AN INTEGRATED BUSINESS READINESS FRAMEWORK OF E-MARKETPLACE RETAILERS IN MALAYSIA: EXTENDED THEORY OF PLANNED BEHAVIOUR



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2024

DECLARATION

I declare that the work in this thesis was carried out in accordance with the regulations of

University of Wales Trinity Saint David. This work has not previously been accepted in

substance for any degree and is not being concurrently submitted in candidature for any

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STATEMENT

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ABSTRACT

The global pandemic happening in year 2020 has cause enormous changes to the world. Unemployment soared and many opt to start a small business via e-marketplaces, owing to the low barrier to entry. This phenomenon can be seen in Malaysia with an enormous surge of sellers onboarding Shopee and Lazada, the two leading e-marketplaces in Malaysia. Business of e-marketplace retailers grow exponentially during the pandemic; however, this growing trend did not last. With the loosening of movement control order, sales of emarketplace retailers declined and many businesses, mainly micro and small businesses, were left with no choice but to exit the business. These businesses are not ready to face the volatility of market changes. The non-sustainability of e-marketplace retailers can cause the growth instability of e-marketplaces in Malaysia, thus hamper the digital entrepreneurial initiatives of the country. The study aims to develop an integrated business readiness framework for MSME e-marketplace retailers to assist them in preparing for future uncertainties. The researcher investigated from the behavioural perspective, the relationship between three behavioural intentions on organisational commitment and business readiness of e-marketplace retailers in Malaysia. The three intentions are intention to enhance digital marketing competence, intention to seek knowledge and intention to take risk. Factor analyses were conducted via PLS-SEM technique to investigate reliability and validity of each latent construct, thereafter, path coefficient evaluated relationship between intentions, and organisational commitment and business readiness. The antecedents of behavioural intentions, represented by (1) attitude, (2) subjective norm, and (3) perceived behavioural control postulated in the Theory of Planned Behaviour were selected as a measure of intentions. Current findings have validated the positive significant impact of behavioural intentions on organisational commitment and business readiness. Intention to enhance digital marketing competence shows direct positive significant impact on business readiness.

Intention to seek knowledge and intention to take risk shows significant impact on business readiness with organisational commitment acts as a moderator. Current study is the first attempt to investigate business readiness of MSME e-marketplace retailers in Malaysia from the perspective of behavioural intentions, contributed to the literature on organisational commitment and business readiness. Results of this study has provided insights into how emarketplace retailers, despite with limited resources, can improve business readiness. This research opens opportunities for researchers to consider behavioural belief when assessing a business's level of readiness. It also reveals theoretical gaps in pursuing and identifying more antecedents inspired from the theory of planned behaviour that can be used to measure the intentions that influence business readiness. Business readiness framework from this study will benefit MSME e-marketplace retailers to better prepare for future uncertainties. It will act as a guideline for e-marketplaces when formulating sellers' growth strategies, thus becoming an impactful area of study in Malaysia's e-marketplace industry. On a country level, it can aid the policy makers in formulating strategies to help micro and small businesses achieve sustainable growth, thus propelling Malaysia to produce a more equitable society.

ACKNOWLEDGEMENT

This journey has been a very fulfilling one for me personally. Throughout the seven years since I first started enrolling for this course, many changes took place in my life. I started this while I was still holding a C-level position, constantly embracing workplace challenges and opportunities, and as I completed the thesis, I am already a small business owner, operating a few online retail stores, and working towards creating a life that I truly desire. Life changes from being a high-performing executive envied by many, to becoming a mediocre who desires simplicity more than anything else post-pandemic. Conducting this research not only tests my patience, perseverance, and stress tolerance but also reminds me that time is of the essence and must be cherished. This is because only with time, I am allowed to cherish my family, friends, and two lovely puppies who are critically important in my life. They were the ones who silently accompanied me while I was struggling to complete my research at home. I am grateful to have my family who tolerated my emotional swings, and indifferences while focusing on writing the thesis. I am also grateful to have a business partner who understands the need for me to constantly take leave from work for the same reason. To the special person in my life who silently embraced my insufficiencies and provided support to me for years. I truly appreciate it. Not forgetting also my supervisor, Professor Dr. Ilham Sentosa who constantly reminds me of my unfinished thesis, and the team in London School of Commerce who assured me that my submission is still possible.

The most challenging for me throughout this journey is making the ultimate decision to sacrifice time spent on business in exchange for time spent writing this thesis. Multiple times, I have promised myself and my supervisor that I would spend more time to complete the research yet failed to do so as I had to juggle my time between business, family and my personal life. This unfinished work has indeed created a sequence of turbulence in my life,

with lots of frustration, sadness and emotional strain. I was grateful that the global decline of online business post-pandemic and the impending need to monitor the progress of my son's undergraduate project has forced me to truly make time for my thesis. The power of the universe gave me the opportunity and strength to finally decide putting on hold my business, and to pull through the final few months of completing this research. It was also the desire to visit my dad as soon as possible that made me commit to completing this thesis quickly as without completion, visiting my dad will further divide my attention. I was lucky that all these happened concurrently at the right time, and I am truly grateful for the miracles accorded by the universe.

Finally, to all fellow student researchers, if you are like me, facing difficulties in allocating sufficient time for your research, fret not. The universe will do its magic and create miracles if you truly desire to complete your research because only with intense desire, things will happen according to your wish. The only thing you need to be mentally fit is to never consider giving up as an option in your life.

THESIS STRUCTURE

Chapter 1. Introduction

The chapter introduces the basic concept of the study, the importance of the topic and the aim and objectives. Problem statement, research questions and research objectives were will be identified in this section.

Chapter 2. Literature Review

This chapter introduces the concept and gives theoretical background necessary in this research. It reviews academic and industry publications on the theory of planned behaviour, digital marketing competence, knowledge seeking, risk taking, organisational commitment and business readiness, thereafter, propose conceptual framework for hypotheses testing, adopting PLS-SEM technique.

Chapter 3. Methodology

This chapter discusses topic on research paradigm, research design, data collection and data analysis. The researcher provides justification on each of the selected approaches and methods to conduct the study. Factor analysis and structural equation model will be applied to analyse and interpret the data.

Chapter 4. Data Analysis

This chapter presents results from structural equation model analysis. Preliminary data assessment was conducted by considering missing data, outliers, data normality and common method bias. Discussion on demographic, measurement model analysis, structural model analysis and PLS-SEM framework were presented.

Chapter 5. Discussion on Findings and Conclusion

This chapter presents the findings and discussions on the relationship between latent constructs based on the proposed model. The researcher laid out the proposed model, theoretical contributions, practical implications, and limitations of the study. Further research directions were proposed. This chapter concludes the thesis by summarizing the findings from this research and literature.

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LIST OF ABBREVIATIONS

BR Business Readiness

B2C Business to Consumer

B2B Business to Business

C2C Consumer to Consumer

CAGR Compound Annual Growth Rate

CEP Courier, Express & Parcel

DM Intention to Learn Digital Marketing

EDI Electronic Data Interchange

e-marketplace Electronic Marketplace or Online Marketplace

GDP Gross Domestic Product

GMV Gross Merchandise Volume

MDEC Malaysia Digital Economy Cooperation

MSME Micro & Small-Sized Enterprise

NESR National E-Commerce Strategic Roadmap

OC Organisational Commitment

OECD Organisation for Economic Cooperation and Development

PAKEJ National Courier Accelerator Plan

PBC Perceived Behavioural Control

SK Intention to Seek Knowledge

SKU Stock Keeping Unit

SME Small & Medium-Sized Enterprise

SN Subjective Norm

TPB Theory of Planned Behaviour\

TR Intention to Take Risk

TRA Theory of Reasoned Action

GLOSSARY OF TERMS USED

Researcher It means Ki Yah Ping, the author of this doctoral thesis.

e-Marketplace A digital platform that brings together buyers and third-party

sellers of consumer goods and facilitates payment for such

goods. There's no distinction made between pure and hybrid e-

marketplaces in this research.

e-Marketplace Retailers A person, a group of persons, enterprise, or corporate entity

who conduct their primary retail business in e-marketplaces.

They are mostly termed as sellers or merchants by most e-

marketplaces.

MSME Predominantly include individual, micro entrepreneurs, micro

enterprises, and small enterprises, with no more than RM3

million annual turnover or less than 30 employees.

CHAPTER 1: INTRODUCTION

1.1 Introduction

Over the past few years, the global retailing has focus on e-commerce, following the advent of the ongoing digitalisation of the modern life post-pandemic. The number of people transacting online is increasing with 2024 global e-commerce sales estimated to exceed US\$6.3 trillion, and by 2027 the estimation will increase to US\$7.96 trillion. The increasing trend of e-commerce is notably seen post-Covid-19, with sales of US\$4.98 trillion in 2021, US\$5.29 trillion in 2022 and US\$5.82 trillion in 2023 as per Figure 1 (Ethan Cramer-Flood, 2024; Koen van Gelder, 2024; Ying Lin, 2024).

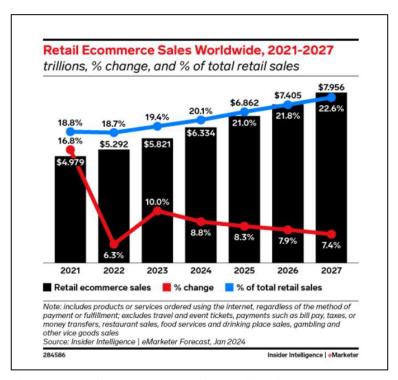


Figure 1: Retail Ecommerce Sales Worldwide, 2021-2027 (Ethan Cramer-Flood, 2024)

It is projected that a total of 20.1% of the global retail sales will be transacted digitally in 2024 with retail market continue to focus on online sales. Global average annual growth rate

is projected at 8.1% between forecast period of 2021 and 2027. Despite the growth rate is projected to decrease gradually from 2024 to 2027, the total global value of projected sales continues to show an increasing trend, hence showing constant new adoptions of e-commerce.

Out of the US\$5.82 trillion global e-commerce sales realised in 2023, the largest contribution are from China at US\$3 trillion and United States at US\$1.1 trillion (Ying Lin, 2024). With China alone contributing 50% of the total global e-commerce sales, this also means that Asia has accounted for more than 50% of the total global e-commerce sales. Southeast Asia region top the global retail e-commerce market growth in 2023 at 18.6% (TMO Group, 2024). This region consists of 11 countries with economies primarily led by Indonesia, Thailand, Malaysia, Singapore, Philippines and Vietnam. Southeast Asia online retail sales is projected to grow at 14.3% in 2024 (WebRetailer, 2024), surpassed the global average e-commerce growth rate of 8.8% (Ethan Cramer-Flood, 2024). E-commerce penetration on the other hand is projected at 23.3% in 2024 and expected to hit 32% by 2029, shows a growing potential within the region (Statista, n.d.).

Being one of the most important economic engines in the Asia-Pacific region, many ecommerce players are seeing Southeast Asia as one of the prioritised markets for business growth. Based on the statistic provided by (Statista, 2024), the fastest retail e-commerce sales growth by country in 2023 is led first by Mexico (25.1%), ranked 2nd by Philippines (24.1%) and ranked 3rd by Malaysia (18%), followed by Argentina (17%), Brazil (15.4%), India (15%), Russia (14%), Japan (12.7%), Vietnam (12%) and China (11%). Three out of ten fastest retail e-commerce growing countries are from Southeast Asia, consisting of Philippines, Malaysia and Vietnam (TMO Group, 2024). This further affirm the importance of Southeast Asia in retail e-commerce. Euromonitor predict that the economic growth of countries such as Indonesia, Philippines and Vietnam will be greater than the entire Asia-

Pacific region by 2030. Shopify, a global market leader offering e-commerce solution reported that its firm's merchants contributed US\$1.5 billion to Singapore GDP, US\$500 million to Indonesia GDP and Vietnam GDP respectively in 2022. Despite these numbers are modest, however, the e-commerce platform provider is still betting on the region's growing numbers of direct-to-consumer brands, as it foresees the need for these brands to find alternatives outside of e-marketplaces (Jofie Yordan, 2023). The positive performance in Southeast Asia and the confidence placed by market leaders have made this region a global focus of e-commerce industry.

E-commerce activities mostly evolve around e-marketplaces. The increasing trend of the total gross merchandise volume (GMV) of the top 100 global e-marketplaces as per Figure 2 corresponds with the increasing trend of the global retail e-commerce sales as shown in Figure 1. Despite having similar trend, GMV produces by e-marketplaces contributed near to 60% of total retail e-commerce sales worldwide from 2021 to 2023, highlighting the importance of e-marketplaces in online retailing.



Figure 2: Top 100 Global Online Marketplaces Total GMV Year-over-Year (Farnia Ghavami, 2024)

The GMV of the top 100 global e-marketplaces grew at a slower rate in 2021 (17.7%) and 2022 (2.5%) as compared to 2020 (29.50%), highly due to the post-pandemic recovery period. After a full year lockdown, consumer started to feel fatigue and opt to walk out, causing

online purchase to temporarily decline. Even with a slow growth rate, the total GMV is still growing and in 2023, growth rate increases to 8.2%, indicating increased adoption of e-marketplaces. This growing trend is expected to hit 10% in 2024. The total GMV of the top 100 e-marketplaces is projected to reach a staggering US\$3.832 trillion by end of 2024, doubling in market size within just 6 years. Growing performance of e-marketplaces around the world has indicated that consumers still have affinity to continue shop online, primarily through e-marketplaces (Digital Commerce 360, 2023; Ethan Cramer-Flood, 2024; Farnia Ghavami, 2024).

Even with positive indications that e-marketplaces around the world are showing growth momentum, the researcher opined that these numbers could possibly be largely contributed by the larger retailers at the expense of micro and small retailers since the former have more resources than the latter and therefore achieving competitive edge from economic of scale is possible. Such scenario can prove to be a concern for any nation as micro, small and medium enterprises form most of a country's business population. The distribution of income can be skewed sharply on one side, creating an imbalance in wealth distribution, thus can potentially resulting in social issues that can cost more for a nation to rectify it.

Digital Commerce 360 (2023) categorise e-marketplace into pure and hybrid model. Pure e-marketplace only facilitate third-party seller-consumer transaction. Hybrid e-marketplace not only facilitate third-party retailing but will also sell own product or first-party merchandise directly to the consumer in the same e-marketplace. Example of pure e-marketplaces are Tmall, Taobao, Shopee, Tokopedia, Lazada and Pinduoduo whereas hybrid e-marketplaces are Amazon and Walmart. The 2023 top five global e-marketplaces in third party sales volume is led by Taobao (US\$723.8 billions), followed by Tmall (US\$682.7 billions),

Amazon (US\$435.7 billions), JD.com (US\$249.9 billions) and Shopee (US\$77.2 billions) as per Figure 3 (Farnia Ghavami, 2024).



Figure 3: Top 5 Largest Online Marketplaces in the World (Farnia Ghavami, 2024)

But when it comes to combined first-party and third-party sales, Amazon top the chart (US\$728.9 billions), followed by Pinduoduo (US\$590 billions), Taobao (US\$550.4 billions), Tmall (US\$535 billions) (ECDB, 2024; Stephanie Chevalier, 2024a). This means that Amazon first-party sales is equivalent to almost the value of its third-party sales. Such scenario contributes towards the wider gap of revenue contributions between first-party and third-party retailers. Regardless of GMV from either side, China asserts its dominance by having Pinduoduo, Taobao, Tmall and JD.com within the top five. The only representative from Southeast Asia is Shopee, generating US\$77.2 billion in third-party GMV sales, highlighting the region's rise in e-commerce activities. In terms of ranking by number of visits, Amazon top the list, followed by eBay, Rakuten, Shopee and AliExpress. Except Amazon and eBay that break the one billion visits, the rest each rack around 500 million visits per month (Jake Pool, 2024).

Consumers in Southeast Asia predominantly use e-marketplaces for product discovery (James Bledsoe, n.d.; Jaylene, 2023; Madan et al., 2022; Wong et al., 2023). More and more people are buying a wider range of products across all e-marketplaces with the most number of visits to Shopee, followed by Tokopedia, Lazada and Bukalapak in 2023 (WebRetailer, 2024). The potential of this region in the growth of e-marketplace is further affirmed with Shopee, being ranked the global third most downloaded e-marketplace app in 2023, after Temu and Amazon (Stephanie Chevalier, 2024b). Shopee is also ranked 8th among the largest online e-marketplaces by GMV worldwide (Cihan Uzunoglu, 2024). In Malaysia, the most visited e-marketplace is similarly led by Shopee, followed by Lazada, Amazon, Temu and Taobao (SimilarWeb, 2024). Shopee GMV grew by over 2.5 times in 2019 – 2021 and projected to continue its growth from US\$62.6 billion in 2021 to US\$88.4 billion in 2025 (Cihan Uzunoglu, 2024). With most studies on e-marketplaces in Southeast Asia considering Shopee as a subject matter ((Jaylene, 2023; Madan et al., 2022; Wong et al., 2023), the researcher opined that Shopee can reasonably represent the performance of e-marketplace retailing in this region, including in Malaysia.

As one of the leading countries for e-commerce growth, Malaysia e-commerce industry is set for a promising future. Even though Malaysia internet economy size of US\$23 billion in year 2023 is not as large as Indonesia (US\$82 billion), Thailand (US\$36 billion), Vietnam (US\$30 billion), and Philippines (US\$24 billion), however, Malaysia still has the highest internet penetration rate among countries in Southeast Asia which translate to higher growth potential in online retailing. The increased popularity to shop via e-marketplaces among Malaysian consumers makes the country an even more interesting market for e-commerce (James Bledsoe, n.d.; Madan et al., 2022; Mordor Intelligence, n.d.; Statista Research Department, 2023; Wong et al., 2023). The increase of e-commerce contribution on Malaysian Gross

Domestic Product (GDP) from 11.6% in 2020 to 13% in 2021 has further affirmed the influence of e-commerce towards the country's economic growth (SM, 2023).

Propelling e-commerce as the engine for catalytic growth, Malaysian government has extended the National E-Commerce Strategic Roadmap (NESR) for a second term from 2021 - 2025. NESR forms a critical component under Malaysia Digital (MyDigital) initiative to transform Malaysia into a digitally driven nation. NESR is guided by three underlying principles, (1) intensifying e-commerce adoption and growth, (2) enhancing ecosystem development and (3) strengthening policy and regulatory environment (MDEC, 2021a). The government has also initiated the National Courier Accelerator Plan (PAKEJ) in 2021 to support the growth of Courier, Express and Parcel (CEP) industry, enabling a more conducive e-commerce ecosystem (SM, 2023). Malaysia's CEP industry is expected to grow at a compound annual growth rate (CAGR) of 6.23% during the forecast period from 2024 to 2030, more than the previous CAGR of 4.78% from 2017 to 2023. Value of CEP market continue to grow steadily from 2020 to 2023 and projected to achieve US\$1.58 billion in 2024 and reach US\$2.24 billion by 2030. B2C, the fastest growing CEP segment, mostly ecommerce, with a projected CAGR of 7.89% on the same forecast period, signify that the Malaysian government recognised the growing importance of e-commerce in facilitating major delivery demand (Mordor Intelligence, n.d.). In line with MyDigital, Malaysian government has allocated USD242.5 million to develop cybersecurity, connectivity, internet of things, digital talents and digital transformation to make e-commerce a more complete ecosystem (ECDB, 2022; Google et al., 2021; Mordor Intelligence, 2022; Tang, 2022). It is projected that by 2025, Malaysia digital economy is expected to contribute 22.6% towards the nation's GDP (MIDA, 2021). Malaysia being ranked top 3 countries in the world with the fastest retail e-commerce sales growth, and the highest internet penetration within Southeast Asia has make it feasible for the researcher to study deeper into Malaysia e-commerce

industry, particularly on e-marketplaces when this sub-domain has proven its significance for e-retailing, yet hardly received much attention by academicians.

Small and medium-sized enterprise (SME), known as the engine of growth of the global economy are seen as the forces behind both established and developing economies. For services and trading sector in Malaysia, medium-sized firm has an annual turnover of between RM3 million to RM20 million or 30 to 75 employees and small enterprise is consider one with an annual turnover of between RM300,000 and RM3 million or 5 to 30 employees. Malaysian government define micro business as an enterprise with an annual turnover of less than RM300,000 or less than 5 employees.

Detailed categorisation of micro, small and medium-sized businesses can be found as per Figure 4.

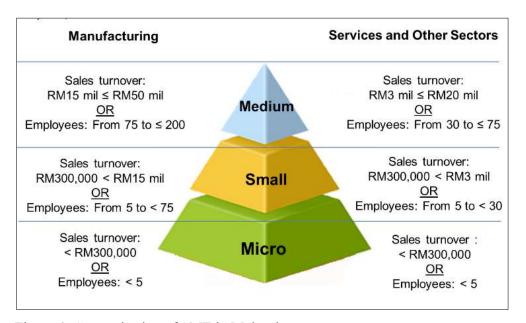


Figure 4: Categorisation of SME in Malaysia (SME Corp. Malaysia, 2023a)

Based on the experience of the researcher, most e-marketplace retailers form part of micro and small businesses (MSME). Malaysian government acknowledged this fact and has included micro entrepreneurs and individuals operating an e-commerce business as part of micro enterprise under the inclusive approach of Malaysia NESR 2.0. This means, Malaysian micro enterprise running an e-commerce business does not only include micro-sized firms, but also individual who did not register a business, but only operate e-commerce under personal name. Micro and small enterprises play a crucial role in the economic development, as evidenced in their contribution in raising GDP. Of all the SME in Malaysia, micro and small enterprises accounted for 98.4% (micro firms 78.6% and small firms 19.8%), and medium-sized firms 1.6% (DOSM, 2022; SME Corp. Malaysia, 2023b). Micro and small enterprises form a substantial group of people who leverage on e-marketplace commerce as a means to sustain throughout the pandemic (OECD, 2020). The significant numbers of MSME in Malaysia should receive more attention by academicians as their presence highly influence the social and economy stability of a nation, particularly in the distribution of income. The current study will not be conducted by observing the official categorisation of enterprises under SME Corp (2023b). This is because most e-marketplace retailers are either individual, micro entrepreneurs, micro enterprises or small enterprises. For most retailers, fulfilling the criteria to be considered as medium-sized enterprises, generating a minimum annual revenue of RM3 million is not easy. Therefore, for the purpose of current research, the researcher term the respondents as MSME, referring to only individual, micro entrepreneurs, micro enterprises, and small enterprises. Current study will predominantly conduct on MSME with not more than RM3 million annual turnover or less than 30 employees with only very minimal numbers of participants that is slightly out of this range, if there's any.

Despite the many global digital transformations initiated by governments from around the world (Napitupulu et al., 2018; Ramli, 2017a, 2017b), many businesses are still reluctant to invest in e-commerce. Small businesses particularly, show rejection towards the idea of bringing their business into the e-marketplace, citing time and manpower scarcity, and the

fear of not getting adequate rewards. Medium to large retailers on the other hand either fear the lack of expertise and experience in terms of order processing, inventory control, and content digitalisation and some with medium online presence do not believe that e-marketplace can provide comprehensive support (Miguel et al., 2019). The prominent push factor that literally forced businesses to start e-commerce as a sales channel is the emergence of Covid-19 pandemic (Chen and Wu, 2022; Kathiarayan, 2022; Lim, 2020; Perez, 2020; Wong et al., 2023). This pandemic has forced businesses to focus on short-term priorities such as ensuring financial stability, preserving employee health and well-being and protecting jobs and salaries (Vodafone Limited, 2021).

On 30 January 2020, Covid-19 was declared a Public Health Emergency of International Concern by the World Health Organisation. Countries were forced to shut down non-essential businesses, public amenities, schools, and restaurants and forced people to stay at home via strict movement control orders. Businesses are not able to operate as usual and retailers cease operation within a few days' notice, causing businesses to struggle to sustain financially. Employees were forced to work from home and accept salary reductions and some lost their jobs. Approximately 46% of self-employed Malaysians and 24% of employees in Malaysia lose their jobs. More than 71% of self-employed Malaysians and 49% of employees in Malaysia do not have enough savings to sustain their daily living for more than a month (Lim, 2020). Many are not ready with sufficient resources if the movement control order is extended. The unemployment rate soared, and the gross domestic product tumbled to the core in decades. The global economy shrank, and market unpredictability continues to traumatise businesses and individuals.

This pandemic has forced people and businesses to do things differently and changed the landscape of doing business, whereby one distinctive phenomenon is the abrupt increase of

online activities with the intention to sustain (Vodafone Limited, 2021; Zunaira Saieed, 2021). People started to connect, trade, and pay online (OECD, 2020), trying their best to continue performing activities they usually do, but this time over the internet. Laid-off workers turn to self-employed to continue earning an income while businesses on the other hand have no choice but to bring their products online to ensure business continuity. This pandemic has drastically changed the business landscape on a global scale and laid a platform for a fresh round of e-commerce revolution, one that gave businesses no other choice but to go online. The pandemic has accelerated the shift to online commerce by 5 years (Perez, 2020). Many retailers and individuals who onboard e-marketplaces during the pandemic have managed to secure an alternative source of income effortlessly due to consumer mobility restrictions, forcing buyers to shop online. Lazada reported the biggest jump in new retailers' onboarding activities throughout the pandemic compared to the previous few years (Zunaira Saieed, 2021), whereas Shopee GMV jump more than triple from US\$17.5 million in 2020 to US\$62.6 million in 2021 (Cihan Uzunoglu, 2024).

The important role played by e-marketplaces on both traders and consumers cannot be undermined and was reiterated in academic publications, industry reports, government recommendations and news portals (Dass and Md Johar, 2022; Digital Commerce 360, 2023; Jaylene, 2023; OECD, 2022; The Star, 2024a; Wong et al., 2023). Digital Commerce (2023) report has shown that born-on-the-web brands or termed as digitally native brands, who tend to focus on building own e-commerce sites, since 2020 has shifted their focus on e-marketplaces, increasing participation by 7.2%. OECD (2022), on the other hand reiterate that e-marketplaces have improved consumer protection when doing online transaction. Dass and Md Johar (2022) emphasise on the impact e-marketplaces on SMEs and Wong et al. (2023) focus on how e-marketplace affect consumer behaviour. The growing importance of e-marketplaces worldwide has somehow or rather supported the entrepreneurial initiatives of

government across the globe, at the same time satisfying the needs of consumers looking for a richer, simpler, and a less-complex digital shopping experience. This trend has already become a way of life and is likely to continue (Baijal et al., 2021). In Southeast Asia, 9 out of 10 users in 2020 continued to use digital services a year later, citing that it has become a habit, making life more convenient. Consumption of digital services remains strong and frequency of Malaysian making purchases online has consistently show high demand even after the pandemic (Statista Research Department, 2023). The habit once cultivated is difficult to change and bound to stay for the longest time ever. All these indicate that online shopping is going to stay.

The positive increased in the market share of top 1000 retailers selling on top marketplaces from 2021 to 2022 has indeed shows the strengthening of retailers' confidence on emarketplaces (Digital Commerce 360, 2023). It is interesting to note that the increasing market share of retailers reported in Digital Commerce 360 (2023) heavily relied on the data collected from the top 1000 retailers who are mostly medium to large-sized enterprises. Like the earlier argument presented by the researcher based on the report by Farnia Ghavami (2024), the resources available for diffusion between top retailers and MSME retailers can differ enormously. Medium and large-sized enterprises have larger pool of resources to invest in new business channels such as e-marketplaces, to increase market share. However, MSME on contrary are often plague with lack of resources. The result of this report is biased towards the top retailers. Furthermore, the report is based on data collected in year 2022, and many things change throughout 2023 to 2024, especially in the fast-moving e-commerce sector. There is no report or academic papers mentioning this sub-sector of e-commerce (emarketplace) that can accurately explain the real situation faced by MSME e-marketplace retailers except in some news portal. The fact is many MSME retailers who participated in emarketplaces during the pandemic no longer enjoy the same revenue post-pandemic (Parr, 2022). This is also evidenced in the lack of confidence of merchants in large sales carnival such 618 Day and Singles Day when heavily discounting has alienated them (The Star, 2024b). As the researcher is also an e-marketplace retailer, it is generally agreed within the seller communities that the mounting discounts forced on them by e-marketplaces to attract more buyers have pushed away merchants from investing more resources into this sales channel. Hence, it is concluded that the report presented by Digital Commerce 360 (2023) and Farnia Ghavami (2024) cannot reflect the real performances of MSME e-marketplace retailers.

In the same report, onboarding of brand manufacturers in Amazon and pure web-based retailers fell in 2022. Wish.com, a popular e-marketplace, best known for its low-price items, has similarly seen a 75% drop in GMV in 2022 (Digital Commerce 360, 2023). A popular explanation is that the brand manufacturers might have chosen to shift its focus to resuming conventional business model through wholesale retailing that can generate greater revenue in one single transaction, than selling directly to consumer via e-marketplaces, generating very little revenue per transaction, yet require additional manpower to manage orders and customer support activities. Existing retailers on the other hand stop focus or exit entirely from e-marketplaces that once sustained them throughout the pandemic, highly due to losing confidence that this market segment can generate revenue and growth that justify the time and resources invested. There is indeed a mix level of confidence demonstrated by different stakeholders involved in an e-marketplace.

The researcher argue that the hybrid e-marketplace model mentioned in most reports (Digital Commerce 360, 2023, p. 360; Maier and Wieringa, 2021; Tian et al., 2018) has created conflicting interest between third-party sellers and first-party sellers who are also e-marketplace owner such as Amazon and Walmart. There is an observed trend of pure e-

marketplaces increasingly diversifying to accommodate various business models and niche markets (Digital Commerce 360, 2023).

Since 2018, there's a significant widened gap between first-party and third-party sales in the world top e-marketplaces. Increase GMV of global marketplaces in year 2022 is largely contributed by first-party sales in hybrid e-marketplaces such as Amazon and Walmart. The gap of total GMV growth rate between first-party and third-party in year 2018 stands at 1.5% and this gap widen to 8.2% in 2022 with first-party sales increasing. Based on 2022 numbers, the total three-year CAGR for GMV of 22.8% at hybrid e-marketplaces like Amazon and Walmart are more than twice as high as the 11.2% for pure e-marketplaces like Alibaba, eBay, Lazada and Shopee. With the borderless nature of online retailing, the researcher opined that the increase of GMV contributed from first-party sales has largely affected negatively on the GMV of third-party merchants who are mostly MSMEs. While hybrid emarketplaces that sell own merchandise having more bargaining power, greater resources, with the sole rights to platform traffic algorithm, and thus making their offerings gaining competitive advantage, third-party sellers must suffer and compete for traffic and GMV. It is likely that the hybrid trend started in the United States will gradually move into Asia, just like how e-marketplaces started by the big giants, Amazon and eBay. It will be in no time that such model will encroach Southeast Asia looking at the enormous potential in e-commerce that this region can generate. In the opinion of the researcher, hybrid model has contributed towards the intense competition within the eco-system, posing greater difficulties for sellers, especially MSMEs. Such imbalance situation raises concern for the researcher to explore possibilities that can help MSME e-marketplace retailers who are at a disadvantage due to resource-limitation, to become more ready when facing constant changes or any future market disruptions.

The business of e-marketplace retailers was highly profitable but is no longer the same postpandemic. In Malaysia, the fatigue felt from 2 years of lockdown has driven consumers to walk-out from their home and resume physical shopping experience (Parr, 2022). Nowadays, shoppers feel more confident about returning to stores and willingly do so. Pure-play emarketplace retailers who conduct their trade online and had enjoyed the spike in their business during lockdowns are now seeing transactions fall sharply post-pandemic (The Star Business, 2022). The e-marketplace is highly volatile, and changes are constant, happening almost every day. This is partly due to its borderless characteristics, ease of accessibility, and the real-time nature of the internet. For example, competitors can make quick changes to their product content by altering price, creative content, description, promotions, and advertisement, almost instantly. E-marketplace on the other hand can announce changes to its process, rules, fees, and algorithm, which can impact e-marketplace retailers instantly, making MSME retailers even more vulnerable to the slightest change. Price competition from China traders continues to put more pressure on Malaysia e-marketplace retailers. Some sellers ceased operation due to fatigue from prolonged business uncertainties and the rest continue to show vulnerability in the light of global economic instability. Business continuity has now become a major concern, and this revealed the obvious weakness in the powerlessness of MSME e-marketplace retailers. There is literally little to no sign of readiness shown by most e-marketplace retailers when facing continuous changes and challenges. Malaysian retailers are obviously not ready to face the volatile online retailing industry.

Consumer in Southeast Asia predominantly has the habit of using e-marketplaces to search for product and shop online, together with the growing trend and the significant market share e-marketplaces is contributing towards retail e-commerce sales, it is therefore feasible for the researcher to suggest a study revolving around e-marketplaces. Malaysia is among the top 3

countries in the world with the fastest retail e-commerce sales growth and has the highest internet penetration rate within Southeast Asia. A huge 98.4% of SMEs in Malaysia consist of MSMEs and most e-marketplace retailers fall into this category. The proven potential of e-commerce in contributing towards the country's GDP makes it even more feasible for the researcher to select Malaysia as the context in this research. The various strategic initiatives by the Malaysian government such as NESR and PAKEJ to promote e-commerce as a catalytic growth, and the inclusive approach to include individual or micro entrepreneur as MSME to receive the benefit from NESR, give more reasons for the current study to be conducted in Malaysia.

Most MSME lack of resources in terms of time, manpower, expertise and financial support, therefore, find it difficult to compete with larger retailers. They form part of the vulnerable group in terms of business partly due to challenges in obtaining adequate resources in financing, knowledge & skills, supply chain, and not able to enjoy competitive advantage from economic of scale, currently exploited by larger retailers. Therefore, the researcher believes that this group of people deserve more help and support from the government, academicians and industry players to reduce the gap of inequality. Malaysian e-marketplace retailers who fall into the category of MSME is selected as the subject of this research, other than the reasons justified earlier, it is predominantly because the researcher is a Malaysian and also an e-marketplace retailer. Being an e-marketplace retailer who is also facing similar challenges within this industry, she has the passion to find out how best to help similar retailers to continuously sustain and growth in their business.

1.2 Background

Unlike research on e-commerce, there are not much research specifically conducted on e-marketplaces. And if there are, most focus on e-marketplace business model; adoptions; roles,

benefits and impact; key success factors; customer acquisition; supply chain management; and sustainability (Daniel et al., 2004; Dass and Md Johar, 2022; Gomeseria, 2019; Kawa and Wałęsiak, 2019; Maier and Wieringa, 2021; OECD, 2022; Pucihar and Podlogar, 2005; Shi et al., 2021; Tian et al., 2018; Wang and Archer, 2007). No study was found explicitly investigating the third-party e-marketplace retailers on a global perspective. Even research related to e-marketplaces in Malaysia focus on similar pattern (Aziz et al., 2022; Madan et al., 2022), primarily on consumer behaviour (Jaylene, 2023; Kathiarayan, 2022; Tang and Ya'acob, 2023; Wong et al., 2023). There's only one notably publication about the impact of e-marketplaces on Malaysian SMEs (Dass and Md Johar, 2022), narrowing associated with e-marketplace retailers, yet not on individual sellers.

