they recognize that action in one area will affect outcomes in others, and that development must balance social, economic and environmental sustainability. Countries have committed to prioritize progress for those who're furthest behind. The SDGs are designed to end poverty, hunger, AIDS, and discrimination. The creativity, knowhow, technology and financial resources from all of society is necessary to achieve the SDGs in every context. (<https://www.undp.org/sustainable-development-goals?> Retrieved 1/1/2023). The main key points take away from the UN definition are as follows: •The Sustainable Development Goals (SDGs), are regarded as Global Goals which make its achievement the responsibility of everyone. •The Sustainable Development Goals (SDGs) were adopted by the United Nations in 2015. •The Sustainable Development Goals (SDGs) are not principle to be comprehended and understood for the purpose of knowledge but they are a universal call to action. •The overall objective of the Sustainable Development Goals (SDGs) is to end poverty, protect the planet. Hence it is about the prosperity of everyone living on this earth, where no one will be left behind. •The Sustainable Development Goals (SDGs) is it about the safety of everyone on this earth including animal and environment. •The Sustainable Development Goals (SDGs) are not open-ended goals, but it has a timeline, where by 2030 all people enjoy peace and prosperity. •The Sustainable Development Goals (SDGs) are integrated, and there should be balance between social, economic and environmental sustainability. •The Sustainable Development Goals (SDGs) are about social, economic and environmental, where the 17SDGs are under their scope and purview.

•There is internal agreement and commitment on such goals which come at cost. •Everyone, being individual, institution, government plays his role within his capacity, ability and areas to expertise to address the gap, because the at the end the result is assessed in overall as a global contribution.

3. History of the sustainable development Goals: The 2030 Agenda for Sustainable Development, adopted by all United Nations Member States in 2015, provides a shared blueprint for peace and prosperity for people and the planet, now and into the future. At its heart are the 17 Sustainable Development Goals (SDGs), which are an urgent call for action by all countries - developed and developing - in a global partnership. They recognize that ending poverty and other deprivations must go hand-in-hand with strategies that improve health and education, reduce inequality, and spur economic growth all while tackling climate change and working to preserve our oceans and forests. The SDGs build on decades of work by countries and the UN, including the UN Department of Economic and Social Affairs. In June 1992, at the Earth Summit in Rio de Janeiro, Brazil, more than 178 countries adopted Agenda 21, a comprehensive plan of action to build a global partnership for sustainable development to improve human lives and protect the environment. Member States unanimously adopted the Millennium Declaration at the Millennium Summit in September 2000 at UN Headquarters in New York. The Summit led to the elaboration of eight Millennium Development Goals (MDGs) to reduce extreme poverty by 2015. The Johannesburg Declaration on Sustainable Development and the Plan of Implementation, adopted at the World Summit on Sustainable Development in South Africa in 2002, reaffirmed the global community's commitments to poverty eradication and the environment, and built on Agenda 21 and the Millennium Declaration by including more emphasis on multilateral partnerships. At the United Nations Conference on Sustainable Development (Rio+20) in Rio de Janeiro, Brazil, in June 2012, Member States adopted the outcome document "The Future We Want" in which they decided, inter alia, to launch a process to develop a set of SDGs to build upon the MDGs and to establish the UN High-level Political Forum on Sustainable Development. The Rio +20 outcome also contained other measures for implementing sustainable development, including mandates for future programmes of work in development financing, small island developing states and more. In 2013, the General Assembly set up a 30-member Open Working Group to develop a proposal on the SDGs. In January 2015, the General Assembly began the negotiation process on the post-2015 development agenda. The process culminated in the subsequent adoption of the 2030 Agenda for Sustainable Development, with 17 SDGs at its core, at the UN Sustainable Development Summit in September 2015. 2015 was a landmark year for multilateralism and international policy shaping, with the adoption of several major agreements: •Sendai Framework for Disaster Risk Reduction (March 2015). •Addis Ababa Action Agenda on Financing for Development (July 2015). •Transforming our world: the 2030 Agenda for Sustainable Development with its 17 SDGs was adopted at the UN Sustainable Development Summit in New York in September 2015. •Paris Agreement on Climate Change (December 2015).



Figure 1: The 17 Sustainability Development Goals (Source: UN)

Now, the annual High-level Political Forum on Sustainable Development serves as the central UN platform for the follow-up and review of the SDGs. (UN official website: <https://sdgs.un.org/goals>).

4. The 17 SDGs & 169 Targets: The 17 SDGs as mentioned above, where each of the 17SDGs has a specific target to achieve. These goals are as follows: •GOAL 1: No Poverty: End poverty in all its forms everywhere (eradicate extreme poverty currently measured as people living on less than \$1.25 a day.) •GOAL 2: Zero Hunger: End hunger, achieve food security and improved nutrition and promote sustainable agriculture •GOAL 3: Good Health and

Well-being: Ensure healthy lives and promote well-being for all at all ages •GOAL 4: Quality Education: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all •GOAL 5: Gender Equality: Achieve gender equality and empower all women and girls •GOAL 6: Clean Water and Sanitation: Ensure availability and sustainable management of water and sanitation for all •GOAL 7: Affordable and Clean Energy: Ensure access to affordable, reliable, sustainable and modern energy for all •GOAL 8: Decent Work and Economic Growth: Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all •GOAL 9: Industry, Innovation and Infrastructure: Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation •GOAL 10: Reduced Inequality: Reduce inequality within and among countries •GOAL 11: Sustainable Cities and Communities: Make cities and human settlements inclusive, safe, resilient and sustainable •GOAL 12: Responsible Consumption and Production: Ensure sustainable consumption and production patterns •GOAL 13: Climate Action Take urgent action to combat climate change and its impacts. •GOAL 14: Life Below Water Conserve and sustainably use the oceans, seas and marine resources for sustainable development. •GOAL 15: Life on Land Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss. •GOAL 16: Peace and Justice Strong Institutions Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels. •GOAL 17: Partnerships to achieve the Goal Strengthen the means of implementation and revitalize the global partnership for sustainable development.

5. Sustainability in the context of Islamic finance: Islamic finance industry in overall welcome the initiative of the United Nations by promoting the 17 SDGs, however, Islamic finance has its own approach and way to define those goals and the way they understood and implemented, especially in the context of Islamic finance industry. According to CIBAFI, Sustainable development within the Islamic paradigm can, therefore, be defined as follows: “Recognising the complementarity nature of all the stakeholders to reach unity (tawhid) within the balance (mizan), which requires the recognition and provision of an opportunity space for the given (fitra) development path for each stakeholder to reach their perfection, where the growth of each stakeholder has to be in harmony with other stakeholders’ leading to inter-and-intra generational justice (adalah) through the actualization of equilibrium- based (ihsani) governance”. (CIBAFI Sustainability Guide, 2022). The above definition showed that the sustainability from an Islamic perspective covered the following criteria: •The sustainability in overall is governed by the Shariah rules and principles. •The sustainability has a shariah dimension in it, related to the recognition the unity (tawhid). •There is a requirement of the recognition and provision of an opportunity space for the given (fitra) development path for each stakeholder to reach their perfection. •The growth of each stakeholder has to be in harmony with other stakeholders’ leading to justice (adalah). •The justice is based on the actualization of equilibrium- based (ihsani) governance. Therefore, the 17 sustainability development goals, are subject to screening by Shariah in term of definition, concept, features, objectives, implementation process, assessment, etc. where at all time the Shariah compliance should be observed in the through in each goal. Any possible inconsistent with the Shariah rules and principles required just adjustment, amendment and enhancement to ensure compliance with Shariah rules and Maqasid al Shariah which represent the objective of Shariah, hence the Sustainability development goals and Maqasid al Shariah must be consistent with each other.

5. The pillars for building a sustainable Islamic financial framework/ system: There are Key pillars for building a sustainable Islamic financial system, which have been introduced in the UAE Sustainability Finance Framework 2021-2031, they are as follows:

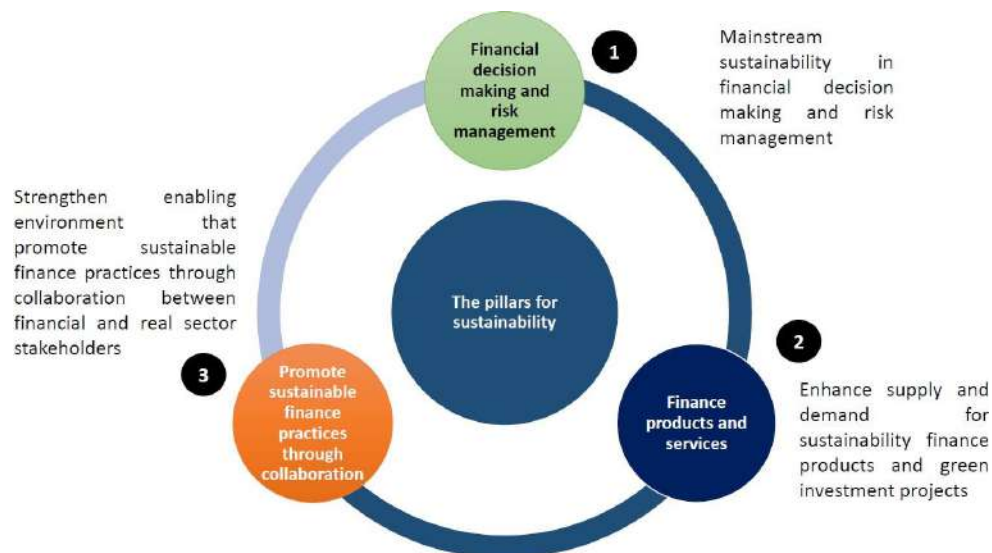


Figure 2: The three Pillars of framework (Source: Author)

5.1. Mainstream sustainability in financial decision making and risk management. This pillar is mainly related to the financial decision making and risk management, it has key points to achieve such pillar as highlighted in the figure below.