Most research on SMEs focus on firm performance (García-Lopera et al., 2022); leadership, management and entrepreneurship (Gallato et al., 2012; Gu et al., 2022); job satisfaction (Ha and Lee, 2022; Ling et al., 2019), and organisational commitment (Chung and Al-Khaled, 2022). Research evolving readiness often been associated with a specific objective such as change management (Alolabi et al., 2021), e-commerce adoption and technology adoption (Idris et al., 2017; Nuari Harmawan, 2022). There is very little academic research evolving around the generic topic of business readiness without specifying any objective. Most studies on the topic of business readiness as a whole were published by industry leaders (Aaron De Smet et al., 2021; Acceler8 Venture Builder, 2022; Vodafone Enterprise, 2014; Vodafone Limited, 2021). This suggests that the holistic view of business readiness is observed critically by the industry but neglected by academicians. Because of the lack of academic research on a holistic view of business readiness, it is therefore pertinent to investigate deeper into this topic.

It is generally accepted that MSME, being relatively lean in size, have the competitive advantage of speed and agility, adaptability, flexibility and personalisation which are often unachievable by large corporations. Owners make quick decisions, and often has the passion towards the business, and such passion ignite possibilities, creativity and innovations, turning desired incomes into impact. With a relatively small team in most MSME e-marketplace retailers, the topic of leadership, management and employee satisfaction might not be too critical for discussion when the biggest challenge for e-marketplace retailers is the lack of resources, hence making the business unready to face future uncertainties. Rather than blaming on resource inadequacy, the researcher opined that MSME business owners can rely on having a strong mindset and determination with business continuity in mind in order to sustain and continue growing in this competitive market environment. Even e-marketplaces that focus primarily on technology are still struggling to recruit the right sellers and helping them to grow (Digital Commerce 360, 2023). This indicated that having advanced technology alone can no longer support the growth of retailers. This claim is equally supported in Vodafone Limited (2021).

None of the e-marketplaces consider mindset, belief, motivation and behavioural of e-marketplace retailers as a factor during onboarding process or when designing educational materials to help them better prepare for growth. Hence, the researcher aims to investigate how behaviour of Malaysian MSME e-marketplace retailers can impact business readiness. The current thesis could be the first in Malaysia that consider having the right mindset and intentions could impact business readiness for MSME.

1.2.2 Business Readiness

Business readiness measures the extent to which a business is prepared and equipped to manage future challenges and opportunities. Traders who are well-prepared are more likely to

achieve success than ones who are not. There are many factors contributing to a businessreadiness such as financial stability, well-defined strategy, competent management team, ICT fundamentals, organisational capability, and effective delivery system (Al-Douis, 2019; Alolabi et al., 2021; Awajan et al., 2013; Idris et al., 2017). Apart from top-level commitment, a knowledgeable team can also potentially prepare a business to become ready for the future (Carvalho et al., 2021; Idris et al., 2017; R. M. X. Wu et al., 2017). Ready businesses are rich communicators, value their people and partners, exploit technology to the fullest, and are open-minded about solving technology needs (Vodafone Enterprise, 2014). The latest research by Vodafone Limited (2021) introduced the term future-ready business, as a followup to the global pandemic crisis. The study asserted that a future-ready business has shown resilience during Covid-19 pandemic and shares six key characteristics in common. These characteristics include having a positive attitude to change, always being open to new technology, continuously planning for future technology needs, setting detailed and precise strategies, continuously keeping up with emerging trends and being highly adaptable to any situation (Vodafone Limited, 2021). All these involve behaviour and a positive attitude towards achieving business readiness. Attitude has become the prerequisite for a future-ready business (Aaron De Smet et al., 2021; Acceler8 Venture Builder, 2022).

1.2.3 Organisational Commitment

The concept of organisation commitment has been widely used in the study of human resource management. It is commonly expressed as the employee's state of attachment and identification with the organisation's values and goals (AL-Jabari and Ghazzawi, 2019; Muhajir et al., 2023). Commitment is conduct that can be categorized into affective commitment (employee emotional attachment to the organisation), continuance commitment (cost-benefit assessment by an employee) and normative commitment (sense of commitment

caused by obligatory feeling) (Allen and Meyer, 1990; Meyer and Allen, 1991). Evidence shows that a firm readiness and performance can be highly dependent on CEO, managerial and employee commitment (Alqudah et al., 2022; Molla and Licker, 2005; Silalahi and Bimo, 2021). With the right commitment and positive attitude, any business can become future-ready (Vodafone Limited, 2021). Therefore, the researcher suggests it is reasonable to relate commitment, whether it is from an employee, manager, or owner, with a positive impact on business readiness.

1.2.4 Intention to Enhance Digital Marketing Competence

A competent workforce is viewed as one significant predictor of a ready business (Alolabi et al., 2021; Awajan et al., 2013; Ibrahim et al., 2016; Vodafone Enterprise, 2014; Vodafone Limited, 2021). It's the ability and capability of a person or a team to achieve organisation goals, related to capability in handling issues, developing resources and ensuring management effectiveness (Ibrahim et al., 2016). Both marketing competence and digital technology are viewed as critical driving forces in social and economic development (Krasnostavskaia et al., 2020).

The need for e-marketplace traders to perform data analysis as a fundamental part of planning, and creating digital content to connect with customers has forced them to acquire reasonable knowledge and understanding of digital marketing (Gomeseria, 2019). E-marketplace retailers who are quick in applying email marketing, social media marketing, search engine optimization and retargeting marketing are more likely to acquire new customers, retain existing customers and increase revenue (Wibowo et al., 2020). Evidence also shows that businesses with good knowledge, skills, attitude, and interest in digital marketing are more resilient when facing uncertainties and future risks (Malesev and Cherry, 2021; Vodafone Limited, 2021; Yasynska et al., 2019).

A study conducted on China & Australian SMEs by Wu et al. (2017) suggests using CEOs' IT, e-commerce and e-commerce marketing knowledge as critical success factors to measure SMEs' success in adopting e-commerce. The researcher suggests that applying digital marketing knowledge and skills of top leaders to fundamentally measure e-commerce success has further strengthened the importance of digital marketing competence among businesses. Digital marketing competence is proven a critical business asset for e-marketplace retailers to build awareness, stand out from a broader and diverse customer base, and improve customer loyalty. Even though digital competence is critically important in any business, it is regrettably to note that more than 75% of academic research on digital literacy in Malaysia focus on population from schools and higher education (Ahsan et al., 2021; Ramli et al., 2023). Only a handful of studies on assessing the level of digital marketing literacy of Malaysia SMEs with one notably consider Malaysia lacking far behind Singapore in terms of adopting digital marketing techniques (Jaini et al., 2022), commonly agreed by most people. Having digital literacy does not equate to having digital marketing competence. A research conducted on Indonesia MSMEs postulate that only a mere 9% of SMEs show sophisticated digital marketing capacity (Erlanitasari et al., 2020). Hence, with the increasing importance of digital marketing competence in businesses, it's therefore critical to study how this competence can impact organisational commitment and make businesses more ready to embrace future opportunities and manage challenges.

1.2.5 Intention to Seek Knowledge

Knowledge is one of the key factor for MSME to stay competitive (Carvalho et al., 2021). Knowledge-seeking behaviour can be viewed as the act of continuously seeking new information and learning opportunities to improve a person's value. It is about how a person proactively seeks information, knowledge and expertise from another person to solve task-

related issues (Haas and Cummings, 2015). Constantly providing employee with career advancement opportunities which include the opportunity to learn can increase employee commitment towards the firm they work for (Chung and Al-Khaled, 2022). For emarketplace retailers, continuously seeking new knowledge has become an important behaviour that can critically affect the business. Knowledge enables e-marketplace traders to constantly stay up to date with the latest trends, cost-profit structure, customer preferences, competitor's movement and industry best practices. However, the information needs of an emarketplace retailer vary at different stages, and hence continuously seeking and sharing knowledge is highly required among colleagues.

Knowledge is perceived as a critically important strategic resource in an organisation, and managing this key resource is a determinant of an organisation's success (Ipe, 2003; Nahapiet and Ghoshal, 1998). Proper knowledge management is proven to improve knowledge creation, knowledge sharing; and knowledge seeking; thus improving flexibility and long-term sustainability of organisations (Carro Saavedra et al., 2017; Ingršt and Zámborský, 2021; Lai et al., 2014; Mihi Ramírez et al., 2012; Nonaka and Takeuchi, 1995). With increasing high-quality and relevant knowledge, businesses can perform better in decision-making, identify new growth opportunities and avoid potential risks in their journey. It is therefore important for e-marketplace traders to always stay mentally prepared to receive new information, acquire unexplored knowledge, and learn the latest technology. Acquiring first-hand information and knowledge to meet the ever-changing customer expectations has become the norm for every e-marketplace retailer.

Creative, innovative and collaborative behaviour are needed in a market to do their jobs efficiently and effectively (CIM, 2019). Marketers who can think creatively and make decisions under chaotic conditions are highly sought by employers as they are seen to have

the ability to solve problems and meet organisation goals. However, the ability to create new ideas and innovate is highly dependent on the activeness of knowledge-seeking demonstrated by a person (Henard and McFadyen, 2008; Ingršt and Zámborský, 2021; Krasnostavskaia et al., 2020; H. Wu et al., 2017; Wu et al., 2015). Knowledge seeking has therefore become one key enabler for innovation to happen. When innovation happens, then competitive advantage can become possible, thus resulting in a business that is well-prepared for the future.

1.2.6 Intention to Take Risk

Willingness to take risks refers to the inclination towards taking bold actions without certainty or in the wake of potential failure and negative impacts such as forgoing profits. A person who engages in voluntary risk-taking views the action as being risky in some way, yet they choose to do it voluntarily (Dickason-Koekemoer and Sune Ferreira-Schenk, 2022; Fan et al., 2022; Han et al., 2019). This type of behaviour only occurs when the possible negative outcome is severe as perceived by a person whereby these outcomes, whether positive or negative, must be faced by the decision-maker. Most people who engage in risk-taking or take risks are aware of the danger and harm they might be exposed to. It's driven by a particular purpose whereby it can be aiming for material gain or developing value identity. The inclination towards risk-taking can also result from structural pressure or continuously living in an unbearable situation when control becomes minimal with no desirable alternatives (Zinn, 2020, 2023).

Entrepreneurs who are willing to take risks are more likely to experiment with new ideas and business approaches that can aid an organisation to stay competitive and adapt to market changes (Chanda and Unel, 2019; Dheer, 2018; Rodríguez-Gutiérrez et al., 2020). Risk-taking is therefore proven to impact a person's innovative intention, leading to the realisation of action (Bran and Vaidis, 2019). There's evidence showing that risk-taking backed with

sufficient organisation resources can positively impact the innovation performance of a company (Giaccone and Magnusson, 2022). Businesses that are innovative and used to taking risks are more adaptable to uncertainty and ambiguity and, therefore resilient to market volatility (Haider et al., 2017).

Some businesses achieve success by embracing risk and foregoing profit for years to drive customer loyalty, scale and innovation (OECD, 2020), however, this number comprises only a very small fraction, despite it can potentially pay off over the long term. Much research on risk-taking revolves around business performance, innovation performance and entrepreneurship. The researcher opined that even though there is a possible negative outcome from taking risks, it is still important for e-marketplace traders to be courageous and take greater risks in exchange for better business performance. Risk-taking is proven to impact business readiness and organisational commitment, either positively or negatively (Gouweloos and McArthur, 2019; Jung et al., 2020).

1.3 Problem Statement

Knowing the unreadiness of MSME retailers in starting online selling, the Malaysian government rolled out various initiatives to help them. For instance, the Federal Agricultural Marketing Authority of Malaysia (FAMA) collaborated with Lazada to onboard local farmers so they could sell their produce directly to the end consumer. Malaysia Digital Economy Corporation (MDEC) collaborates with Shopee to subsidise local traders in driving sales, particularly those specialising in export, tourism, and craft products (Business Today Editorial, 2022). Despite continuous support from the Malaysia government through giving grants and affordable loans to SME in adopting digitalisation and e-commerce (Amrita V. Nair, 2023), the disproportionate liquid squeeze as a global effect post-pandemic was

strongly felt and created a knock-off effect on Malaysia economy, making businesses insolvent, individuals bankrupt, and leading to increase of non-performing loans.

In 2022, Shopee closed its Indian office, laid off 300 staff members and started a spree of regional layoffs. In the same year, this marketplace leader also pulled out from France, shutting operations in Chile, Columbia and Mexico. Sea Limited, Shopee's parent company has lost USD170 billion of market value since October 2021 high. Revenue continues to fall with a forecast of between USD8.5 billion to USD9.1 billion in the year 2022. The current focus of Shopee has shifted from a growth strategy to becoming self-sufficient by implementing a series of cost-cutting measures that include downsizing, layoffs, restricting employee expenses, and instructing all executives to temporarily forgo compensation. (Pandurangi, 2022; Samarathisa, 2022).

Lazada, the 2nd largest e-marketplace equally racked up mounting losses in its financial year ended 31 March 2021. Revenue fell more than 65% to USD556,000 from USD1.6 million a year before (Neo, 2022). This macroeconomic-induced tech recession is not limited to Shopee and Lazada but also Tencent Holding, Meta, Netflix, Tesla, Google, Twitter Amazon, Microsoft, Yahoo, Zoom, and many more with reported fallen headcounts from as low as 1% to as high as 70% of the total workforce (Kaur, 2022; Mascarenhas, 2023). Main contributing factors to this adverse situation include continuous war between Russia and Ukraine, tense relationships between the US and China, Federal interest rate hikes, global inflation, fear of recession, and buyer's inclination to buy from brick-and-mortar stores due to fatigue felt from restricted movement control within the 2-years of prolong pandemic. Despite Lazada continuing to make losses, no cost-cutting measure was announced and on the contrary, it received USD1.6 billion from Alibaba Singapore via 3 rounds of fund injection in year 2022 (Rosendar, 2022; TechNode Feed, 2022), and TikTok continues to expand its operation by

announcing the launch of TikTok Shop for Malaysian in April 2022 (Mordor Intelligence, n.d.). The enormous investments from China-based Alibaba for Lazada and ByteDance for TikTok imply strong confidence from investors that online buying will continue to stay.

Although there is strong confidence from buyers towards online buying, mounting challenges for e-marketplace traders continue. Some have no choice but to participate in misleading marketing, supply of unsafe and unauthorized products, engage in price gouging, and misuse buyer's data to survive. These created consumer risk and impacted negatively on society. To ensure a safe trading environment, e-marketplaces imposed stringent rules that require traders to acquire critical competence to ensure adherence. Some notable rules include additional legal compliance on specific product categories such as medical supplies and vape equipment, and intellectual property restrictions that disallow e-marketplace retailers to include certain words or creatives in their product listing. All these have set up a taller roadblock, increasing compliance costs and preventing businesses from fetching a justifiable profit margin. This poses greater challenges for retailers to grow within the e-marketplace space. Additional requirements have forced e-marketplace retailers to continuously seek knowledge, improve digital marketing competence and take more risks to maintain competitiveness.

Owning to the initial low startup cost, low risk and broad market access, it is undeniable that e-marketplace is still gaining popularity and has become the key e-commerce channel globally (Dass and Md Johar, 2022; Digital Commerce 360, 2023; Jake Pool, 2024; OECD, 2022). This has also resulted in unhealthy and intense price competition, pushing advertising costs higher and forcing businesses to engage in more promotional activities that can greatly reduce profits and risk credibility. E-marketplace retailers who have just started their business, similarly face challenges, particularly in establishing conditions to convince buyers to buy from them (OECD, 2020).

Despite tremendous revenue growth being recorded during the pandemic, not all e-marketplace retailers can continuously grow post-pandemic. Many businesses are struggling to sustain their previous growth and eventually exit the e-marketplace when they fail to do so. This situation is notably observed in the year 2022 when the pandemic has officially ended as declared by the World Health Organisation. According to The Star Business (2022), retailers observed an increase in transaction volume, but also a sharp decline in e-commerce revenues. This decline ranges from as low as 20% to as high as 90%. Even the long awaited large-scale annual sales carnival such 618 Day and Singles Day were not spared from such sales decline (The Star, 2024b). This is also evidenced in the lack of confidence of merchants in large sales carnival such 618 Day and Singles Day when heavily discounting has alienated them (The Star, 2024b). As the researcher is also an e-marketplace retailer, it is generally agreed within the seller communities, that the mounting discounts forced on them by e-marketplaces in order to attract more buyers have pushed merchants away from investing more resources into this sales channel. The MSME e-marketplace retailers are obviously not ready to embrace the rapid market changes.

The unfavourable macro-economic plays a critical role, yet in the case of e-marketplace retailers, it is also partly due to the continuous increase in service fees imposed by major e-marketplaces. For example, Shopee and Lazada introduced a commission fee at a rate of 2% in Year 2021 and increased this fee to as high as 14% in the next 3 years. These e-marketplaces are obviously seeing the unsustainability of their business model when only charge a minimal 2% fee to onboard more sellers when starting out. The negative effect after mounting losses incurred by these e-marketplaces was passed down to sellers in the form of increased fees. This has greatly exhausted the profit margin of e-marketplace retailers causing more exits, as observed via chats and comments of Shopee and Lazada e-marketplace retailers WhatsApp and Facebook community groups, whereby the researcher is also a

member. Businesses that have previously shifted the focus of their sales channel to an e-marketplace model out of convenience during the pandemic are now struggling to achieve an acceptable performance via these channels, despite investing heavily in the channel. According to the research by Vodafone Enterprise (2014), less than 35% of the retailers across geographics are considered business-ready and only 26% of SME across industries achieve business readiness. Business readiness is indeed a concern in business sector. The fierce competition, unfavourable market conditions, stringent compliance, and increasing service fees and advertisement costs imposed by e-marketplaces have put more pressure on e-marketplace traders to sustain. Some that face tougher conditions have resulted in business closing. From a societal point of view, the closure of e-marketplace retailers has taken away consumers' convenience in sourcing and comparing products online when making purchase decisions.

Although the literature on e-marketplaces is rising over time, however, the knowledge about e-marketplace retailers in Malaysia is very limited. Most research on e-marketplaces focus on its classification, roles, sustainability, impact, and key success factors, and none focus specifically on e-marketplace retailers who are mostly MSME forming a substantial group of Malaysia firms. The increasing trend of online buying, the conducive logistic ecosystem in Malaysia and extensive support from the Malaysian government via MyDigital, NESR and PAKEJ, make it sensible for the researcher to study ways for Malaysian MSME e-marketplace retailers to achieve business readiness, when readiness is the key concern for the industry.

It is commonly agreed that most MSME in Malaysia face the problem of having limited resources and insufficient time to grow their business (Amrita V. Nair, 2023; Mohamad et al., 2021). With the limitation of resources faced by most MSME, it is with the opinion of the

researcher that having the right attitude has become increasingly important towards achieving a state of business readiness. Influenced by her parents, the researcher is a firm believer that the right mindset, attitude and behaviour can make anyone be well-prepared to embrace any situations, regardless it's challenge, threat or opportunity. This belief is equally affirmed in multiple industry reports (Aaron De Smet et al., 2021; Vodafone Enterprise, 2014; Vodafone Limited, 2021). Therefore, the researcher decided to investigate how having the correct mindset, attitude and behaviour can impact business readiness of MSME e-marketplace retailers in Malaysia.

Digital has now become the basic level of competence in any business, and digital marketing is generally accepted as a pre-requisite for any online business. As mentioned earlier, digital literacy of businesses in Malaysia were not getting enough attention from academic studies. Most academic research on digital literacy in Malaysia focus on population from schools and higher education (Ahsan et al., 2021; Ramli et al., 2023). Having said that, digital literacy does not equate to digital marketing competence. Digital marketing competence can be said as a subset of digital literacy, yet it requires more in-depth knowledge, skills and attitude towards acquiring this competence. In Indonesia, only a mere 9% of SMEs demonstrates sophisticated digital marketing capacity (Erlanitasari et al., 2020) and Malaysia is considered left far behind as compared to Singapore in adopting digital marketing techniques for business with less than 40% adoption (Amrita V. Nair, 2023; Jaini et al., 2022). The inadequacy of digital marketing capabilities of Malaysia SMEs within the region raises concern for both the government and businesses.

The competitiveness of MSME is highly depending on the availability of information and knowledge (Carvalho et al., 2021). Without adequate knowledge such as in big data and analytics, it is impossible for retailers to make data-driven decisions, and finally enhance

customer experience and better meet customers' needs. Having the capacity and capability to acquire knowledge is even more important for e-marketplace retailers when this industry is highly competitive, and rapidly changing. SMEs in Malaysia lack of knowledge in digitalisation which is the core to conduct online retailing. Most facing the problem to remain competitive (Amrita V. Nair, 2023; Mohamad et al., 2021). Reasons cited by SMEs such as lack of time, difficult, unsure and reluctant to research and establish digital management and migration in Amrita V. Nair (2023) obviously indicate the lack of knowledge among Malaysian SME. With knowledge widely accepted as on one of the critical key success factors in ensuring business competitiveness, hence, Malaysian MSME owners and managers should pay attention to knowledge management.

In any businesses, it's unavoidable to consider risk as part of a decision-making. Risk-taking can come in the form of adopting digitalisation, investing in acquiring new knowledge, introducing new products, deciding on supply chain and logistic, or implement unprecedented strategies. Large retailers view brand and reputation, supply chain, and cyber risk as the top three risk the worry about (WTW, 2024). Risk management is highly required in retail industry to ensure customer satisfaction, customer retention and to make profit (Chen and Wu, 2022; Hofmeister and Portner, 2019; Rodríguez-Gutiérrez et al., 2020). Firm risk management is proven to have a positive moderating effect on Malaysian retailers' performance when adopting retail 4.0 (artificial intelligence, internet of things, cloud computing and big data analytics) (Sakrabani and Teoh, 2020). However most risk-taking research focus on larger firms but not on MSME. With the increasing importance of risk-taking as seen during the pandemic, the topic of risk-taking in business therefore warrant attention from the researcher.

Currently, there is no research specifically targeting MSME e-marketplace retailers in Malaysia, there is even none studying on the intention to enhance digital marketing competence, intention to seek knowledge and intention to take risk in this context. Hence, current research shall investigate how the three intentions can impact the business readiness of MSME e-marketplace retailers in Malaysia, moderating by organisation commitment.

1.4 Research Questions

This paper aims to investigate how the behaviour of e-marketplace retailers in Malaysia can impact organisational commitment and business readiness. The four research questions are identified below.

- RQ1 How does intention to enhance digital marketing competence (DM) impact on Organisational Commitment (OC) and Business Readiness (BR)?
- RQ2 How does intention to seek knowledge (SK) impact on Organisational Commitment (OC) and Business Readiness (BR)?
- RQ3 How does intention to take risk (TR) impact on Organisational Commitment (OC) and Business Readiness (BR)?

RQ4. How does Organisational Commitment (OC) impact on Business Readiness (BR)?

1.5 Research Objectives

Current research aims to understand the motivation behind Malaysian MSME e-marketplace retailers' intention to enhance digital marketing competence, seek knowledge and take risks; and how these intentions can impact business readiness and organisational commitment. This

study also investigates the mediating role of organisation commitment on the relationship of each intention and business readiness. Ten objectives are derived:

- RO1 To study if intention to enhance digital marketing competence (DM) have positive significant impact on Organisational Commitment (OC) and Business Readiness (BR).
- RO2 To study if intention to seek knowledge (SK) have positive significant impact on Organisational Commitment (OC) and Business Readiness (BR)
- RO3 To study if intention to take risk (TR) have positive significant impact on Organisational Commitment (OC) and Business Readiness (BR).
- RO4. To study if Organisational Commitment (OC) has positive significant impact on Business Readiness (BR).

1.6 Significance of the Study

It is important to conduct a study on factors affecting the business readiness of MSME e-marketplace retailers in Malaysia because many are currently finding it difficult to sustain post-pandemic due to a drastic drop in sales, low profit margin, intense competition, limited resources to continue the business, and the tightening of regulatory requirement for e-marketplaces (Digital Commerce 360, 2023; OECD, 2022; Parr, 2022; Samarathisa, 2022; The Star, 2024b). There is an obvious lack of readiness in MSME e-marketplace retailers to face potential challenges, let alone embrace possible opportunities. Rather than investigating and focus on resource-based facilitating conditions being factors affecting business readiness which are commonly observed in many studies (Alqudah et al., 2022; Mladenova, 2022), the researcher suggests investigating influencing factors from the aspect of behavioural intentions of e-marketplace retailers will be more appropriate. This is because when a person

is facing tremendous pressure, and highly deprived of critical resources, it is the mindset, belief and behaviour that will make them continue with their struggle and turn the situation positive.

Rising unemployment is often viewed as a negative phenomenon that can caused a country's instability in the context of social and economy. High unemployment rate can lead to the occurrence of unfavourable social issues, that can slow down the progressiveness of a nation. For an administration of a country to manage the increasing unemployment due to unfavourable market conditions, finding ways to create more job opportunities is always the top priority. One way is to build more entrepreneurs, making more people able to self-sustain without the need to depend solely on employment market. The researcher opined that unemployment can also become a push factor for more entrepreneurs to be born. Conducting business in an e-marketplace is one of the quickest ways for people to become an entrepreneur. It is generally agreed that e-marketplaces have supported Malaysia's retailing industry to continuously operate during the two years of the disruptive Covid-19 pandemic. It has also provided support for the unemployed to find alternative sources of income when they lose their jobs. The significant role played by e-marketplaces in supporting the growth of MSME retailing businesses is incontestable (Dass and Md Johar, 2022). The low barrier to entry, attractive pool of buyers, and opportunities to learn have attracted many individuals and traditional traders to participate. With the huge opportunities offered by e-marketplaces in creating more entrepreneurs, it is therefore important to ensure the sustainability of these e-marketplaces, with foremost ensuring that the traders operating businesses here are ready to embrace market challenges, and to scale their businesses. This study will reveal how the behaviour of MSME e-marketplace-retailers will impact the readiness of their firms.

Marketing is important in every business and the term digital marketing refers to marketing

activities that are conducted online or digitally. Digital marketing competence is increasingly receiving more attention from the government and business communities around the globe (Cham et al., 2022; MDEC, 2021b, 2021a; Vodafone Limited, 2021). Despite there are many studies on the topic of digitalisation, marketing and competence, however, each topic was commonly studied independently (Cham et al., 2022; CIM, 2019; Directorate-General for Education, 2019; Krasnostavskaia et al., 2020). There's very little research that comprehensively studies digital marketing competence as a single research topic. The role of organisational commitment was repeatedly proven to generate a positive significant impact on business readiness, change management, and technology adoption. However, no research on the impact of organisational commitment on the business readiness of e-marketplace retailers. Whether it is the study on human behavioural intentions, organisation commitment or business readiness, none consider MSME e-marketplace retailers as a subject matter. This study contributes towards understanding the behavioural factors consisting of (1) intention to enhance digital marketing competence, (2) intention to seek knowledge, and (3) intention to take risks, which can impact the business readiness of e-marketplace retailers in Malaysia. The findings of the current study will be used to validate the proposed model and finally develop an Integrated Business Readiness Framework for future research. Hence, current research shall lay a foundation for researchers to study the impact of behavioural intentions on business readiness and organisational commitment of MSME e-marketplace retailers in the future. Results obtained from current research can also add more insights for the Malaysian government when designing policies, strategies and programs on sustainable development, fulfilling the inclusive needs of the nation.

1.7 Chapter Summary

Public exchanges type of e-marketplace such as Shopee, Lazada and TikTok has infiltrated the life of many people in Malaysia as it offers the lowest barriers to entry, facilitating transactions between buyers and sellers and bringing together relevant actors such as live streamers, influencers, logistic partners, e-payment partner, and related service providers to generate value for all participants. It is perceived as a serious online trading platform, highly recognisable by buyers, sellers, and partners, gaining more trust and popularity in recent years. The popularity of e-marketplaces has encouraged the adoption of e-commerce among Malaysians and local businesses. It does not only act as an online trading platform but also an educational and learning source for businesses to acquire the necessary knowledge and skills to run their business online (Dass and Md Johar, 2022). Many depend on e-marketplaces to sustain their livelihood and business operations during the 2-year pandemic. Shopee and Lazada have literally become a saviour throughout the crisis.

Despite there being a fall in revenue of e-marketplace retailers, post-pandemic, it is predicted that online shoppers are going to stay because habit once cultivated, is difficult to change. That is the reason why it is important to prepare e-marketplace traders to become future-ready. This way, they can continue to sustain their business amidst fierce competition, increased governance, and reduced profits, and at the same time can support society's needs in search for products online.

Many resource-based factors contribute towards business readiness. Many psychological factors are under-explored. This offers opportunities for the researcher to conduct further research on the behavioural intentions of e-marketplace retailers and their impact on organisation commitment and business readiness. E-marketplace retailing businesses are going to stay post-pandemic, and therefore it's imperative to study the business readiness of

these e-marketplace retailers and help them regain the growth momentum to a sustainable level.

CHAPTER 2: LITERATURE REVIEW

2.1 Introduction

In Chapter 1, the basis of the research with background, problem statement, research questions, research objectives, and significance of the research were explained. Chapter 2 will cover reviews of the industry and related concepts and theories of the five constructs which are (1) intention to enhance digital marketing competence, (2) intention to seek knowledge (3) intention to take risk (4) organisational commitment, and (5) business readiness. This chapter will also establish research gaps, conceptual framework and hypotheses, to predict business readiness of MSME e-marketplace retailers in Malaysia. The latent variables and the indicators used in the proposed model will be selected from literature reviews and the researcher's personal experience in the industry. Indicators to measure intentions will observe the components of attitude, subjective norm, and perceived behavioural control in the theory of planned behaviour (Ajzen, 1991). Indicators of organisational component observe the three components of commitment, leadership and work ethics (Bahadori et al., 2021; Meyer and Allen, 1991). Indicators of business readiness will be adapted from multiple literature and industry reports (Aaron De Smet et al., 2021; Council Of The European Union, 2018; Vodafone Enterprise, 2014). These latent constructs are hypothesised to predict business readiness. The current chapter will start with a discussion of related academic and industry publications, followed by a proposed research framework and hypotheses.

2.2 Evolution of The Study on E-Commerce and E-Marketplace

The concept of e-commerce and e-business were used inter-changeably with the former commonly viewed as a sub-set of the latter, involving trading or exchange of goods and services via the internet (Combe, 2006; Dave Chaffey, 2009; Finnbogason, 2013; Karmaker, 2019; Martin Kutz, 2016; Turban et al., 2017). This chapter will discuss the evolution of the study in the field of e-commerce, and e-marketplace at the global, regional and local perspective, focusing the empirical findings from Malaysian cases and around the world.

Electronic form of business; e-shopping; e-payment, e-commerce, e-marketplace, e-communication, and cloud computing has formed part of our daily life to enable convenience, efficiency, and cost-saving, ultimately enhancing a person's quality of life and making the environment more sustainable. With the mushrooming of technology-driven firms, borderless spaces were introduced for more people to easily start a new business, and for existing businesses, particularly small businesses to explore online trading termed electronic commerce or e-commerce.

The term e-commerce is used interchangeably with electronic business or e-business (Dave Chaffey, 2009). It is often difficult to establish a clear line between the two because both are closely interconnected (Joy Karmaker, 2019). Both are facilitated from the development of electronic data interchange (EDI), the exchange of business documents from one computer to another, attempting to create a paperless office (Darwin L. Hermogeno, 2019). Combe (2006) define e-business as the act of adopting the internet to interact within a network, and empowering business process, electronic trade, corporate communication and cooperation within an organisation. Martin Kutz (2016) defines e-commerce as the trading of products and services via a medium of computer networks, commonly known as the internet. Turban et al. (2017) define e-commerce as the exchange of goods and services, usually between organisations and/or persons in which transactions take place over electronic networks, mostly the internet.

Unlike e-commerce which involves exchanges of trade value between 2 or more parties, according to Dave Chaffey (2009), e-business encompasses a broader range of processes that incorporate internal transactions within an organisation. These can include transactions related to procurement, supplies, logistics, payment, stock control and order capturing (Combe, 2006). Karmaker (2019), further argued that e-commerce is limited to commercial and monetary transactions, whereas e-business covers not only monetary but also non-monetary business transactions. Resources required to conduct e-commerce activities are therefore viewed as only a fraction of those required to conduct e-business. E-commerce can be viewed as a subset of e-business and has proven to positively support economic opportunities for small businesses, particularly on entrepreneur prospects and firm's competitiveness (Finnbogason, 2013). Regardless of whether it is e-commerce or e-business, both are critical to keep up with the industry, social and environmental changes.

The earliest form of e-commerce is credited to Michael Aldrich. He was an English inventor that invent online shopping or term as "teleshopping" in year 1979 (Wikipedia Foundation, 2024). Technologies that contributed towards the further development of e-commerce are automated teller machine, telephone banking, and credit cards throughout the 1980s (Darwin L. Hermogeno, 2019). In the late 80's, World Wide Web, popularly known the internet (Katherine Taken Smith, 2011; Numao and Sato, 2001) was invented by Sir Tim Berners-Lee (Bory et al., 2016), a key event in the introduction of e-commerce. The hyperlinks, html, and http has laid a foundation for the innovation that allowed for invention of dot-com stores. Initially, there was a ban on e-commerce whereby no one is allowed to engage in trading activities via the internet. However, this ban was later lifted by the National Science Foundation in year 1991 (Christina Marfice, 2020; James Hardy, 2014).

The decision to adopt e-commerce is driven by perceived relative advantage, owner's innovativeness, and competition (Ghobakhloo et al., 2011); tolerant attitude of decision makers towards negative information (Gorla et al., 2017); managerial attitudes, corporate strategies, external pressures and firm technology strength (Li and Xie, 2012); and potential knowledge acquisition and application (Yee-Loong Chong et al., 2014). The foremost is about profitability, cost-reduction, and then assessing the value it can generate, either tangible or intangible. Whether it's e-business or e-commerce, the quality of the internet, security, privacy, perceived usefulness of going digital and trust are significant factors that can impact its development (Alqahtani et al., 2012; Al-Somali et al., 2009; Cepani, 2012).

It is common to categorise e-commerce transactions of a firm based on exchanges that take place with the consumer, termed as business-to-consumer (B2C) or with another business, termed as business-to-business (B2B) (Darwin L. Hermogeno, 2019; Mirescu, 2010; OECD, 2020). The introduction of social media and networking has further broadened the scope of ecommerce to allow transactions between end-users with another end-users or consumer-toconsumer (C2C). Social network is a network of social interactions and personal relationships whereas social networking is the use of internet-based social sites to stay connected with friends, family, colleagues, or customers. Communication happens via one-to-one chat, community groups, or simply sharing ideas via a feed. Users exchange opinions and experiences within the platforms, and this can greatly influence buying decisions. This process is termed social influence and can affect all stages of the decision-making process (Valerio et al., 2019). Most social networking sites such as Facebook, TikTok, LinkedIn, and Instagram provide tools for members to build profiles, interact, share, connect and publish user-generated content (Turban et al., 2015). To a certain extent, it is also free for members to conduct buy and sell activities, provided the rules and guidelines set by the platform are fully complied with. Consumer started to sell new or used items another consumer via Facebook,

Twitter, Instagram and YouTube. The C2C or social media selling model has gained popularity and has become one of the main drivers that impacted the growth of multiple business-driven e-commerce channels (Dave Chaffey, 2009). Firms on the other hand leverage these sites as an additional sales channel to reach majority of their target audience. Such selling involves sharing of content, videos and images for advertising purposes. The internet has transformed the business competitive landscape and began to impact the life of people around the world, whether is a user or a non-user.