	Embed sustainability considerations into existing policies, legislation, and directives pertaining to public and private financial activities
	Include the management of climate-related risks in the mandates of relevant federal, municipal and local supervisory authorities
	Establish regulatory guidelines for the assessment and management of ESG- and climate-related risk exposures in lending and investment activities of financial institutions
	Develop environmental stress testing tools to aid financial services sector, including commercial and investment banking, asset management and insurance
	Propose standardized guidance on ESG- and climate-related reporting and disclosure, in alignment with the Task Force on Climate-related Financial Disclosures (TCFD) Recommendations

Figure 3: First pillar of the Sustainability framework (Source: UAE Sustainability Finance Framework 2021-2031)
The key points to build this pillar is as follows: •Embed sustainability considerations into existing policies, legislation, and directives pertaining to public and private financial activities. •Include the management of climate-related risks in the mandates of relevant federal, municipal and local supervisory authorities. •Establish regulatory guidelines for the assessment and management of ESG- and climate related risk exposures in lending and investment activities of financial institutions. •Develop environmental stress testing tools to aid financial services sector, including commercial and investment banking, asset management and insurance. •Propose standardized guidance on ESG- and climate-related reporting and disclosure, in alignment with the Task Force on Climate-related Financial Disclosures (TCFD) Recommendations. (UAE Sustainability Finance Framework 2021-2031). This pillar is about making the sustainability integrated into existing policies, legislation of the financial sector. Which include the management of climate-related risks? This initiative such be supported by issuing regulatory guidelines to assist the relevant industry for the assessment and management of ESG- and climate related risk in the financial activities such financing and investment. However, to main its resilient, environmental stress testing tools should be in place to aid financial services sector.

5.2. Enhance supply and demand for sustainability finance products and green investment projects: This pillar is mainly related to the financing and investment; it has key points to achieve such pillar as highlighted in the figure below.

	Establish a nation-wide common taxonomy for sustainable finance, along with tools for identifying and assessing eligible projects
	Explore public finance options for providing green finance incentive mechanisms, such as tax deductions / exemptions, targeted refinance schemes, guarantees and other risk sharing instruments, in transitioning from business-as-usual to green economic projects
	Incentivize financial institutions to develop and market sustainable products and services, such as green deposits, green mortgages, green bonds / sukuk, green loans and green insurance / takaful
	Assess readiness and opportunities for sovereign green bond issuance to fund eligible projects
	Develop climate- and green investment project pipeline in targeted sectors, in alignment with national green economy strategies
	Support the implementation of pilot projects in nascent sectors and technologies that contribute to green economic growth to boost market awareness and interest

Figure 4: Second pillar of the Sustainability framework (Source: UAE Sustainability Finance Framework 2021-2031)

The key points to build this pillar is as follows: •Establish a nation-wide common taxonomy for sustainable finance, along with tools for identifying and assessing eligible projects. •Explore public finance options for providing green finance incentive mechanisms, such as tax deductions/ exemptions, targeted refinance schemes, guarantees and other risk sharing instruments, in transitioning from business-as-usual to green economic projects. •Incentivize financial institutions to develop and market sustainable products and services, such as green deposits, green mortgages, green bonds/ sukuk, green loans and green insurance / takaful.

- Assess readiness and opportunities for sovereign green bond issuance to fund eligible Projects.
- Develop climate and green investment project pipeline in targeted sectors, in alignment with national green economy strategies.

- Support the implementation of pilot projects in nascent sectors and technologies that contribute to green economic growth to boost market awareness and interest. (UAE Sustainability Finance Framework 2021-2031).

This pillar is about integration of the sustainability in finance, through a proper process such as a nationwide common taxonomy that show the way the to identifying and assessing eligible projects. This includes incentive such as tax reduction and exemptions for public finance options, sovereign sukuk, green financing. This pillar also, address the private financial sector by encouraging them to provide sustainable products and services such as green mortgages green sukuk and green takaful.

Closing the Wealth Gap: A Two-Faceted Approach Theory



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Abstract: This work provides a comprehensive overview of income inequality, including its background, relevant data, and different theories and perspectives on the issue. The focus is to shed light on this complex topic and provide a deeper understanding of the various arguments and evidence regarding income inequality. Theories range from classical economics viewing it as a necessary component of growth to more recent perspectives highlighting negative impacts such as slower growth, reduced mobility, and increased poverty. The work will examine these theories in detail and provide an in-depth analysis. JEL codes: A10; B4; D0; D6; E0; E00

Keywords: Economic Development, Economic Growth, Economics

Introduction: Income inequality refers to the unequal distribution of wealth and income among individuals and households within a given population. This issue has been the subject of intense debate among economists, policymakers, and the general public, with various theories and perspectives on its causes, consequences, and potential solutions. This work aims to provide a comprehensive overview of the issue of income inequality, including its background, relevant data and statistics, and the different theories and perspectives on the topic. This work aims to shed light on this complex issue and provide a deeper understanding of the different perspectives and arguments that exist on income inequality. Existing theories and perspectives on income inequality range from classical economic ideas, which view inequality as a necessary component of economic growth, to more recent theories that highlight the negative impacts of inequality on economic outcomes, such as slower economic growth, reduced social mobility, and increased poverty. This work will examine these theories and perspectives in detail and provide an in-depth analysis of the various arguments and evidence of income inequality.

Background: For centuries, income inequality has been a topic of interest for economists and policymakers (Akerlof & Kranton, 2000; Bowles, 2004; Marx, 1867/1967; Sen, 1981). The concept of income inequality refers to the unequal distribution of wealth and income among individuals and households within a population. It has been the subject of intense debate, with various theories. Historically, income inequality has been a topic of interest for economists and policymakers, with some classical economists, such as Adam Smith and David Ricardo, arguing that income inequality was necessary for economic growth and prosperity (Bowles, 2004). The classical economics perspective results from market forces and is essential for economic growth. Proponents of this theory argue that the wealth generated at the top of the income distribution trickles down to the lower classes, improving their standard of living and contributing to overall economic growth. In recent decades, however, income inequality has become a pressing issue in many countries, with some countries experiencing a rise in income inequality since the 1980s (Bowles, 2004; Sen, 1981). For example, in the United States, the top 1% of income earners have seen their share of total income increase from around 10% in the 1970s to over 20% in recent years (Bowles, 2004). This increase in income inequality has led to growing concerns about its potential negative impacts on economic outcomes, including slower economic growth, reduced social mobility, and increased poverty (Akerlof & Kranton, 2000). These concerns have shifted how income inequality is viewed, with more recent perspectives highlighting the negative impacts of inequality on economic outcomes (Bowles, 2004). Relevant data and statistics on income inequality include measures such as the Gini coefficient, a widely used statistic that measures the inequality of a distribution, with a value of 0 indicating perfect equality and a value of 1 indicating perfect inequality. Other measures of income inequality include the Lorenz curve, the top 1% income share, and the Palma ratio (Akerlof & Kranton, 2000). These data and statistics provide a comprehensive overview of the income inequality issue and help us understand the extent of the problem. In conclusion, the issue of income inequality is complex and has been the subject of much debate and discussion among economists, policymakers, and the general public. It is crucial to comprehensively understand the background, context, and theories surrounding income inequality to develop effective policies and solutions to address this pressing issue (Sen, 1981).

EXISTING THEORIES: Income inequality is the unequal distribution of wealth, income, or both among individuals or households. Theories that attempt to explain the causes and consequences of income inequality include Neoclassical economics, Marxist theory, Structuralist theory, Institutional theory, and Behavioral theory. Neoclassical economics explains that income inequality arises from differences in labor, skills, and capital market value. It argues that the market will lead to a fair distribution of income as those who are more productive and efficient earn more, while those who are less effective make less. However, this theory is criticized for not considering the role of power, discrimination, and institutional factors. The Marxist theory posits that income inequality results from the exploitation of the working class by the owners of the means of production. The

capitalist system is seen as inherently unequal, with the rich getting richer at the expense of the poor. This theory asserts that the owners of capital extract surplus value from workers' labor, leading to a concentration of wealth. The structuralist theory believes that income inequality is caused by the unequal distribution of power and resources within society. The distribution of income is shaped by the political, economic, and social structures of a given society, as well as cultural beliefs and values. The institutional theory highlights the role of institutions and norms in shaping income distribution. Institutions such as the state, the market, and the family set the rules and standards that govern economic activity and significantly impact the distribution. Changes in institutional structures and norms can lead to income distribution changes. The behavioral theory argues that income distribution is shaped by individual behavior and decision-making. Individuals make decisions about education, occupation, and investments based on their beliefs, values, and preferences, which affect their income. This theory emphasizes human agency and decision-making in shaping income distribution.