E-commerce can take place through an online brand store commonly known as a private website such as www.AbudenKitchen.com, www.LouisVuitton.com.

These sites are owned and operated by businesses that conduct online buying and selling activities of their products and services. Owners have full control over the decision-making of website design, hosting provider, product, pricing, promotions, selection of payment gateway, shipping and choice of logistics (Turban et al., 2017). Ensuring the growth of visitor traffic and maintaining the security and functionality of these sites becomes the business's sole responsibility and therefore, it also indicates greater resource is required for setup and maintenance. Higher capital investment, multiple skilled & knowledgeable workers, adequate IT infrastructure and tightened cybersecurity are essential to successfully build an online brand store.

Unlike larger firms, most MSME with limited resources will opt to start their business by leveraging on existing 3rd party e-commerce platforms such as social networking, chat messaging and online marketplace or electronic marketplace (e-marketplace). They have very little option but to sell at these third-party sites (Digital Commerce 360, 2023) as it is simpler and cheaper to start with. Two pioneer e-marketplaces in the world are Amazon and Ebay founded in 1995, that has survived the dot-com crisis in early 2000 and still operating until

today (Christina Marfice, 2020; James Hardy, 2014). E-marketplace can be defined as web-based systems which enable automated transactions, trading or collaboration between business partners (Daniel et al., 2004). More recent literatures define e-marketplace as a digital platform that links transacting parties through a centralised information system that adopt a specific infrastructure technology (Alt, 2020), a digital platform that brings together buyers and third-party sellers, thereafter facilitates payment for goods and services (OECD, 2022), or an online shopping mall that give buyers the convenience to buy from multiple sellers on one platform (Digital Commerce 360, 2023).

Earlier publications categorise e-marketplaces based on the roles and ownership, which are consortium exchanges, private exchanges and public exchange models (Kaplan and Sawhney, 2000). Consortium exchanges are owned and operated by an association with similar businesses combining their purchasing power to achieve economies of scale. This buyer-dominated exchange is only effective when both buyer and seller see value in participating in the consortium. Consortium model enables economies of scale and promotes mutual learning and members can benefit from competitive advantage owing to its collective bargaining power and a pool of complementary expertise. Private exchanges belong to a single firm that links its commercial system directly to its suppliers. It's easier to build, compared to a consortium exchange (Baldi and Borgman, 2002). The most observed or has the lowest barrier to entry is public exchanges. This type of e-marketplace is independently managed B2C and B2B online trading sites that facilitate transactions between buyers and sellers. It is open for use to any person or business. Most literatures of e-marketplaces refer to public exchanges.

Based on the model of public exchanges, e-marketplace can further be classified by industry orientation, either vertical or horizontal (Kaplan and Sawhney, 2000; Philips and Meeker,

2000). The vertical marketplace facilitates trading that is specific to a particular industry. They are similar to speciality stores, that cater to the unique needs and interest of a welldefined group of people (Sharetribe, 2024). There is a notable trend in the increase of vertical e-marketplaces that focus on specific niche or product categories with the intention to offer a more targeted shopping experience (Digital Commerce 360, 2023). The researcher opined that the increasing trend in adopting vertical e-marketplaces is due to the need to quickly provide access of niche products to consumer so they can save time browsing irrelevant products. In the fast-paced digital driven environment, the last thing that a consumer wants are to be bombarded with massive, yet irrelevant information. Some popular vertical emarketplaces are Airbnb, Etsy, Property Guru, Trip, and Booking. Horizontal e-marketplaces offer products and services such as accounting, cleaning, maintenance, or other common services that are needed by various industries. Sharetribe (2024) described horizontal marketplace as a big supermarket that offers a wide range of products that attract different types of people. It is a market for the masses like Amazon, eBay, Lazada, Taobao, Shopee and TikTok Shop. Such marketplace is highly competitive, and retailers often have to compete on price. Despite this, horizontal e-marketplace enjoys a significantly large market share with high brand recognition as compared to a vertical model.

Most e-marketplaces use 2-sided market business models (Gassmann et al, 2014) commonly referred to as platform business models, bringing together buyers, sellers and relevant actors such as live streamers, influencers, logistic partners, e-payment partners, etc to generate value for all participants (Hagiu & Wright, 2013,; Van Alstyne et al, 2016). The large number of actors in an e-marketplace enables a variety of goods and services available for sale (OECD, 2020). E-marketplace that adopts public exchanges with a 2-sided market business model in countries within Southeast Asia include Shopee, Lazada, Carousell, PGMall, Motor Trader, Lelong, and TikTok Shop. Alt (2020) that viewed e-marketplace as a centralised information

system, categorise technology infrastructure into proprietary infrastructure, internet infrastructure and ecosystem infrastructure. Proprietary infrastructure as the name indicates, were largely built on proprietary infrastructure technology that restricted diffusion of such platforms. Internet infrastructure on the other hand managed to link businesses and individuals alike on a large scale, diminishes the utilisation of proprietary infrastructure. Ecosystem infrastructure focusing on collaborations and industry-wide supports, emerged to create powerful digital business solutions. Among the ecosystem infrastructures are operating systems such as iOS, Android and Microsoft Windows, social networking platforms such as Facebook, TikTok and X, and transaction platforms such as Amazon, Alibaba and JD. These platforms have emerged as ecosystems, that depend on each other, sharing key services such as payment, logistics, and etc (Alt, 2020). The ecosystem infrastructure mentioned by Alt (2020) is similarly found and described in Hagiu & Wright (2013), Grassmann et al (2014), Van Alstyne et al (2016) and Digital Commerce 360 (2023). This shows that the concept of ecosystem infrastructure was not new and predicted way earlier before e-marketplaces were popularly adopted globally.

Digital Commerce 360 (2023) that describe e-marketplaces as online shopping malls, further categorised them into pure marketplaces and hybrid marketplaces. Pure marketplaces only sell merchandise from other retailers (third-party) as defined in OECD (2022), whereas the hybrid marketplaces sell own merchandise (first-party) alongside other retailers. Pure marketplaces are like eBay, Shopee, Lazada, Alibaba, Taobao, Tmall and Tokopedia that only sells third-party products and services. Other major marketplaces operated by large retailers such as Amazon and Walmart, are categorised as hybrid marketplaces, offering own merchandise alongside the products from other retailers. Hybrid model often creates biased markets as e-marketplace operators place their offerings above offerings from third-party retailers to increase the probability of selling them. Whether it is a pure marketplace or hybrid

marketplace, personalised market is highly possible, provided that the criteria applied are transparent and can highly be influenced by users (Alt, 2020). OECD (2022) simplify the definition and refer online marketplace as "a digital platform that brings together buyers and third-party sellers of consumer goods and facilitates payment for such goods", without explicitly describing the hybrid model. In view of this, the definition by OECD (2022) will be used for the purpose of current study.

It is never easy to draw a clear line between social networking, chat messaging and emarketplace as most features overlap. For example, Facebook started as a social networking site in 2005, launched Facebook Messenger in 2011 and introduced Facebook Marketplace five years later. In 2012, Facebook acquire Instagram, another social networking site and later started Instagram Shop which allows sellers to set up a check-out cart via a payment gateway. TikTok, originally started as a social networking mobile application allowing users to create short videos, introduced TikTok Shop in the year 2021, offering tools & services available in a conventional e-marketplace, allowing sellers to set up their online store. Despite the similarity, one distinctive advantage of TikTok is having an established network of influencers to create original video content to generate income not only for themselves but also for merchants within the platform. Shopee and Lazada offer similar features but are not as popular in video marketing as compared to TikTok. All these overlapping affirm the ecosystem infrastructure technology mentioned in Alt (2020) that is used to support the evolution of e-marketplaces and align with the simplified definition of e-marketplaces suggested by OECD (2022). The recent regulation imposed by the Indonesian government to separate TikTok Shop (e-marketplace) from its social networking site (TikTok) with the intention to protect smaller local merchants and local products has open a precedent on the importance to draw a clear line between social networking site and e-marketplace. In Indonesia, e-commerce cannot become social media, and must be separated (Mariko Oi, 2023; The Star, 2024a). There is an impending call for governments around the world to better regulate e-marketplace (OECD, 2022, 2020). The researcher predicts that there'll be more stricter rules introduced by governments across the globe to better regulate e-marketplaces whether it's to protect the interest of local businesses, other stakeholders or for non-commercial reasons. One possible initiative might be increasing the role and responsibility of competition watchdog to safeguard against potential exploitation of market power and undesirable consequences.

Chat messaging is dominated by WhatsApp, Telegram and WeChat. Despite the absence of many features offered by e-marketplaces defined in most publications mentioned earlier, these chat platforms have become informal e-marketplace that influences consumers' buying decisions. To capitalize on its extensive network, WhatsApp introduced WhatsApp for Business in the year 2018 offering extra tools for businesses to set up store catalogues, analyse traffic data and send autoresponder chat messages to potential buyers, making it easier for millions of individual sellers and businesses to connect with their customers. However, there's no payment gateway available for buyers to instantly make a purchase in most countries. Buyers can only view the catalogue, add to cart their preferred item and finally wait for the seller to revert with own payment advice. As predicted by the researcher at the time this study was initially conducted, WhatsApp Pay was officially introduced to India users in November 2020. Registered businesses can now receive payment from their customers directly through the app (Upadhyay, 2024). This latest development of WhatsApp as an alternative to a full-fledged e-marketplace has further affirmed the importance of online retailing, particularly through third-party platform.

E-marketplaces are mostly regulated with business continuity in mind and offer more comprehensive support for sellers to build and grow their businesses. It is perceived as a

serious online trading platform by most people. This is affirmed with brands increasingly recognising e-marketplaces as one of the important distribution channels to broaden customer reach. Some international brands that adopt e-marketplace as a business channel include Philips, Coach, Kiehl's, Adidas, Nike, etc. There are many roles played by e-marketplace such as facilitating product, services or information exchanges; facilitating payment or delivery arrangements; and providing organisation infrastructure such as governance framework and rules for conducting activities within the platform (Prihastomo et al., 2018). Online marketplaces offer a more user-friendly searching, ordering, paying and return experience. It oftens leverage deep on technology to support the seamless transactions between buyers and sellers (Sharetribe, 2024). Consumers can save time when comparing prices, and accessing to a wide range of attractive offerings, owing to the intense competition between sellers (Digital Commerce 360, 2023). Sellers can effortlessly leverage its technical solutions, secured payment gateway, and highly efficient logistics solutions to ensure an uninterrupted online business transaction (Kawa and Wałęsiak, 2019; Sharetribe, 2024). Emarketplaces aid businesses in customer acquisition, improve customer experiences, and market expansion (Digital Commerce 360, 2023). Apart from the commercial value it generates, e-marketplaces alter business behaviours, knowledge base setting, and drive best business practices, at the same time impart sustainability expertise and improve digital skills and knowledge (Dass and Md Johar, 2022; Finnbogason, 2013). In general, e-marketplace is highly recognisable, offers immediate access to a massive pool of potential clients and acts as the first contact point for buyers to find products. It is also an ideal platform to quickly start a small business, test products and discover new sales markets by collecting data from buyers (Kawa and Wałęsiak, 2019). While the researcher agrees that e-marketplace can benefit both sellers and consumers, however, in the long run, when sellers are not able to achieve sustainable profits due to constantly need to engage in price competition, e-marketplaces shall gradually lose its uniqueness. Therefore, it is imperative to for e-marketplaces to look into strategies that can create equitable benefits for seller, buyers, actors and e-marketplace owner.

Logistics solutions provided by e-marketplaces facilitate finding, purchasing, delivering and paying for goods (Yasynska et al., 2019). Most e-marketplaces collaborate with the external courier, express & parcel service providers (CEP) to complete last-mile fulfilment. The more established e-marketplace will introduce insourcing logistics; a process whereby an organisation carries out logistic activities itself as part of its growth strategy, notably Lazada eLogistics and Shopee Express. This means the e-marketplace will have ultimate ownership of decision-making on logistic operations such as storage and transportation, distribution network design and location of the warehouse. The most pertinent reason for introducing insourcing logistic as a service is the enormous financial gains obtained from centralizing logistic and increasing control, thus making the e-marketplace more flexible and competitive (da Silva et al., 2019). The revenue model of most e-marketplaces includes charging retailers transaction fee, commission fee, service fee, subscription fee, advertising fee, and affiliate commission. Other than giving retailer access to a large pool of buyers, critical services provided to sellers and buyers include payment handling, inventory, logistic and fulfilment, customer relationship and marketing tools, supply chain planning, design collaboration, trade protection, and data analytics. E-marketplaces that emerged over the years had improved their support in facilitating transactions, investing heavily into technology infrastructure.

The researcher opined that e-marketplaces around the world has started to adopt hybrid concept mentioned in Digital Commerce 360 (2023), each competing with third-party retailers for customers, regardless it's via the model of offering in-house merchandise or inhouse logistics. In view that each third-party retailer is charged multiple fees in order to sell

on these platforms, she argues that the hybrid e-marketplace model has infringed the interest of these third-party retailers, and such business model might challenge the conventional view of ethical business behaviour. From the point of view of the researcher, e-marketplace owner should not gain benefits through selling of own merchandise to gain profit and compete with third-party retailers; and at the same time enjoy the unfair privilege of receiving enormous fees from them. E-marketplaces are obviously competing with third-party sellers in their own platform. This has created an unfair competition between first-party retailer who is also the e-marketplace owner and the third-party retailers. The hybrid trend has resulted in more pressure placed on third-party retailers, mostly MSME to compete for customers. A watchdog initiated by the respective government should be established to ensure fair and ethical e-marketplace business ecosystem to further uphold the interest of all parties, giving everyone a fair playing field. In view of the mounting pressure placed on third-party retailers, it is therefore pertinent to conduct the current study on how to help e-marketplace retailers become more ready to face the incoming hybrid trend that has already infiltrate most e-marketplaces in the world, including in Malaysia.

Most e-marketplaces allow sellers to easily register a new store via email, personal national identity number or company registration number to prove their entity, then provide valid bank account details for payment processing. There's no registration fee, no upfront payment and no other details are needed. However, not all e-marketplaces adopt similar business models. For example, Taobao, similar to Lazada and Shopee is free to list an item with millions of sellers. Yet Tmall sellers are required to pay a security deposit of USD25,000 and annual fee up to USD10,000 to start selling. Only about 50,000 sellers conduct business through this platform (Digital Commerce 360, 2023). In general, most e-marketplaces offer low barrier to entry with almost zero capital investment, allowing everyone to start selling almost instantly. Registering for a new store is so brief and easy to the extent that the recent report by OECD

(2022) recommends governments around the world to better regulate e-marketplaces by gathering more seller identification information to ensure a safe e-transaction environment to protect both sellers and buyers. Online marketplaces have become a dominant force in the global e-commerce industry and growth of retailers, impacting both sellers and consumers (Digital Commerce 360, 2023). The favourable conditions for retailers to rapidly scale their offerings without large investments has accelerate retailers' participation in e-marketplaces. It is a common belief that everyone could effortlessly and cost-effectively connect to buyers. Buyers on the other hand can use such platforms to search and compare prices, products and services from a wide range of suppliers. However, it is not the absolute truth.

Despite the low barrier to entry, from the researcher own industry experience, it is never easy to continuously sustain in this fast-paced, volatile, and highly competitive market environment. It is also never so cost-effective selling in e-marketplaces as the selling fees have increased tremendously over the past 2 years as compared to only an average of 2% to 6% per order previously. For existing sellers, selling fee that include transaction fee, commission fee, program fee and advertisement fee can now go up to an average of 20% per order in Malaysia. With sellers forced to offer more discounts due to intense competition, the steep increase of selling fee and the drastic drop of online revenue that were never anticipated post-pandemic, these combined factors have increase difficulties for sellers to maintain business survival. Retailers are obviously not ready for sudden disruption.

On contrary to e-commerce, not much research was conducted on e-marketplaces. Only a handful of research focus on the platform adoptions; business model; roles, benefits and impact; contributing factors; customer acquisition; supply chain management; and sustainability (Daniel et al., 2004; Dass and Md Johar, 2022; Gomeseria, 2019; Kawa and Wałęsiak, 2019; Maier and Wieringa, 2021; OECD, 2022; Pucihar and Podlogar, 2005; Shi et

al., 2021; Tian et al., 2018; Wang and Archer, 2007). The researcher did not find any study considering third-party e-marketplace retailers as a subject matter. Research on e-marketplaces in Malaysia is limited and follow similar pattern of global studies (Aziz et al., 2022; Madan et al., 2022). Most focus primarily on consumer behaviour and consider Shopee as the source of study (Jaylene, 2023; Kathiarayan, 2022; Tang and Ya'acob, 2023; Wong et al., 2023). Only one publication was found on the impact of e-marketplaces on Malaysian SMEs (Dass and Md Johar, 2022), narrowing associated with e-marketplace retailers. The said research only includes SME but not individual sellers despite the Malaysian government view them as important through incorporating as MSME. The limiting studies on e-marketplaces in Malaysia, the importance of MSME retailers and the mounting challenges faced by this group of people have present a gap for the researcher to consider MSME e-marketplace retailers in Malaysia as a subject of study. The current thesis could be the first in Malaysia that consider having the right intentions could impact business readiness of MSME.

2.3 Theory of Planned Behaviour (TPB)

The theory of planned behaviour is a well-established psychological theory that predicts human behaviour based on intentions. The theory postulates that attitude, subjective norm, and perceived behavioural control are three components that can be used to accurately predict behavioural intentions. Achievement of behaviour on the other hand can be predicted with intention and perceived behavioural control. Theory of reasoned action is the predecessor of the theory of planned behaviour. Components of each theory will be discussed.

2.3.1 Attitude (AT) and Subjective Norm (SN)

The cognitive Theory of Reasoned Action (TRA) was developed to assist psychologists in understanding human behaviour in a specific context by assuming that people are rational and

their behaviour is determined primarily by their intentions (Huang et al., 2021). Intention serves as an indicator of how much effort a person is prepared to put forth to carry out the behaviour. As a general rule, the stronger an intention is, the more probable that it will be performed (Ajzen, 1991).

TRA postulates that intentions can be predicted by a person's attitude and subjective norm towards performing that specific behaviour (Ajzen, 1985; Fishbein and Ajzen, 1975). The underlying determinants of attitudes are attitudinal beliefs, and the underlying determinants of SN are normative beliefs. Attitudes relate to a person's belief on whether the perceived outcome of a behaviour is favourable or unfavourable (Fishbein and Ajzen, 1975). When there's a positive feeling about behaviour, then the more important that behaviour is perceived, and the more likely intentions will be formed (Ajzen, 1991, 1985). A person's attitude is built up based on a person's beliefs and values. Trust, compatibility, system quality, knowledge quality, knowledge growth, task needs (Lai et al., 2014), information quality, social interaction ties (Veeravalli et al., 2019), and value (Blankenship et al., 2022) are indicators used to measure and predict attitude and intentions in behavioural studies.

Many decisions made are subjected to conformity to the expectations and opinions of others (Goh and Sandhu, 2013a). Subjective norm, commonly termed as social pressures, relates to a person's sense of what significant others expect them to behave towards the behaviour in question. It relates to the likelihood that an important person or group of people agree or disagree with performing a given behaviour (Ajzen, 1991; Fishbein and Ajzen, 1975). SN can be caused by external influence that comes in the form of community identification, peer influence (Lai et al., 2014), peer pressure (Goh and Sandhu, 2013b; Xu et al., 2023), and image concern (Bursztyn et al., 2019).

Relational capital (trust), structural capital (network ties), and cognitive capital (shared belief) in the social capital theory (Nahapiet and Ghoshal, 1998) can potentially influence SN to ultimately affect actual behaviour (Auliya et al., 2019; Mohammed and Kamalanabhan, 2019; Zhang and Chen, 2018). Interpersonal trust, management support and reciprocal feelings due to indebtedness can only positively impact the SN of a person's behavioural intention (Caimo and Lomi, 2015; Goh and Sandhu, 2013b; Haas and Cummings, 2015; Krajcsák, 2021; Sharma and Bock, 2005; Veeravalli et al., 2019).

According to Trafimow (2009), a theory must be falsifiable to be considered a good theory in order to open up for more criticism and discussion as a source of continuous improvement. He postulates that many researchers assume that relevant theories are not falsifiable, concluding that the research to prove falsification is almost impossible. If one wishes to deny the validity of a theory, then the person must prove that the prediction based on that theory is untrue (Popper, 2013, 2005, 1963). The researcher fully agrees with Trafimow (2009) as change has now become constant, and at an unprecedented speed. Flexibility has become the new norm, therefore, strict adherence to proven theories can no longer be blindly observed for as long anyone desire. The problem faced by many researchers is the fact that it is never easy to determine whether a theory is wrong in a definite manner. It is therefore more reasonable to determine the validity of a theory by assessing its ability to make risky predictions and studying the theory in multiple constructs. A high level of accuracy as a result of risky predictions shall be made a point in favour of the theories used in predictions (Popper, 2013, 2005; Trafimow, 2009). This study aims to validate the influence of attitude, subjective norm and perceived behavioural control on the study of intentions in the construct of emarketplace retailers, and in current challenging business environment that highly depending on digitalisation and technology intervention.

2.3.2 Perceived Behavioural Control (PBC)

The TPB developed by Ajzen (1991) is an extension of the theory of reasoned action (Fishbein and Ajzen, 1975). TPB is considered by researchers as a more defined model to predict human intentions and actual behaviour. It was developed by adding the predictive power of perceived behavioural control to both attitude and subjective norm originally introduced in the theory of reasoned action. PBC plays a dual role in predicting behaviour, first is to act as a co-determinant of intention alongside attitude and subjective norm, and second is together with intention to predict the actual behaviour (Pavlou and Fygenson, 2006).

Perceived behaviour control considers the importance of ability (behavioural control) and motivation (intention) in promoting behavioural achievement. It reflects an individual's perceived ease or difficulty in performing a behaviour, influenced by experience and anticipated obstacles. It is about an individual's control belief of the number of resources and opportunities that they possess, whereby the fewer obstacles anticipated, the greater the control over the behaviour. For example, a person with higher confidence will be more likely to perform compared to a person who is not confident, should both have equally strong intentions (Ajzen, 1991). System quality, resource availability (Lai et al., 2014), perceived ease of use, perceived usefulness (Davis, 1989; Liesa-Orús et al., 2023), self-efficacy, and facilitating conditions (Ahmed, 2023; Veeravalli et al., 2019) are indicators used to measure and predict PBC and intentions in behavioural studies. A highly competent person is positing as more confident than a person who is not, thus perceived to have higher control. Hence, knowledge and skills can potentially be used to test the PBC in the theory of planned behaviour. Whether it is attitude, subjective norm, or perceived behavioural control used to predict intentions, the theory of planned behaviour is only relevant when intention and actual behaviour correspond with each other. For example, the intention to seek knowledge via elearning can only be used to predict the actual behaviour of seeking knowledge via e-learning, not merely seeking knowledge. The researcher argues that TPB is only effective to predict behaviour of a person with a sound mind. It is not effective to predict behaviour of people who constantly live in the moment of stress, pressure, fear, or prolong exhaustion or anyone with degenerative state of mind that prevents normal perception, behaviour, or social interaction. The means, even though a person is mentally sound, yet if living under prolong negative environment, TPB might not be useful to predict behaviour. The question to ponder about is when the current environment is constantly evolving with the continuous presence of stress, fear and prolong exhaustion, will the accuracy of using PCB to predict behaviour be greatly reduced? There is truly a need to conduct more studies and compare the validity of TPB based on previous and current results.

2.3.3 Relationships of Attitude, Subjective Norm & Perceived Behavioural Control

Behaviour is often stemmed from the willingness of the person (Nonaka and Takeuchi, 1995), yet hardly based on a single predictor (Ajzen, 1985). The general rule is, that the more favourable the attitude, SN, and PBC regarding a specific behaviour, the greater is a person's intention to engage in the behaviour and the higher chances such behaviour can be realised when PBC over the behaviour is realistic. It's the salient beliefs of attitudinal, normative and control that act as the prevailing determinants of a person's behaviour. However, not all the predictors exert equal strength on intentions and behaviour.

Numerous studies show that attitude has the strongest relationship with intention (Carro Saavedra et al., 2017; Yee-Loong Chong et al., 2014). In a study conducted by Nguyen et al. (2019), attitude is shown to demonstrate the strongest relationship with intention, followed by PBC and SN. Despite attitude being similarly recognised as the strongest predictor of intention (Lai et al., 2014), however, PBC shows the contrary. Not only that PBC has no

significance in motivating intention to seek knowledge in a virtual community construct, but surprisingly, SN in the context of community identification ranked second, after attitude, on the impact of knowledge-seeking intention. The mixed results of PBC on knowledge-seeking intention can be explained as most valuable experiences, thoughts, knowledge and decision-making reside in the human brain, constructed from a person's experience and action, and therefore it is not easy to be predictively conveyed (Beveren, 2002; Huber, 1991; Ipe, 2003; Lai et al., 2019). Apart from attitudes that show consistent results, both PBC and SN often show mixed results, with the latter having the widest variations of strength on intentions (Nguyen et al., 2019).

Many studies applying the TPB as the fundamental principle theory, have successfully validated a greater degree of its usefulness in predicting intentions and actual behaviour (Fishbein and Ajzen, 1975; Nguyen et al., 2019; Pavlou and Fygenson, 2006). In fact, the theory of planned behaviour is one of the most influential psychological models to predict behaviour (Pavlou and Fygenson, 2006). Unlike earlier studies that adopt the attitude, SN and PBC as causal or formative indicators to predict intentions (Carro Saavedra et al., 2017; Lai et al., 2014; Nguyen et al., 2019), the researcher aims to apply attitude, SN and PBC as effect or reflective indicators to measure intentions. Intentions are shown to demonstrate a stronger association with actual behaviour as compared to perceived behavioural control (Nguyen et al., 2019). In fact, a realistic perceived behavioural control combined with intentions, alone, can accurately predict a person's actual behaviour. Hence, to strengthen the intentions as independent latent variables so that the possibility of carrying out the actual behaviour becomes greater, the intention will be directly used as an observed item to measure independent variables, together with the three reflective indicators mentioned earlier.

2.4 Intention to Enhance Digital Marketing Competence

Competencies are a combination of knowledge, skills, and attitudes (Directorate-General for Education, 2019; Vuorikari et al., 2022). It has become a prerequisite to carry out processes for work, personal and health well-being, and social inclusion. Competence management is important for a business to recruit, retain and manage highly skilled employees, and develop leadership talent from within. This section will address the fundamentals of competencies by assessing various academic publications and industry reports, models of digital marketing competence, and discuss its significance in business construct. Finally, indicators to measure digital marketing competence will be proposed in tandem with the TPB.

2.4.1 Introduction to Competence

Competence is a holistically durable concept and must be reviewed every few years to maintain relevance (European Commission, 2014). The term competence is a concept commonly used in industry and public discourse (Directorate-General for Education, 2019; MDEC, 2021b; Ruikar et al., 2006; Spante et al., 2018; Vodafone Enterprise, 2014; Vodafone Limited, 2021). New competencies are essential for achieving career success within the complex and interrelated world of digital business (Papageorgiou and Marneros, 2023). In the study of competence, researchers investigate the ability of a person to apply knowledge, skills, and attitude to achieve specific results (Directorate-General for Education, 2019; Vuorikari et al., 2022). Knowledge refers to a combination of established facts, figures, ideas, concepts, and theories that support the understanding of a certain subject matter. It is about awareness of the subject matter. For example, it is awareness of whether online content is credible, whether data security is the responsibility of a business, and whether search engine optimisation is a part of digital marketing. Knowledge in digital transformation can be defined as the state of understanding and experience with digital technology (Oh et al., 2022).

More discussions about knowledge can be found in Chapter 2.5 on the "Intention to Seek Knowledge" with discussion focused on the construction of unique knowledge in individual mind.

Skills are the ability and capacity to carry out work processes, through applying existing knowledge for achieving specific objectives (Council Of The European Union, 2018). A few examples include the ability to choose which search engine produces reliable search results, choose a content creation tool that fits the unique needs of a user or able to filter unnecessary information to effectively conduct data analysis. It entails much more than knowledge and represents the active engagement of a person to achieve a specific outcome, create value and reap benefits from such activities.

Attitudes describe the beliefs, dispositions, and mindsets to act or react to ideas, persons or situations. It is a function of a person's values and beliefs (Ajzen, 1991). Attitudes are conceived as the basis for continued competent performance, that comprise values, aspirations and priorities (Vuorikari et al., 2022). Attitude can be positive or negative. When there's a positive feeling about a behaviour, then the more important that behaviour is favourably perceived, and the more likely intentions will be formed (Ajzen, 1991, 1985). For example, a person who values digital marketing more than conventional marketing is more likely to invest resources into digital advertisement, recruit marketers who are digitally savvy or learn through virtual education platforms.

Key competencies are necessities for employability, individual fulfilment, maintaining active citizenship, and for a person to be socially inclusive. The researcher opined that competencies can be similarly associated with the term organisational capability as mentioned in Alolabi et al. (2021). While the researcher agrees that both terms are similar, however the term competence carry more relevance and can better represent the modern social and business

environment as compared to the term capability which were used in most academic studies since the older days. The researcher further argue that the term capability represents current capability, but does not reflect the competence to lifelong learning or learning-to-learn competence, which is more future-oriented. The Council Of The European Union (2018) has categorised competencies into literacy competence, multilingual competence, mathematical competence and competence in science, technology and engineering, digital competence, personal competence, social and learning-to-learn competence, citizenship competence, entrepreneurship competence, and cultural awareness and expression competence. All these competencies are equally important and were given a set of guidelines in the recommendation. It was developed in a lifelong learning perspective, from childhood to adulthood and through formal and informal learning.

Key competencies are interconnected (Council Of The European Union, 2018). This is evidenced in Rogers (2010) that posits integration of competencies creates individual innovativeness. Entrepreneurship competence creates value for the business and by integrating digital competence, can transform ideas into digital innovation (García-Lopera et al., 2022). Some digital innovations that successfully transformed culture across nations include e-wallets, cryptocurrencies, and social media. Organisational capability, a term often found in academic research, whether it is a potential capability or reshaping capabilities can influence organisational readiness (Alolabi et al., 2021). Hence, having adequate competencies can improve a business readiness.

Digital competence or e-competence relates to the knowledge, skills, and attitudes in using digital technologies confidently, critically, and responsibly for learning, work, and participation in society. It compasses information, data and media literacy, digital content creation and programming, safety and cybersecurity, intellectual property, critical thinking

and problem-solving, and communication and collaboration (Directorate-General for Education, 2019). A person with digital competence could use, access, filter, evaluate, create, program, and share digital content. They can protect data, content, and digital identities. These people can engage with tools, systems, hardware, artificial intelligence, and robots effectively (Council Of The European Union, 2018).

The fast-paced technological intervention affecting personnel and businesses has forced people to become digitally competent (Ahmed, 2023). The European Commission (2014) has identified forty e-competences for ICT professionals in all industry sectors. In this framework, the e-competence proficiency level is practically measured from level 1 to 5 based on an individual level of competence in the ICT business process of PLAN - BUILD - RUN - ENABLE - MANAGE as per Figure 5. Despite attitude being critical to motivating a person's behaviour, however, there is no practical measurement recommended in this model. It was merely mentioned that attitude was embedded across all four dimensions. Most study demonstrates ambiguity or complete silence on the component attitude when addressing models of competence assessment (Ibrahim et al., 2016; Papageorgiou and Marneros, 2023; Spante et al., 2018; Tran Phi Hoang and Vo Huu Khanh, 2016; Vuorikari et al., 2022).

The concept of digital competence in higher education research was first observed in the year 2010 and has gained more popularity in recent years. The term digital literacy on the other hand has been popularly observed since 1997 and still gaining a lot of attention in various academic publications (Spante et al., 2018). Ahmed (2023) proposed that mere literate in new technology usage termed as digital literacy can hardly be considered as having e-competence. This supports the view of Vuorikari et al. (2022) that posits digital literacy is only the initial process of acquiring e-competence. Digital literacy is often defined in academic research, yet digital competence is a term mostly defined in policy (Spante et al., 2018). The concept of

digital competence was frequently used in the Europe continent, mostly due to the introduction of the first European e-Competence Framework in year 2008 (European Commission, 2014). For a person to be acknowledged as having e-competence, the ability to communicate, collaborate, create digital content, ensure safety, and solve digital-related problems must be considered (Vuorikari et al., 2022). The researcher agrees with the view of Ahmed (2023) and Vuorikari et al. (2022) that digital literacy does not equate to having digital competence. Similarly, Malaysia having the highest internet penetration rate among countries in Southeast Asia does not translate to having excellent digital competence. Awareness is far behind knowledge and skills. The future predicament of the term digital literacy can be associated with the term capability used in academic research. The use of these two terms can has gradually lose its impact in today's world as compared to earlier years. The researcher suggests academic researchers to consider adopting the term competence to replace the term capability and digital literacy in future research as this term carry more weight and can align better with the industry norm.

Malaysian companies prioritise skills and attitudes when hiring digital talents as compared to experience and academic qualifications (MDEC, n.d.). In fact, the digital economy has contributed 22.6% of Malaysia's gross domestic product (GDP) in 2020 as compared to 18.1% in 2015. CEO of MDEC posits that everyone is now digital by default (Huawei Technologies Malaysia and MDEC, 2022). Acknowledging the importance of digital skills in talent recruitment, the Malaysia government through MDEC launched the Digital Skills Training Directory for interested parties to source for and participate in digital reskilling and upskilling. Courses and online training service providers were carefully selected to guide employees in selecting suitable courses that match their specific needs (MDEC, 2021b).

Dimension 1 5 e-CF areas (A – E)	Dimension 2 40 e-Competences identified	Dimension 3 e-Competence proficiency levels e-1 to e-5, related to EQF levels 3–8				
		e-1	e-2	e-3	e-4	e-5
A. PLAN	A.1. IS and Business Strategy Alignment					
	A.2. Service Level Management					
	A.3. Business Plan Development					
	A.4. Product/Service Planning					
	A.5. Architecture Design					
	A.6. Application Design					
	A.7. Technology Trend Monitoring					
	A.8. Sustainable Development					
	A.9. Innovating					
B. BUILD	B.1. Application Development					
	B.2. Component Integration					
	B.3. Testing					
	B.4. Solution Deployment					
	B.5. Documentation Production					
	B.6. Systems Engineering					
C. RUN	C.1. User Support					
	C.2. Change Support					
	C.3. Service Delivery					
	C.4. Problem Management					
D. ENABLE	D.1. Information Security Strategy Development					
	D.2. ICT Quality Strategy Development					
	D.3. Education and Training Provision					
	D.4. Purchasing					
	D.5. Sales Proposal Development					
	D.6. Channel Management					
	D.7. Sales Management					
	D.8. Contract Management					
	D.9. Personnel Development					
	D.10. Information and Knowledge Management					
	D.11. Needs Identification					
	D.12. Digital Marketing					
E. MANAGE	E.1. Forecast Development					
	E.2. Project and Portfolio Management					
	E.3. Risk Management					
	E.4. Relationship Management					
	E.5. Process Improvement					
	E.6. ICT Quality Management					
	E.7. Business Change Management					
	E.8. Information Security Management					
	E.9. IS Governance					

Figure 5: European e-Competence Framework 3.0 (European Commission, 2014, pg 11)

The technology available today is quite flexible and easy to learn, and therefore it is less challenging for a person to acquire digital competence (Vodafone Enterprise, 2014). The only challenge from the view of the researcher is the availability of determination and time as there's a learning curve involved in learning every business tool.

2.4.2 Concept of Digital Marketing Competence

Digital marketing competence was first introduced as one of the competencies in European e-Competence Framework 3.0, an extension to its previous version 2.0 published in 2010 (European Commission, 2014). This digital marketing competence model recommends measuring the nine dimensions of knowledge and four dimensions of digital marketing skills, whereby the lists are non-exhaustive as Figure 6.

Dimension 1 e-Comp. area	D. ENABLE								
Dimension 2	D.12. Digital Marketing								
e-Competence: Title + generic description	Understands the fundamental principles of digital marketing. Distinguishes between the traditional and digital approaches. Appreciates the range of channels available. Assesses the effectiveness of the various approaches and applies rigorous measurement techniques. Plans a coherent strategy using the most effective means available. Understands the data protection and privacy issues involved in the implementation of the marketing strategy.								
Dimension 3	Level 1	Level 2	Level 3	Level 4	Level 5				
e-Competence proficiency levels e-1 to e-5, related to EQF levels 3 to 8	-	Understands and applies digital marketing tactics to develop an integrated and effective digital marketing plan using different digital marketing areas such as search, display, e-mail, social media and mobile marketing.	Exploits specialist knowledge to utilise analytical tools and assess the effectiveness of websites in terms of technical performance and download speed. Evaluates the user engagement by the application of a wide range of analytical reports. Knows the legal implications of the approaches adopted.	Develops clear meaningful objectives for the Digital Marketing Plan. Selects appropriate tools and sets budget targets for the channels adopted. Monitors, analyses and enhances the digital marketing activities in an ongoing manner.	-				
Dimension 4 Knowledge examples Knows/aware of/ familiar with	K1 marketing strategy K2 web technologies K3 search engine marketing (PPC) K4 search engine optimization (SEO) K5 mobile marketing (e.g. Pay Per Click) K6 social media marketing K7 e-mail marketing K8 display marketing K9 legal issues/requirements								
Skills examples Is able to	understand how web technology can be used for marketing purposes understand User Centric Marketing use and interpret web analytics understand the on-line environment								

Figure 6: Digital Marketing Competence Model (European Commission, 2014, pg 41)

Papageorgiou and Marneros (2023) survey on educators and industry professionals reveals that search engine optimisation and content marketing are two essential digital marketing skills that can significantly affect the success of a business. Content marketing was not mentioned in European Commission (2014), yet it is recognised as one of the most important skills in academic publications, industry reports and public sector reports (Beard et al., 2021; Content Marketing Institute, 2020; Directorate-General for Education, 2019; Huawei Technologies Malaysia and MDEC, 2022; MDEC, n.d.). Out of the thirty-five skills discovered in Papageorgiou and Marneros (2023), five skills were selected to form the proposed digital marketing competencies framework. They are digital marketing strategy, search engine optimisation, content marketing, social media marketing, and email marketing. The proposed framework differs from European e-Competence Framework v3.0 in that posits competence should not be confused with processes such as email marketing, and social media marketing, or with technology concepts such as cloud computing, that are only integrated as elements within knowledge and skills. This revealed the weak understanding of Papageorgiou and Marneros (2023) about the term competence which entails much more than knowledge and skills. There is an obvious omission of attitude in their study of competence. Although CIM (2019) similarly omits the measurement of attitude in their marketing competencies model, however it incorporates behavioural competencies to describe behaviour that marketing professionals must have to efficiently do their jobs. They include creative, commercially aware, collaborative, influencing, inspiring, challenging, entrepreneurial, financially literate, responsible, and innovative. According to Ajzen (1991), behavioural intention is a function of attitude, PBC and SN. The stronger the intention is, the more probable can behavioural performance be achieved. Tran Phi Hoang and Vo Huu Khanh (2016) on the other hand assess factors that affect the digital marketing competence of Vietnamese enterprises from the lenses of shoppers. Similarly, this research omits the influence of attitude on measuring digital marketing competence.

Digital marketing knowledge often relates to the understanding of social media, marketing analytics, website development, creative writing, search marketing, email marketing, and data privacy (Beard et al., 2021; Cham et al., 2022; European Commission, 2014; Malesev and Cherry, 2021; Papageorgiou and Marneros, 2023; Rathnayake et al., 2018), on top of the commonly discussed traditional marketing fundamentals of partnership marketing, brand management, risk and reputation, product management, customer experience, and monitoring and measuring effectiveness (CIM, 2019). Digital marketing skills on the other hand refer to the ability in applying web technology to implement marketing activities such as interpreting web analytics, implementing retargeting marketing, conducting A/B testing and creating digital content (European Commission, 2014; Huawei Technologies Malaysia and MDEC, 2022; Vuorikari et al., 2022).

The term online marketing, digital marketing or e-marketing is used interchangeably, mostly referring to a form of marketing on the internet. It is used for sales promotion, building brands, creating awareness, engaging customers, generating leads, retaining customers, and as a form of communication conducted digitally (Beard et al., 2021; CIM, 2019; Content Marketing Institute, 2020). Customers leverage digital marketing to search for products, compare prices and make a purchase. Retailers use it to quickly target prospective customers and expand market reach cost-effectively and efficiently (Tran Phi Hoang and Vo Huu Khanh, 2016).

Content management is a term used by professionals to describe the capabilities to manage unstructured content. Content marketing is a similar term used by marketing professionals to promote their products and services (Content Marketing Institute, 2020, 2018). Content

marketing forms a larger part of an organisational initiative termed as "content strategy". It involves integrating organisational content, across people working in marketing, corporate communication, and website design. Content marketing is developed to build brands, sell, and offer customer service that encourages people to buy more (Beard et al., 2021). Vuorikari et al. (2022) have identified digital content creation including programming as one of the measures of digital competence. Activities of content marketing involve storytelling, website design, reviews, creative design, copywriting, emails, newsletter, and social media content. One of the main characteristics of content marketing is to generate profitable outcomes.

Online reviews have become a critical source of information for buyers before making a purchase decision. It is proven to positively impact website credibility, thus making significant predictions on online purchase intention (Hwang and Yoo, 2021). Positive reviews should be highlighted and turned into a marketing opportunity, and negative reviews must be replied to promptly demonstrating the professionalism of the brand, reducing undesirable impact, and best if can ultimately making it a positive experience for the buyer. All these require knowledge (product and context), skills (particularly interpersonal communication skills), and most importantly the positive attitude of the employee who handles online customer engagement. There are many sources of online reviews such as Google My Business, review blogs, social media, and online directories. Directing all review sources to a single product page can increase the visibility and trustworthiness of the brand and improve the search ranking of the product page. Again, it requires reasonable knowledge and skills in copywriting, creative design, and selection and utilisation of effective digital tools. This time-consuming yet highly effective approach requires a committed intervention from dedicated employees, and therefore having a positive attitude towards digital marketing competence is critical to ensure excellent service delivery.

Not all customers read reviews, but they will browse product information available on the store page to understand the product before making a purchase. Product feature and description is proven as one of the most significant sources of information in determining purchase decision (Mican and Sitar-Taut, 2020). This makes website design, content presentation, page navigation, and page loading speed important. Website and e-commerce are proven to impact the digital marketing competence of a business (Tran Phi Hoang and Vo Huu Khanh, 2016). Therefore, marketers must be aware, knowledgeable, and skilful in data selection, image quality, original content, photography, copywriting, videography, and persuasive concepts of marketing, including openness to new ideas when presenting product information.

Digital integration emphasises the incorporation of digitalisation when formulating marketing strategy, marketing plan, and implementing marketing activities (CIM, 2019). Cham et al. (2022) postulate the importance of leveraging digitalisation in performing marketing analytics, which many SMEs are not doing much on. In fact, digital job vacancies are on the rise and jobs related to digital marketing, particularly in social media, creative content development and most importantly data analytics, have become one of the fastest growing jobs in South East Asia, including Malaysia (Huawei Technologies Malaysia and MDEC, 2021; MDEC, 2021b, n.d.). This indicates the importance of digital marketing competence in career advancement.

A marketer who possesses digital marketing competence can lead, direct, create, and integrate both physical and digital communications tools to produce and deliver an integrated marketing strategy (CIM, 2016; European Commission, 2014). They understand the importance of ensuring data integrity, using digital technologies, solving technology problems, and thinking critically about digital issues. (Vodafone Limited, 2021; Vuorikari et

al., 2022). A study on customers and online shoppers revealed that factors that prominently influence the digital marketing competence of a business in order of ranking are 1) search engine optimization 2) social media, 3) email marketing and 4) website. (Tran Phi Hoang and Vo Huu Khanh, 2016). Whether it is knowledge or skills in digital marketing, both relate to keyword research, social media, digital advertisement, online traffic, data analytics, creative content and finally the ability to learn and use the latest digital marketing tools. All these terms that illustrate digital marketing knowledge and skills are non-exhaustive and taken from various publications.

2.4.3 Significance of Digital Marketing Competence

The global marketing model has evolved with intensive digitalisation of trade exchange activities and accelerating partly due to the impact of the pandemic. Moving into the world of complexity and ambiguity, discussions have progressed on to the impact of digital growth such as social media, mobile technology, artificial intelligence and cloud computing (Finnbogason, 2013; Valerio et al., 2019; Wibowo et al., 2020; Yasynska et al., 2019). Firms are now seeing digital as a basic level of competence, and no longer a year-long transformation (Vodafone Limited, 2021). This is evidenced by Spante et al. (2018) that explain the mixed terms of digital literacy and digital competence increasingly mentioned and defined in policies, research papers and industry reports in higher education research. Acceler8 Venture Builder, (2022) posits that identifying skill gaps will help to prepare for a ready business.

Digital marketing skills are crucial for the growth of e-commerce (Aziz, 2022). Digital marketing specialist has now become one of Malaysia's top emerging digital jobs (Huawei Technologies Malaysia and MDEC, 2022) with high demand for data analytics and creative content creation (MDEC, n.d.). Cham et al. (2022) opined that knowledge brought from

traditional marketing is no longer sufficient as both digital marketing and marketing analytics have become considerably significant in the modern business environment. Ibrahim et al. (2016) posit marketing skills as one of the core indicators of international business competence of Malaysian SMEs. Capability, learning and information technology are considered part of an organisational capacity and organisational capacity is the antecedent of business readiness (Mladenova, 2022).

Higher readiness equals greater success. To become future-ready, businesses must exploit technology to the fullest (Vodafone Enterprise, 2014). Marketing forecasts in the modern environment based on current and past periods are becoming more irrelevant (Yasynska et al., 2019). With the availability of marketing and data analytic tools, trends can be predicted and marketing campaigns, segmentation and cost associated with marketing can be optimised (Cham et al., 2022). Yasynska et al. (2019) posit businesses that are not ready to improve marketing technologies will experience low profitability even when household consumption increases. Some of the marketing technologies include blockchain, metaverse, and facial recognition and popular tools for marketing include Hootsuite (social media tool), Canva (content creation tool), and Google Keyword Planner (keyword research tool) (Cham et al., 2022; Ki, 2020). Improving marketing tools and systems in circulation will force tool developers to improve their offerings, making the market even more competitive. The rise in technology and internet penetration encourage more people to learn and seek information (Kaaya et al., 2021), thus enabling knowledge creation (Mihi Ramírez et al., 2012; Nonaka and Takeuchi, 1995), and finally contributing towards enhancing digital competence. Technology, in the form of tools, systems, hardware or infrastructure can therefore facilitate business readiness (Mladenova, 2022; Vodafone Enterprise, 2014; Vodafone Limited, 2021; Yasynska et al., 2019). As much as the researcher agrees with most studies that technologyenabled solutions can motivate employees to learn new technological skills and become more

efficient towards achieving effective business performance, however, this can only be achieved in an environment that positively facilitates conditions for learning. Such conditions include sufficient time and resources for learning, and continuous support from the management. Positive attitude from superior that encourage learning is highly critical to enable this.

E-commerce firms need to acquire digital marketing competence to improve performance and achieve a competitive edge. A business with competitive edge is considered more ready than other businesses (Vodafone Enterprise, 2014; Vodafone Limited, 2021). Digital businesses often monetise in different ways as compared to traditional firms. Digital businesses include e-commerce, e-payment, cryptocurrency exchanges, and cloud services firms. These firms leverage data extensively to make money, scale businesses, and manage relationships. E-commerce is considered one of the business channels for international expansion (Aziz, 2022). E-commerce allows quicker purchase decision-making, thus shifting purchasing power towards the consumer (Vodafone Limited, 2021). The prerequisites to expand the potential of online business include optimizing customer service, increasing marketing activities and personal interaction with customers, cross-marketing, creating compelling digital content, and understanding customer demands. All efforts are customer-focused, gearing towards customer engagement (De Azambuja et al., 2023; Gallart-Camahort et al., 2021; Kaveh et al., 2021). Others include the use of marketing and logistic automation, social marketing, and organizing public events to improve brand ratings (Yasynska et al., 2019).

With more businesses powered by digitalisation post-pandemic, data, that were once issues only for large firms are increasingly mainstream for smaller firms. Data and digitalisation are transforming businesses across value chain from design, development, and manufacturing to distribution, quickly creating new business challenges. The vast amount of data being

collected has made it an important strategic asset to make the best commercial decisions (Vodafone Limited, 2021). Marketers can use available data combined with individual experience and knowledge to predict future trends, formulate marketing strategies, directly monetise, or indirectly offer value to multiple parties of a business. However, data requires protection to prevent data breaches (Anderson, 2023; The Star Business, 2023), employees abusing user data (Canales, 2021) and possible legal liabilities resulting from poor data management (Kaye, 2022; Raymond, 2022). Many businesses are unprepared to handle these data, let alone to extract value from it (Vodafone Limited, 2021). Engaging with digital content and technologies demands an ethical, safe, and responsible approach to using these tools (Vodafone Limited, 2021; Vuorikari et al., 2022). The researcher advocates the importance for the firm and employees to be aware of the criticality of data management and have an ethical and responsible attitude to ensure data integrity.

The tightening of statutory requirements to ensure data integrity has made data governance a critical knowledge in digital marketing competence (Olaleye et al., 2017; Rathnayake et al., 2018). Marketers are obliged to understand data integrity and digital governance that focus on establishing clear accountability for digital strategy, policy, and standards. Managing data and content-related decisions to create value for the business must therefore be done meticulously for businesses to stay ahead of risk. To promote business sustainability, there is an even stronger need to adopt an ethical, fair, transparent and responsible approach to digital safety (Mohamad, 2018). All these emphasise the importance of digital marketing competence in conducting business, despite Aziz (2022) posits that having digital marketing competence alone is not conclusive. It is the marketing ambidexterity, both market-driven and market-driving forces that are essential to maximise the impact of digital marketing capacities.

2.4.4 Indicators of Enhance Digital Marketing Competence

2.4.4.1 Value as Attitude

Value serves as a guiding principle in people's lives (Schwartz, 1996), or standards of behaviour about an individual's judgement of what is important, worth, or useful in life. Values, aspirations and priorities form part of an attitude of digital competence (Vuorikari et al., 2022). A person with protean career characteristics is self-directed and value-driven. Their choice of career is based on individual needs but not organisation needs (Kumar et al., 2023). They emphasise self-learn, personal freedom, self-growth, and autonomy. A person's attitude is built up based on a person's values. Value relates to trust, openness, responsibility, ethics, empathy, etc. Attitudinal beliefs that are expressed by important values can guide behaviour, sustain longer, and tolerate change. A study by Blankenship et al. (2022) posit that people with a strong attitude formed with value as a basis demonstrate greater clarity in attitude. This strengthens the belief that value has a significant impact on a person's attitude and value can be used to predict attitude. Digital marketing skills alone are not sufficient to boost performance and create a true competitive edge (Aziz, 2022). It is the perceived value of digital marketing competence that can deliver economic benefits to more SMEs (Yulia Segarwati et al., 2020).

In studies based on the theory of planned behaviour, attitude was found to be the most significant indicator in measuring and predicting intentions and behavioural achievement. The positive attitude of employees (knowledge, individual innovativeness, self-efficacy, and involvement) on digital transformation has positively influenced the acceptance of digital transformation at an individual level (Oh et al., 2022). A person with a problem-solving attitude, able to motivate themselves, confident and resilient, and is more inclined to learn

and can manage obstacles and change. A positive attitude towards lifelong learning is the basis for competence development (Directorate-General for Education, 2019).

According to Vuorikari et al. (2022), engaging with digital content and technologies demands curiosity, criticality, openness and a forward-thinking attitude. In a study on international business competence, interviews were conducted with nine top decision-makers to determine terms that are critical towards business performance. Critical terms representing attitudes such as perseverance, commitment and risk-taking were found relevant (Ibrahim et al., 2016). Although the importance of attitude in building e-competence is being emphasized in multiple publications (Ahmed, 2023; Council Of The European Union, 2018; Directorate-General for Education, 2019; Tran Phi Hoang and Vo Huu Khanh, 2016; Vodafone Limited, 2021; Vuorikari et al., 2022), however, most models failed to statistically measure attitude on competence. Attitude was also omitted or not explicitly addressed in CIM (2019), Papageorgiou, Marneros (2023), and Huawei Technologies Malaysia and MDEC (2022). Most studies on competence focus on knowledge and skills as a means of measurement. Surprising, the term attitude was only briefly mentioned without significant elaboration nor explicit means of measurement. As such, value is hence critical in measuring intention to enhance digital marketing competence.

2.4.4.2 Community Identification as Subjective Norm

A person with strong emotional ties with a community is likely to consider opinions from members of the same community when seeking knowledge. A community consists of a group or a cluster of people with diverse backgrounds, who share common properties, and interests, or have similar functions within a network. Identification refers to "an emotional tie with another person" (Freud, 1922) and forms part of relational social capital (Claridge, 2018). Community identification can directly affect the subjective norm of knowledge seeking,

leading to influencing the intention to seek knowledge (Lai et al., 2014). There is a very minimal behavioural study on community identification in the topic of knowledge management but more on brand member management (Confente and Kucharska, 2021), customer engagement (Ammari et al., 2021), sports team marketing (Kim and Manoli, 2023), and Covid-19-related assistance (Wakefield et al., 2022).

Brand community involves members of the same interest, and the interest is the brand. In the world of social media, brand community refers to a non-geographical binding community, based on a social relationship system among admirers of a brand (Muñiz and O'Guinn, 2001). Brand community identification does not impact behavioural loyalty but rather represents an important antecedent to building attitudinal loyalty (Confente and Kucharska, 2021). Ammari et al. (2021) postulate that brand community identification affects the behavioural engagement of the community. Sports team community identification also impacts the behavioural intentions of community members (Kim and Manoli, 2023). As such, community identification is critical in measuring intention to enhance digital marketing competence.

2.4.4.3 Knowledge and Skills as Perceived Behavioural Control

Knowledge and skills undeniably have become widely acknowledged as the common indicators of competence. Acquiring knowledge and skills towards achieving digital marketing competence demands the lifelong learning behaviour of the acquirer. Knowledge seeking is defined as a learning process that results in knowledge improvement of the seeker, to solve problems and challenges (Lai et al., 2019). The term learning repeatedly appeared for a total of 112 times in the report on competencies. In fact, "learning to learn" is identified as one of the core competencies, and given special attention in the Council Of The European Union (2018).

Training and development can encourage employee engagement in the organisation, thus improving operational efficiency in digital transformation (Hizam et al., 2023). This implies the importance of acquiring knowledge and skills through learning in achieving a high level of competence and therefore facilitating a variety of learning approaches, environments and settings with guidance, tools, and resources are critical to support the development of key competencies. Some methods of learning include participation-based learning, cross-discipline learning, digital technologies-based learning, collaboration or project-based learning, and peer group learning. Ahmed (2023) posits that self-directed learning can allow the learner to acquire digital competence. Self-directed learning is an initiated learning process by the seeker without the conventional assistance from a mentor. Facilitating conditions, readiness, perceived usefulness, computer self-efficacy, and personal innovativeness can significantly impact self-directed learning for gaining digital competence. As such, knowledge and skills are critical in measuring intention to enhance digital marketing competence.

2.5 Intention to Seek Knowledge

The importance of knowledge is incontestable. Having adequate knowledge can improve efficiency, increase productivity, and ignite creativity and innovation, thus leading to building a profitable and sustainable business. This section will address the fundamentals of knowledge management by assessing various terms such as knowledge creation, knowledge sharing and knowledge seeking, giving particular emphasis on the significance of knowledge seeking and the indicators that best represent knowledge-seeking behaviour.

2.5.1 Introduction to Knowledge and Knowledge Management

Knowledge is commonly known to exhibit two dimensions: tacit and explicit (Zhang, 2019; Zhang and Chen, 2018). Tacit knowledge, a concept first introduced by Polanyi (1966), argued that human knowledge cannot be easily articulated and made explicit (Beveren, 2002; Huber, 1991; Lai et al., 2019). It can be viewed as a know-how accumulated from years of personal experience (Nonaka and Takeuchi, 1995). Tacit knowledge is developed based on common sense, resides in the human mind, and happens through informal talks, stories, mentoring, internships, and observations. Explicit knowledge is developed following academic accomplishment (Holste and Fields, 2010). Most knowledge management systems are primarily used to seek explicit knowledge such as documents, reports, and manuals. However, most requests for knowledge happen spontaneously and therefore tacit knowledge, is highly sought after (Holste and Fields, 2010; Nonaka and Takeuchi, 1995; Smith, 2001).

The terms knowledge creation, knowledge sharing, knowledge sourcing, knowledge acquisition, and knowledge seeking are interrelated in the study of knowledge management. Knowledge creation and knowledge sharing have since become the key terms in this domain (Beveren, 2002; Gray and Meister, 2004; Huber, 1991; Ipe, 2003; Lai et al., 2019; Mihi Ramírez et al., 2012; Nahapiet and Ghoshal, 1998; Nonaka and Takeuchi, 1995). Knowledge seeking was more recently introduced as the key factor influencing improvement in subject knowledge (Kim, Jae Kyeong, 2014; Lai et al., 2019). People who seek knowledge often filter and sort information and, thereafter, construct an individual understanding of subject knowledge to make sense of it. Knowledge constructed in the mind of the receiver is termed as meta-knowledge or explained as "knowledge about knowledge" available uniquely to an individual (Kim, Jae Kyeong, 2014). The combination of both original knowledge and meta knowledge encourages knowledge sharing.

Nonaka and Takeuchi (1995) in their publication "The Knowledge Creating Company", were among the first to recognize the importance of individual employees in studying knowledge creation. Their knowledge creation model, namely SECI (socialization, externalization, combination, internalization) is probably the most widely cited. SECI model explains that knowledge is first created when tacit knowledge is converted into explicit knowledge at the team and organisation levels, internalized by individual group members, and finally converted into new tacit knowledge by going through a complete cycle of socialization, externalization, combination, and internalization. Socialisation is a process of sharing experience and creating knowledge as a group (tacit to tacit). It happens between the customer and the firm, suppliers, and workers, or during clients' knowledge-sharing activities. It facilitates valuable exchange of tacit knowledge and increases collective learning and knowledge seeking. Externalisation is the process of formalisation of knowledge from tacit to explicit. Combination is the process of synthesising explicit knowledge to be recorded as part of the knowledge base. Internalisation happens when an employee uses and learns through application. The possession of valuable knowledge by an employee will not benefit other parts of the organisation unless it is shared (Ipe, 2003). Nonaka and Takeuchi (1995) argue that knowledge is unlikely to impact an organisation unless it is transferred from individuals to individuals.

Despite SECI being called the knowledge creation model, the researcher posits that new knowledge is constantly created in the minds of the different knowledge holders and transferred throughout the four-stage process. For example, during socialisation, tacit knowledge is transferred from person A to person B. Formalisation of the tacit knowledge can then be completed jointly by a person A, B and C. Synthesizing explicit knowledge requires a good content creator and therefore highly possible be completed with the assistance of a person D, and finally, internalisation exercised by a person E, who practically

learn and use the knowledge. This means, that knowledge created by a person or a group of people at different stages was repeatedly created, transferred, and re-created into becoming enhanced or new knowledge. This happens because knowledge is personal and special, embedded in the mind of each and every person (Beveren, 2002; Huber, 1991; Lai et al., 2014). Therefore, adding personal construction to each stage of the knowledge-creation process has enriched original knowledge. The researcher opines that SECI can also encompass knowledge-sharing activities.

The researcher questioned the practicality and possibility of converting tacit to explicit knowledge during this process. Tacit knowledge is created through individual distinctive learning, doing, and experiencing, whereby it is practically impossible to convert the whole of such complex constructs. Lai et al. (2019) argued that there's no knowledge transfer, but only construction of knowledge because knowledge is only created when a person carries out activities or gains experiences. Therefore, it is impossible to transfer knowledge as a whole entity. Either addition or deduction might be possible. Furthermore, knowledge should not be treated as an entity as it is only meaningful when constructed in the mind of the knowledge holder.

Knowledge sharing is another term that depicts knowledge transfer. It is the act of making knowledge available to people within the organisation. It can be defined as a process of transferring knowledge from one person to another person in a manner that can be easily understood, absorbed, and used by them (Ipe, 2003). Kim, Jae Kyeong (2014) argue that the sharer must be confident in the truthfulness of the knowledge before presenting it to the receiver (Mohammed and Kamalanabhan, 2019). The model of knowledge sharing developed by Ipe (2003), as emerged from the literature review, is shown in Figure 7, presenting four interrelated factors influencing knowledge sharing between individuals in an organisation.

These four factors consist of the nature of knowledge, motivation to share, opportunities to share and culture of work environment.

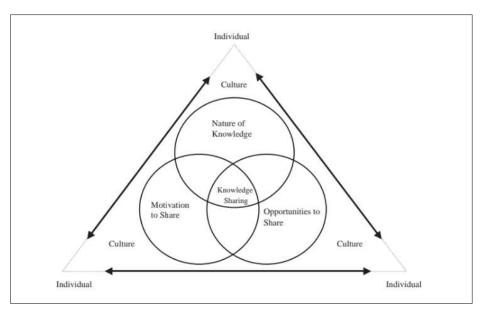


Figure 7: A Model of Knowledge Sharing Between Individuals in Organisations (Ipe, 2003, p352)

In this model, the nature of knowledge was made up of tacit knowledge, explicit knowledge, and value of knowledge. Motivation to share consists of a relationship with the recipient (Nonaka and Takeuchi, 1995; Zhang and Chen, 2018), rewards for sharing, and perceived knowledge as power and reciprocity (Caimo and Lomi, 2015). Opportunities to share on the other hand include purposive learning channels and relational learning channels (Lai et al., 2014). Culture has significant influence across all three factors by determining the way it values knowledge (Carro Saavedra et al., 2017), the type of relationship (Zhang, 2019) and rewards it encourages about knowledge sharing, and the formal and informal opportunities possessed by everyone in sharing knowledge. All factors do not exert the same amount of influence on knowledge sharing and the importance of each factor depends on organisation objectives, practices and policies, structure, reward system and culture.

From an economic perspective, self-interest is the main motivation of behaviour (Lai et al., 2019). In most literature, knowledge is viewed as a key resource and explained in a cost-benefit analysis (Bratianu, C. et al., 2020). To explain the knowledge-sharing model, the value of knowledge described in Ipe (2003) can be impacted by its scarcity. Scarce resources are often viewed as more valuable compared to those that are widely available. Therefore, people who own scarce resources will have a more competitive advantage over others. The sharer views the *knowledge as power* and the receiver views it as highly valuable (*nature of knowledge*). This means sharing it will make the sharer less competitive (Ipe, 2003). Therefore, to make sharing possible, the receiver or organisation must be willing to offer more rewards to the sharer as a *motivation to share*. The combination of motivation to share (knowledge as power and reward to share) and nature of knowledge (perceived value of knowledge) do collectively influence knowledge-sharing behaviour.

The motivation factor comprising of "relationship with recipient, reciprocity and rewards for sharing" in Ipe (2023) was similarly identified as relational capital in social capital theory introduced by Nahapiet and Ghoshal (1998). *Relational capital* refers to personal relationships formed through a string of interactions that comprises interpersonal trust (Holste and Fields, 2010; Mohammed and Kamalanabhan, 2019), existence of shared norms, identification with other individuals (Lai et al., 2014), and obligation and expectations (Ajzen, 1991; Coleman, 1990; Ipe, 2003). The relational capital in social capital theory is similar to the motivation elements of attitude and subjective norm in the theory of reasoned action by (Fishbein and Ajzen, 1975), with the exception that the latter did not mention the benefits or capital aspect of the relationship but rather focus on the study of human intention and behaviour. Nahapiet and Ghoshal (1998) suggest that social capital affects the extent of knowledge sharing and knowledge seeking (Mohammed and Kamalanabhan, 2019).

Social capital, a concept related to human behaviour and motivation, was introduced over time by several prominent scholars such as Pierre Bourdieu, James Coleman and Robert Putnam (Häuberer, 2011). It is defined as the total resources that are embedded within, and acquired from the network relationships owned by a person (Nahapiet and Ghoshal, 1998), and exist from the interpersonal relationship of two or more individuals (Bolino et al., 2002). It relates to the study of human-to-human relationships, or a network of relationships with the belief that benefits can be derived from such relationships (Claridge, 2018). The other two types of social capital are structural capital and cognitive capital. *Structural capital* refers to the total connectivity pattern between individuals inclusive of network ties, network configuration and appropriable organisation. *Cognitive capital* relates to the extent a social group shares a common understanding and perception comprised of shared narratives, shared language (Nahapiet and Ghoshal, 1998), shared goals or visions and shared culture (Tsai and Ghoshal, 1998). All three dimensions of social capital are interrelated in motivating human behaviour from the perspective of economists.

The word knowledge acquisition was found in Beveren (2002) and Huber (1991) as part of knowledge management. Beveren (2002) developed a model to describe the knowledge acquisition process from the perspective of data, information, and knowledge. According to him, information and knowledge are different whereby the latter can only be developed via the processing of information inside the brain (Ipe, 2003; Lai et al., 2019; Smith, 2001). There are two stages of knowledge processing; the first step is acquiring information through the sensor outside of the brain and the second step is processing information inside the brain. To simplify, this model asserts that knowledge cannot exist outside of the human brain and therefore expression of knowledge can only be transformed into information to be communicated outside of the brain. This supports the claim by multiple researchers (Ipe,

2003; Lai et al., 2019; Nonaka and Takeuchi, 1995) that knowledge is constructed in the mind of the knowledge holder.

Huber (1991) presented knowledge acquisition in the process of organisation learning of four constructs which are 1) knowledge acquisition, 2) information distribution, 3) information interpretation, and 4) organisational memory. Similar to SECI model by Nonaka and Takeuchi (1995), this model demonstrates traces of knowledge sharing. The concept of both knowledge acquisition and knowledge distribution in Huber (1991) is closely associated with the concept of knowledge sharing in (Ipe, 2003). The researcher opines that only the terms used to describe the process are different. Beveran (2002) and Huber (1991) believe that organisational knowledge is the key construct to organisational learning, and both share the same view that knowledge can only reside inside the brain because cognition is special and personal which is the same belief as (Lai et al., 2019). Although the researcher generally agree that knowledge cannot exist outside the human brain, however the introduction of artificial intelligence such as ChatGPT might challenge the conventional belief that knowledge can only be constructed within the mind of the knowledge holder. This powerful generative AI tool has somehow or rather proves that knowledge can truly be generated via learning algorithms, despite its usage is still considered based on lower level of knowledge.

2.5.2 Concept of Knowledge Seeking

Knowledge seeking is defined as an active behaviour or proactive request for information and expertise from one person to another. It is created by a person when activities are carried out and experiences are gained (Haas and Cummings, 2015; Lai et al., 2019; Le and Lei, 2018). Knowledge-seeking embraces steps in locating and selecting experts and expertise for knowledge to be applied (Carro Saavedra et al., 2017). Lai et al. (2019) define knowledge seeking as "a learning process, or a process of constructing knowledge, which resulted in the

improvement of the seeker's knowledge structure to solve problems or satisfy some goal". Lai et al. (2019) further argued that knowledge-seeking plays a more important role than knowledge-sharing. This is because it is the seeker who is going to determine the nature of knowledge (Kim, Jae Kyeong, 2014) due to evidence pointing out that knowledge construction only happens in an individual mind (Beveren, 2002; Huber, 1991; Ipe, 2003; Polanyi, 1966). Only through construction in the mind, knowledge will be enriched and given an entirely new and possibly unexplored function. The researcher viewed knowledge seeking and knowledge sharing equally complementing to give true meaning and purpose to knowledge.

Knowledge-seeking between employees who are different from each other can benefit teams within the workforce. Barriers to interpersonal knowledge-seeking can prevent the knowledge-sharing process (Haas and Cummings, 2015). Geographical and nationality differences can create barriers to knowledge seeking. This is because employees residing in different countries, with different cultures, languages, and international time, will incur higher communication costs, find it difficult to achieve common understanding and have very little opportunity to engage in face-to-face interaction. Culture as a factor is posited to influence knowledge sharing (Ipe, 2003). This is because, without observing each other's behaviour and attitude, shared identity and sense of trust are therefore missing, making communication less appealing. As posited by Gray and Meister (2004), traditional-based methods can be more productive than technology-based methods. Vodafone Limited (2021) further affirmed that a future-ready business chooses conventional methods of communication such as face-to-face or telephony over digital communication. Although the researcher is a digitally-savvy person, she strongly agrees with Vodafone Limited (2021) that many times, lifting up a phone to make a call can be more effective than typing messages on

WhatsApp when communicating with customers. This reduces communication breakdown, misinterpretation and can enhance persuasive power, and thus improving time efficiencies.

Employees from different divisions can develop their own "thoughts world" which creates a barrier to knowledge-seeking across departments. These "thought walls" can comprise departmental distinctive terminologies, routines, practices or different perceptions of goals and interests. Demographic factors such as age, tenure, or education level can also potentially create barriers to knowledge seeking. All these barriers resulting in ineffective communication, hinder the development of interpersonal relationships and thus become barriers to knowledge seeking. Only people who lived through the same era shared workplace experiences or have similar education levels might embrace similar values and attitudes. In general, geographical and departmental differences created greater barriers to knowledge-seeking than nationality differences (Haas and Cummings, 2015).