A TWO-FACETED APPROACH THEORY: My economic theory addresses economic inequality with a unique approach. The persistent wealth gap despite efforts by governments and various organizations can be attributed to two distinct groups of people. One group comprises well-educated individuals with steady jobs but limited career advancement opportunities, while the other comprises those with limited education and a lack of entrepreneurial drive. This highlights the shortcomings of existing solutions to economic inequality. To address this issue, we need targeted solutions for each group. For those with an educational background, we need to focus on fostering entrepreneurship skills and encouraging them to take on more responsibility in their careers or businesses. This is exemplified by successful immigrant entrepreneurs in the US who leveraged their education and entrepreneurial spirit. For clear path toward entrepreneurship or employment can help them participate in the economy and add value. In conclusion, solving economic inequality requires a practical and tailored approach for each group, rather than a one-size-fits-all solution. Articulate and defend your perspective or theory on income inequality, including the evidence and reasoning that support your argument. My theory argues that income inequality is a crucial economic growth and innovation incentive. Individuals and firms situated on the lower end of the income graph will be motivated to work hard and invest in their businesses to reap significant rewards and potentially grow in the income scale. This, in turn, drives innovation, productivity, and economic growth, leading to higher standards of living for all members of society. My perspective on income inequality is that it provides a crucial economic growth and innovation incentive. Numerous studies show a positive correlation between income inequality and economic development, with countries with higher income inequality having higher rates of entrepreneurship, innovation, and economic growth. The reasoning behind this perspective is that income inequality creates incentives for individuals and firms to take risks and invest in their businesses, leading to increased innovation and productivity, which drives economic growth and leads to higher standards of living for all members of society.

Implications: This perspective argues that efforts to reduce income inequality through progressive taxation and transfer programs may undermine economic growth by reducing incentives for work and investment. Instead, it suggests that policymakers should create an environment that promotes economic growth, such as reducing regulations and taxes, to ensure individuals and firms have the incentives and resources they need to innovate and succeed.

Potential Criticism: Critics' impact on society, including reduced social mobility and increased poverty, may contribute to economic instability. Additionally, some may argue that this perspective overlooks the distributional effects of economic growth and that it is important to consider how the benefits of economic growth are distributed across society, not just overall economic growth. In conclusion, the Incentives and Economic Growth perspective highlight income inequality's positive impact on economic growth and innovation. However, it also recognizes this perspective's potential criticisms and limitations and acknowledges the importance of considering the distributional effects of economic growth and the impacts of income inequality in the broader society. The evidence for this perspective comes from numerous studies that have found a positive correlation between income inequality and economic growth. For example, countries with higher levels of income inequality tend to have higher levels of entrepreneurship and innovation, and higher rates of economic growth. The reasoning behind this perspective is that income inequality incentivizes individuals and firms to take risks, invest in their businesses, and strive for success. This results in increased growth and leads to higher standards of living for all members of society. From this perspective, efforts to reduce income inequality, such as progressive taxation and

transfer by reducing incentives for work and investment. Instead, this perspective argues that policymakers should focus on creating an environment that promotes economic growth, such as reducing regulations and taxes, to ensure that individuals and firms have the incentives and resources they need to innovate and succeed. In conclusion, the Incentives and Economic Growth perspective argue that income inequality is a major advantage for the economy, as it provides the incentives necessary for innovation, productivity, and economic growth. According to this perspective, efforts to reduce income inequality, rather than reducing income differences.

Analysis and Discussion: Analyze income inequality and the broader economy. Address potential criticisms or objections to your argument. The view that income inequality can drive economic growth and promote innovation and entrepreneurship is based on the idea that rewards and incentives encourage investment, risk-taking, and entrepreneurship. This perspective also supports the free market principles, where individuals and firms are free to pursue their interests. However, this perspective has significant weaknesses, as it can result in a widening wealth gap, leading to poverty, unemployment, and crime. Additionally, income inequality can reduce social mobility, making it harder for individuals from lower-income backgrounds to improve their economic situation. Another criticism is that it may lead to market failures, such as monopolies, market power, and exploitation, which can negatively affect the broader economy. In conclusion, while the perspective that income inequality can drive economic growth and promote innovation and entrepreneurship has its strengths, it also has significant weaknesses that need to be considered. To address the negative impacts of income inequality, it may be necessary to implement policies that balance the free market principles with measures that promote greater equality and social mobility. An alternative perspective to this view is that income inequality harms economic growth. This perspective argues that when income is concentrated in the hands of a few, it creates a lack of purchasing power among the majority of the population. This, in turn, reduces demand for goods and services, which can lead to slower economic growth. Moreover, income inequality can lead to reduced investment in education, health, and infrastructure, which can negatively impact the economy's long-term competitiveness and growth potential. Additionally, income inequality can result in increased political instability and conflict, creating an unfavorable environment for business and investment. For example, in extreme cases, wealth concentration can lead to social unrest and violent conflict, which can undermine the stability of countries and regions. Furthermore, income inequality can reduce social trust and cooperation, which can negatively affect economic growth by decreasing the level of trust in government and financial institutions, reducing the quality of public goods, and creating barriers to economic cooperation. The perspective that income inequality harms economic growth highlights the importance of addressing this issue through policies and programs that promote greater equality and social mobility. This may include measures such as progressive taxation and investment in education and training enterprises. Income inequality is essential for promoting fairness and social justice supporting sustained economic growth and development.

Conclusion: Summarize the main points of your perspective or theory and its contributions to the existing knowledge and debates on income inequality. Provide final thoughts on the issue and the potential for future research. In conclusion, the Incentives and Economic Growth perspective on income inequality argue that income inequality serves as a crucial incentive for economic growth and innovation, leading to higher standards of living for all members of society. This perspective is based on evidence that shows a positive correlation between income inequality and economic growth, and the reasoning that income inequality provides the necessary incentives for work, investment, and innovation. However, this perspective also acknowledges the potential negative consequences of income inequality, such as broader wealth gaps, reduced social mobility, and market failures. These trade-offs suggest the need for a nuanced and balanced approach to addressing the issue of income inequality. In terms of contributions to existing knowledge and debates on income inequality, this perspective highlights the importance of considering the role of incentives in economic growth and the potential trade-offs of income inequality, and the need for policies that balance the promotion of economic growth with the reduction of income inequality. In terms of future research, there is potential to explore further the relationship between income inequality and economic growth, as well as the possible consequences of income inequality for different segments of society. Additionally, there is potential to examine alternative approaches to addressing the issue of income inequality, such as policies aimed at promoting equality of opportunity, rather than equality of outcomes. In conclusion, the Incentives and Economic Growth perspective provide valuable insights into the issue of income inequality and its potential consequences for the economy. It highlights the need

for a nuanced and balanced approach to addressing this issue and the importance of considering the role of incentives in economic growth and innovation. Moreover, income inequality, such as technological progress, globalization, and changes in the labor market, to design effective policies to mitigate its negative impacts. Finally, an essentially complete, or comprehensive explanation of income inequality and its impacts. It should be combined with other theories and perspectives to gain a more complete understanding of the issue. Further research and analysis are needed to understand better the complex interplay of factors contributing to income inequality and its consequences. Growth perspectives are a valuable contribution to the ongoing debates and discussions on income inequality and its implications for the economy.

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References: ●Akerlof, G. A., & Kranton, R. E. (2000). Economics and identity. *The Quarterly Journal of Economics*, 115(3), 715-753. ●Bowles, S. (2004). *Microeconomics: Behavior, Institutions, and Evolution*. Princeton University Press. ●Karl Marx. (1867/1967). *Capital, Volume I: A Critical Analysis of Capitalist Production*. Moscow: Progress Publishers. ss●Sen, A. (1981). *Poverty and famines: An essay on entitlement and deprivation*. Oxford University Press.

Green Innovation: Bridging the Gap between Corporate Sustainability Development and Enterprise Risk Management: Evidence from Jordan



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Abstract: The study examines the impact of green innovation on the relationship between corporate sustainability development and enterprise risk management and sustainable performance in Jordanian companies.

Data was collected through a structured questionnaire from Jordanian service, merchandise, and manufacturing companies listed on the Amman Stock Exchange. A total of 97 responses were received from 233 companies (41.63% response rate), with the largest number of responses from the service sector, followed by manufacturing and merchandise sectors. The participating firms had between 50-450 employees and were less than 10 to more than 25 years old. The study results show that green innovation significantly and positively mediates the relationship between corporate sustainability development and enterprise risk management ($\beta=1.374^{***}$, $p=0.000$) and significantly and negatively mediates the relationship between corporate sustainability development and enterprise sustainable performance ($\beta=1.374^{***}$, $p=0.000$). The research findings suggest that the green innovation approach, which incorporates the green concept throughout the product innovation stages, can improve resource utilization, promote the development of green products, enhance product quality and firm reputation, increase market share, and achieve sustainable growth.

Introduction: In recent years, corporate sustainability has become an increasingly important issue as society and investors are placing greater emphasis on the role of companies in addressing social and environmental challenges. Studies have shown that companies that prioritize sustainability tend to have better financial

performance and are more attractive to investors. For example, a 2020 study by the Boston Consulting Group found that companies that have integrated sustainability into their business models had higher revenue growth and a higher return on assets compared to those that had not. Additionally, a 2020 survey by Deloitte of global investors found that environmental, social, and governance (ESG) factors are becoming increasingly important in investment decisions. Respondents cited concerns about climate change, human rights, and social inequality as key drivers of their ESG investment strategies. Corporate Sustainability Development (CSD) and Enterprise Risk Management (ERM) are two interrelated concepts that have gained increasing attention in recent years. CSD refers to the practice of businesses taking into account the economic, social, and environmental impact of their operations on society and the planet. ERM, on the other hand, is a process that helps organizations identify, assess, and prioritize potential risks to their operations and stakeholders. Studies have shown that integrating CSD into ERM can lead to improved risk management and overall business performance. A study by the Cambridge Institute for Sustainability Leadership (CISL) found that companies that integrated sustainability into their ERM processes had a better understanding of the potential risks and opportunities associated with sustainability issues and were better able to manage them. (Preuss, 2015). Another study by the Chartered Institute of Management Accountants (CIMA) found that companies that integrated CSD into ERM had a better ability to identify, assess, and respond to risks related to sustainability issues such as climate change and human rights. (CIMA, 2014). Furthermore, research has shown that companies that prioritize CSD tend to have better financial performance and are more attractive to investors. A study by the Harvard Business Review found that companies in the top quartile for environmental, social, and governance (ESG) scores had a return on equity that was 2.5 times higher than companies in the bottom quartile. (HBR, 2018). However, it should be noted that the implementation of CSD in ERM can be challenging for some companies, as it requires a change in mindset and can be resource intensive. A study by the Journal of Business Ethics found that companies that had a more proactive approach to sustainability had a better ability to integrate CSD into ERM. (JBE, 2016). In conclusion, the literature suggests that integrating CSD into ERM can lead to improved risk management and overall business performance. However, the implementation of CSD in ERM can be challenging and requires a change in mindset and resources. Over the last decade, a company's role in achieving sustainable development is important, especially in today's fast-changing environment. Firms are facing fierce competition and need to continuously improve their ability to develop and maintain a competitive advantage. Most high-tech firms rely heavily on pursuing sustainable and innovation capabilities (Wen-Hsiang Lai, 2015). Sustainability is an evolving area of research and is grabbing the attention of corporations, research communities, and regulatory bodies worldwide which had enhanced its implementation. For corporations focusing on sustainability need to ensure that the business is able to manage the business risk while meeting the stakeholder expectations. The adoption of sustainable practices increases resource-use competence and greater adoption of clean and environmentally friendly technologies and industrial processes (Muhammad Kashif Shad, 2019). Firms with sustainability in their orientation and innovation processes show evidence of value creation, such as the development value of products new to the market (radical innovations) and cooperation value with stakeholders (Wen-Hsiang Lai, 2015). ERM is crucial for everyday business activities and organizational practices in the current era as it facilitates business firms to control their internal system. Risk management is deemed a core factor for business competitiveness. It facilitates a firm to develop a unique strategy to minimize the potential losses and open a door for the exploitation of new opportunities, ERM practices reduce costs associated with a business operation and facilitate competitive advantage and superior performance (Songling Yang, 2018). There are several types of risk groups, namely the investment risk, the business risk, the financial risks and the nonfinancial risks. In financial institutions, risk includes credit risk, market risk and operational risk, several studies have found that the ERM has a significant effect on the financial performance of companies (Al-Nimer, 2021). Green innovation is related to products, processes and services that protect the environment. It is a process in which enterprises continuously carry out and implement green activities such as reducing waste, preventing pollution and improving environmental quality, and finally improve environmental and economic performance. Green innovation strategy is one of the most important environmental strategies and an important internal organizational factor that affects the enterprises' production and operation. (Sun, 2021). In this research we will shows the association between Corporate Sustainability Development and Enterprise Risk Management is mediated by Green Innovation in Jordanian manufacturing sector.

The Research Hypothesis: 1. Corporate Sustainability Development and Enterprise Risk Management: As businesses grow so do the risks. Thus, organizations need to adopt an integrated approach of risk management to mitigate risk (Agrawal, 2016). Enterprise Risk Management (ERM) has become the most important part of management for all organizational types. As a consequence of globalization, public expectations have risen those businesses should behave responsibly and accountably in terms of minimizing their environmental and social impacts (Saardchom, 2013). The awareness by most of the companies in the world towards the environmental perils leads to the sustainability development. By emphasizing the sustainability risk management (SRM) and the sustainability agendas as part of corporate strategy, it's not only effecting on the company's financial performance but also maintaining the longer term of survival in the industry (Othman, 2016). ERM play a significant role in sustainable development of the organization through identification, measurement and management of risk including sustainability-related risks (Muhammad Kashif Shad, 2019). Implementing an integrated framework of ERM provides an essential foundation ensuring corporate commitments to ethical sustainability. Risk management and sustainability are interrelated, unethical and unsustainable behaviors may generate potential business risks and harm an organization's sustainability, as a management control system, the purpose of ERM is to help an organization achieve sustainable outcomes (Liu, 2019).

H0: Corporate Sustainability Development is significantly influencing Enterprise Risk Performance in Jordanian manufacturing sector.

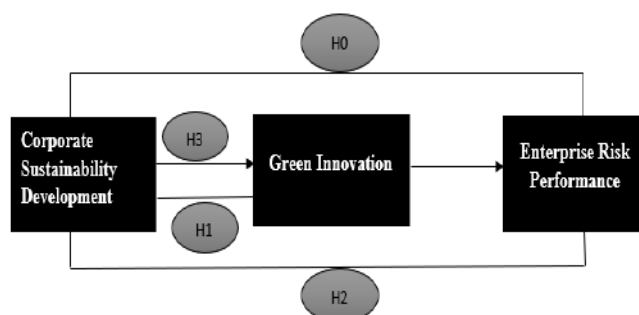
2. Corporate Sustainability Development and Green Innovation: Sustainability performance refers to the ability of an organization or company to meet the needs of existing stakeholders without infringing on the needs of future stakeholders (Dyllick & Hockerts, 2002). Reid and Miedzinski (2008) stated that green innovation is any solution offered at any stage of a product or service life cycle to include a significant improvement in resources while reducing environmental impact. Green innovation can also refer to all kinds of innovations that contribute to the creation of new processes, products or services to minimize damage to the environment and prevent degradation and at the same time, maximizing utilization of natural resources (Leal-Millán et al., 2017). Based on relevant literature, previous research on the influencing factors of green innovation focuses on external factors, such as stakeholder pressure, environmental regulation, green supplier, external knowledge resources and market demand. Few studies emphasize the internal factors that promote green innovation, such as environmental ethics and environmental orientation. In the process of green management, an enterprise's internal stakeholders will increase the input of effective resources for green products, processes and services, coordinate the required heterogeneous resources and strengthen their environmental willingness, which is conducive to the integration of organizational resources and reduces the risk of process and output on environmental impact (Sun, 2021). H1: Corporate Sustainability Development is significantly influencing Green Innovation in Jordanian manufacturing sector.

3. Green Innovation and Enterprise Risk Management: At present, innovation has attracted the attentiveness of many researchers and business owners. Green innovation has become one of the most important strategic tools to sustain resources and make environment-friendly. (Yehia Elzek, 2021). The emergence and popularity of ERM have ensued from a response to the rapid changes due to globalization and regulatory pressure on organizations to manage risk holistically. Its importance dramatically increased in recent years due to a series of corporate fraud, financial scandals, increasing the complexity of risks and pressure from regulatory bodies. (Muhammad Kashif Shad, 2019). ERM is supposed to minimize direct and indirect costs of financial distress, earnings volatility, and negative shocks in financial markets, as well as improve the decision-making process to select the best investment opportunities, ERM practices enable a firm to reduce different types of costs associated with firms' operational and non-operational activities, ERM helps top management to manage different types of risk effectively (Songling Yang, 2018). Unsustainable behaviors can generate potential business risks to an organization's reputation and ultimately result in the collapse of an organization (Liu, 2019). H2: Green Innovation significantly influencing Enterprise Risk Performance in Jordanian manufacturing sector.

4. Corporate Sustainability Development, Enterprise Risk Performance and Green Innovation: Risk management is an essential element of the strategic management of any organization and should be embedded in the ongoing activities of the business. ERM is defined in many ways but the accepted definition is: "a process, effected by an entity's board of directors, management and other personnel, applied in strategy setting and across the enterprise, designed to identify potential events that may affect the entity, and manage risks to be within its risk

appetite, to provide reasonable assurance regarding the achievement of the entity’s objectives”. (Committee of Sponsoring Organizations of the Treadway Commission COSO), the failure to prevent unethical and unsustainable behavior in risk management systems was a key factor in the financial collapse of the company. To mitigate threats derived from unethical behavior and direct sustainable decision-making, it is necessary to employ a wide range of control mechanisms, such as risk management (Songling Yang, 2018). Sustainability is often broken into three core concepts or "pillars": economic, environmental, and social. Many businesses and governments have committed themselves to sustainable goals, such as reducing their environmental footprints and conserving resources. Some investors are actively embracing green investments. Resource limitations and environmental concerns have made sustainable operations of assets and environmental pollution one of the major global issues. The economy’s overall development may not go “hand in hand” with the reduction of pollution and sustainable management of resources, numerous investigations examined factors altering green innovations practices, such as environmental regulations, ethics, legal systems, and supply chain. (Haijun Wang, 2021). sustainable development has increasingly become a global consensus, promoting green growth and implementing green policies is the common choice of all major economies in the world, although green innovation can create economic, social, and ecological value, it is also a high-risk activity that needs to protect the value of green innovation through risk management. The process of green innovation is full of high uncertainty (Yingying Sun, 2019). H3: The association between Corporate Sustainability Development and Enterprise Risk Management is mediated by Green Innovation in Jordanian manufacturing sector.