Initial research on knowledge management evolves around key concepts of knowledge creation (Mihi Ramírez et al., 2012; Nonaka and Takeuchi, 1995) and knowledge sharing (Holste and Fields, 2010; Ipe, 2003). The term knowledge seeking was rarely discussed as a core concept in academic research yet in the view of the researcher, is an important enabler that can play a crucial role in accelerating the progressiveness of knowledge management. It is the "accelerating" property embedded in knowledge seeking that makes it an interesting topic for future research consideration. Knowledge seeking can happen through searching, browsing, and monitoring activities and information posted in virtual communities. Knowledge seeking through the usage of virtual community platforms (Kim, Jae Kyeong, 2014; Lai et al., 2014) is particularly relevant in the fast-paced and volatile e-marketplace environment. Virtual communities in the context of e-marketplace can refer to seller communities in social networks (Facebook, Twitter or Instagram) and chat messaging groups

(WhatsApp, Telegram, or WeChat). Virtual community platforms are actively used by e-marketplace retailers to quickly seek answers or solutions from other members through posting questions in their respective community networks. This happens very frequently when there is unavailable or unclear information in in seller education hub provided by the respective e-marketplace. Members provide advice and share experiences in response to such enquiries out of reciprocity, to build authority, or solely based on obligation as community members.

Rather than knowledge creation or knowledge sharing that has been widely researched, the author researcher posits that knowledge seeking is a more relevant study in an e-marketplace construct since data and the digital economy have swiftly created new business challenges and opportunities (Vodafone Limited, 2021), resulting in higher demand of knowledge workers. The researcher is adamant that knowledge seeking is distinctive, proactive, and dynamic and enables continuous learning with the intention to an end either to offer a solution or solve a problem.

2.5.3 Significance of Knowledge and Knowledge Seeking

The rapid growth of interest in the study of knowledge management started in the 1990s, happening in post-industry society, whereby knowledge has become the key asset in the knowledge economy (Lai et al., 2019). Knowledge is a strategic resource of any organisation and contributes towards organisation performance and competitive advantage (Bratianu, C. et al., 2020). The process of managing knowledge is increasingly seen as a key to organisational creativity (Henard and McFadyen, 2008), that lays the foundation for innovation (Carvalho et al., 2021; Constance et al., 2019; Mohammed and Kamalanabhan, 2019; Verm et al., 2018). Creativity, formed from a combination of new and existing knowledge, can allow a firm to achieve a lasting competitive advantage (Henard and McFadyen, 2008; Mohammed and

Kamalanabhan, 2019; Verm et al., 2018). Knowledge management can positively impact the productivity of knowledge workers (Kianto et al., 2019), organisation performance (Verm et al., 2018), organisation culture and work climate (Bratianu, C. et al., 2020). Both competitive advantage and organisational culture are critical determinants of business readiness (Vodafone Enterprise, 2014; Vodafone Limited, 2021).

Despite it's common for knowledge-seeking to leave a positive impact on innovation performance (H. Wu et al., 2017), in the case of Chinese multinational enterprises engaged in knowledge-seeking overseas acquisitions, it's the knowledge absorptive capacity of the acquirer firm that determines improvement in innovation performance of its firm. Acquiring and acquired firms with different levels of capabilities will require the intervention of an effective organisational learning mechanism to improve innovation performance (Wu et al., 2015). Regardless, without knowledge seeking, the term knowledge absorptive capacity will become irrelevant in the study of innovation performance.

Firms should take into consideration the knowledge level of customers when designing innovative activities in product development as a higher level of customer knowledge translates to greater intention to recommend the firm's services or products (Zhang et al., 2020). The lack of critical knowledge can negatively influence business performance, triggering multiple negative consequences leading to risking business sustainability of a firm. Businesses that lack the necessary knowledge are rendered the business unready for emerging change, bracing through challenges and harnessing potential growth. Affected performance relates to product and service quality, resource management efficiency, customers' needs, future growth, and investment performance (Bratianu, C. et al., 2020). As postulated in Carvalho et al. (2021), knowledge is highly critical in determining MSME's current and future competitiveness.

2.5.4 Indicators of Knowledge Seeking

2.5.4.1 Knowledge Quality as Attitude

People seek knowledge for various reasons, such as to fulfil work-related needs (Byström and Järvelin, 1995), out of curiosity or boredom (Mohammed and Kamalanabhan, 2019; Veeravalli et al., 2019), to fulfil personal obligation or responsibility (Zhang, 2019) or personal habit to seek knowledge (Carro Saavedra et al., 2017). Despite there being much evidence showing that work-related needs are critical in the formation of knowledge-seeking, however, the study on knowledge-seeking in members of professional virtual community revoke such belief (Lai et al., 2014). A study in a multinational engineering firm shows that employees seek knowledge out of curiosity (Veeravalli et al., 2019). The researcher posits this is because engineers are viewed as naturally creative and therefore their level of curiosity is higher as compared to the others.

Findings show that users will only seek knowledge from a knowledge base if they perceive the knowledge as useful, high quality, or valuable in enhancing work performance (Veeravalli et al., 2019). Perceived ease of use is the degree of a person's expectation that the target system can be used free of effort. An easy-to-use knowledge management system can affect employees' intention to seek and deposit knowledge into the system enabling cost-saving in the long run (Carro Saavedra et al., 2017). A system that is robust, stable and easily available is considered reliable and trusted by users. A person is more likely to use a digital tool that is perceived as easy to use because it gives the user the impression that this tool is useful at the same.

Perceived usefulness is defined as the subjective probability that a specific system would enhance the job performance of a person (Schultz and Slevin, 1975) or the degree of value

obtained from using the system (Davis, 1989). Perceived usefulness is the degree of knowledge seeker belief that using a knowledge management system to seek knowledge can positively impact the task performance of a person. Despite interpersonal trust can influence the process of knowledge management (Holste and Fields, 2010), without the moderating factor of the perceived usefulness of the system, trust in the community does not impact knowledge-seeking behaviour in the knowledge management system (He et al., 2009). That is the reason why perceived usefulness shows higher consistency as an influencing attitude in determining knowledge seeking (Carro Saavedra et al., 2017; Sharma and Bock, 2005) but perceived ease of use shows varying results (Carro Saavedra et al., 2017).

From the various studies, it can be determined that perceived usefulness and perceived ease of use are highly related to determining the level of knowledge quality (Kim, Jae Kyeong, 2014; Waheed et al., 2016). Perceived ease of use is a direct determinant of perceived usefulness in the initial stage of technology adoption (Davis, 1989) but this impact gradually faded in the later stage of adoption. Perceived ease of use has been repeatedly proven to have a positive impact on perceived usefulness (Liesa-Orús et al., 2023), thus improving knowledge quality (Kim, Jae Kyeong, 2014; Waheed et al., 2016). Key dimensions that determine knowledge quality are relevance, accuracy, reliability, usefulness and timeliness of the embedded knowledge (Tsai et al., 2010). A review done by Waheed et al. (2016) expanded the view of knowledge quality with six items namely adaptability, applicability, expandability, innovativeness, justifiability and factuality or truthfulness of the knowledge whereby knowledge quality is determined by the input of data quality and information quality. To determine knowledge quality, an assessment will be made by evaluating the credibility of the person who posted it and assessing the ease of understanding the knowledge, including knowledge validity, accuracy and usefulness (Kim, Jae Kyeong, 2014). Knowledge developed with the participation of the subject knowledge expert is viewed as high quality

and more trustable by the user (Kaaya et al., 2021). Trust is therefore one of the influencing factors in knowledge quality (Holste and Fields, 2010; Zhang and Chen, 2018).

Knowledge is classified as useful when it can meet the needs of the user. It is important to avoid keeping a large quantity of outdated knowledge to prevent users from getting frustrated when trying to retrieve their desired content (Carro Saavedra et al., 2017). The presence of good knowledge quality not only can encourage employees to seek knowledge but also reuse the knowledge. Knowledge quality is often defined as a perception of the person constructing the knowledge. It is the attitudinal belief embedded in the mind of the knowledge holder after going through experiences and actions. Both Carro Saavedra et al. (2017) and Lai et al. (2014) propose the use of knowledge quality to represent attitude in the study of knowledge-seeking intention. Without distinguishing between information and knowledge, Veeravalli et al. (2019) posited perceived information quality as a positive attitude to influence intention to seek knowledge. As such, knowledge quality is critical in measuring the intention to seek knowledge.

2.5.4.2 Peer Influence as subjective norm

Lai et al. (2014) proposed the use of peer influence to represent subjective norms in the study of knowledge-seeking intention. Subjective norm, a type of normative belief in Ajzen (1991) was proven to significantly impact intentions and behavioural achievement in the study of knowledge management. Peer pressure is proven to impact students' behaviour in making educational decisions (Bursztyn et al., 2019), and employee knowledge-sharing behaviour (Caimo and Lomi, 2015; Chatzoglou and Chatzoudes, 2016; Goh and Sandhu, 2013b; Nguyen et al., 2019). In the study of knowledge-sharing intention, a significant influence of peer pressure is affirmed with the presence of affiliation or reciprocal relationships (Goh and Sandhu, 2013b; Haas and Cummings, 2015), and trust (Zhang and Chen, 2018).

An employee is unlikely to seek knowledge from a person who is different from them than a person who is like them, especially in a large work environment that demonstrates wide differences in culture, value, attitude, language, nationality, geography and departments (Zhang and Chen, 2018). Interpersonal trust is positively related to the increase of knowledge-seeking in all stages of workplace relationships (Gu et al., 2022). Cognitive trust refers to a person's competency, integrity and goodwill, whereas affective trust refers to emotional closeness, empathy and friendship. Cognitive trust shows a stronger impact when it comes to knowledge-seeking as compared to affective trust (Zhang and Chen, 2018). Similarly, based on interpersonal relationships, Zhang (2019) opined that not all types of interpersonal relationships will lead to knowledge-seeking intention. Two types of interpersonal feelings were observed in Chinese firms; "Jiaoqing"; interpersonal feeling based on instrumental exchanges, (e.g.: help each other) and "Ganqing"; interpersonal feeling based on emotional attachment (e.g.: fond feelings for each other). "Jiaoqing" has a positive relation with knowledge seeking but "Ganqing" does not show any relation (Zhang, 2019). Based on both findings by Zhang (2019) and Zhang and Chen (2018), it is therefore significant to separate cognitive and affective relationship or trust when conducting a study on knowledge seeking behaviour. Despite these, interpersonal relationship can cause the formation of peer influence that impact subjective norm of intention to seek knowledge.

When a person perceives conforming to social norms as important, that person is more likely to share knowledge (Ajzen, 1991). For example, workers will have a higher intention to seek knowledge when this behaviour is perceived positively by their superiors and demonstrated by other employees of the same workplace. However, despite Lai et al. (2014) proposing the use of peer influence in the study of knowledge-seeking intention, peer influence does not significantly impact subjective norm. Few studies are giving inconsistent results about the influence of subjective norms on the intention to seek knowledge (Humayun and Gang, 2013,

2013; Lai et al., 2014; Veeravalli et al., 2019). As such, peer influence will be adopted as a measure of intention to seek knowledge in current research.

2.5.4.3 Resource Availability as Perceived Behavioural Control

A review of publications from the year 2005 to 2010 by Carro Saavedra et al. (2017) revealed the three repetitive factors influencing knowledge-seeking include facilitating conditions, perceived ease of use and perceived usefulness. Facilitating conditions are also one of the predictors of perceived behavioural control in the study of intention to seek knowledge in a knowledge management system (Veeravalli et al., 2019). Facilitating conditions can be seen in the form of management support, training (Veeravalli et al., 2019), slack time, low time pressure (Sharma and Bock, 2005), and resources such as computing hardware and tools (Taylor and Todd, 1995).

The role of supportive leadership in impacting knowledge-seeking was further strengthened in the study of Humayun and Gang (2013). Management support and a positive attitude in providing sufficient time for employees to seek knowledge, providing regular training on the use of the knowledge base and ensuring consistence access to high-quality content, will similarly encourage employees to seek knowledge (Veeravalli et al., 2019). The act of continuously seeking knowledge will form a habit among employees (Carro Saavedra et al., 2017), thus making them willingly seek knowledge and repeat the activities, to ultimately form a learning culture. A person who demonstrates a willingness to learn is more likely to seek knowledge than a person who does not (Kim, Jae Kyeong, 2014).

A commonly discussed facilitating condition is the availability of resources. Resource availability can refer to knowledge content, technology platform (Ojo et al., 2022), hardware, software and internet (Lai et al., 2014). Resource availability was repeatedly proven to leave

a positive effect on perceived behavioural control in the study of technology adoption and knowledge management (Lai et al., 2014). It is further supported by Nguyen et al. (2019) who suggest the importance of resource-facilitating conditions to encourage knowledge sharing. Both Lai et al. (2014) and Veeravalli et al. (2019) conclude that the combination of perceived control over resource availability and intention to seek knowledge has positively impacted behavioural achievement. As such, resource availability is critical in measuring the intention to seek knowledge.

2.6 Intention to Take Risk

Human beings often make decisions involving a certain level of uncertainty, whether it is choosing between entrepreneurship or employment, choosing which brand of household appliance to buy, or even which restaurant to eat. Risk-taking is a broad construct (Bran and Vaidis, 2019) whereby predicting risk-taking in a controllable and uncontrollable context often shows mixed outcomes. This section will define risk-taking and discuss the various concept such as risk preference (Fan et al., 2022; Schildberg-Hörisch, 2018), risk-taking attitude (Chanda and Unel, 2019), risk-taking propensity (Gowen et al., 2019; Rodríguez-Gutiérrez et al., 2020), risk appraisal (Prince and Kim, 2021), and risk-taking behaviour (Byrnes et al., 1999).

2.6.1 Introduction to Risk

Choices that we make shape all types of behaviours, whether it is made with certainty or uncertainty. Risk-taking is letting go of what you know to achieve something of greater value. Risk never discriminates and it is inherently important. It puts a test on all entities, businesses or individuals with consequential uncertainties of current decisions and actions, without considering the level of intelligence (Fan et al., 2022). Preference refers to the order in which

a person ranks alternatives by considering the relative value or worth they will receive. Risk preference is the attitude or the tendency to choose risky or safe options demonstrated by a person when facing different events or situations.

According to Schildberg-Hörisch (2018), a person's risk preference seems to be persistent and moderately stable over time, however, the degree of stability is too insignificant. Stability of risk preference changes when psychological and situational changes, or happening of exogenous shocks such as economic crises, natural disasters or temporary changes in self-control (Byrnes et al., 1999; Karsh et al., 2021; Losecaat Vermeer and Sanfey, 2015; Schildberg-Hörisch, 2018). This contrasts with the claim of Stigler et al. (1977) that favours stability of preference.

Risk preference stability refers to a condition whereby an individual adopts the same willingness to take risk over time. In economics, the strict definition of risk preference stability indicates that a person will demonstrate consistency in risk preference throughout their entire life (Schildberg-Hörisch, 2018). Research on risk preference stability is important as it can be used to predict aspects of the talent market, investment, and decision-making (Dickason-Koekemoer and Sune Ferreira-Schenk, 2022; Ismail et al., 2015; Zhao and Min, 2021). It is often directed towards an individual as opposed to the entire population. Fan et al. (2022) believe that risk preference adopted by the majority of people is flexible, yet optimal under different levels of pressure. With growing rationality, a person will adopt extreme risk-aversion in time of making crucial decisions and be risk-neutral on trivial decisions. Risk preference is therefore highly related to the importance a person places on the risky event.

It is common to associate risk-averse characteristics with age, gender, and rationality. Risk-averse is the disinclination or reluctance to take risks. It is the escape from harsh, unpleasantly rough and severe conditions, particularly when facing uncertainties (Prince and

Kim, 2021). People tend to become more risk-averse as they age (Schildberg-Hörisch, 2018). Women in general are more risk-averse than men, but in the context of social decisions, result shows the opposite (Weber et al., 2002). Despite men are more likely to take risks as compared to women (Falk et al., 2018; Weber et al., 2002), when age becomes a determinant of risk-taking, results from gender differences varied (Byrnes et al., 1999). This can be attributed to the vast knowledge and experiences gained as a person become older which can significantly increase rationality, altering their risk perception (Maddux and Rogers, 1983; Prince and Kim, 2021; Wang, 2019). This supports the claim by Fan et al. (2022) on their proposed theory of revolutionary rationality that posits risk attitude of an individual is determined by the intensity of selection (the degree of attention after evaluating reward and individual fitness) given to a risky event. The intensity of selection is influenced by evolutionary dynamics such as the increased rationality of a person, which is gradually internalised and mentally processed over time. Fitness in this theory refers to the projection of fitness uniquely embedded in an individual's mind, termed as "meta-fitness". A person who wins a bet will be more risk-adverse than a person who loses (Tomal and Brzezicka, 2022). Risk-averse people are less likely to become an entrepreneur or invest in equity that potentially yields high returns with greater risks.

Contextual risk-taking plays a critical role in making preferences (Byrnes et al., 1999). For example, gamblers prefer riskier options after losing money (losing context) and opt for safer ones after winning (winning context). In the study of gambling risk preference by Losecaat Vermeer and Sanfey (2015), it was discovered that prior performance-based feedback of success and failure that are not associated with financial gain or losses, do not alter future risk preference. Only prior performance-based feedback on success and failure that has monetary implications on gamblers can impact future risk preference. However, if the monetary impact from prior performance-based feedback is about reducing losses rather than increasing gain,

then the impact is not significant. This is supported by the findings of Karsh et al. (2021) whereby action-effectiveness towards increases and decreases the actual risk of losing money does not motivate risk-taking. A greater risk preference shift is observed when prior monetary gains and losses happen in the context of winning or losing based on pure luck but not based on individual skills or performance (Losecaat Vermeer and Sanfey, 2015). Meier (2022) posits that happiness makes a person more risk-neutral, yet life satisfaction increases the risk tolerance of investors (Ismail et al., 2015).

People in the lower social strata, mostly low-income groups, are more exposed to taking risks. Risks taken by this group of people are more impactful as there is very little or no support available (Zinn, 2023). Despite being under extreme conditions, these groups of people will take risks rather than give up. However, it is the feeling of anger that motivates them to take risks (Meier, 2022). To keep them going, intuition, trust, emotions, faith, hope and ideology, will become more important, particularly when there is limited knowledge and control (Zinn, 2020). The researcher completely agrees with Zinn (2023) as it can be seen in the risk-taking attitude of e-marketplace retailers during the pandemic. It can be explained by the fact that many who start selling on e-marketplaces were forced to do so after being laid off with no income.

2.6.2 Concept of Risk-Taking

Risk-taking is a complex form of decision-making that involves calculated appraisal of positive and negative impacts that can happen immediately or later (Gowen et al., 2019). It relates to constructs such as objectives, values, choices, and results. The possible negative outcomes must be severe and affect the person who makes the decision to make sense of a person's risk-taking behaviour (Zinn, 2017). Fundamentally, risk-taking involves making decisions that could lead to negative outcomes (Byrnes et al., 1999). It is not the same as risk

behaviour (Bran and Vaidis, 2019) as risk-taking requires a minimum awareness of the risk (Zinn, 2015), including possible negative or positive outcomes before making any decision to actually engage in risky behaviour. Risk-taking involves rationality (Fan et al., 2022), and form part of modernity because it is perceived positively in the era of millennial (Zinn, 2020), mostly due to enormous uncertainties, as a result of digitalisation, war, natural disasters and unprecedented pandemic. While the researcher agrees with some aspects, she disagree with the overall conclusion that risk-taking involve rationality. For example, a teenager obviously understands the risk involved with drugs abuse but continue to do so. This obviously demonstrate the irrationality of the person when taking risk. The researcher opined that risktaking can be influenced through peer pressure, the desire to feel excited and can happen during extreme situation. Risk-taking has now become a norm in every business due to the compounding effect of economic volatility. The decision of a person to become an entrepreneur, which to a certain extent involves risk-taking, can largely be impacted by the changes in economic conditions surrounding the person (Chanda and Unel, 2019). Under extreme conditions, people will choose to take unprecedented risks, in exchange for the probability of gaining value or worth (Zinn, 2016, 2023).

Risk-taking is a valuable concept that requires precision to prevent ambiguity, confusion, and error in each study (Bran and Vaidis, 2019). Some concepts of risk-taking include risk-taking behaviour (Zinn, 2015), risk-taking attitude (Chanda and Unel, 2019), risk-taking propensity (Gowen et al., 2019; Rodríguez-Gutiérrez et al., 2020), and risk appraisal (Prince and Kim, 2021; Wang, 2019) often shows inconsistency that could mislead readers. Using multiple items via a questionnaire (Gowen et al., 2019) and/or experiments to measure a single construct (e.g.: risk-taking tendency or risk preference) can significantly reduce error in measurement (Schildberg-Hörisch, 2018). However, many incorrectly termed risk behaviours as risk-taking tendencies when using a single objective question to determine the presence of

risk behaviour (Auliya et al., 2019). Risk behaviour is the actual event; however, risk-taking tendency is an inclination to take risks.

Falk et al. (2018) posits self-assessment of an individual willingness to take risk using point-scale answers can sufficiently predict risk-taking behaviour. Bran and Vaidis (2019) argue that imperfections in the study of risk-taking can be reduced by redefining key terms of risk-taking precisely. Measuring a person's willingness to take risks as a whole can sufficiently explain the propensity of becoming an entrepreneur, without the need to take into consideration the exogenous effects (Chanda and Unel, 2019). Meier (2022) suggests adding a few explicit questions about emotions such as fear, happiness or anger, to extract more accurate information when measuring risk attitudes and behaviour.

There is a wide range of risk-taking behaviours such as smoking, gambling, investing, buying, or becoming an entrepreneur. Risk-taking behaviour is the action or inaction that involves predicted or unpredicted risks (Bran and Vaidis, 2019). Byrnes et al. (1999) introduced three methods to measure risk-taking behaviour consisting of self-reported behaviour, hypothetical choice, and observed behaviours. Bran and Vaidis (2019) further opine that terms used in these measures are confusing and therefore rename them to give readers less ambiguity. Self-reported behaviour is replaced with *reported behaviours*, hypothetical choice is replaced with *projected behaviours*, and observed behaviours is replaced with *actual behaviours*. Self-reported behaviour is used more commonly to assess individual risk as it is proven to accurately reflect the actual situation (Auliya et al., 2019; Prince and Kim, 2021; Rodríguez-Gutiérrez et al., 2020).

Despite many factors such as age, gender, cognitive ability, culture, religion and rationality can influence risk-taking behaviour (Falk et al., 2018; Fan et al., 2022), however, self-worth, self-esteem and self-competence of a person are clearly not related to such behaviour

(Meertens and Lion, 2008). Karsh et al. (2021) similarly postulate that action-effectiveness produced from a certain degree of self-competence motivates action but not risk-taking behaviour. It means a competent person, who has greater control over resources or can mitigate risk might not necessarily make risky decisions. This also indicates that perceived behavioural control over negative risk outcomes might not significantly influence risk-taking behaviour.

However, this cannot directly indicate that self-efficacy has no impact on risk-taking behaviour. The presence of higher self-efficacy has resulted in a stronger relationship between political identity and the financial risk-taking of conservative politicians. The Conservatives politicians who possess high self-efficacy also demonstrated higher financial risk-taking than the Liberals (Han et al., 2019). The researcher argues that the impact of self-efficacy on risk-taking behaviour is probably independent of an individual risk-taking propensity in a situation with no possibility of control over the outcome (e.g.: gambling). However, when the outcome is controllable, self-efficacy can potentially become a control mechanism over the outcome, therefore leading to possible risk-taking behaviour, just like Zinn (2020) who postulates reflexivity (the ability to look inward at oneself) as the motive behind risk-taking. A person who is very satisfied with their life is more likely to take financial and investment risks (Dickason-Koekemoer and Sune Ferreira-Schenk, 2022), and refrain from violent activities (MacDonald et al., 2005), as compared to a person who is not. The current research will consider the various concept of risk-taking, incorporating the theory of planned behaviour to measure the intention to take risk.

2.6.3 Significance of Risk Taking

A large body of research postulates that people make risky decisions consciously (Fan et al., 2022; Zinn, 2017) with two social desires that drive this behaviour, that is to prevent or

minimise the negative impact of risk; and hold on to the belief that some benefits are only achievable when taking risk (Zinn, 2016). Risk-taking is inherently critical to achieve something of greater value (Aldhnhani and Nobanee, 2021; Bratianu, C. et al., 2020; Giaccone and Magnusson, 2022; Zhao and Min, 2021).

Businesses have moved into a world of high volatility, complexity, and uncertainties (Vodafone Limited, 2021). Many times, making risky decisions is required to facilitate business transformation, aligning with current or new strategic goals. Risk-taking has a positive significant impact on innovation performance (Giaccone and Magnusson, 2022). Innovation can improve business competitiveness, leading to business readiness (Vodafone Limited, 2021). However, a well-established innovation process will discourage risk-taking (Giaccone and Magnusson, 2022). This also implies that a well-structured process discourages risk-taking, thus reducing the achievement of innovation performance. The same study also revealed that collaboration among employees has a positive correlation with risktaking. Effective leaders are viewed as ones who demonstrate more personally risky acts (Frost et al., 1983). Effective leadership can enhance organisation performance (Huguet, 2017). A study conducted by Jung et al. (2020) posits that risk-taking moderates a positive relationship between empowering leadership and employee commitment. The mediating effect of risk-taking is further amplified when the task is complex, thus making employees even more committed. Empowering leadership improve team collaboration, and thus increase risk-taking among employees to ultimately improve employee commitment. The means, a leader should demonstrate and encourage risk-taking behaviour when the task is complex in order to produce committed workforce.

Trust is commonly addressed in the study of leadership (Le and Lei, 2018). Employees working under an ethical leader will be more committed to their organisation (Bahadori et al.,

2021). Nowadays, customers and employees demand more from every organisation to act ethically, be socially inclusive and demonstrate a positive attitude towards sustainability (Shafer et al., 2016). Regretfully, many businesses are not ready to embrace social responsibilities and sustainability as part of their business strategy (Vodafone Limited, 2021). To ensure longevity, businesses must be courageous and start considering sustainability and risk-taking as part of their financial management (Aldhnhani and Nobanee, 2021). A positive organisational culture towards diversity and differences without bias can positively impact business readiness (Alolabi et al., 2021). The researcher suggests businesses to adopt The Sustainability Risk Management Framework developed by Deloitte Southeast Asia Ltd (2019) to oversee the sustainability risk management practices to improve business readiness.

Digital transformation has intensified firm-level strategic risk-taking (Dai et al., 2023; Vodafone Limited, 2021). Digital transformation demands critical resources to enhance successful performance. An organisation that takes risks is viewed as one with adequate resources (Giaccone and Magnusson, 2022). Companies with inadequate resources are unlikely to make risky decisions, that can potentially deplete more resources when the risk outcome turns negative. The researcher understands that risk-taking and innovation is unlikely a priority for companies that lack fundamental business resources, such as MSME emarketplace retailers. However, she insists that risk-taking is important to encourage breakthrough in growth, particularly for small businesses. Therefore, risk-taking is selected to be part of this research.

A firm's performance is influenced by professionalism, risk-taking and technological innovation (García-Lopera et al., 2022). Professionalism includes competence, confidence, accountability, integrity, etiquette, and respect at workplace (Chris Kolmar, 2022). Risk-taking can amplify the impact of professionalisation on business performance (García-Lopera

et al., 2022). Like organisational commitment (Rogers, 2020; Suifan et al., 2021), increasing risk-taking, can significantly improve business performance. Chen and Wu (2022) posit that the inaction of managers in the face of risk will render a business unable to identify opportunities in times of crisis. Such an act signifies the lack of responsibility, accountability, and confidence at the workplace, against the principle of professionalism.

There are many differences in risk styles among professionals of different occupations (Henderson et al., 2021). Confident, adventurous, excitement-seeking, trusting, compliant, emotional, patient and calm are some risk styles commonly explained. It was found that an individual whose occupation deals with risk (e.g.: risk manager, or auditor) is calm, less emotional, and will measure each risky outcome before making risky decisions, as compared to a person in a human resource role. Traders or retailers, tend to be fearfulness when making risky decisions as they are generally less emotional, more rational, and highly mistrustful. Selective fearfulness is indicative of traders whereby emotional self-regulation and internal locus of control play important roles in traders' risk-taking decisions. It is proposed that taking calculated risks within one's capability can yield substantial profits, particularly during extreme situations (Chen and Wu, 2022). This supports the claim of Fan et al. (2022) that rationality plays a critical role in risk-taking, thus mitigating factors should be considered. Hence, traders are more likely to play the role of risk managers than risk-takers as their risk appetite is not high (Henderson et al., 2021). Despite the researcher argues that risk-taking might not entirely involve rationality, however, when it comes to making risky decisions for businesses, rationality does become critical.

Extreme conditions like Covid-19 are the best possible time for businesses to consider new ways of working post-pandemic (Chen and Wu, 2022; Vodafone Limited, 2021). New initiatives on digitalisation have forced businesses to make unprecedented riskier decisions.

Such decisions enable businesses to successfully deal with the impact of the crisis to ultimately make a profit (Chen and Wu, 2022; Rodríguez-Gutiérrez et al., 2020). Under extreme conditions, there is literally no room for any business not to be committed to their undertakings to sustain. However, risk-taking does not always guarantee commitment as there are many factors affecting the decision to take risk, such as personality, impulsivity traits, sensation seeking, control, emotional control, and executive control (de-Juan-Ripoll et al., 2021; Zinn, 2017).

Entrepreneurship is inherently a risky choice, yet it is affirmed repeatedly as a critical force behind innovation, job creation and economic growth (Chanda and Unel, 2019). People with a positive attitude and inclination to risk-taking are more likely to engage in entrepreneurial activities (Filmina and Mayangsari, 2020; Spicka, 2020). Risk-taking propensity can strengthen the positive relationship between entrepreneurship and trust (Chanda and Unel, 2019). Entrepreneurship is transmitted across generations (Chanda and Unel, 2019), and therefore risk-taking is critical in catalysing a nation's economic growth. Risk-taking can likely have an impact on business readiness, a firm's performance, and economic growth, through entrepreneurship.

Risk-taking is driven by a particular purpose, but it does not necessarily aim to add value or benefit to the person who took the risk. The decision to take risk can be made simply to achieve a sense of satisfaction or to gain emotional needs. People who took part in social work were aware of the risk they were exposed to but consciously took risks with the intention to aid other people or the community (Dahlgren et al., 2009; Zinn, 2017). They simply accept the risk even though it is out of their control (Ismail et al., 2015; Karsh et al., 2021). This is because they view the activity as important (Fan et al., 2022), and align with their personal value, organisation value or valued identity (Shaheen et al., 2021; Wakefield et

al., 2022; Zinn, 2023). Risk-taking is therefore required in delivering social support and effective volunteerism.

Risk-taking has many downsides too. One study examines how people and social groups rationalise risk in daily life assuming that risk is deeply rooted in social processes (Zinn, 2017). Parents who took risks investing in the stock market positively affected their children's decision to invest as they grew older. These family traits passed down across generations could lead to wealth inequality (Zhao and Min, 2021). In fact, risk-taking plays an important role in the re-creating of social inequality. People take risks with the hope to make changes in life and this might trigger a broader social change when done collectively (Zinn, 2023). Despite the various terms of risk-taking identified by Bran and Vaidis (2019), the study of risk-taking on entrepreneurship does not specifically differentiate the various terms and will generally adopt risk-taking as the single term to measure entrepreneurial intentions (Abd Razak et al., 2020; Auliya et al., 2019; Ismail et al., 2015).

2.6.4 Indicators of Risk-Taking

2.6.4.1 Risk Attitude as Attitude

Psychologists considered attitudes, which is a personal evaluation of behaviour, as a predictor of behavioural intention and actual behaviour (Ajzen, 1991, 1985). The presence of attitude is established from the general reaction that is located within the dimension of favourability from negative to positive (Fishbein and Ajzen, 1975). Economists conventionally associate risk-taking attitudes with favouring or avoiding risky choices. Attitude can be assessed from two perspectives, affective and evaluative (Ajzen and Timko, 1986). In the context of risk-taking attitudes, affective components refer to the feelings and emotions of risk-taking (I enjoy the thrill of winning) and the evaluative component refers to knowledge or belief in

risk-taking (I believe it is necessary to take risk in business). Despite visual imaginary skills can arouse emotions, and decision frame can arouse evaluation, it does not have a substantial impact on risk attitude (Zeng et al., 2022),

Risk attitude is the fundamental attribute of entrepreneurial behaviour (Spicka, 2020). Both risk attitude (Filmina and Mayangsari, 2020) and risk-taking attitude (Chanda and Unel, 2019) strongly increase the entrepreneurial intention of a person to become self-employed. This contradicts the study conducted by Auliya et al. (2019) which failed to show a significant relationship between risk-taking attitude and entrepreneurship intention. Chanda and Unel (2019) took both country-level data on willingness to take risks by Falk et al. (2018) based on 80,000 respondents in 76 countries, and individual-level occupational data on risk-taking attitudes from 25 years (1995 - 2019) of Global Preference Survey to assess entrepreneurial intentions. Auliya et al. (2019) survey is based on obtaining empirical data from respondents in Indonesia. This can potentially strengthen the claim that risk-taking is domain-specific and culturally influenced.

The research by Chanda and Unel (2019) is conducted based on the assumption that risk attitudes are transmitted across generations and survive evolution. Fan et al. (2022) postulate risk attitudes embedded with rationality can survive evolution, in the sense that risk attitudes are formed through the perceived importance of the risk event while considering the optimum winning chances. This strengthens the claim by Fan et al. (2022) that risk attitude is rational and evolves over time.

Emotion in the context of happiness, anger and fear significantly correlates with a person's fluctuation of risk attitude, greater than the relationship between income with risk attitude (Boss et al., 2015; Meier, 2022). A happy person is satisfied with their life and demonstrates higher risk tolerance (Dickason-Koekemoer and Sune Ferreira-Schenk, 2022). Fear is

associated with risk aversion, whereby worrying prevents people from taking risks (Maddux and Rogers, 1983; Prince and Kim, 2021; Schildberg-Hörisch, 2018). The event of death of a parent or child, and exposure to natural disasters such as earthquakes, floods and hurricanes have shown greater changes to a person's risk-taking preference. Positive emotions disengage a person from spending time worrying about negative aspects of life, making them more risk-neutral. Changes in emotion are directly related to changes in risk attitude, and ultimately can influence entrepreneurship, innovation, growth, political development, and readiness to take action (Bach and Dayan, 2017; Chan et al., 2023; Meier, 2022). The researcher posits that being able to control one's emotions is the ultimate predictor towards risk-taking behaviour, with little or no consideration of alternative factors or explanations as mentioned in Meier (2022).

Risk-taking should be viewed from different lenses, yet risk-taking is often associated with fear, threat, vulnerability or worry from a negative perspective. Hardly one can find a study on risk-taking from a positive point of view except one from Zinn (2017) that associates risk-taking with exploration of one's limit and confirmation of skills and abilities. Adopting a fixed mindset on risk-taking will prevent a person from taking risks, yet viewing risk-taking with a growth mindset will encourage risk-taking in a positive tone.

A negative outcome from one decision cannot be entirely considered a risk but rather can be an inconvenience or nuisance as the term risk is subjective and socially framed (Zinn, 2017). The researcher viewed risk-taking as a valuable experience and a learning process to become successful. It is either taking a risk and learning valuable lessons as you fail or putting a hold on risk-taking and taking it moderately, worrying and fear of future failure, which has yet to happen. It is the different attitudes either positive or negative towards risk-taking that

determine the perceived outcome in the mind of an individual. The current research will adopt a positive tone when assessing the intention to take risks in a business construct.

2.6.4.2 Risk-Taking Propensity as Subjective Norm

Risk-taking tendency is a term used interchangeably with risk-taking propensity in the study of risk-taking. It is defined as the consistency of an individual in engaging or avoiding taking risks when placed in a risky situation (Bran and Vaidis, 2019). It can be measured as a general inclination to take risks or specific to a certain context, such as the propensity to take risks in purchasing decisions or after winning a bet (Losecaat Vermeer and Sanfey, 2015). Risk propensity scale, is best used to measure the general tendency of risk avoiders and risk takers in making risk-taking decisions but does not correlate in the specific context of gambling behaviours (Meertens and Lion, 2008).

In general, men have a high risk-taking propensity and take more risks as compared to women (Gowen et al., 2019). This is supported by Byrnes et al. (1999) and Meertens and Lion (2008) even though gender differences are less obvious in the study of the student population. This might be due to the lack of rationality in young people (men and women) in making risky decisions (Fan et al., 2022). When comparing among women population, females who sleep late tend to take more risks than women who sleep earlier. No significant difference in risk-taking propensity is observed across men's chronotypes (Gowen et al., 2019). Ironically, risk-taking behaviour can be manipulated in a make-believe situation when bogus genetic feedback on risk-taking propensity is applied. A study showed that people who believe they are genetically inclined to risky behaviour demonstrated higher risk-taking behaviour than those who received feedback of the opposites (Wheat et al., 2022).

Similar to risk-taking attitude and actual behaviour, risk-taking propensity is highly associated with entrepreneurial intention (Abd Razak et al., 2020), yet is contextual and domain-specific (Dickason-Koekemoer and Sune Ferreira-Schenk, 2022; Weber et al., 2002). Chinese migrant retailers in Spain demonstrate a lower risk-taking propensity as compared to the same community owners of restaurants, cybercafes, travel agencies, real estate agencies, and logistics businesses (Rodríguez-Gutiérrez et al., 2020). These results can generally be accurate as retail business requires a smaller amount of capital and fewer technical needs, therefore taking fewer risks is reasonable. However, with the nature of the online retail business that involves new technological knowledge and skills, risk-taking propensity might indicate differently.

An established organisation generally averts risk-taking due to rigid protocols and standard operating procedures as compared to emergent organisations. Emergent organisations see risk-taking as an opportunity and can be beneficial (Shaheen et al., 2021), possibly due to their flexible structure. Network ties, an important component of social capital (Nahapiet and Ghoshal, 1998) can improve organisation performance with the presence of adequate, effective and efficient processes (Dheer, 2018). Network ties of a specific business community increase as the length of time in the business increases. Evidence shows that the longer a business operates, the more inclined it is to take risks (Rodríguez-Gutiérrez et al., 2020). Having partners in a business can also contribute towards enlarging its social network. This can be due to the accumulation of greater knowledge and connections within the business ecosystem, therefore increasing the perception of control over the business, despite the control factor is not self-evident (Zinn, 2020). Relational capital (Claridge, 2018), and interpersonal connections better known as "guanxi" in the Chinese community can stimulate the risk-taking propensity of the business owner (Rodríguez-Gutiérrez et al., 2020). This means entrepreneurs with a strong network of connections and a supportive ecosystem are

more inclined to take risks as they view these favourable situations as safety nets and a source of knowledge to potentially produce favourable results. Proactiveness and business planning are also shown to stimulate the risk-taking propensity of entrepreneurs (Rodríguez-Gutiérrez et al., 2020), however, action-effectiveness does not show the same in the context of betting (Karsh et al., 2021). Bran and Vaidis (2019) recommend that the best method to understand risk-taking propensity is to directly ask the person involved, either about general risk-taking (Meertens and Lion, 2008) or risk-taking in a specific context (Losecaat Vermeer and Sanfey, 2015).

Many studies separate social norms and attitudes when analysing risk attitudes, yet both imply complex, interdependent relationships. For example, risk attitude of a person can be influenced by social norms about taking risks resulting in normative demands from the community or society. Such demands can sound like "c'mon, be a real man", particularly in the context of engaging in hazardous behaviour such as taking drugs. Conversely, the social norm can be shaped, formed or abandoned with collective yet unique risk attitudes of many others, starting from the disobedience of one individual (Nax, 2021).

As compared to risk attitude, social norm is proven to exert a stronger impact on risk-taking with risk-taking becoming significantly elevated when social norm is stronger. However, the quantum of impact depends on the strength of social norm that varies across different situations (Veflen et al., 2020). The presence of strong social norms in risk-taking will supersede painful experiences (Zinn, 2017) and alter the risk perception of a person (Veflen et al., 2020). With an entrepreneur inherently a risk taker, therefore risk-taking propensity will be used as a measure representing subjective norm in current research.

2.6.4.3 Risk Appraisal as Perceived Behavioural Control

Risk appraisal, commonly known as risk perception, is the subjective assessment of the level of riskiness in a specific situation (Bran and Vaidis, 2019). Vulnerability and severity are two components critical in risk perception, amplified by the feeling of fear (Prince and Kim, 2021). Vulnerability relates to the possible negative outcome that can happen, while severity relates to the possibility that these negative outcomes can occur.

Protection Motivation Theory (PMT) is a psychological model that illustrates the method to evaluate threats and to explain the tendency of people to protect themselves (protection motivation). It comprises two main cognitive components consisting threat appraisal as a function of severity, vulnerability and maladaptive rewards, aroused from the source of fear, and coping appraisal as a function of response efficacy, self-efficacy and response cost (Maddux and Rogers, 1983). This six-constructs model without the mediating role of fear is adopted by Wang (2019) on the adoption intention of m-payment. In fact, the widely adopted simplified version of PMT includes five factors that consist of perceived threat severity, perceived threat vulnerability, response efficacy, self-efficacy, and response cost. Self-efficacy was confirmed to be the strongest predictor of behavioural intention, thus improving the predictive power of PMT model (Boss et al., 2015). More commonly, this model is adopted not entirely, but partially to assess the intention to take risks (Abd Razak et al., 2020).

In general, human beings are rational risk-takers (Fan et al., 2022; Zinn, 2020), and will react differently, depending on different contexts (Byrnes et al., 1999; Karsh et al., 2021; Losecaat Vermeer and Sanfey, 2015). Distinguishing motives of risk-taking should be treated as an ultimatum, as a means to an end and in response to vulnerability. There are a few attempts to systematise the insights of risk-taking. Zinn (2020) suggests control, reflexivity, and personal identity as key motives for risk-taking. Out of the three, control in risk-taking can potentially

become the key motive, despite it is not self-evident. For example, people who lose their jobs might be exposed to a greater risk of losing control over financial stability. This left them with little choice but to take risks with the hope of regaining control, despite knowing the negative consequences they might be exposed to. Trust, emotion, faith and ideology keep a person going forward, hence taking risker decisions (Zinn, 2020), especially in times of mounting challenges

A lack of reflexivity is the lack of knowledge or ability to grasp the situation at hand. It is also the inability to look inward at oneself. Knowledge is a function of personal competence (Directorate-General for Education, 2019), personal competence can enhance self-efficacy and self-efficacy can impact risk-taking when the outcome is controllable. Lack of reflexivity is often associated with unreasonable and irrational risk-taking (Zinn, 2017). However, in a situation where there is little control, reflexivity is no longer applicable because these unbearable conditions may force people to intentionally ignore information or knowledge that deviates them from taking risks (Meier, 2022; Zinn, 2016, 2023). It is the same as one's identity. People take risks to protect their unique identity (Han et al., 2019). However, in extreme conditions, people can forgo their values and identity, and thus take risks that contradict their intrinsic values, culture, or expert risk knowledge. The key element of control in Zinn (2020) is similar to the control belief in the theory of planned behaviour (Ajzen, 1991). Hence, risk appraisal will be considered as a measure representing perceived behavioural control in current research.

2.7 Organisational Commitment

Organisational commitment is a term coined by Meyer and Allen (1991) to reconceptualise their views on the three dimensions of employee commitment in an organisation namely affective commitment, continuance commitment and normative commitment. On top of the three dimensions of organisational commitment popularly used to explain individual identification, attachment and involvement at workplace, both leadership (Al-Douis, 2019; Bahadori et al., 2021) and work ethics (González-Cruz and Guillén Parra, 2008; Hall, 1992; Muhajir et al., 2023) are also closely related. This section will discuss affective commitment, normative commitment, continuance commitment, leadership, and work ethics in the study of organisational commitment.

2.7.1 Introduction to Organisational Commitment

Organisational commitment is a concept focused on by human resource managers in many organisations to predict employee engagement, retention, turnover, satisfaction and commitment to change (Al-Douis, 2019; Ennida and Allouani, 2023; Hizam et al., 2023; Ling et al., 2019; Redondo et al., 2021). One key responsibility of human resource managers is to have an adequate understanding of the factors that can improve employee commitment, and then use that knowledge to retain good employees with the aim to improve productivity.

Commitment is defined as a force that ties a person to a specific course of action that is critical and representative of a specified target whereas organisational commitment is defined as the psychological state identifying the relative strength of an individual attachment to their organisation (Meyer and Herscovitch, 2001). Organisational commitment is the intention of employees to remain in the organisation as a result of the person's identification with the organisation's values and goals (Porter et al 1974). It is the relative strength of involvement and individual identification (Mowday et al., 1979). It can also be defined as the power or force that motivates employees to perform towards delivering organisation objectives (Meyer and Herscovitch, 2001). González-Cruz and Guillén Parra (2008) define organisational commitment as personal voluntary decision-making based on calculated rationality, affective tendency and moral judgement, that creates a degree of attachment, identification, and

involvement with an organisation, extending non-repayable effort in achieving organisational goals. On contrary with González-Cruz and Guillén Parra (2008), the researcher does not viewed organisational commitment as solely based on voluntary nature as some commitments were forced on employee. Culture will play a significant role in forced commitment. For example, if the culture of a firm is to work overtime, then new employees will be compelled to do. The researcher further argue that the term "voluntary" is to vague to apply on the topic organisational commitment.

Most studies relating to organisational commitment are associated with either the traditional distinction of attitudinal commitment and behavioural commitment (Gallato et al., 2012; Mowday et al., 1979) or the concept of social exchange theory (Al-Douis, 2019; Blau, 2017; Emerson, 1976; Ennida and Allouani, 2023; Homans, 1958; Ling et al., 2019). According to Mowday et al. (1979), attitudinal commitment is a thinking process that illustrates how people relate themselves to an organisation. It is the mindset of an individual when perceiving the extent their personal value aligns with those of the organisation. Behavioural commitment, on the other hand, relates to the process, by which a person is locked into an organisation and the ways demonstrated by them in dealing with challenges. Al-Douis (2019) shows that employees' beliefs, attitudes, and perceptions are critical factors to impact an organisation's success.

Based on the literature review conducted by Ennida and Allouani (2023), there are two classifications to exchange relationships: (1) economic and (2) social. Economic exchanges often refer to contractual rewards such as salary and bonus in exchange for jobs performed by an employee as a contractual obligation. Social exchanges will go beyond employment contracts to the level where both employee and organisation are reciprocally loyal to each other by sharing mutual respect, feeling and understanding. Social exchange is the voluntary

acts of a person in exchange for expected returns. This concept initially introduced by Homans (1958) is used to explain the social interdependencies at workplace, illustrating how employees form attachments to the organisation they work in.

Ennida and Allouani (2023) postulate that the behaviour of an employee related to work is the result of an exchange relationship. A study conducted by Hizam et al. (2023) confirms the validity of social exchange theory in promoting employee engagement. These forms of attachments are created based on the assumption that resources will continue to flow when value is reciprocally exchanged (Emerson, 1976). It is also formed with the belief that personal reactions to social interactions can be predicted by multiple inherent factors (Blau, 2017). The concept of social exchange theory has been popularly adopted in the study of organisational commitment (Emerson, 1976; Homans, 1958), and this is the same for Blau (2017), who attempted to set a foundation of a social interaction theory based on the same concept.

Meyer et al. (1990) have conceptualised organisation commitment into three dimensions: (1) affective commitment; (2) normative commitment; and (3) continuance commitment. While affective commitment is the voluntary emotional attachment of an employee to the organisation due some identification (Goh and Sandhu, 2013a; Mahmod and Rosari, 2020); a normative commitment is the feelings of obligation, commonly due to an individual intrinsic sense of responsibility, morality, or ethicality (Allen and Meyer, 1990; Rogers, 2020). Finally, continuance commitment is a straightforward commitment whereby employees choose to attach with the organisation due to personal economics as an exchange of salary, bonus, and rewards (Meyer et al., 1990; Meyer and Allen, 1991). There are many concepts and theories related to organisational commitment, however, the commonly used concept in most studies is the social exchange theory.

Syed and Tappin (2019) postulate that factors influencing organisational commitment can be segmented into intrinsic factors (employee's personal characteristics) and extrinsic factors (work-related conditions). Employees' personal characteristics can consist of age, gender, tenure of service, personality, values, creativity, personal achievement, or opportunities for achievement (Chan et al., 2020). Work-related conditions are made up of job challenge, organisational dependability, perceived managerial support, job experience, salary and remuneration, policies, or job securities, and mobility preference (Gorgulu et al., 2019; Kumar et al., 2023; Meyer et al., 1990; Meyer and Allen, 1997). Ennida and Allouani (2023) summarised these factors into individual characteristics, task characteristics, organisational characteristics, and leadership behaviours from the review of related literature. Sentosa et al. (2022) postulate that intentions can positively impact commitment.

There are often mixed results when applying employee characteristics such as gender and age to predict organisational commitment. A study by Gorgulu et al. (2019) on employees in the IT industry revealed that gender did not predict organisational commitment, affective commitment or normative commitment. However, the same study posits that women are more prone to conduct a cost-benefit analysis and, therefore more likely to exhibit continuance commitment as compared to men. This can pretty much explain the high turnover of females in the male-dominated field. Working in the IT field might be too costly for women when issues such as sexism, lower pay and fewer opportunities are present versus the natural responsibility of women to take care of children and household chores, adding more stress.

Many studies revealed that as employees age, their organisational commitment will increase, particularly affective commitment (Singh and Gupta, 2015). However, this is not the case for boomers in the IT industry. Overall, boomers become less committed as they age (Syed and

Tappin, 2019), and the researcher argue that this might be due to the technostress environment naturally present in the fast-paced IT field that detached boomers from the organisation. As a person age, stress tolerance becomes lower (Brooks et al., 2023). Kumar et al. (2023) posit that increasing employee mobility preference can improve an individual's continued commitment at workplace. This means employers who give work-from-home options to employees will most likely see an increase in their work commitment. The researcher agrees with increasing mobility preference can improve organisational commitment, however, it is important to assess the pros and cons that comes with it before making any decision on employee mobility. Not every employee can deliver equitable work quality with working from home versus work in office.

Regardless of which concept of organisation commitment is used in every study, it is evident that human resource managers are facing increasing pressure in the 21st century with intensified complexity, business volatility, and companies vying for talented employees. The advances in technology, globalisation of the workforce and talent market shift, have created more challenges for managers to recruit talent, retain a competent workforce and reduce employee (Directorate-General for Education, 2019; Huawei Technologies Malaysia and MDEC, 2022; Mowday, 1984; Vodafone Limited, 2021). With the increasing importance of employee engagement and the demand for businesses to be constantly ready, it's therefore critical to focus on ways to make employees more committed to the organisation.

2.7.2 Significance of Organisational Commitment

Organisational commitment has a positive relationship with employee engagement (Chan et al., 2020), employee retention (Redondo et al., 2021), employee effectiveness (Hizam et al., 2023), job satisfaction (Ennida and Allouani, 2023), and employee performance (Nastavia Putri and Lista Meria, 2022) that ultimately affect knowledge transfer (Goh and Sandhu,

2013a), organisation performance (Silalahi and Bimo, 2021), organisation success (Ling et al., 2019), organisation survival (Bahadori et al., 2021), and business readiness (Al-Douis, 2019; Mladenova, 2022; Vodafone Limited, 2021).

Committed employees are important as it affects their engagement in the organisation, ultimately contributing towards talent retention (Meyer and Allen, 1997). Hizam et al. (2023) postulate that employee engagement entails precursors in an organisation that motivates job commitment and positively influences organisational commitment (Baiquni, 2020). Employee engagement is described as a state where employees involve, commit, and focus their passion, effort, and energy towards achieving the organisation's purpose. Behavioural commitment introduced in Mowday (1984) can appear in the form of psychological empowerment that impacts both employee engagement and organisational commitment (Hizam et al., 2023; Ling et al., 2019). Other factors that predict employee engagement include knowledge sharing, employee mobility, and training and development (Hizam et al., 2023).

The influencing strength of each employee engagement antecedent varies depending on the division or department an employee resides. For example, knowledge sharing can greatly enhance employee engagement in the admission department of a university as compared to the IT department. This implies that encouraging knowledge-sharing based on occupational type can improve work engagement and thus benefit the organisation (Chan et al., 2020). Conditions contributing towards poor work engagement include inadequate sleep, stress, and workplace bullying should be avoided (Brooks et al., 2023; Mahmod and Rosari, 2020).

Many studies have found that employee engagement can improve operational efficiency (Hizam et al., 2023), and has a significant effect on job performance, whether it is directly or indirectly as a mediator (Corbeanu and Iliescu, 2023; Juyumaya and Torres, 2023; Mişu et al.,

2022; Nastavia Putri and Lista Meria, 2022; Suifan et al., 2021). Work performance on the other hand will influence the readiness and overall performance of an organisation. Employee engagement is proven to mediate the link between transformational leadership and creative performance (Juyumaya and Torres, 2023). Bran and Vaidis (2019) emphasise the importance of commitment in times of declining business performance, and mounting challenges and uncertainties, which reflect the current business atmosphere.

Both job satisfaction and organisational commitment are highly related. Job satisfaction can positively impact organisational commitment, and organisational commitment in turn can influence job satisfaction. An employee who is committed to the organisation tend to be more satisfied with their jobs than one who is not (Gallato et al., 2012), and vice-versa (Ling et al., 2019). Similar to job engagement, dissatisfaction of an employee can be caused by excessive workload, low morale, value mismatch, insufficient support, lack of learning and development opportunities, disappointing process of career advancement, inequitable salary, poor working conditions and unhealthy co-worker relationships (Ennida and Allouani, 2023).

Generally, a dissatisfied employee will not consider the organisation as a long-term career. Mahmod and Rosari (2020) posit that cynicism or a negative attitude towards an organisation will result in a lower level of organisation commitment and higher turnover intention. Employee dissatisfaction can increase the workforce turnover rate, ultimately leaving negative consequences on an organisation. These negative consequences can be seen in the form of increasing cost, demoralisation, negative public perception, operational disruption, disruption of social interactions among employees, and loss of strategic opportunity (Mowday, 1984). Both job satisfaction and organisational commitment can improve employee performance (Nastavia Putri and Lista Meria, 2022).

2.7.3 Affective, Normative and Continuance Commitment

The three dimensions of organisational commitment in Meyer and Allen (1991) are based on the attitude and perceptions of each employee in terms of loyalty to the organisation. This model depicts the multi-faceted role of organisational commitment, as the desire to become part of the organisation (affective commitment), a sense of obligation to remain (normative commitment) and cost of leaving (continuance commitment). Despite there being correlations between affective and normative commitment, using only two dimensions to predict organisational behaviour is not always possible (Meyer and Allen, 1997). It is the psychological state of combination in a three-dimensional model that can produce a more accurate prediction and in-depth explanation. With the conceptual differences among the three dimensions of organisational commitment, each dimension should have its own antecedents (Allen and Meyer, 1990).

Affective commitment is defined as "an emotional attachment to the organisation such that the strongly committed individual identifies with, is involved in, and enjoys membership within the organisation" (Allen and Meyer, 1990, p. 2). People stay in the organisation because they truly want it (Allen and Meyer, 1990). It is the positive attitude towards an organisation that creates a sense of attachment. When negative attitude towards an organisation increases, emotional attachment, identification and engagement with the organisation decreases (Mahmod and Rosari, 2020). Affective commitment is the most desired form of attachment sought after by many businesses. It is considered the core essence of organisational commitment (Meyer and Herscovitch, 2001), and one that can improve business readiness (Alqudah et al., 2022). An employee who establishes an affective commitment to an organisation tends to stay committed for a longer period and will remain active as part of identification with the organisation (Nguyen et al., 2022).

Mahmod and Rosari (2020) have identified three components of burnout, a psychological syndrome of emotional exhaustion, that can potentially impact the affective commitment of employees. These components consist of exhaustion, cynicism (negative attitude towards the organisation) and reduced professional efficacy (expected work contribution). However, results from the study indicate the opposite whereby exhaustion will not result in a decrease in employee affective commitment towards the organisation. This means employees will probably continue to remain emotionally attached voluntarily despite experiencing psychological and physical tiresome from their daily work. This also explains why affective commitment can have a positive significant impact on the readiness of a business to change (Alqudah et al., 2022). However, should an employee develop a negative attitude (cynicism) and reduced professional efficacy, they will be less committed. Affective commitment is also less possible with employees who are self-directed and value-driven in selecting career options, particularly employees with protean careers and boundaryless career attitudes (Kumar et al., 2023). This contradicts Redondo et al. (2021) who posit protean talented employees demonstrate higher organisational commitment. The researcher opined that higher organisational commitment can likely happen when the protean employee chooses an organisation that aligns with his or her values.

Organisational citizenship behaviour is the behavioural side of an affective commitment or the behavioural commitment concept introduced by (Mowday, 1984). It is summarised as the discretionary or voluntary behaviours and actions that are beneficial to an organisation yet go beyond the formal functions or role of an employee. Such voluntary behaviour is performed in the absence of reward to promote effective operations of an organisation (Ennida and Allouani, 2023). Organisational citizenship behaviour consists of employee helping behaviour, sportsmanship (fair play), individual initiative (voluntary actions), organisational loyalty, organisational compliance, civic virtue, and self-development has a strong

relationship with organisational commitment (Nguyen et al., 2022). The helping behaviour of an employee was found to significantly increase the employee's affective commitment towards an organisation as compared to other components. This behaviour at the same time exerts an indirect positive impact on continuance and normative commitment. When an employee receives support and assistance from co-workers, a sense of identification with the organisation will be established, thus developing affective commitment.

However, affective commitment can be superseded by continuance commitment when an employee conducts a cost-benefit analysis considering situational pressure. This behavioural switch is unique to each individual (Mowday et al., 1984) and can also happen due to situational and contextual factors, such as the continuity of a high unemployment rate (Apergis, 2017), or based on country-specific culture (Kumar et al., 2023). Organisational commitment is often associated with a lower level of turnover, yet in the presence of excessive exhaustion, the intention to quit increases (Mahmod and Rosari, 2020).

Despite the similarities between affective and normative commitment, however, it is distinguishable and also important to differentiate them (Allen and Meyer, 1990). Normative commitment relates to the feeling of moral obligation that motivates an individual to form an attachment to the organisation. It deals with a sense of responsibility, and the belief that it is the right thing to do (Meyer and Allen, 1997). According to Gellatly et al. (2006), there are two sides to normative commitment, one is the indebted sense of obligation to stay with the organisation, and another is the sense of moral duty. Moral duty can be formed through the realisation that other people are relying on this obligatory behaviour to contribute to the organisation. Whether it is moral or indebtedness, normative commitment is obligatorymotivated, less personal, and more likely formed based on perceived societal expectations

(Singh and Gupta, 2015). It is born out of compulsion and many times reflects moral duty surpassing affective commitment (Rogers, 2020).

Normative commitment is also defined as a type of relationship between employee and the organisation they work for, yet highly depending on how the organisation treat its employees. Offerings from an organisation to its employees that make them feel valued can potentially create a normative commitment of the employee (Phungula et al., 2022). These offerings are not the same as indicated in the study of continuance commitment that deals with compensation versus the cost of changing jobs. Normative commitment can only be created when employees perceive the compensation and other value propositions (monetary or nonmonetary) offered by the organisation can make them feel valued (Phungula et al., 2022). It is more of a reciprocal feeling, moral or indebted sense of obligation (Gellatly et al., 2006; Masud et al., 2018) rather than exchanges that come with fear derived from the cost of switching jobs. Employee value proposition can be presented in the form of financial rewards, benefits, career advancement, engaging work content, and affiliation. Phungula et al. (2022) show that work, rewards, and opportunities can enhance the normative commitment of employees.

Normative commitment was also discussed in a professional context. It is the feeling of obligation that makes an employee stay in the same profession, emphasised by specialisation at the workplace (University of Split, Faculty of Economics and Bakotić, 2021). This type of relationship is commonly termed professional commitment (Singh and Gupta, 2015). Sportsmanship, organisational loyalty, and organisational compliance development can positively impact normative commitment in a professional construct (Nguyen et al., 2022).

Continuance commitment is generally viewed as a negative type of commitment due to the fear of cost involved in changing jobs, compelling individuals to stay with the organisation

despite having a negative attitude (Masud et al., 2018). The researcher argue that continuance commitment is similarly illustrated as economic exchanges in Ennida and Allouani (2023). To the researcher it is a kind of forced commitment. Employees feel a sense of commitment to the organisation when they consider the incurring of various costs when leaving the organisation (Meyer et al., 1990; Meyer and Allen, 1991). Despite affective commitment and normative commitment demonstrating similar behavioural patterns, Meyer and Allen (1997) posit that affective commitment, normative commitment and continuance commitment are three separate dimensions of commitment. The inter-relations between normative commitment and affective commitment, and inter-relations between normative commitment and continuance commitment, are used to measure the effect on any independent dimension for individual employee's commitment to organisational goals (Meyer and Allen, 1991).

Gellatly et al. (2006) posit that the combination of high affective and normative commitment can lower turnover intentions and improve citizenship behaviour, provided that the low continuance commitment condition is met. It is because stronger affective commitment creates a feeling of bonding which ties an individual emotionally to stay in the organisation. This feeling that promotes affective commitment, combined with normative commitment, creates self-regulation and produces a sense of moral duty (Meyer and Parfyonova, 2009). In the presence of weak continuance commitment, the combination of affective commitment and normative commitment as posited by Gellatly et al. (2006) will reduce turnover intention and promote citizenship behaviour. A commitment profile of strong affective commitment, strong normative commitment and weak continuance commitment is posited to create a more significant impact as compared to a strong affective commitment profile (Masud et al., 2018). Contrary to the combined strength of affective commitment and normative commitment that can create stronger positive work outcomes (Gellatly et al., 2006; Meyer and Parfyonova, 2009), high normative commitment and high continuance commitment will results in the

indebted obligation of the employee to perform their duty (Meyer and Parfyonova, 2009). When this happens, resistance among employees tends to be stronger, thus causing low work motivation (Meyer and Parfyonova, 2009). However, Masud et al. (2018) findings of current studies contradict and posit that normative commitment and continuance commitment do not create indebted obligation as per Meyer and Parfyonova (2009). While many work-related factors can influence organisational commitment, other factors such as unemployment are not controllable by the organisation. In a study conducted by Apergis (2017), it was found that job insecurity and the cost of job loss as a result of high levels of unemployment can lead to greater organisational commitment among employees (Apergis, 2017). Masud et al. (2018) latest findings that contradict Meyer and Parfyonova (2009) can possibly be due to uncontrollable factors such as the unemployment factor mentioned in Apergis (2017).

In the research by Gellatly et al. (2006) and Meyer and Herscovitch (2001a), it was discovered that when all three forms of commitments are high, the independent impact of affective commitment on positive employee behaviours becomes weaker. The combination of multiple motivational elements from the three components of organisational commitment has created an act of balancing its overall strength. This correlates with the view in Meyer and Allen (1997) that using only two dimensions to predict organisational behaviour is not always possible. Strong continuance commitment, strong normative commitment and weak affective commitment are detrimental, sometimes hazardous, and will negatively impact organisational performance as they link with undesirable forces of staying (Gellatly et al., 2006; Masud et al., 2018). It is therefore critical for human resource managers to have an in-depth understanding of the concept of organisational commitment, and manage a balance.

To the researcher, organisational commitment can never be easily measured. This is because commitment can be falsified through intentional acts demonstrated by employees to the party with interest such as to their superior, with the intention to receive intended benefits. For example, an employee will work overtime or even bring in personal resources to the organisation they work for, to provide a false impression that they are commitment to their work. All these come with the intention of the employee to achieve salary or bonus increment or merely to impress the superior. Such falsified organisational commitment cannot be easily identified, and in most of the time, never impact positively on task achievement. Hence, the researcher suggests including additional factors such as task achievement to measure organisational commitment.

2.7.4 Leadership and Ethics

Bran and Vaidis (2019) posit that leaders play an important role in organisational commitment as a leader's charisma, strategic decision-making, competence, and attitude towards ethicality, equity and fairness, can potentially lead to the achievement of a committed workforce. Therefore, how leadership style impacts organisational commitment is of paramount importance in predicting employee and organisational performance. Leadership, an act of leading a group of people in an organisation, is defined as the interaction process between leaders and subordinates, in a manner influenced by the leader to collectively meet the goals and objectives of an organisation (Conger and Kanungo, 1998; Kanter, 1982; Pavett and Lau, 1983; Reid and Karambayya, 2016).

The German sociologist, Weber (1922), first introduced the traditional, legal-rational, charismatic and bureaucratic style of leadership in his book "Economy and Society". Traditional leadership is based on long-established customers and traditions. Legal-rational authority is exercised by following a system of rules and laws. The bureaucratic style is like legal-rational authority except that the rules are mostly set by the leaders themselves, highly rigid but effective when facing a situation of turbulence or chaos. Lastly, charismatic

leadership is derived from the individual uniqueness of a leader. Weber asserted that charismatic leaders are transformational and bureaucratic leaders are transactional in nature (Weber, 1947).

Many studies have proven that leadership style can considerably influence employee commitment and performance (Al-Douis, 2019; Bahadori et al., 2021; Brown et al., 2019; Juyumaya and Torres, 2023; Nastavia Putri and Lista Meria, 2022). In a study on the food and beverage service industry in Indonesia, transformational leadership is found to have a direct positive relationship with organisational commitment, job satisfaction and employee performance (Nastavia Putri and Lista Meria, 2022). An ethical leader can establish mutual respect and trust with subordinates, thereafter increasing subordinates' organisational commitment (Bahadori et al., 2021). Research conducted in Yemen postulates that an employee led by a transformational leader is more committed to change as compared to a transactional leader. However, in the presence of a committed employee, readiness can be greatly improved even under the lead of a transactional leader (Al-Douis, 2019). This implies the importance of employee's commitment in enhancing readiness to change, with little or without considering leadership factor (Gelaidan and Ahmad, 2013).

Similar to leadership, managerial support has a positive relationship with organisational commitment (Meyer and Allen, 1997). It can be seen in the form of, but not limited to psychological and work empowerment, workers' involvement in discussion and making important decisions, adequate resource allocation, psychological support, opportunities for training and development, facilitation of effective communication between workers and managers, and fair and equitable treatment at workplace. A manager who can garner the confidence of an employee through facilitating a sense of self-control, competence and meaningfulness, can successfully improve the employee's commitment towards the

organisation (Ling et al., 2019). This facilitating process termed psychological empowerment can positively impact employee engagement and be facilitated through the creation of a supportive work environment (Hizam et al., 2023). A supportive football club manager creates positive interactive opportunities between managers, elite coaches, and players. Such interactions have improved coaches and players' commitment to the club (Gorgulu et al., 2019). Having adequate managerial support is crucial for employees in managing stress (Syed and Tappin, 2019) and motivating learning (Gu et al., 2022; Humayun and Gang, 2013; Veeravalli et al., 2019).

Work ethic is critical when an employee carries out his duty and responsibilities. It is a fundamental belief of good behaviour, distinguishing right from wrong, deeply rooted as a commitment to a job. It is a benchmark for employees in fulfilling their responsibilities at workplace (Supardi et al., 2021). Hall (1992) defined ethics as, "knowing what ought to be done, and having the will to do it" (pp. 12-13) and postulates the importance of applying ethics as a foundation of pride and motivation at workplace. Organisations apply the criteria of work ethic when assessing employees for recruitment, appraisal, and rewards. Work ethics are statistically proven to leave a positive impact on normative commitment and employee performance (Muhajir et al., 2023). However, when an organisation practices unethical behaviour, it will be exposed to greater danger such as reputational damage and bankruptcy. Some famous scandals due to ethical breaches include Enron's fraudulent practice, the Volkswagen emission scandal, and Uber's "bro" culture (IG International, 2018).

Ethics and morals are similar yet different. Ethics refer to a set of rules from external sources to be followed based on individual assessment of value in response to specific professional settings. Morals are guidelines formed by society and commonly based on personal principles on what is good, right or a norm for all. Normative commitment in the literature of

organisational commitment has reduced ethics to moral judgements on norms (González-Cruz and Guillén Parra, 2008). González-Cruz and Guillén Parra (2008) viewed the importance of ethics in normative commitment and therefore proposed a wider conceptualisation of the moral dimension, labelled moral commitment, considering moral norms, moral goods, and virtues as well. In fact, employee work ethics are considered moral issues that can potentially help or harm others or us (Hussain et al., 2021).

In the study of job performance, keeping with ethical principles is important when making moral decisions. Ethical training provided by the organisation is crucial and can potentially improve the moral awareness of employees to yield better job performance (Hussain et al., 2021). Work ethics and moral awareness are particularly important in a highly humanintensive industry such as a retail store that requires optimum commitment from the workforce. Research conducted by Supardi et al. (2021) posits that work ethic can significantly impact employee professional commitment. Professional commitment relates to a sense of responsibility towards the profession and represents the desire to stay loyal to the profession (Jafaraghaie et al., 2017). It is the strength of attachment or identification with a profession (University of Split, Faculty of Economics and Bakotić, 2021). Similar to organisational commitment, professional commitment is usually observed through the concept of affective, normative and continuance commitment (Meyer and Allen, 1991). Research conducted by the University of Split, Faculty of Economics and Bakotić (2021) posits that it is possible to distinguish between organisational commitment and professional commitment. Whether it is a professional commitment or an organisation commitment, both are inter-related.

With the increasing importance of business halal offerings, recent works of literature have focused on work ethics from an Islamic point of view. Islamic work ethics have proven to impact job satisfaction, organisational commitment and work performance (Muhajir et al., 2023; Salahudin et al., 2016). Organisational commitment can also positively influence Islamic work ethics (Husin and Kernain, 2020) in the case of the Royal Malaysian Air Force. The success of an organisation can reasonably be concluded as the result of employees' commitment.

2.8 Business Readiness

Business readiness measures the extent to which a business is prepared to embrace emerging challenges and opportunities. It is often linked to a firm's performance, business success, organisation capacity (Mladenova, 2022), technology adoption and change management (Aziz and Salleh, 2011; Gelaidan and Ahmad, 2013; Gouweloos and McArthur, 2019; Ruikar et al., 2006; Vodafone Enterprise, 2014). Yasynska et al. (2019) proposed a macroeconomic assessment of business readiness for transition into the digital economy. This section will discuss the fundamentals of business readiness and how organisation culture and management, policy and processes, technology, digitalisation and enabling solutions, and competence readiness can impact business readiness.