Research Model: The following figure shows the research model that displays each of the dependent variable (Corporate Sustainability Development) and independent variable (Enterprise Risk Performance) and mediator variable (Green Innovation): (based on the above discussion)



Methodology: •Sample and Population: The study used a structured questionnaire to collect data from Jordanian service, merchandise, and manufacturing companies listed on Amman Stock Exchange. Where the number of companies listed in the services sector reached 139 companies, the manufacturing sector 55 companies, and the merchandise sector 39 companies. The firms participating in the study have shown in the following table. In this research, we surveyed those firms having between 50-450 employees and their age less than 10 to more than 25 years. We receive 97 responded of 233 companies which indicate 41.63% of total number of listed companies: 29.4% of service companies, 60.18% of manufacturing companies, 56.4% of merchandise companies responded. The greatest number of firms is from service, followed by manufacturing and merchandise respectively.

	Frequency	Percentage
Industry:		
• Service	41	42.26%
• Manufacturing	34	35.05%
• Merchandise	22	22.68%
Age:		
• Less than 10 years	42	43.29%
• 10- 15 years	25	25.77%
• 16-20 years	18	18.55%
• 21-25 years	9	9.27%
• More than 25 years	3	3.09%

Products/ Services:		
• 4 products/ services	44	45.36%
• 5 – 10	34	35.05%
• 11 – 20	15	15.46%
• 21 – 40	4	4.12%
• 41 or more	0	0%
Number of employees:		
• Less than 50	47	48.45%
• 50- 150	19	19.58%
• 151-300	21	21.64%
• 301-450	10	10.3%
• More than 450	0	0%

• **Measuring Research Variables:** Measuring sustainability can be by using a five-item scale (Q29–Q33) from the Sustainability Practices Indicator. The five items measure the overall focus of the organization on sustainability practices and principles. These items were measured using a 7-point Likert-type scale (1 = strongly disagree to 7 = strongly agree) (Muhammad Imran, 2019). Sustainable competitive advantage indicators are adopted including having advantage of caring environment compared to the competitors, having advantage to continue focusing on green, and having advantage to have social responsibility compared to the competitors (Eila Ardyan, 2017). Enterprise Risk Management: Impact of ERM on firm's value, examine ERM processes and operational performance and influence of ERM on firm value mediated through its financial performance can measuring by questionnaire survey, regression analysis, multivariate OLS regressions and annual report (Muhammad Kashif Shad, 2019). Because of the absence of a general theoretical framework or model that can predict the key factors influencing the relationship between a firm's CSR behavior and its risk management, we use the ERMI, to measure the effectiveness of a firm's risk management. This index is based on COSO's (2004) four business objectives: strategy, operations, reporting, and compliance. ERMI is to combine the achievements of the four objectives into one metric (Ya-Fen Kuo, 2018). $ERMI = \sum \text{Strategy} + \sum \text{Operation} + \sum \text{Reporting} + \sum \text{Compliance}$.

Green Innovation: A five-item Likert scale is used to measure green innovation (1=strongly disagree to 5=strongly agree) (Sascha Krausa, 2020). The focal mediator variable in the context of the current study was green innovation measuring by a questionnaire survey (Chatterjee2, 2019). "To measure the variable relating to innovation, we followed the approach of Stilgoe et al. (2013) by focusing on the four dimensions advocated by their research which are: Inclusion, anticipation, responsiveness and reflexivity." (Hadj, 2020).

• **Summary of Measuring the Research Variables:**

Variable	Measuring Method	Reference
<i>Corporate Sustainability Development</i>	1. 7-point Likert-type scale. 2. Some indicators.	1. (Muhammad Imran, 2019) 2.(Eila Ardyan, 2017)
<i>Enterprise Risk Performance</i>	1. Questionnaire survey, regression analysis, multivariate OLS regressions and annual report. 2. Four business objectives.	1. (Muhammad Kashif Shad, 2019) 2.(Ya-Fen Kuo, 2018)
<i>Green Innovation</i>	1. Questionnaire Survey. 2. The approach of (Stilgoe et al). 3. A five-item Likert scale.	1.(Chatterjee2, 2019) 2.(Hadj, 2020) 3.(Sascha Krausa, 2020)

References: Preuss, L. (2015). Sustainability and enterprise risk management. Cambridge Institute for Sustainability Leadership. CIMA. (2014). Corporate sustainability and enterprise risk management. Chartered Institute of Management Accountants. Harvard Business Review. (2018). Companies with Strong Environmental and Social Performance Outperform Peers. Retrieved from <https://hbr.org/2018/01/companies-with-strong->

[environmental-and-social-performance-outperform-peers](#). Journal of Business Ethics. (2016). Proactivity and corporate sustainability: A review and research agenda. Journal of Business Ethics, 136(3), 437-463. Boston Consulting Group. (2020). Sustainability Pays: How Sustainable Business Models Lead to Higher Revenue Growth and Returns. Retrieved from <https://www.bcg.com/publications/2020/sustainability-pays-how-sustainable-business-models-lead-higher-revenue-growth-returns>. Deloitte. (2020). 2020 Global ESG Survey. Retrieved from <https://www2.deloitte.com/global/en/pages/about-deloitte/articles/2020-global-esg-survey.html>

Self-Orientalism Repackaged: Mlw Foods Inc. Wong Wing Fried Rice



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Abstract: Globalization has prompted a multicultural retheorization of both consumer and market (Fu et al., 2014; Riefler et al., 2012, p. 287; Kipnis et al., 2019). Beyond ethnocentric purchasing behaviours, white, North American consumers are increasingly exhibiting cosmopolitan, and even xenocentric reorientations (Cho et al., 2019; Diamantopoulos et al., 2019; Kipnis et al., 2019; Li, 2020; Riefler et al., 2012; Thompson & Tambyah, 1999). Recognizing the viability (and competition) of imported goods, domestic companies have diversified their portfolios to market internationally inspired products. In short, the multicultural market consists of international goods which are authentic, domestic goods purporting authenticity (e.g., orientalizing), and multinational, fusion innovations that are authentic-ish (e.g., self-orientalizing; Hui, 2019; Li, 2020; Stephens, 2021). What results is a fetishistic commercialization of multiculturalism, where brands are packaging ethnicity and race to vie for consumer attention. This paper focuses on the latter variety — self-orientalist packages designed for products born out of (formerly) diaspora-owned enterprises. Drawing on key marketing concepts, autoethnography is coupled with purposive sampling to arrive at a select graphic designed consumer packaged good, namely, MLW Foods Inc. Wong Wing Fried Rice. Developing an analytical and theoretical approach that can support the identification of racialization, racist typologies are situated in graphic design. Themes derived from the analysis include racism, orientalism, self-orientalism, exoticism, cultural appropriation, among others.

Keywords: Graphic Design, Racist Packaging and Label Design, Self-Orientalism, Anti-Racism, (Auto)Ethnography

The Importance of a Coordinator in International Joint Interdisciplinary Research



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Abstract: We are currently working on an interdisciplinary research project aimed at righting educational inequalities between high school students residing in the provinces of Bangladesh (ie. socially disadvantaged areas) as opposed to the cities. More specifically, we are attempting to provide inclusive and fair educational opportunities throughout Bangladesh through the use of studying devices, such as electronic books and smart phones and learning software, such as text to speech readers, utilizing information technologies. Our research team consists of both Japanese and Bangladeshi members and our disciplines span diverse fields from information science, statistics, anthropology and arts management. In the early half of 2022 when we first formed our team, we did not have members well versed in social research methodologies, and it took a great deal of time to establish our research plans. At the same time, one of our greatest challenges was how to understand our differences in research approach that arose from our varying positions. For this reason, we invited an anthropology researcher as a coordinator for this research project to design qualitative and quantitative surveys that would form the basis for our studies. We plan to continue to work with the coordinator to develop a text to speech reader based on our survey results. In this presentation I would like to report on how we are overcoming the various barriers between researchers in international interdisciplinary research and describe the results of interviews with our joint researchers. Such research barriers can arise from cultural differences, such as differences in language, religion and social structure.

Keywords: Social Inclusion, E-learning, Educational Inequalities, International Joint Interdisciplinary Research, Community Development

Tribal Women in Modern Telangana Society: Problems and Challenges

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Abstract: Tribes are one of the diverse groups among the Indian population and Telangana has the distinction of having a large number of ethnic tribes. They remain disadvantaged mostly as they are considered as the lowest section of Indian society since ancient times. The tribes remain disadvantaged due to various factors like geographical and cultural isolation, lack of proper health facilities, inability to satisfy basic needs, lack of control over resources and assets, lack of education and skills, malnutrition, lack of shelter, poor access to water and sanitation, vulnerability to shocks, violence and crime, lack of access to proper infrastructure facilities and technologies and lack of political freedom. All these challenges can make their living a difficult task. Telangana state now represents a blend of modernity with Hyderabad being the hub of IT and other industries while interior districts have various tandas housing a large tribal population. While Adivasis are traditional forest-dwelling communities, Lambadas are a nomadic community and the major dominant tribal groups inhabiting the Telangana State. Women's questions have attracted the attention of social scientists who find plenty of areas still unexplored for researchers. The role and status of tribal women in society can best be understood within the cultural context by the operation of various historical, political and economic factors shaping the society within the frame-work of time. There are gradual changes in the status of tribal women as a result of modernization. Even though there is much advancement in the field of education, a large majority of tribal women remain tradition bound. The proposed Paper attempts to capture the problems and challenges faced by the tribal women and what kind of roles they play within their exclusive tribal tandas as well as the so-called modern/urban societies to where they migrate in search of a livelihood.