2.8.1 Introduction to Business Readiness

Readiness is defined as an attitude towards a distinct situation (Mladenova, 2022). The topics on readiness are often found in the study of change management (Alolabi et al., 2021; Mladenova, 2022), project management (APM, 2018), technology adoption (Aziz and Salleh, 2011; Gouweloos and McArthur, 2019; Idris et al., 2017; Yasynska et al., 2019), and innovation (Acceler8 Venture Builder, 2022; KTH Innovation, 2016). Most studies on readiness focus on a specific purpose of readiness rather than one that serves to prepare for the unexplored future. A view of business readiness from the perspective of unexplored

future received very little attention in academic research (Alolabi et al., 2021) but is widely discussed in professional virtual networks (Acceler8 Venture Builder, 2022), professional publications (APM, 2018), and industry reports (Vodafone Enterprise, 2014; Vodafone Limited, 2021).

Vodafone Limited (2021) termed business readiness of the unexplored future as "future ready". Acceler8 Venture Builder (2022) suggests that business readiness is concerned with the maturity of efforts in business concept development, workforce structure, awareness of competition, and financial aspects of a business. Aaron De Smet et al. (2021) proposes that future-ready business understand who they are and what they stand for; they operate with speed and simplicity in mind and grow by improving their ability to learn, innovate and seek ideas without considering their origin. The idea to investigate business readiness on a macroeconomic level was proposed by Yasynska et al. (2019). KTH Innovation (2016) of the Swedish Royal Institute of Technology developed a framework for innovation readiness level by incorporating customer readiness, technology readiness, intellectual property readiness, team readiness, funding readiness, and business readiness as part of its assessment. Both industry and academic publications emphasise the importance of assessing business readiness from a holistic view in the current context.

Most companies understand the importance of business readiness, however many businesses are still not ready (Vodafone Limited, 2021), and even more unready for digitalisation (Yasynska et al., 2019). Yasynska et al. (2019) believe that outsourcing, marketplace, and retailing are the modern representations of business readiness in digitalisation. A ready business can clearly see threats and opportunities and react to them accordingly. They demonstrate a forward-thinking attitude, understand what is important for the future and generally feel positive about it. These businesses are confident of delivering customer

satisfaction and perform better than their competitors (Vodafone Limited, 2021). They are rich communicators, value their people and partners, exploit technology to the fullest and are open to solving technology needs. A few distinctive characteristics of a ready business is that they place higher than average emphasis on traditional form of communication such as faceto-face and telephony, insist on choosing the right suppliers and recognize future opportunities that leverage machine-to-machine application (Vodafone Enterprise, 2014). The researcher reiterates that traditional form of communication in increasingly important due to the fatigue felt by users when using chat messaging for as long as chat messaging has started. There are unwritten expectations from sender that receiver should constantly be ready to response to incoming chats. This added pressure and stress to the receiver. Furthermore, chat messaging can increase misinterpretation and miscommunication that can be detrimental to any organisation. A phone call will greatly reduce such miscommunication and offer the chance for both communicators to understand each other and realise the "real presence" of a human. It also creates a sense of respectfulness and genuine feeling in every conversation. With the uprising of more ill-designed conversations managed by chatbots, this makes traditional form of communication even more important.

A business readiness framework was developed by Vodafone Enterprise (2014) after gathering insights from over 1,000 businesses and IT professionals in multiple industries and geographies. It measures four constructs of a business, (a) Culture and management, (b) Policy and process, (c) IT and communication fundamentals, and (d) Enabling solutions. Gouweloos and McArthur (2019) proposed an organisational readiness framework for financial service institutions in adopting cloud computing by classifying factors into perception (risk, trust, and awareness) and business readiness (performance, service fit, organisation IT, and compliance). Perception readiness assesses whether a business is ready to accept cloud computing and business readiness investigates whether it makes business

sense to use it. Despite human resources being undeniably the core asset of every business, however, most companies face problems training employees (Awajan et al., 2013). Knowing the importance, Awajan et al. (2013) measure the e-readiness of Jordanian economy, by considering the aspect of human resource readiness (competencies) and training needs as two key measurement metrics, on top of technological infrastructure, and legal, social and cultural environment. Alolabi et al. (2021) on the other hand posit that organisational readiness depends on the preparedness of various industry players and people are the most significant concern in evaluating issues for change readiness. Factors that influence organisational readiness identified by Alolabi et al. (2021) consist of contextual factors, leadership, organisational culture, organisational capability, and technology. Regardless of which model is used to measure business readiness, in general, most models will involve but not limited to human resource and management (personal competence), technology (infrastructure and systems), process and policy (legal, ethics, compliance), and organisation capacity in a contextual setting (external business environment). Capacity is defined as the capability that evolved around that situation (Mladenova, 2022). Capacity goes beyond the individual level and is described as collective capabilities of a business (Judge and Blocker, 2008). It is important to note that business readiness should not be treated as a one-off indication but as a continuum without any absolute end state (Vodafone Enterprise, 2014). Results in Yasynska et al. (2019) emphasise the importance of monitoring business readiness for digitalisation of the economy. The researcher argues that a business that is ready today, does not imply that it will be ready in the future. Hence, readiness should therefore be treated as a continuum that requires constant monitoring.

The researcher opined that change has now become a norm in every business. As change is consistently happening and accelerating, businesses are now compelled to achieve the state of readiness, thereafter, maintain business sustainability and reap benefits from it. That's the

reason as to why business readiness is selected as the core in current research. In fact, it is challenging to assess readiness with the nature of emergent change, as such change is unintended, never planned and can happen when least expected. Assessing readiness in a linear causal model to plan and implement changes is no longer a topic as relevant as before. This is because the need to change is now unpredictable (Mladenova, 2022). Businesses must change, be creative, innovative, and ready with appropriate change capacity in response to market and environmental changes. It is more relevant to study the underlying factors that influence change rather than to plan for change. Some factors motivating decisions to change include organisation capability, availability of resources, competencies, enabling solutions, culture, management support, attitude and employee commitment (Alolabi et al., 2021; Awajan et al., 2013; Gouweloos and McArthur, 2019; Payne et al., 2022).

In this research, there will be no distinction made between business readiness (Aziz and Salleh, 2011; Vodafone Enterprise, 2014; Vodafone Limited, 2021; Yasynska et al., 2019), organisation readiness nor organisation capacity (Alolabi et al., 2021; Judge and Blocker, 2008; Mladenova, 2022). The researcher opines that readiness should no longer be frequently associated with change management, neither is on technology adoption, nor project management. Readiness must be studied holistically throughout the entire organisation, whether change is imminent now or soon. This is to ensure that every organisation is ready to embrace the unexplored future. With the right mindset, attitude and behaviours combined with the organisation's capability of integrating technological innovations into operational activities, any business can become future-ready (Vodafone Limited, 2021; Yasynska et al., 2019).

2.8.2 Significance of Business Readiness

In general, a higher level of readiness is equal to greater success (Acceler8 Venture Builder, 2022; Vodafone Enterprise, 2014; Vodafone Limited, 2021; Yasynska et al., 2019). A business that ignores the importance of readiness, will clearly see it in the competition (Aaron De Smet et al., 2021). A future-ready business can be observed in the unprecedented crisis that disrupted the world, on how they showed resilient bracing through the business challenge of the last half-century. The unprepared, unanticipated, and shocking challenge of Covid-19 has forced people and businesses to examine their relationship with technology, the environment, and human connection, and how human skills of compassion, resilience and empathy can be so significant to a company's survival (Vodafone Limited, 2021).

Currently, a few key challenges span almost all industries. They include the challenges in achieving sustainability, responding to data and digital economy, talent recruitment and retention, adaptability to new social attitudes and customer behaviours, and rebuilding and reinforcing resilience post-pandemic (Vodafone Limited, 2021). Aaron De Smet et al. (2021) suggest more connectivity, lower transaction costs, unprecedented automation and fundamental societal shifts will replace the old rules of management. It is important to understand the level of business readiness as knowing and monitoring changes over time allow a business to evaluate maturity, monitor progress and plan for the next action. A business that constantly monitors readiness levels could identify missing skills and resources to achieve future goals and, at the same time evaluate and manage risk for potential investors (Acceler8 Venture Builder, 2022). That's why business readiness is important, yet regretfully, often neglected by most MSMEs, who are mostly constantly trying to find more resources rather than making sure that their

Sustainability is the key issue post-pandemic. A business with a continuity plan that is welldocumented and tested will work well when facing a crisis (Vodafone Limited, 2021). The unprecedented Covid-19 pandemic has provided data that human activities absolutely drive climate change. More people are aware of the criticality of good ethics, social responsibility and a sustainable environment, and have started to demand businesses to observe the same (Deloitte Southeast Asia Ltd, 2019; Shafer et al., 2016). People are demanding businesses to show more social impact (Aaron De Smet et al., 2021). Conscious customers will opt to buy from companies that adopt sustainability practices, such as using biodegradable packaging, responsible supply chains, employing a diverse workforce, and protecting equality. A business that observed the seventeen sustainable development goals proposed by the United Nations will align with the value of increasing consumers who feel that this is important. Keeping up with the sustainability trend will help companies be prepared for future changes in their industries, making it easier for them to plan for the future (Aaron De Smet et al., 2021). The researcher absolutely agrees with the need for businesses to conduct business by keeping in mind the need for sustainable development. This is even more critical for emarketplace retailers when using excessive packaging made of unsustainable material to deliver their products can potentially proves fatal to their business. The researcher predicts that in the future, more consumers will demand for sustainable packaging when making purchases online. Hence, it's critical for e-marketplace retailers to consider this aspect when making business decisions.

The talent war looming for workers with technology and digital skills (Huawei Technologies Malaysia and MDEC, 2022; MDEC, n.d.) has forced businesses to provide training and the latest technology at workplace. Learning opportunities and flexible or remote working hours are now more important as compared to offering career prospects in talent recruitment. Good career prospects are no longer the main criteria for new-generation workers in choosing the

companies they want to work for. Rather, new generation workers demand work life balance, something that was never considered by baby boomers (Vodafone Limited, 2021). The researcher opines that the short-term employment (gig economy), employee wellness and work-life balance are important considerations for human resource practitioners in rewriting talent recruitment, retention, and training policies. Businesses must be aware, acknowledge, and adapt to the emerging needs of Generation Z, expecting fundamentally different career aspirations with demand for more variety and learning, more leadership and promotion opportunities, and increasing career mobility (Aaron De Smet et al., 2021).

Unlike the earlier management that focused on economies of scale, barriers to entry and costs to achieve scale are diminishing with the increase of free market transactions, connectivity, and unprecedented automation (Aaron De Smet et al., 2021). To excel within competing industries, businesses must strengthen core capabilities, innovate and offer more value to their customers. Business capability is viewed as a resource-based dimension with businesses having diverse capabilities and resources critical in preparing for business readiness (Alolabi et al., 2021). It is grounded on the foundation of achieving a competitive edge. This means, that a business's competitive performance and set strategies highly depend on the availability of organisation-specific capabilities and resources. Capabilities relate to skills, competence and managerial processes, whereas resources can refer to technology, capital, intellectual property, network, and supply chain (Chang et al., 2017; Mladenova, 2022; Ojo et al., 2022). A ready business not only demonstrates competitiveness but can continuously grow within a pool of competition.

2.8.3 Culture and Management

Organisation culture and management have widely proven to impact knowledge-seeking (Al-Douis, 2019; Humayun and Gang, 2013), business performance (Gallato et al., 2012;

Juyumaya and Torres, 2023; Nastavia Putri and Lista Meria, 2022), and organisation readiness (Alolabi et al., 2021; Awajan et al., 2013; Mladenova, 2022; Payne et al., 2022; Vodafone Enterprise, 2014).

High volatility, unpredictability and emergent changes have forced businesses to evolve from being rigid to becoming more flexible (Henard and McFadyen, 2008). Maintaining a culture of flexibility is critical in a modern and technology-driven economic environment. Flexibility proves to be an ideal climate for change, innovation, optimization, and employee empowerment (Chang et al., 2017; Gu et al., 2022; Mişu et al., 2022). A collaborative, customer-focused, innovative, assertiveness to new ideas and openness to change culture can improve flexibility within an organisation (Vodafone Enterprise, 2014). Therefore, employees' flexibility, capability and responsiveness in mitigating customer anxiety and stress can bring positive engagement (Auh et al., 2007).

Having a customer-centric and responsive culture is important to enhance customer engagement, leading to positive marketing results. Customer engagement can lead to customer satisfaction, customer delight and customer harmony, resulting having happy customers (De Azambuja et al., 2023). In the retail industry, customer engagement can also positively impact brand awareness, perceived quality, perceived value, brand loyalty and purchase intentions (Gallart-Camahort et al., 2021; Kaveh et al., 2021). Engaging customer in sales promotions provide opportunities for retailers to attract customer's attention and interest, thereafter improve product and brand value (Kaveh et al., 2021). Online reviews are an important source of information that influences the perceived credibility of a website, thus enhancing buying intentions (Hwang and Yoo, 2021; Mican and Sitar-Taut, 2020). Customers who always give online reviews tend to trust the website more as compared to customers who do not. Responding swiftly to customers, ensuring high-quality offerings that

meet their needs and continuously providing excellent after-sales service have now become a pre-requisite criterion in customer purchase decision-making (Vodafone Limited, 2021). It is therefore critical to maintain and encourage a culture of flexible yet customer-centric responsiveness to create positive customer engagement. The researcher argue that a flexible work culture has a direct impact on improving business performance and therefore practising a certain level of flexibility to manage the complex environment, reduce uncertainties and achieve lasting competitive advantage has become a key objective for businesses. Flexibility is the competitive advantage of any MSME and therefore, in the opinion of the researcher, is crucial for MSME to optimise it and turn it into an unparalleled strength.

Another emerging trend in the study of organisation culture is ethics, sustainability, and social responsibility. Having ethical leadership and culture embedded in a firm can make businesses operate from a stronger position, thus enhancing the possibility of success (Payne et al., 2022). Good work ethics can also improve employee commitment (Bahadori et al., 2021). Nowadays, customers are expecting more than just good products or services. They demand businesses to act ethically, have a positive attitude towards sustainability, and be responsible in serving a wider social purpose (Shafer et al., 2016). However, most businesses are not ready or have yet to embrace sustainability and social responsibilities as part of their business strategy (Vodafone Limited, 2021). To meet the expectations of demanding customers, businesses must change, embrace new ideas, and do things differently. This will require businesses to be courageous and consider risk-taking from the perspective of sustainability and risk (Aldhnhani and Nobanee, 2021). A positive organisational culture towards diversity can positively impact business readiness (Alolabi et al., 2021). Moral, ethical and social responsibilities therefore form a critical part of enhancing business readiness.

Support from leaders and management plays a critical role in enhancing business readiness, organisational commitment, and business performance (Gorgulu et al., 2019; Gu et al., 2022; Humayun and Gang, 2013; Nastavia Putri and Lista Meria, 2022). Management support can encourage new ways of doing business, technology adoption, strategy development, knowledge acquisition, and business processes that enhance collaboration (Pucihar and Podlogar, 2005). Employee empowerment will require a certain level of flexibility and collaborative support from the management (Vodafone Enterprise, 2014). This is important because employees who feel empowered are more likely to engage in ideas creation and innovation and thus improve business performance and competitiveness (Chang et al., 2017).

2.8.4 Policy and Process

Policy and process address a series of actions that are conducted for a specific purpose. It includes ethics, procedures, and working rules in or between organisations. It is developed to ensure compliance whether it is in compliance with rules and regulations within the business or the external environment it operates in, e.g.: the legal restrictions and compliance (Gouweloos and McArthur, 2019). Policy and process are well-researched items in assessing business performance, business sustainability, business readiness and technology adoption (Mladenova, 2022; Ruikar et al., 2006; Vodafone Enterprise, 2014). A ready business not only has policy and process in place but one that is well-defined and can provide a clear definition of the way an organisation works. Policy changes can have significant implications on e-business development (Awajan et al., 2013). A good policy and process is adaptable and can support flexible execution as and when needed. It includes ways to provide ongoing business visibility and capabilities to handle new and exceptional requirements effectively and elegantly daily (Vodafone Enterprise, 2014).

As compared to brick-and-mortar shopping, the online consumer takes more shopping risk due to the inability to inspect the product before making a purchase, therefore requiring undertaking delivery risk. The uncertainties in online purchases are making consumers likely to anticipate negative purchase outcomes pre-purchase. Having a clear, convenient, and fair return policy is a way to reduce the anticipated risk (Yu and Kim, 2019). This leaves a favourable impression on the customer and encourages future purchases. Businesses need to balance between logistic cost, convenience and customer satisfaction when developing return and refund policies. This is because policy that is inclined towards customer-friendliness can improve customer satisfaction, purchase, and repurchase but at the same time increases trader's cost, thus reducing profitability. Return and refund policies often address issues on acceptable duration of return, return methods, refund processing time, return documentation as validation and refund method (Yu and Kim, 2019). Developing and developed nations adopt different approaches in their return and refund policies. It is noted that China market has a considerably stricter policy as compared to the US. The time allowed for China buyers to return their items is narrower than US consumers. Free return service and return processing time are generally similar in both markets. It is worth noting that the return and refund policy for e-marketplace traders varies depending on the respective e-marketplace, and trader status within the platform. The researcher argues that despite the positive impact can be derived from customer-friendliness policy such as lenient returns and refund policies, however, at the same time can encourage abuse by consumer too. This is evidenced in her own personal experience within the industry whereby abuse of such policy by buyers are not uncommon. Businesses are therefore required to consider local culture, buyer's preferences and associated costs when developing return and refund policies.

LazMall in Lazada and Shopee Mall in Shopee are considered branded retailers in the emarketplace, perceived by buyers as having higher credibility, offering more quality products and with a favourable return and refund policy, as compared to normal sellers. These topnotch e-marketplace retailers are obliged to offer a "no question asked" 7-days return
convenience to buyers. This means buyers can return the item without giving any reasons, nor
do they require the seller's consent to get their money back. Payment will be credited to the
buyer's account once the returned item is handed over to the e-marketplace's authorised
logistic provider. The E-marketplace return and refund policy favours the buyers and many
times e-marketplace retailers are forced to bear the logistic costs despite paying high
commission fees to the e-marketplace (Lazada Malaysia, 2023; Shopee Malaysia, 2023). Any
trader-initiated dispute can only proceed after the returned item is received by the emarketplace trader. For non-branded e-marketplace retailers, the buyer's request for a return
and refund used to require the trader's consent before money can be returned. However, this
privilege also ceased starting beginning of year 2024.

Despite having to follow strict policies set by e-marketplace, non-branded e-marketplace retailers chose to bring the buyer's return and refund request offline to prevent complications and inconvenience to buyers. This means e-marketplace retailers will try to contact the buyer outside of e-marketplace platforms and reach a settlement with them while requesting the buyer to cancel the return and refund request from inside the platform. This is because any return due to manufacturing defects will add a penalty point to the e-marketplace retailer, which leads to a reduction of store traffic. This will be more costly to e-marketplace retailers than paying for return logistic charges. The negative side of this arrangement is possibly the penalty received from Shopee and Lazada when e-marketplace retailers were found to transacting outside of the platform.

Firms are now swiftly embracing digitalisation to introduce e-commerce as a new revenue channel. Such implementation requires changes in current practice, process and workflow (Ruikar et al., 2006). When adopting new technology, companies must ensure that the current processes are flexible enough to accommodate technology, and new technology can complement current processes (Ruikar et al., 2006). Many SMEs are perceived as not having well-documented IT policies that address technology standards, disaster recovery, technology-acceptable use, network, and IT services (Idris, 2015). To achieve profitable growth, process standards must be present (Nuari Harmawan, 2022).

2.8.5 IT and Communication Fundamentals

Technology has become one of the most important elements in driving business readiness (Mladenova, 2022). Business applications, productivity tools and communications facilities are important when it comes to technology usage. A business is considered ready when its IT and communications facilities are responsive and can deliver flexibility (Ruikar et al., 2006). It must also be effective in managing, monitoring and protecting security, access, information and service levels with modern communication integration that exploits hosted and managed services such as cloud computing (Olaleye et al., 2017; Vodafone Enterprise, 2014). Awareness and trust are two key factors to determine the readiness to adopt new technology (Mladenova, 2022) as compared to cost-saving (Gouweloos and McArthur, 2019). Trust relates to the safety, reliability, efficiency, accessibility and competence of the support team (Gouweloos and McArthur, 2019).

The rampant cyber-security breach in recent years has shown vulnerability in data management (Anderson, 2023), raising red flags for global organisations, and forcing them to pay more attention to data security and ICT management. Despite cyberattacks focusing on specific industries such as education/research, healthcare/insurance and government/military, mostly in US and UK, the latest data show that even Singapore experienced a tremendous surge in such attacks (Anderson, 2023). Malaysia is not spared from this negative impact as

recently Prudential Assurance Malaysia has confirmed that customer data were affected by the global MOVEit data-theft attack (The Star Business, 2023).

The level of safety and security requirements is different for every industry. Based on industry-specific, banks may require technology that offers highly secured data security as there are stricter legal requirements and compliance in this sector (Gouweloos and McArthur, 2019). Businesses in the banking industry therefore opt to build their IT and communication systems within their own server as compared to an e-marketplace retailer who might only need an average data security embedded in the cloud services. Large enterprises may need state-of-the-art technology that offers complex and secured services, but smaller companies will choose a mix of small-footprint applications with simpler services, particularly from cloud computing (Vodafone Limited, 2021).

Having IT and communication facilities does not mean that a firm must own the facility, rather can opt for cloud computing. The ability of an organisation to exploit hosted or managed services is critical in the current world of connectivity (Gouweloos and McArthur, 2019; Kaur, 2019; Vodafone Enterprise, 2014). In the cloud processing model, the facility is not owned by the firm, but rather rented from cloud service providers. Cloud computing is viewed as an emerging and disruptive technology that can bring benefits to service delivery. Services delivery through the internet is considered cloud computing. Resources found in the cloud include infrastructure, platforms, databases, data storage, servers, software, applications and networking (Gouweloos and McArthur, 2019; Kaur, 2019).

Awareness of cloud computing is generally still low yet there are suggestions that this service will support small businesses (Gouweloos and McArthur, 2019). The cost-saving element of cloud services has minimal impact on the banking industry, yet it might not be the same for other industries. Many businesses adopt the cloud mainly to reduce cost, apart from the

benefits of high computing power, security, scalability, increased productivity, speed, efficiency and high performance (Kaur, 2019). Cloud services are more affordable as compared to building in-house IT and communication facilities. The researcher agrees that cloud-based applications available today are affordable and can bring benefits to service industry, whether it is large or smaller firms. Cloud-based applications can seamlessly bring complex solutions within reach to all businesses. However, not all businesses are ready to adopt this technology and gain benefits from it. This is because there are still limitations in terms of learning opportunities, availability of time, trust, and resistance to change from employees, notably from employers too.

Consistent support, usefulness, ease of use, system quality, performance and security become critical considerations for business decision-making in adopting cloud computing (Davis, 1989; Kaur, 2019; Liesa-Orús et al., 2023). Cloud applications commonly used by emarketplace retailers include SQL accounting system, Zetpy stock management system, Site Giant or Easystore e-commerce site builder, and Microsoft 365. Some popular cloud storage include Google Drive, Apple iCloud, Amazon Cloud Drive, Microsoft One Drive and Oracle Cloud (Kaur, 2019). Whether a business chooses in-house IT and communication facilities or subscribes to cloud computing, there's a need to ensure seamless integration with existing systems without giving rise to future issues, yet meeting the organisation's needs (Gouweloos and McArthur, 2019).

2.8.6 Enabling Solutions

Enabling solutions or enabled solutions refer mostly to technology-enabled solutions (Tan and Tan, 2021), data-enabled solutions (Olaleye et al., 2017), blockchain-enabled solutions (Ingraham and St. Clair, 2020), cloud-enabled solutions (Rathnayake et al., 2018), AI-enabled solutions (Bhande, 2020), and IoT-enabled solutions (Santil et al., 2021). Most

publications about enablement address IT and communication solutions involving people. Technology centred around people is being viewed as a key enabling solution post-pandemic (Vodafone Limited, 2021). Enabling solutions refer to how well the current IT and communications facilities can allow multi-channel customer engagement; support effective internal collaboration; allow remote and flexible working and support secure collaboration with partners. A good IT solution can enable mobile communication, unlock the value of available business information; and exploit widely available machine-to-machine connectivity (Vodafone Enterprise, 2014). The researcher argues that it is no longer about how good an IT solution is, as nowadays, most solutions have reached an acceptable quality. To the researcher, it is more about the readiness, willingness and how the user can effectively and efficiently use the technology to achieve its intended objectives. A poor capability and inability to apply technology in a coordinated way will result in higher cost, risk, and frustration among users.

E-readiness, one of the key enabling solutions in a business, is commonly defined as the ability of the workforce and level of preparation of an entity, whether it's a nation or an organisation to take part, contribute and benefit from the information and communication technologies (Ruikar et al., 2006). It's viewed as the ability of the user to embrace and use new technologies such as productivity or marketing tools and systems to achieve personal, work and career goals. Factors contributing towards e-readiness consist of enterprise management readiness, ICT infrastructure readiness, external environment readiness, information readiness, human resources (competencies) readiness and e-commerce readiness (Awajan et al., 2013; Aziz and Salleh, 2011; Idris, 2015).

Marketing-based cloud computing applications, one of the enabling solutions in emarketplace retail business suitable for both large and small firms to reach a broader customer base include CRM tools such as Hubspot, Salesforce or Zendesk (SCORO, 2017), email marketing tools such as AWeber, MailChimp or GetResponse (Ki, 2020), keyword research tools such as KWFinder (Ki, 2019), Google Keyword Planner, Ahrefs, or Jaaxy (Dean, 2023) and finally social media applications such as Facebook, Instagram or TikTok. Self-learning bots like ChatGPT and LISA chatbot in Lazada are the trending cloud-based marketing tool to support marketing activities of e-marketplace retailers. With the increasing of self-learning bots usage in the marketplace and retail, the possibility of new business development was increased (Yasynska et al., 2019). The researcher agrees with Yasynska et al. (2019) that the advancement of digital tools will further force learning and improve the capability and productivity of the workforce.

Social media such as Facebook, Instagram, YouTube and Twitter (currently rebranded as "X") are commonly used by companies to increase brand equity (Universiti Utara Malaysia et al., 2018), enhance customer relations and service activities (Parveen et al., 2015), drive customer purchase (Harun and Husin, 2019) and increase sales and profitability (Musa et al., 2016). Findings revealed that using user-generated content and firm-created content has positively impacted the development of brand equity of Malaysian businesses, particularly in using social media advertising and social media promotions (Universiti Utara Malaysia et al., 2018). Based on the experience of the researcher, it is the norm for e-marketplace retailers to engage in social media marketing such as advertising, promotion, branding, information search, and lead generation, as part of their marketing operation (Parveen et al., 2015; Universiti Utara Malaysia et al., 2018). However, there is a lack of evidence showing the presence of active engagement on social media to improve marketing results.

Although there is widespread recognition of the importance of social media marketing among SMEs, however, there is often a lack of investment for effective planning and implementation.

Most reasons for not actively engaging in social media marketing include lack of time, inability to keep up with the rapid changes, lack of digital marketing competencies, and lack of resources. Many small businesses prefer to focus inward such as price and product than focus on social media marketing that involves expanding market share. Businesses use social media but fail to comprehend its effectiveness and performance, neither will they appoint a dedicated staff to do it. They pursue social media marketing in order not to be left behind while everybody else is doing it (Malesev and Cherry, 2021). Whether a business decides to pursue or not to pursue social media marketing, it is undeniable one of the best enabling solutions is social media. Having good enabling solutions are more likely to experience a productive, effective and efficient workforce that can deliver flexible implementations of business solutions (Vodafone Enterprise, 2014). As much as the researcher agrees with this, however, she still believes in the need to set priorities. There are just too many types of enabling solutions that e-marketplace retailers can leverage on to grow their business. However, being literally small, there is only a handful of resources available to dispense. Therefore, it is important for MSME e-marketplace retailers to decide on the most optimum solution and focus on exploiting its benefits to the fullest before embarking on new solutions. With limited resources, running on few solutions at one time might increase level of exhaustion among employees, thus decrease commitment.

The earlier studies on business readiness focus on current resource availability such as clear policy and procedure, ICT fundamentals, well-defined strategy, management and leadership, and effective delivery system (Al-Douis, 2019; Awajan et al., 2013; Idris, 2015; Vodafone Enterprise, 2014). After experiencing the disruptive impact of the Covid-19 pandemic, and the multiple industry reports released post-pandemic, the researcher opines that it is practical for businesses to consider competence readiness (future resource) as one measure of business readiness.

2.8.7 Competence Readiness

Competence and competence readiness are different and must be distinctively differentiated. Competence is the state of being suitable for a particular task or the ability to do something successfully as defined in the Oxford Dictionary. It is the ability that is demonstrated in the application of knowledge, skills and attitudes to achieve specific results (European Commission, 2014). Competence involves the confident and critical use of a person's ability to achieve work, leisure and communication goals (Council Of The European Union, 2018) and is highly relevant in the study of readiness (Awajan et al., 2013; Gouweloos and McArthur, 2019). Competence requirements have changed as more jobs are being subject to automation and technologies. It has become more important in this unpredictable market environment to ensure resilience and the ability to adapt.

Eight key competencies were identified by the Council Of The European Union (2018). Key competencies are related to lifelong learning, acquired through formal and informal learning from one person to another, and from within a community. Measuring competence achievement of an employee should be made a continuous observation and effort (Council Of The European Union, 2018). This also indicates that continuously acquiring new competencies is critically important. Attitude is often neglected in many of the competence models (Papageorgiou and Marneros, 2023), yet it is considered the basis for continued competent performance (Vuorikari et al., 2022), Competence readiness is the degree of "being ready" to acquire or enhance the current level of competence, whether it is from personal, community or organisation perspective. It is related to questions like "Is the person ready to enhance his/her competence level?" or "Is my company ready to acquire new competence?" or "Does he have the attitude to continuously improve". The researcher opines that competence readiness relates to the mindset, attitude, and capacity of the person to

improve current competencies or to acquire new competences. Aaron De Smet et al. (2021) explained improving the ability to learn is one of the characteristics in a future ready business. The researcher suggests that competence readiness relates to the "personal, social and learning to learn competence" explained in the Council Of The European Union (2018). Competence readiness is therefore important because having competence now will not guarantee future competences. Only by having a positive attitude towards competence, can a person continue to acquire new competences or enhancing current competences.

In a study inspired by Covid-19 crisis that investigated the attitudes and behaviour of 2,613 companies, firms that show resilience during the pandemic are classified as future-ready (Vodafone Limited, 2021). This study posits that the attitude and behaviour demonstrated by a business have become the core item to assess future readiness, a deeper look into the culture and management of its predecessor (Vodafone Enterprise, 2014). The study of future-ready business signifies that a business with a positive attitude to change, is open to new technology, actively plans for technological futures, sets detailed strategies, keeps up to date with emerging trends and is adaptable, is considered as more future-ready than those that are not.

The importance of attitude in predicting behavioural intentions and actual behaviour has been repeatedly studied, yielding positive results (Fishbein and Ajzen, 1975; Lai et al., 2014; Liesa-Orús et al., 2023). Vodafone (2021) identified a few attitudes such as positiveness, openness, and adaptability, to represent future-ready businesses. Attitude is one of the components to measure competence, yet remain silent in most model of competence measurement, probably due to its complexity. The positive attitude of a business towards achieving competence readiness can result in the continuity of enhancing existing and acquiring new knowledge and skills. With readiness defined as an attitude (Mladenova, 2022),

it is therefore important to assess a person's competence-readiness to ensure a future-ready business that is resilient towards achieving sustainability.

2.9 Research Gap & Unresolved Questions from Past Literatures

Most research on e-marketplace focus on the classification of e-marketplace (Wang and Archer, 2007), the sustainability of e-marketplace (Daniel et al., 2004; Kestenbaum, 2017), the success factors of e-marketplace implementation (Prihastomo et al., 2018). and the impact of e-marketplace (Kawa and Wałęsiak, 2019; OECD, 2022; Shi et al., 2021). Out of the total 37 publications related to e-marketplace implementation reviewed by Prihastomo et al. (2018), only one paper is from Malaysia. Even research related to e-marketplaces in Malaysia focus on similar pattern as in global studies (Aziz et al., 2022; Madan et al., 2022), primarily focus on consumer behaviour (Jaylene, 2023; Kathiarayan, 2022; Tang and Ya'acob, 2023; Wong et al., 2023). The tremendous growth of e-commerce and e-marketplaces in Southeast Asia countries eventually only encourages studies on e-readiness (Aziz, 2022; Nuari Harmawan, 2022) and buyer intention (Harun and Husin, 2019; Wibowo et al., 2020). No study was found explicitly investigating the readiness of third-party e-marketplace retailers on a global perspective. Only one publication about the impact of e-marketplaces on Malaysian SMEs (Dass and Md Johar, 2022), slightly associated with e-marketplace retailers, were found. However, this research does not apply to individual seller, neither is it about business readiness. There is obvious lack of research relating to business readiness, and even none specifically targeting MSME e-marketplace retailers in Malaysia. With sellers being identified as one of the key success factors of e-marketplace (Prihastomo et al., 2018), the increasing importance of e-marketplace in e-commerce industry, and the importance of MSME emphasized by the Malaysian government, it therefore warrant more investigations to be conducted on MSME e-marketplace retailers.

The effect post-pandemic has revealed the unreadiness of MSME in handling the disruptive market volatility. Majority of the studies on organisation commitment and business readiness focus on SME, larger corporations or even public sectors (Gelaidan and Ahmad, 2013; Silalahi and Bimo, 2021; Vodafone Enterprise, 2014; Vodafone Limited, 2021). There is hardly any research in this aspect targeting MSME. Even there is, most research on business readiness only investigate the aspect of firm readiness concerning adoption of technology and e-commerce or during change management (Awajan et al., 2013; Idris, 2015; Molla and Licker, 2005; Ruikar et al., 2006; Alolabi et al., 2021). There is very little academic research evolving around the holistic topic of business readiness, without explicitly targeting an objective. However for industry reports, the topic of business readiness were often emphasized (Aaron De Smet et al., 2021; Acceler8 Venture Builder, 2022; Vodafone Enterprise, 2014; Vodafone Limited, 2021). With the rapid adoption of digitalisation worldwide and the growing onboarding of e-marketplace retailers in Malaysia, there is a need to investigate deeper into the business readiness of Malaysia MSME e-marketplace retailers as an independent subject, but not one that's hidden beneath the e-commerce, retail industry or service sector. This is because there are more MSMEs adopting business models that only focus on a single sales channel of e-marketplace. The criticality to investigate business readiness is further amplified by the steep revenue decline post-pandemic faced by emarketplace retailers, and the increasing importance of business readiness from the perspective of industry.