Keywords: Lambadas, Tandas, Telangana, Tribes, Women

Online Customer Satisfaction: A Critical Evaluation of Grounded Theories



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Abstract: Organizations are in a continuous battle to survive amid ever-increasing competition. The increasing competition has eroded organizational financial performance in many industries. Many organizations have realized that they have exhausted resources due to ineffective customer loyalty programs. One of the critical contributors to the above challenge is the organization's inability to retain customers by offering marketing programs that influence repeat purchases. The above phenomenon is no exception to organizations that provide online businesses. The failure of online companies to measure their online customer satisfaction has become of paramount importance in today's business, where the online business drives a more significant stake in the business. Therefore, companies must frequently measure online customer satisfaction and introduce necessary changes to their business model to increase on-site and online customer retention for long-term profit generation while creating overall organizational value for stakeholders. Thus, this paper critically evaluates current theories related to online customer satisfaction grounded in the body of literature.

Keywords: Customer Satisfaction, Online Customers, Customer Retention, Organizational Performance

The Addiction of the 21st Century? Evidence from a Deprivation Study on Teenagers' Dependence on Their Smartphones

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Abstract: Since the smartphone's appearance fifteen years ago, it has become the most dominant medium in teenagers' lives, especially among the children of generation Z, "the smartphone natives". In fact, some scholars argue that their intensive smartphone use is similar in its characteristics to actual addiction. Researchers have also identified two emotional conditions underlying cellphone dependency, tagging them FOMO (=fear of missing out) and NOMOPHOBIA (=no mobile phobia). However, the use of the term "addiction" when it comes to smartphones is considered controversial among researchers, who propose to describe the strong connection between the youth and smartphones in a more complex way. In this research I examine the relationship between teenagers and their smartphones from an original point of view: through a 'deprivation study'. I examined 100 adolescents (14-18 yrs), who refrained from using their Smartphones for one week, in order to explore the physical, psychological, and social significance of the cellular phone in everyday life, via experiencing its absence. The premise of the study is that the experience of absence can indicate the level of users' dependency on the medium, and the nature of the relationships between the device and its users.

Parental Perception of Traffic Safety for Active School Travel



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Abstract: Active school travel (AST) is important for a child's physical and mental well-being. AST is travelling to school using modes such as walking, cycling, scootering etc. Since AST has many benefits, researchers have been focussing on improving active travel to school. However, children actively commuting to school is decreasing in countries around the world. The parental perception of traffic safety is a main factor that influences active school travel besides social safety and distance to school. Interesting studies have shown that lateral distance and buffers with respect to traffic improve the perception of traffic safety, which needs to be explored for active school travel research. Also based on the ground situation near schools in Melbourne, streetscape videos are developed. The objective of the research is to find if the parental perception of traffic safety varies for different streetscape elements of low and high canopy trees, pedestrian fencing, reduction to 30km per hour speed, and widened footpath. The streetscape videos are developed using SketchUp and rendered in Twin motion and embedded in the Qualtrics survey questionnaire and circulated to over 300 community Facebook groups online from Metropolitan Melbourne. Responses were received from about 300 participants and the data is being analysed using SPSS. This research may have a significant impact on creating a safe street for children to walk to school and also form a new direction of research for active school travel.

Keywords: Active School Travel, Parental, Traffic Safety, Perception

Sustainability in Interior Design Education Assessment Proposal



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Abstract: The average person spends 90 percent of their time indoors, making building quality and performance a crucial role in our health and pleasure. Considering that 54 percent of energy consumption is directly or indirectly tied to buildings and their construction, and that the quality and performance of structures is also a major influence in the health of the environment, making designers key players in developing more sustainable societies. Interior designers make decisions that have major consequences on the environment and society, making awareness to environmental and social problems a necessary in the building profession. Limited

pedagogical research has been performed to create and examine approaches for integrating sustainability into interior design instruction. This paper describes an undergraduate course designed to teach students of building-related fields about sustainability. The elements are specified in the form of an easy-to-use Sustainability in Interior Design Education Assessment Rubric that faculty members can use to create effective programs and courses of their own to teach principles of sustainability to their students.

Keywords: Rubric, Sustainable Design, Ecological Sustainability, Sustainable Interior Design

Religious Nationalism in Contemporary Japan

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Abstract: The study of religious nationalism in Japanese politics has been a relatively understudied sub-field of research. Although secularization has been apparent in Japan, there has been a substantial revival of religion in politics of Japan. The assassination of former Japan's Prime Minister Shinzo Abe in July 2022, shed light on the relationship between the controversial religious organization, known as the Family Federation for World Peace and Unification, and Japanese politics. The mother of the man suspected of killing Abe was bankrupted as the result of huge donations to the Church. Through strong ties with Abe family, the Church has exerted its influence on Japanese politics especially among conservative LDP (Liberal Democratic Party) members for several decades. Its ties with politics went back to the period of the Nobusuke Kishi's administration, known as Abe's grandfather. Religious nationalism is not a new phenomenon in Japan, however hitherto Buddhist nationalists and state-Shinto have been paid attention as the center of religious nationalism especially during the Japanese imperialist war in 20th century. While religion is not a necessary component of nationalistic ideologies, religious considerations have been part of political decisions. The religious groups as the social organization have continued to gain more political power and to impose their religious visions on all of society. The election supports by religious groups for increasing vote-gathering power cannot be ignored by the candidates to win the national or municipal elections. This paper seeks to reveal the relations between religious nationalism and politics little discussed in the mainstream of Japan's political studies and to examine how political decision have been affected by religious nationalism.

Keywords: Religion, Politics, Japan, Nationalism, Electoral Incentives

Aesthetic Value: Attachment to Digital Experience and Real-Life Experience



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Abstract: The purpose of this academic article is to present the merging of digital experiences and real-life experiences in the view of value and aesthetics through 5 roles of digital approach generating two types of experience at present, namely, the role of digital age towards education, the role of digital age towards work, the role of digital age towards economy, the role of digital age towards art and culture, and the role of digital age

towards tourism. The study results revealed that today value and aesthetics of experience play an important role in how people spend their life. Technological evolution brings about new forms of interaction that people across the world consume and treat each other. Though digital experience enables people to have comfort, access information and communicate with each other more easily, people do not have profundity and meticulousness to understand experience. On the contrary, real-life experiences offer more experiences of participation in terms of sensory perception or emotional perception. However, they are unable to offer borderless connection and data accessibility as comfortable as digital experiences. Therefore, it can be said that digital experiences and real-life experiences cannot be separated since both of them can fulfill humans' good experiences in a different way, making humans feel fulfilled and enjoyable while they can admire things surrounding themselves. Humans receive benefits from technologies while connecting to the world they can touch.

Keywords: Digital experiences, Real-life experiences, Value, Aesthetics, Parallel World

Digital Media and Its Role in Preserving Tribal Handicrafts



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Abstract: The purpose of this academic article is to study the role of digital media in preservation of tribal handicrafts before extinction. This complies with the government's important policy in protecting tribal lifestyle, folk arts, and cultures in the context of Thai society. The study results revealed that 21st century digital media is in the role as a tool to communication with other societies, as well as promoting the understanding of the uniqueness of tribal handicrafts more easily and quickly which is suitable for present society. Another role of modern media is to strengthen social values and spread the tribal identities to be known to wider audience. It is an important part in creating the harmony with the context of Thai society. We often see the tribal handicrafts are being used as cultural selling point in movies, animations, advertisements, games, and applications. It can be said that the using knowledge of technology is benefit to the tribe as tool to record and store their way of life, patterns, and story of their cultures in the form of digital media. These phenomena presented the role of technology towards culture. In this regard, the creation of its role in building commercial opportunities will be regarded as a creative business which will save tribal folk arts and handicraft from extinction.

Keywords: Role, Digital Media, Media, Awareness, Uniqueness, Creative business, Tribal handicrafts

An Unadorned Adornment: The Aesthetics Experience of An Alterity in The Jewellery

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Abstract: Adornment on the human body is a culture commonly found in nearly all races and nationalities. The adornments represent their identity. Human created, produced and in search of the decoration pieces that we called them jewelry. Other than body adornment, each item plays different roles. Jewelries that are made using valuable materials are often seen as expensive which symbolize rich status to those who are wearing the pieces because in this capitalist world, the expensive objects belong to those of the rich. Jewelry represents person's character which is often found in many subcultures. The materials of those jewelry are to represent their own self. The mark appearing on the body is not to be mistaken for adornment but to show their character and method in which people connects to the object spiritually. Because of the deep spiritual connection, therefore, the selection of material comes from the wish to represent a person by showing different forms of their identities such as hair that is kept in a locket. Those who don't understand the true meaning of those identities kept in the locket will not understand the real reason for wearing the item. It is a great way to represent the person and the desire to be able to feel close to their loved one after they deceased which would not be possible in real life. The 21st century global warming has provoked a more sustainable design and to be conscientious about the use of resources and recycling. The production that is environmentally friendly has become the new trend setting. Materials reflect the definition of true adornment and being environmentally conscious has caused awareness and action to support a long-lasting environment.

Keywords: Jewellery, Adorn, Human, Material, Belief, Spirit, Relic, Remembrance, Announcement, Appearance, Desire, Sustainability

Benefits Containing in Amulets



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Abstract: Since ancient times, each culture had an object called an “amulet” as a spiritual anchor to protect people from negative energy, evil, and injury. Humans were born in the world and they need to confront many things for living their lives and survival. These things occurred with fear, pain, suffering, and others. Therefore, amulets were created to strengthen mental power for getting ready to fight against what humans were unable to overcome. Human belief in amulets has been passed down from generation to generation until today, the era with technology advancement and goodness. Those prosperities are a tool that humans can use to eliminate problems and feelings reasonably, such as small Buddha images, amulets, and symbols in different forms. Thus, amulet art containing history, art, culture and phenomena has been legitimized by proof and references from research studies that present the importance of objects or amulet art in terms of how they have an effect or produce any factor on humans and what is the main purpose of amulet art that can be proved by scientific tools from utilization and mental development and restoration rather than credulity.

Keywords: Amulet Art, Energy, Spiritual Elevation, Science

Style Evolution in Modern Chinese Fashion Design: The Embodiment of Gender Consciousness

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Abstract: With the development of modern Chinese fashion design, the style of clothing has been constantly changing, and so has the gender consciousness expressed in clothing. This study explores the evolution of clothing styles in China over the past 30 years by analyzing 875 finalists from the “Hempel Award” China International Young Fashion Designers Contest, China’s most influential fashion design competition, from 1993 to 2023, and examines how gender consciousness is reflected in modern Chinese fashion design. The “Hempel Award” was called the “Brother Cup” until 2002 and has been officially renamed the “Hempel Award” since 2003. It has witnessed the development of China’s fashion industry and has had a great impact on Chinese fashion design. The study used the method of semantic differential to create a 7-level scale to rate the clothing styles of all the images, videos, and physical clothing materials collected into quantitative data, and used data visualization to present the final results of the study. The study shows that the styles of modern Chinese fashion design are diversifying and moving from an emphasis on masculinity and femininity to neutralization and blurring of gender. This evolution of gender consciousness in clothing is influenced by social change, economic development, and culture. This study innovatively examines Chinese gender consciousness through the evolution of fashion styles, and future research could explore gender consciousness from more diverse perspectives.

Keywords: Chinese Modern Fashion, Clothing Design, Fashion Style, Gender Consciousness

The Changing Waterfront of Clan Jetties: As World Culture Heritage in Georgetown, Penang, Malaysia

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Abstract – In 7 July 2008, George Town has been recognized by The United Nations Educational, Scientific and Cultural Organization (UNESCO) as the World Heritage Site. Georgetown Penang, a well-known Malaysian island in the Straits of Melaka, has a long and rich history, with people of many races arriving from all over the world. Georgetown Penang gradually became known as the "Pearl of the Orient" due to its allure and beauty. With her charm and beauty specifically as Chinese village that has received much attention is Clan Jetties. Clan Jetties are unique in term of historical, attractive architecture, multicultural social and economy and many being designated as heritage sites. The research location was conducted along the southern stretch of the island’s Weld Quay. These settlements still retain the clustered attap-roofed wooden houses on stilts, the anchored sampan swaying gently on the water evoking a sense of tranquillity. The research question is what has changed in terms of accessibilities, attraction and amenities, in the Clan jetties before and after listed by UNESCO. The study was conducted using grounded theory “lived reality” to identified the development of Clan Jetties. Result shows, the scenario changed dramatically. There are huge differences of Clan Jetties before and after listed by UNESCO especially in tourism categories which are attraction, accessibility and amenities. In the last 19th century, life in Clan Jetties is about survival, apart from the informal sector activities which are largely oriented towards serving the larger society of Penang. Sixty-five percent of the men largely engaged in the port-based and sea-based activities. Now, the old jetty with attached houses had been converted into business outlets, with residents selling everything from sight seeing boat ride service, souvenir, coffee shop, restaurant with variety of food as the main activities for tourist attraction. In conclusion, listed in UNESCO World Heritage Site give a huge impact to the community, particularly when the government, stakeholders, and non-governmental organizations (NGOs) invest

heavily in developing the Clan Jetties to maintain as World Heritage Site. However, this phenomenon may have solved the problem of unemployment among residents in some ways, but it has also had significant social consequences. Many residents have moved away from the jetty by renting out their homes to outside business operators, competition for business by neighbours and relatives has resulted in an increase in community clashes.

Keywords: George Town, UNESCO, World Culture Heritage, Heritage Fishing Village, Clan Jetties, Tourism

Information Retrieval, Question Answering Systems, ChatGPT: Technology, Capability, and Intelligence



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Abstract: Launching of the ChatGPT at the end of last year has caught many off guard. Within five days the number of user hits one million and the investment collected hits more than twenty billion US dollars in a couple of months. The question is will ChatGPT replace Google? To answer the question, we have a look at the engine that power ChatGPT. Knowing the engine that drive it, we will be able to measure its capability and power. Information retrieval and question answering systems have been around for decades using well known technology to serve their purposes, such as keywords approach, semantic technology, predicate logic, and natural language processing. Personally, after using ChatGPT for a while, I am convinced that ChatGPT passed Turing test. Several WH questions have been tested to assess the quality and the correctness of the answers given. With respect to What, Where, and How questions, we found that ChatGTP seems to understand the questions and answer them quite well. But some facts embedded in the answers are found not accurate. These are due to the “hallucination” problem caused by the Large Language Models adopted in the engine. Concerning Why questions, it appears that ChatGPT understands the questions and struggles in phrasing the answers. We wonder here, whether ChatGPT, which adopt Generative Pre-Trained Transformer based on LLMs, has the deduction mechanism to answer Why questions. Regarding the definition of intelligence, we relate ChatGPT to the idea of Chinese Room, Korean Room, and Malay Room as proposed by Searle, Rapaport and Sembok, respectively. In conclusion, ChatGPT represents a significant leap forward in the field of information retrieval and question answering systems. However, it is important to recognize that ChatGPT and Google are not direct competitors, but rather complementary tools that serve different purposes. Two improvements that may enhance the power of ChatGPT are the capabilities to perform deduction or induction mechanism and to provide explanation to answers given. Thus, the war to

dominate information seeking market is still on.

Keywords: Information Retrieval, Question Answering Systems, Large Language Models

The Impact of Caring Training Program and Effectiveness Evaluation on The Turnover Rate of Newcomers — Taking Manufacturing Company T as an Example

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Abstract: Newcomers resign at such short notice will increase the cost of recruitment and training for the organization. It will also reduce team cohesion and increase the workload of other employees. Therefore, it is necessary to understand the reasons why a newcomer quits and what the company's system or problems should be improved to increase the retention rate. This study takes the newcomers of an automobile manufacturing company (company T) as the research object, and according to the resignation questionnaire survey and interviews, we found that the main reasons for the resignation of some newcomers in company T was the attitude and teaching methods of the newcomers' counselors, which made newcomers feel great pressure. Thus, we proposed the following solutions and management approaches. First, the company could offer training programs to the counselors and evaluate the effectiveness of the programs to ensure that counselors know how to assist new employees. Second, HR could classify the reasons for resignation in more detail in the resignation questionnaire and conduct a more in-depth reason exploration during the resignation interview. Third, the company could provide relieve stress methods and an online feedback platform for newcomers and counselors to relieve stress and express their opinions. In summary, these solutions may help Company T to solve the problem of newcomers resign caused by the counselors and reduce the cost of re-recruitment.

Keywords: Counsellor, Turnover, Newcomer

A Competency-Based Training Program for Interns in The Hospitality Industry in Taiwan - A Case Study of L Hotel

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Abstract: The cooperative education system is common in the hospitality industry, which can benefit the interns, business, and schools. However, the interns' abilities and skills are crucial factors in service quality of hotel. Moreover, most of the interns are newcomers to the workforce, how to improve their knowledge, skills, and abilities through the training program is exceptionally important. This study attempts to understand the problems the interns come across and to design the training program. According to observations the interns and interviews

the supervisor in the L hotel, three problems were found: Firstly, the education-job mismatch increased the turnover intention. Secondly, due to workforce shortage, business had to relax the standard to select interns who lack KSAOs. Finally, there weren't systematic planning, nor core competency training program in the L hotel. In order to resolve these problems, we planned a one-year program. The program includes: (1) A lesson about core competencies every three months to develop core competencies. (2) On-the-job training four times per month to develop functional competencies. (3) Developing functional competencies through mentoring. (4) Each intern was required to set their own objects to improve their ability of self-management and self-directed learning. (5) Presenting the competency model in the manual so that the interns could understand clearly what competencies they need. In summary, these solutions may help L hotel improve the KSAOs of interns. It is expected that these suggestions can help more enterprises enhance their competitiveness and value.

Keyword: Training, Interns, Hospitality Industry, Competency

Employer branding as a tool for employee loyalty: The case of Moroccan companies listed on Casablanca stock exchange



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Summary: Nowadays, companies evolve in a competitive and uncertain environment which knows continuous and deep changes. In this context, human capital has become a key resource in companies' strategy. To attract qualified profiles, known as talents, and to retain them, many enterprises are actively leveraging on employer branding. The objective of this research is to shed light on the role played by the concept of employer branding, defined as the set of brand image assets with respect to employees and their impact on human resources loyalty. Our hypothetico-deductive research method will be completed by conducting an empirical study based on a series of semi-structured interviews with 10 large companies listed on Casablanca stock exchange market. We suggest a model to articulate the employer brand around three key dimensions: low propensity to seek a new job, affective engagement and task performance.

Keywords: Employer Brand, Loyalty, Affective Engagement, Task and Contextual Performance, Intention to Leave

Religiosity Related to Life Satisfaction, Locus of Control and Defense Mechanisms



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Abstract: The proportion of non-religious individuals has been increasing rapidly over the last decade. Consequently, the interest in knowing whether there are any distinct psychological differences between those who believe in the creator and those who do not is also growing. Therefore, the present study aimed to investigate the association between religiosity and life satisfaction, locus of control, and defense mechanisms, and the differences between religious and non-religious individuals in terms of these factors. In this paper, data were collected from 90 non-religious individuals (atheists, and agnostics) by using snowball sampling, and 110 religious individuals (Muslim, Hindu, Buddhist, Christian) by using purposive sampling and choosing them according to their self-identified religions. It was found that religiosity is positively correlated with life satisfaction, external locus of control, and mature defense styles, and negatively correlated with neurotic defense styles. Moreover, religious participants scored significantly high on life satisfaction, external locus of control, and mature defense styles than non-religious individuals, and non-religious participants scored significantly high on neurotic defense styles than religious individuals. Though this paper can give an outlook of the answers to our present questions, but further research should be done, including the data of the degree of religious involvement of religious individuals for a clear outcome.

Keywords: Religiosity, Non-religiosity, Life satisfaction, Locus of control, Defense mechanisms.

The Hero's Sexual Journey: The Process of Sexual Subjectivation in the Philosophy of Foucault and Butler

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Abstract: Subjectivation is an endless process, in which the subject and power mutually bring each other into existence. Sex, one of the most important topics in the process of subjectivation, is a discursive and dynamic construction that constantly re-exists itself from the moment it is defined. Sexuality, which we encounter when subjectivity is put up for discussion, gives rise to sex, which, according to Foucault is an artificial category. Michel Foucault and Judith Butler have produced seminal texts that question sexuality and point to the spiral of constant re-signification of subjects as a discursive practice. This study discusses the dilemmas of gender binary and the artificiality of these categories through Foucault's and Judith Butler's approaches to the subject. It examines the dynamics and historicity of the politics of sexual repression, which, according to Michel Foucault, has only existed in the last few centuries, and, according to Judith Butler, since humans began to communicate with each other and develop systems through discourse and deed, from the perspectives of these two thinkers. The aim of the study is to interrogate the filters through which sexuality, which is a private sphere, passes as a politics of identity and becomes a public issue revisiting the perspectives of Michel Foucault and Judith Butler's gender and subject.

New Requirements in The Management Board in EU Companies and Their

Implementation in Croatian Academic Institutions

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Abstract: New requirements in the management board in EU companies and its implementation in Croatian academic institutions In November 2022 the European Parliament has adopted the new EU Directive (EU) 2022/2381 on improving the gender balance among directors of listed companies and related measures. This directive was adopted after the long debate starting more than a decade ago and supported by the Communication (EC) – Gender balance in business leadership: a contribution to smart, sustainable and inclusive growth. The goal promoted by the Directive is to achieve, by the 2026, that companies have at least 40% of the underrepresented sex among non-executive directors or 33% among all directors. Already in the EU Gender Equality Strategy 2020-2025 there were presented policy objectives and actions to make significant progress by 2025 towards a gender-equal Europe. The goal is a Union where women and men, girls and boys, in all their diversity, are free to pursue their chosen path in life, have equal opportunities to thrive, and can equally participate in and lead our European society. One of its key objectives is achieving gender balance in decision-making. In paper authors will analyze current situation in the boards of academic institutions and trends in next 5 years that should be followed based on the number of employees analyzing case study in Croatia.

Cultural Identity and Home in I, The Divine

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Abstract: As an estranged Lebanese and American, Sarah is caught between two worlds and traditions. She can neither be here nor there; and she longs for a place to call home. This paper applies a qualitative data analysis based on textual analysis where it explores Sarah's sense of difference and rigidity between her cultures and sense of self and constantly being torn apart between her Americanness and Arabness. Is she Arab or American? Is she neither or both? This difference will be examined through Homi Bhabha's concept of "unhomeliness" in which he believes that the first feeling a newcomer gets when encountering a new culture is the sense of "unhomeliness". The latter is generated through the change of places and the fact that home or part of it is missing, and this is how she felt when she yearned for New York in Lebanon and vice versa. Furthermore, her Arab-American experience will be explored to a greater extent through Gloria Anzaldúa's "Borderlands" or "Mestiza" in which these invisible borders are onerous to distinguish.

Keywords: Cultural Identity, home, hybridity, migration, Arab American Identity

Internationalization of Companies: Asset of Foreignness in Singapore's Unique Context

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Abstract: International companies expanding to foreign markets risk being challenged by liability of foreignness (LOF) that are manifested in the differences in regulatory, cognitive, and normative institutions (North, 1991) between home- and host-countries. Sources of LOF are attributable to unfamiliarity, discrimination and relational hazards (Eden and Miller, 2004). The tiny nation of Singapore, lacking in natural resources, has depended on successfully inviting international companies to their shore that could lead to the creation of assets of foreignness. This paper explores the trajectory of the regulatory framework, the ensuing pillars to enhance the quality of workforce (cognitive) and the essential socio-cultural norms (relational). Singapore's success over the years, can be attributed to providing a necessary infrastructure as well as conditions that help mitigate risks for foreign investors.

Government Subsidies and Performance in The New Energy Vehicle Industry During the Post-Subsidy Era in China

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Abstract: As the new energy vehicle industry matures, the Chinese government has gradually reduced government subsidies for new energy vehicle enterprises since 2017. This study focuses on the impact of government subsidies on the performance of new energy enterprises in China during the post-subsidy era, which is the period previous literature did not cover. Our research relies on new energy vehicle enterprises' panel data from 2017 to 2022. The results show that the relationship between government subsidies and new energy vehicle enterprise performance is inverted U-shaped. Also, compared with state-owned enterprises and enterprises in developed regions, non-state-owned enterprises and enterprises in underdeveloped regions have a higher dependence on new energy subsidies. Moreover, the impact of government subsidies on new energy vehicle enterprises is realized through R&D as an intermediary effect. The robustness test shows that this result is stable and reproducible when considering the subsidies' lag. The study draws attention to government subsidy utilization efficiency, significantly when new energy vehicle subsidies decline.

Effects of Economic Diplomacy Measures in Developed Countries

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Abstract: Certain countries use differently organised systems for the promotion of their economic interests in the global environment. Such systems are called economic diplomacy models. The basic premises and aims of economic diplomacy models are to a larger extent similar in developed countries, and this is also logic since a country's economic interests are what matters in all countries. However, the modalities of achieving the economic interests through the economic diplomacy network are different in various countries. The economic diplomacy model of a country represents the diplomatic activities directed toward the advancement and protection of economic interests of a country, while its concept has to ensure that the activities of such a diplomacy are efficient and successful. Literature divides the organisation of the economic diplomacy activity network into the unified model, partially unified model, model of competition, third agency model and model of resignation. The aforementioned economic diplomacy model's classification determines the research subject: to study and explain the economic diplomacy model conducted in France and Austria and determine the effects of economic diplomacy measures.

Keywords: Economic Diplomacy Models, Economic Interests, Country Study

Developing Skills of Risk Assessment in Child and Family Social Work Using a 3D Simulated Approach



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Purpose: This research project developed a virtual reality 3D simulation for social workers about risk assessment in the context of child protection in the UK. Then conducted an evaluation of the simulation was to explore its effectiveness and user-friendliness.

Research Design: In order to achieve the aim this research study was conducted in three distinctive phases: Phase 1: Scenario building, plus learning and system design. Phase 2: Development and testing of the simulated learning resource. Phase 3: Evaluation of the simulated learning resource. Both qualitative and quantitative research methods were utilized to develop and evaluate the simulation.

Findings: Data suggested that participants agreed that virtual reality simulation is a valid teaching and learning strategy. It enabled them to think critically about the way they conduct their risk assessment and management. They also reported that their confidence level increased and satisfied with the way the scenario, assessment, and reflective session were developed. They agreed that the simulation supported them in deeper learning. However, in order to develop the simulation more authentic i.e., similar to a real-life scenario they wanted avatars' facial expressions. They also wanted developers to work alongside practitioners and researchers.

Originality: There is no research focus on the development, testing, and evaluation of 3D simulation for risk assessment in child protection.

Practical Implications: Although the simulation was developed for social workers it can be used to train health workers and students in both health and social care discipline; it can also be used to improve experienced social workers' existing knowledge and skills. This simulation can also be customized to train and assess both front-line and senior managers' knowledge and skills in risk assessment and management.

Keywords: Child Protection, Risk Assessment, And Management, Safeguarding, Social Work, Simulation, Virtual Reality Simulation.

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EURASIA RESEARCH