Digital marketing capability is a prerequisite to ensure the daily operationality and profitability of modern business (Cham et al., 2022; Council Of The European Union, 2018; Yasynska et al., 2019). Due to the business nature of e-marketplace retailers that constantly required to race against time as a result of rapid changes in technology, fierce competition, and increasing demand from consumers (Dass and Md Johar, 2022; Kawa and Wałęsiak,

2019), continuously acquiring new competences has become the norm to remain competitive (Lai et al., 2019). There is very little distinction made concerning the terms digital marketing and digital marketing competence in academic research and both terms are frequently used interchangeably (Aziz, 2022; Yulia Segarwati et al., 2020). Being recognized as one of the key competencies for lifelong learning (Council Of The European Union, 2018; Directorate-General for Education, 2019), the importance of acquiring digital marketing competence must never be ignored. Digital marketing competence entails much more than knowledge and skills but rather the attitude towards digital marketing that motivates continuous learning. Only by continuously acquiring new digital marketing competence, it is possible to out beat competitors and stay ahead of them. All these require a positive attitude towards digital marketing. Most literature on digital marketing competence applies only knowledge and skills in search engine optimization, social media, e-commerce, email marketing and website management as items of measurement without considering attitude as a critical component (Tran Phi Hoang and Vo Huu Khanh, 2016). Despite Malaysia and Singapore is only separated by a causeway with a mere distance of 2.4km, however, the adoption of digital marketing techniques vary significantly; with Malaysia left far behind Singapore (Amrita V. Nair, 2023; Jaini et al., 2022). The inadequacy of digital marketing capabilities of Malaysia SMEs within the region is somehow or rather making Malaysia less competitive as compared to its neighbour Singapore. This raises concern for Malaysian government and businesses towards increasing competitiveness. Currently, no study has been found researching on the intention of Malaysian MSME e-marketplace retailers to enhance digital marketing competence, and this presents a gap for the researcher to study deeper into digital marketing competence of Malaysian MSME e-marketplace retailers, and how this competence can impact business readiness.

Like enhancing digital marketing competence, seeking knowledge has become the prerequisite to keep up with market changes, latest trends, and rivalry among retailers. Knowledge seeking has become the new horizon in knowledge management as it is the active act of knowledge seeking that can construct more new knowledge for sharing (Lai et al., 2019). Studies on the intention and actual behaviour to seek knowledge were conducted on members of virtual communities (Kim, Jae Kyeong, 2014; Lai et al., 2014), designers (Carro Saavedra et al., 2017), employees of software development firms (Humayun and Gang, 2013), multinational firms (Haas and Cummings, 2015), engineering firms (Veeravalli et al., 2019) and hospitals (Chan et al., 2023), and post-graduate students (Zhang, 2019). With the increasing importance of acquiring new knowledge to compete among e-marketplace retailers, it is, therefore, significant to investigate an e-marketplace retailer's intention to seek knowledge as there is no such research found now. Similarly, no study on the intention to seek knowledge was ever conducted on Malaysian MSME e-marketplace retailers

Whether it is investing in acquiring new knowledge, enhancing existing skills, adopting new technology, introducing new products, or implementing unprecedented marketing initiatives, it is unavoidable to make decisions, many times, risky ones to race ahead of competitors (Bran and Vaidis, 2019; Fan et al., 2022, 2022; Giaccone and Magnusson, 2022; Zinn, 2020). Entrepreneurs are inherently risk-takers (Auliya et al., 2019; Filmina and Mayangsari, 2020; Rodríguez-Gutiérrez et al., 2020). Firm risk management is proven to impact positively on Malaysian retailers' performance when adopting retail 4.0 (Sakrabani and Teoh, 2020). With most study on risk-taking focus on larger firms but not on MSME, and with the increasing importance of risk-taking seen during disruptive change, the topic of risk-taking in business therefore warrant attention from the researcher. Intention to take risks is therefore highly recommended as an item to study on the business readiness of Malaysian MSME emarketplace retailers, together with the intention to enhance digital marketing competence

and intention to seek knowledge. As the saying goes, the higher risk a business is willing to take, the greater the return. Similarly, there's no research on intention to take risks ever conducted on MSME e-marketplace retailers in Malaysia.

Currently, there is no research specifically targeting MSME e-marketplace retailers in Malaysia, there is even none studying on how behavioural intentions can impact the business readiness of MSME e-marketplace retailers in Malaysia, with or without the presence of organisation commitment. This presents a research gap for the researcher to conduct this study.

2.10 Hypotheses and Research Framework

Based on reviews of multiple publications conducted by the researcher, there is very little attention given to the study of business readiness in totality by academic researchers. Most academic studies on readiness are based on a specific purpose such as for change management, digitalisation, and project delivery, etc. Most studies on business readiness in totality can be found in industry reports. The current research aims to undertake an industry-specific approach to understand the factors from a psychological point of view, that can influence the totality of business readiness of Malaysia's MSME e-marketplace retailers, without taking into consideration specific objective (e.g.: change management) that are commonly discussed in academic research. The researcher opines that in this constantly changing environment, change is no longer predictable, and discussing "change" as a topic is neither critical nor relevant anymore. It is incontestable that businesses must always be ready for the unknown future, whether change is happening now or in years to come, predictable or not predictable. Current research will adopt factor analysis via hypotheses formulation to study the direct and indirect relationship between behavioural intentions and business

readiness with organisational commitment as the key moderator to these relationships. Hypothesis and related references are organised for easy reference as per Appendix 2.

2.10.1 Intention to Enhance Digital Marketing Competence (DM)

2.10.1.1 Relationship of DM on OC and BR

There is a total of eight core competencies for lifelong learning identified by the Council Of The European Union (2018) and forty competencies for ICT professionals identified by the European Commission (2014). Digital marketing competence encompasses skills, knowledge and attitudes related to marketing and technology, and has appeared in both publications. CIM (2019) emphasises the importance of digitalisation when planning and implementing marketing strategies. Digital marketing competence has become the basic level of competency in business and social constructs. The crisis of Covid-19 has forced the acceleration of digitalisation and resulted in a talent war for technology-skilled workers. Digital marketing jobs, in particularly social media, creative content and data analytics, are on the rise in Malaysia (Huawei Technologies Malaysia and MDEC, 2022; MDEC, n.d.). Both digital marketing and marketing analytics involving technology applications are considerably significant in the business environment (Cham et al., 2022). In fact, digital marketing has been treated as an enabler in managing ICT business processes from as early as 10 years ago by the European Commission (2014). The enabling solutions or the ability of a person to apply technology in achieving intended objectives can critically impact business readiness (Vodafone Enterprise, 2014). Human resources is viewed as a critical influencing factor in assessing the readiness of a firm (Idris, 2015). Organisational capability, whether it is a potential capability or reshaping capabilities can influence organisational readiness (Alolabi et al., 2021). Organisational commitment is an indicator of business competence (Ibrahim et al., 2016). Organisational commitment is recognised as one of the key factors to

assess the e-readiness of a business (Idris et al., 2017). Training and skills development can improve employee engagement, thus enhancing employee commitment towards the organisation they work for (Hizam et al., 2023). Hence, it is hypothesised as follows: -

H1a: Intention to enhance digital marketing competence (DM) has a positive significant impact on BR

H1b: Intention to enhance digital marketing competence (DM) has a positive significant impact on OC

H1c: OC positively mediate between the intention to enhance digital marketing competence (DM) and BR

2.10.2.2 Measures of Intention to Enhance Digital Marketing Competence

Value: Attitude is widely acknowledged as one of the strong predictors in the study of behavioural intentions and actual behavioural achievement (He et al., 2009; Lai et al., 2014; Liesa-Orús et al., 2023). Reports published by established organisations similarly acknowledged the importance of attitude as a component in measuring competence (Council Of The European Union, 2018; Directorate-General for Education, 2019; European Commission, 2014; Vuorikari et al., 2022). Attitude is also an important indicator in the preparation for a future-ready business (Vodafone Limited, 2021). Perseverance, commitment and risk-taking are a few attitudes that are critical in building international business competence (Ibrahim et al., 2016).

Maintaining a positive attitude when dealing with existing customers can enhance the purchase intention of future buyers through online reviews (Hwang and Yoo, 2021). Digital transformation is a process of integrating digital technologies into all components of an

organisation, be it marketing, human resource, finance or operation, in delivering value to all stakeholders. Employee's positive attitudes toward digital transformation can positively influence digital transformation attitudes at a personal level (Oh et al., 2022).

Value, an attitudinal belief embedded in the mind of a person, serves as a guiding principle in the person's life (Schwartz, 1996). It is about a standard of behaviour that affirms an individual's judgement on what is right or wrong in life. The stronger the value of attitudinal belief is, the more clarity is the attitude (Blankenship et al., 2022). Attitude as an indicator of digital competence (Vuorikari et al., 2022) includes values, aspirations and priorities. Value is proven to have a significant relationship with attitude clarity. Hence, value is used as an indicator, representing attitude, on intention to enhance digital marketing competence.

Community Identification: Identification is defined as the emotional ties between two or more people (Freud, 1922). A stronger identification can develop greater social capital (Claridge, 2018) and is proven to impact subjective norms in the study of behaviour (Ajzen, 1991; Lai et al., 2014). Many studies on community identification evolve around brand management, customer engagement, volunteerism and sports team marketing (Ammari et al., 2021; Confente and Kucharska, 2021; Kim and Manoli, 2023; Wakefield et al., 2022). Learning is the basis of competence development (Council Of The European Union, 2018), and knowledge-seeking is a learning process (Lai et al., 2019). Community identification is affirmed in the study of Confente and Kucharska (2021) to affect member's attitudes on brand loyalty and attitude is a critical yet unexplored indicator of competence.

With the principle that learning is the basis of competence building, the positive impact shown by community identification on knowledge-seeking intention in Lai et al. (2014), and the significant impact of community identification on attitude, it is reasonable to adopt

community identification, representing subjective norm, on intention to enhance digital marketing competence.

Knowledge and Skills: Generally, an employee is considered competent when they are equipped with knowledge, skill, and ability to accomplish a task. Self-efficacy is the subjective judgement of a person's ability to perform a task (Venkatesh et al., 2003). In the context of digital marketing competence, self-efficacy is the subjective judgement of one's ability to perform digital marketing tasks such as keyword research, creative content creation, digital advertisement, and analysis of marketing data. Self-efficacy is used as an indicator to predict attitude (Carro Saavedra et al., 2017; Oh et al., 2022; Sharma and Bock, 2005) and predict perceived behavioural control on getting information skills (Pavlou and Fygenson, 2006) in the study of intentions and actual behaviour.

Knowledge and skills are widely discussed and acknowledged as critical indicator in many established journals and reports on the topic of competence (Ahmed, 2023; Spante et al., 2018; Vuorikari et al., 2022). Knowledge is the awareness of a subject matter, and skills are the ability acquired from knowledge construction, applied to carry out tasks to achieve specific goals (Council Of The European Union, 2018). Knowledge-seeking is equivalent to lifelong learning (Lai et al., 2019) and learning is the basis for the formation of all competencies (Council Of The European Union, 2018; Directorate-General for Education, 2019).

Knowledge can encourage the development of an innovative mindset and improve innovation performance (Ingršt and Zámborský, 2021; Verm et al., 2018; Wu et al., 2015). Employees' innovativeness capability enhances their willingness to upgrade their knowledge and skills for digital transformation (Chaudhuri et al., 2023). Innovativeness at a personal level can impact both intention and behavioural acceptance of digital transformation (Chaudhuri et al.,

2023; Oh et al., 2022). This means, that knowledge impact individual innovativeness leading to high adoption of technology that results in business performance upgrade. With the validity of self-efficacy in influencing perceived behavioural control and the acknowledgement that knowledge and skill as indicators of competence, hence, knowledge and skill are used as an indicator, representing perceived behavioural control, on the intention to enhance digital marketing competence.

2.10.2 Intention to Seek Knowledge (SK)

2.10.2.1 Relationship of SK on OC and BR

Knowledge management is seen as the key to organisation creativity and innovation (Henard and McFadyen, 2008; Ingršt and Zámborský, 2021; Wu et al., 2015) whereby knowledgeseeking is proven as a predictor (Mohammed and Kamalanabhan, 2019; Wu et al., 2015). The study on knowledge management encompasses knowledge creation, knowledge sharing and knowledge seeking (Ipe, 2003; Lai et al., 2019, 2014; Nonaka, 2007). Knowledge seeking drives knowledge creation and knowledge sharing (Lai et al., 2019). Knowledge sharing, a type of helping behaviour, is proven to increase employee affective commitment (Nguyen et al., 2022). Good knowledge management can maximise profit, nurture creativity, achieve competitive advantage (Verm et al., 2018), improve productivity, and create a positive organisational culture (Bratianu, C. et al., 2020). A positive attitude towards a firm strengthens organisational commitment through emotional attachment, identification and engagement (Mahmod and Rosari, 2020). Top management support towards employee knowledge acquisition is critical for businesses to achieve readiness (Pucihar and Podlogar, 2005). Knowledge management is a strategy for business survival, and achieving this requires business to be future-ready (Humayun and Gang, 2013). A competent workforce contributes towards the e-readiness of a business (Aziz, 2022; Papageorgiou and Marneros, 2023).

Competence can be developed through knowledge acquisition (Directorate-General for Education, 2019). With knowledge being considered highly critical in determining the competitiveness of MSME in Carvalho et al. (2021) whereby firm competitiveness is influenced by business readiness, hence, the intention to seek knowledge is used to predict business readiness. It is hypothesise as follows:-

H2a: Intention to seek knowledge (SK) has a positive significant impact on BR

H2b: Intention to seek knowledge (SK) has a positive significant impact on OC

H2c: OC positively mediate between the intention to seek knowledge (SK) and BR

2.10.2.2 Measure of Intention to Seek Knowledge

Knowledge Quality: Reviews on knowledge management literature related to knowledge-seeking initiations conducted by Carro Saavedra et al. (2017) and a study on the actual knowledge-seeking behaviour of members of a professional virtual community in Lai et al. (2014) have proven that knowledge quality can positively affect a person's attitude in the intention and actual behaviour to seek knowledge, as observed concerning knowledge management repositories and professional virtual communities in Taiwan. Veeravalli et al. (2019) in a study on employees of an MNC engineering firm, based on the theory of planned behaviour, proved that perceived information quality positively affects a person's attitude to seek knowledge. Waheed et al. (2016) posits that knowledge quality is determined by the input of data and information quality. Hence, knowledge quality is used as an indicator, representing attitude, on the intention to seek knowledge.

Peer Influence: The term knowledge creation (Mihi Ramírez et al., 2012; Nonaka, 2007), knowledge sharing (Chan et al., 2023; Ipe, 2003), knowledge sourcing (Gray and Meister,

2004), knowledge acquisition (Beveren, 2002), and knowledge seeking (Lai et al., 2019; Mohammed and Kamalanabhan, 2019; Veeravalli et al., 2019), are interrelated in the study of knowledge management. Peer influence was found to positively impact the subjective norm on intentions to create, share and seek knowledge (Carro Saavedra et al., 2017; Goh and Sandhu, 2013b; Haas and Cummings, 2015; Lai et al., 2014; Zhang and Chen, 2018). Lai et al. (2019) define knowledge seeking as "a learning process, or a process of constructing knowledge" and results in Xu et al. (2023) show that positive peer influence can increase the learning intentions of a person. Learning and knowledge seeking are highly related, hence peer influence is used as an indicator, representing subjective norm, on the intention to seek knowledge.

Resource Availability: Carro Saavedra et al. (2017) identify facilitating conditions as one of the repetitive factors impacting knowledge-seeking initiation. Nguyen et al. (2019) posit that resource-facilitating conditions as a perceived behavioural control can encourage knowledge sharing. Resources consist of knowledge content, management support, supportive coworkers and technology hardware and systems (Ojo et al., 2022; Sharma and Bock, 2005; Taylor and Todd, 1995). Management support in providing regular training and sufficient time for employees to seek knowledge will encourage knowledge-seeking among employees (Haas and Cummings, 2015; Veeravalli et al., 2019). Resource availability is proven a perceived behavioural control construct to positively impact knowledge-seeking intention and actual behaviour (Carro Saavedra et al., 2017; Lai et al., 2014). Hence resource availability is used as an indicator, representing perceived behavioural control, on the intention to seek knowledge.

2.10.3 Intention to Take Risk (TR)

2.10.3.1 Relationship of TR on OC and BR

Risk-taking involves rationality (Fan et al., 2022) and requires a minimum awareness of the risk (Zinn, 2015), including possible outcomes as a result of it. A person who is willing to take risks is more likely to become an entrepreneur than a person who is not (Abd Razak et al., 2020; Chanda and Unel, 2019). One of the fundamental attributes of entrepreneurial behaviour is having a risk attitude (Spicka, 2020). Despite entrepreneurship being inherently a risky activity (Chanda and Unel, 2019; Filmina and Mayangsari, 2020; Spicka, 2020), it has long been established as a driving force behind innovation, job creation and economic growth. Innovation can improve competitiveness, thus making businesses more ready.

It is a norm for businesses to make riskier decisions due to the increasing business volatility. It is also important for businesses to take risks to facilitate readiness to transform (Dai et al., 2023). Chen and Wu (2022) and Vodafone Limited (2021) posit that the pandemic has forced businesses to make unprecedented riskier decisions and such decisions were proven to result in making profit. A future-ready business that shows resilience during a pandemic is adaptable and can react quickly to challenges and new trends (Vodafone Limited, 2021).

Financial risk-taking is a prerequisite in managing a business. Self-efficacy can potentially influence financial risk-taking when the outcome is controllable (Han et al., 2019). Self-efficacy is the strongest predictor of behavioural intention (Boss et al., 2015) and can positively impact digital transformation (Oh et al., 2022), and organisational commitment (Mahmod and Rosari, 2020). With the inter-relationship between risk-taking, self-efficacy, entrepreneurship, business readiness and organisational commitment, hence it is hypothesised as follows:-

H3a: Intention to take risks (TR) has a positive significant impact on BR

H3b: Intention to take risks (TR) has a positive significant impact on OC

H3c: OC positively mediate between the intention to take risk (TR) and BR

2.10.3.2 Measure of Intention to Take Risk

Risk-Taking Attitude: The risk attitude of a person is moderately stable over time, yet the degree of stability is insignificant (Schildberg-Hörisch, 2018) and high depending on the context risk is measured. Risk-taking can be assessed in the context of gambling, entrepreneurship (Chanda and Unel, 2019), business environment (Dickason-Koekemoer and Sune Ferreira-Schenk, 2022; Rodríguez-Gutiérrez et al., 2020), innovation (Giaccone and Magnusson, 2022), humanitarian mission (Dahlgren et al., 2009), and unprecedented global emergencies (Chen and Wu, 2022). Apart from the contextual differences that can significantly alter the risk-attitude of the same person (Byrnes et al., 1999; Losecaat Vermeer and Sanfey, 2015), the volatility of risk-taking attitude is also highly related to the rationality of a person influenced by age, gender, nationality and culture (Byrnes et al., 1999; Chanda and Unel, 2019; Gowen et al., 2019; Zinn, 2017).

In economic preferences, emotion correlates with a person's fluctuation of risk attitudes (Meier, 2022), either positive or negative attitudes. A person who fears the negative impact of risk-taking is less willing to favour risk-taking (Boss et al., 2015; Maddux and Rogers, 1983). Positive emotion disengages a person from worrying about the negative aspects of life, thus taking risks from a neutral stance (Meier, 2022). Attitude is considered by psychologists as the most powerful predictor of behavioural intention (Ajzen, 1991). It is the feelings, emotions, knowledge and beliefs that are commonly used in assessing attitude (Ajzen and Timko, 1986). Measuring a single construct like the intention to take risks with multiple

items using questionnaires can sufficiently reduce error in measurement (Schildberg-Hörisch, 2018). Hence, a risk-taking attitude (belief) is used as one of the indicators, representing attitude, to measure a person's intention to take risks.

Risk-Taking Propensity: People who take risks hold on to the belief that benefits can be derived from risk-taking (Zinn, 2017). Digital transformation has forced businesses to take risks, especially strategic ones (Dai et al., 2023). Risk-taking amplifies professionalism leading to improved business performance (García-Lopera et al., 2022). Many studies postulate that risk-taking propensity is highly related to entrepreneurship (Chanda and Unel, 2019; Filmina and Mayangsari, 2020; Spicka, 2020). People who are more inclined to risk-taking are more likely to become entrepreneurs. Unprecedented crisis like COVID-19 has proven the best possible time for businesses to consider new ways of business, and ultimately make a profit (Chen and Wu, 2022). Emergent organisations like e-marketplace retailers, normally with flexible structures, view risk-taking as an opportunity that can be beneficial (Shaheen et al., 2021). Risk-taking has a direct impact on perceived leadership effectiveness (Frost et al., 1983). Leadership effectiveness (Huguet, 2017) and risk-taking propensity have a significant positive impact on business performance (Chen and Wu, 2022; García-Lopera et al., 2022).

Like many research on risk-taking propensity (Abd Razak et al., 2020; Rodríguez-Gutiérrez et al., 2020; Spicka, 2020), the current research assumes the social norm of entrepreneurs having generally higher risk-taking propensity as compared to people who opt for employment. Therefore, it is reasonable to consider taking risks as a norm in their entrepreneurial journey. Hence, the risk-taking propensity is used as one of the indicators, representing subjective norm, to measure a person's intention to take risks.

Risk Appraisal: Individual risk appraisal is highly subjective (Bran and Vaidis, 2019), and depends on a person's rationality (Fan et al., 2022) and the context risk it is measured (Karsh et al., 2021; Losecaat Vermeer and Sanfey, 2015). Vulnerability and severity are two main components as a source of fear used to measure threats, or the negative impact of risk (Prince and Kim, 2021). The level of riskiness is mitigated (coping appraisal) with the availability of response efficacy, self-efficacy, and response cost. The level of riskiness can be defined as a combined function of threat appraisal and coping appraisal in the Protection Motivation Theory (Maddux and Rogers, 1983).

Self-efficacy or perceived capability to perform a behaviour has a strong positive direct influence on intentions (Ahmed, 2023; Wang, 2019), including entrepreneurial intentions (Auliya et al., 2019). The presence of self-efficacy can result in a positive relationship between a person's identity and risk-taking. This means a person with stronger self-efficacy are more inclined to take financial risk than a person who is not (Han et al., 2019). However, unlike the outcome as a result of gambling, which is uncontrollable, the influence of self-efficacy is probably applicable only to risk-taking when the outcome of the risk is controllable. Zinn (2020) postulates control, reflexivity and personal identity are three key motives for risk-taking, with control taking the lead.

It is less likely for a person with high reflexivity (knowledge or ability to grasp the situation) and intention to protect personal identity (e.g.: an ethical politician) (Han et al., 2019) to take risks in a situation where control is no longer possible. Lack of reflexivity will render irrational and unreasonable risk-taking (Zinn, 2017). The researcher opines that regardless it is self-efficacy or reflexivity, a certain level of control is necessary when assessing risk to produce a more reliable result. Hence, risk-taking appraisal is used as one of the indicators, representing perceived behavioural control, to measure a person's intention to take risks.

2.10.4 Organisational Commitment (OC)

2.10.4.1 Relationship of OC and BR

A business is ready to embrace future uncertainties, whether it is opportunity or challenge when it has a positive organisational culture, competent workforce, good policy and processes, and enabling solutions such as new technology and optimised digitalisation (Vodafone Enterprise, 2014). Business readiness is a continuum state with no absolute end as the volatility of the business environment does not allow businesses to stop transforming. Monitoring business readiness is therefore critical to ensure survival (Yasynska et al., 2019). Human resources as a strategic asset is critical in preparing for a ready business (Alqudah et al., 2022; Huawei Technologies Malaysia and MDEC, 2022; Idris, 2015; Vodafone Limited, 2021).

Organisational commitment measures the level of attachment an employee has to an organisation they work for. Employee positive attitude towards the organisation they work for resulting in stronger attachment (Allen and Meyer, 1990; Mahmod and Rosari, 2020; Meyer and Allen, 1991). An employee who is committed is more willing to perform for the best benefit of the organisation without asking for more return (Ennida and Allouani, 2023; Gellatly et al., 2006; Nguyen et al., 2019). The performance of an employee can influence readiness in a business (Alqudah et al., 2022). Mowday (1984) explains that organisational commitment revealed characteristics of employee readiness to work hard and a strong desire to stay in the organisation.

A ready business demonstrates openness, a forward-thinking attitude, are rich communicator, values people, and generally feels positive about the future (Vodafone Limited, 2021). Leadership and management support can potentially impact organisational commitment

(Bahadori et al., 2021; Bran and Vaidis, 2019; Juyumaya and Torres, 2023; Nastavia Putri and Lista Meria, 2022), and employee commitment and organisational capacity can influence the readiness of an organisation (Al-Douis, 2019; Idris et al., 2017; Mladenova, 2022). Employee affective commitment has proven to improve the readiness of a business (Alqudah et al., 2022). Hence, it is hypothesised as follows:

H4: OC has a positive significant impact on BR

2.10.4.2 Measures of Organisational Commitment

Affective, Continuance and Normative Commitment are the types of organisational commitment conceptualised by Meyer and Allen (1991) to measure organisational commitment. Affective commitment is the most sought-after commitment by an organisation (Meyer and Herscovitch, 2001). It is emotionally motivated whereby employees voluntarily choose to attach to the organisation out of personal identification (Nguyen et al., 2022), positive attitude and feeling of happiness. Employees who develop an affective commitment to the organisation they work for tend to stay longer (Nguyen et al., 2022), and emotionally attached despite overwork (Mahmod and Rosari, 2020). Normative commitment is obligatory-motivated and relates to a sense of indebtedness and moral duty (Gellatly et al., 2006). It is likely based on perceived societal expectations (Singh and Gupta, 2015) and an act of reciprocity (Phungula et al., 2022). Continuance commitment is a sense of loyalty to the organisation after employees lack alternatives and perceive the cost of leaving the organisation is too high. Affective commitment can be superseded by continuance commitment when a person under pressure conducts a cost-benefit analysis (Apergis, 2017; Mahmod and Rosari, 2020; Mowday, 1984). It can be overtaken by normative commitment when the social norm is stronger (Kumar et al., 2023; Rogers, 2020). It is therefore important to distinguish between the three types of commitment when measuring organisational

commitment (Meyer and Allen, 1997). Hence, affective commitment, normative commitment and continuance commitment are used as measurement items of organisational commitment.

Work Ethics and Leadership: Leadership plays a critical role in organisational commitment (Bran and Vaidis, 2019). A transformational leader has a positive significant impact on organisational commitment (Bahadori et al., 2021; Nastavia Putri and Lista Meria, 2022). Transactional leadership on the other hand can enhance employee readiness to change in the presence of a committed workforce (Al-Douis, 2019). Supportive managers garner the confidence of their subordinates by facilitating the process of psychological empowerment, thus improving employee engagement (Hizam et al., 2023). Supportive manager and employee engagement improves organisational commitment (Gorgulu et al., 2019; Hizam et al., 2023; Syed and Tappin, 2019). Work ethics is a benchmark for employees to fulfil their job duties and responsibilities (Supardi et al., 2021). It is knowing what is supposed to be done and having the determination to do it, or a set of rules to be followed based on personal assessment of value (González-Cruz and Guillén Parra, 2008; Hall, 1992). Work ethics is statistically proven to enhance normative commitment. Employee unethical behaviour will expose businesses to greater damage and destruction (IG International, 2018). González-Cruz and Guillén Parra (2008) posit that normative commitment has reduced ethics to moral judgements regarding norms. Therefore, it is imperative to impose a wider conceptualisation of moral norms. Ethical leaders garner trust from their followers and make them willingly commit to their cause (Bahadori et al., 2021). Hence, ethics and leadership are used to measure organisational commitment, together with the three-component conceptualisation of organisational commitment by (Meyer and Allen, 1991).

2.10.4.3 Measures of Business Readiness

Most studies access business readiness towards a distinct situation. Readiness was access from the topic of change, technology adoption and innovation (Alolabi et al., 2021; APM, 2018; Aziz and Salleh, 2011; Gouweloos and McArthur, 2019; Idris et al., 2017; Mladenova, 2022). A holistic view on business readiness was hardly discussed from an academic perspective, yet it is often mentioned by industry practitioners (Acceler8 Venture Builder, 2022; APM, 2018; Vodafone Enterprise, 2014; Vodafone Limited, 2021).

A ready business is equipped with modern technologies (Awajan et al., 2013; Aziz and Salleh, 2011; Nuari Harmawan, 2022), effective policy and process, enabling solutions, culture and management, and IT and communication fundamentals (Vodafone Enterprise, 2014). Ready businesses often keep up with emerging trends, are highly adaptable to changes and can enhance competitiveness (Vodafone Limited, 2021). Business readiness is a continuum measure with no absolute end state (Vodafone Enterprise, 2014; Yasynska et al., 2019)

Gouweloos and McArthur (2019) proposed a readiness framework to adopt cloud computing to include risk, trust, awareness, performance, service fit, organisation IT, and compliance. Awajan et al. (2013) measure e-readiness by considering competencies, training needs, technological infrastructure, and legal, social and cultural environment. Alolabi et al. (2021) on the other hand investigate organisation readiness from the dimension of contextual factors, leadership, culture, business capability and technology.

The researcher suggests adopting the four dimensions of business readiness recommended in Vodafone Enterprise (2014). Attitude is a critical component in behavioural research and readiness is related to attitude (Ajzen, 1991; Yasynska et al., 2019). Attitude is also critically acknowledged as one very important component that influences the making of a future-ready

business (Aaron De Smet et al., 2021; Vodafone Limited, 2021). Competence is critical in every aspect of life (Directorate-General for Education, 2019; Vuorikari et al., 2022). Therefore, the researcher proposes "competence readiness" as the fifth dimension in measuring business readiness. Hence, culture and management, policy and process, IT and communication fundamental, enabling solutions, and competence readiness will be used to measure business readiness in the current study

2.10.5 Proposed Research Framework

The proposed conceptual model of this research is derived from the researcher's own understanding of the industry, and her personal belief in the criticality of acquiring digital marketing competence, seeking knowledge and taking risks to ensure the continuity of emarketplace retailers, in light of the availability of limited resources. It is also her belief that businesses highly rely on a team of committed workforce to drive it towards continuous growth, placing employees as the top priority in delivering excellent business performance. The strong focus on human resources emphasised by the researcher supersedes the importance of technology, but this does not imply any insignificance to digitalisation and technology. This is because e-marketplace retailers basically require cloud-based technological enabling solutions that are less complex. Reviews conducted on related works of literature affirmed the researcher's belief that psychological factors do significantly impact business performance, business readiness, and business sustainability. Being a positive, forward-looking person, the researcher is adamant that current business performance is not indicative of future performance. However, should a business be constantly ready to embrace future undertakings, the business will be able to achieve excellence when opportunities are presented. Hence, the proposed model was developed as per Figure 8.

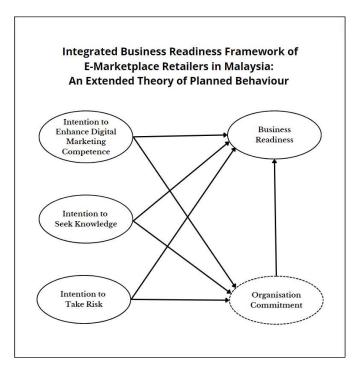


Figure 8: Conceptual Model of Integrated Business Readiness Framework

The main concepts employed in the formation of this model are The Theory of Planned Behaviour (Ajzen, 1991, 1985), the three-component of organisational commitment (Allen and Meyer, 1990; Meyer and Allen, 1991), and the industry practices of readiness framework and future-ready report (Aaron De Smet et al., 2021; Vodafone Enterprise, 2014; Vodafone Limited, 2021).

The purpose of this study is fourfold: First is to apply the components of attitude, subjective norm and perceived behavioural control proposed in the theory of planned behaviour as effective indicators to measure the relative strength of the three intentions. To strengthen the intentions as independent latent variables so that the possibility of carrying out the actual behaviour becomes greater in the current study, the indicator "intention" will be directly used in the study, together with the three reflective indicators mentioned earlier. The independent latent constructs identified in current research are intentions to enhance digital marketing competence (DM), intention to seek knowledge (SK), and intention to take risks (TR).

Second, to conduct a causal effect analysis and find out how these intentions influence directly both organisational commitment (OC) and business readiness (BR). Third, investigate the role of organisation commitment in mediating between intentions and business readiness. Finally, based on the findings, develop an integrated business readiness framework from a psychological perspective, to help advance our knowledge regarding the role of intentions and organisational commitment in preparing for a future-ready e-marketplace retailing business in Malaysia.

2.11 Chapter Summary

This study will extend the theory of planned behaviour (theory of planned behaviour) to measure the reliability and validity of the three intentions and discover how these intentions impact organisation commitment and business readiness of e-marketplace traders in Malaysia.

CHAPTER 3: RESEARCH METHODOLOGY

3.1 Introduction

This chapter is a connector leading to the achievement of study objectives, linking the model constructed through reviewing evidence from the background of the study, literature reviews and the proposed conceptual framework in Chapters 1 and 2. Results will be presented in Chapters 4 and 5. The purpose of this chapter is to explain and justify the selection of research methodology based on the context and fundamental nature of research. This chapter shall start with the research paradigm, followed by research design, data collection, exploratory factor analysis, and Partial Least Squares Structural Equation Modelling (PLS-SEM) will be discussed.

3.2 Research Paradigm

The concept of paradigm in social science is adopted to discover the reality of research problems, viewed as a set of basic assumptions which constitute a frame of reference, theorizing mode and ways of working within a group (Saunders et al., 2019). It is an important illustration of the subject matter within a science. It is meant to define the boundary of study that includes what should be studied, questions to be asked, and rules to be followed when interpreting answers (Jeffries, 1999). Based on the concept, the paradigm relates to the researcher's assumptions about the world. It is the paradigm that defines various ways to discover solutions. Saunders et al. (2019) assert that positivistic and interpretative paradigms are two relevant approaches to exploring the truth and fact of the business world. In the view of some researchers, the positivistic paradigm is "quantitative" and the interpretative paradigm is "qualitative" (Collis and Hussey, 2014).

3.2.1 Interpretative Paradigm

The aim of interpretive research is to create unexplored, richer understandings and interpretations of society and context. In the study of business and management, it means assessing organisations through the lenses of different groups of people (Saunders et al., 2019). The interpretivist position requires the researcher to be involved in the construction of meanings by engaging with participants. Such research is based on the combined interpretation of reality by both researchers and respondents (Chowdhury, 2019). It is the meaning rather than measurement of social phenomena that is being taken seriously. Researchers holding strongly to the interpretivism position are likely to argue that "rich insights into humanity are lost if such complexity is reduced entirely to a series of law-like generations" (Saunders et al., 2019)

3.2.2 Positivistic Paradigm

Taking a positivistic position involves accepting the fact that the only way to find out the reality is by taking a neutral stance, distancing oneself from the research, and assuming that the objective facts offer the best scientific evidence, yet not exclusively, resulting in choosing quantitative research methods. It puts emphasis on strictly scientific empiricism, which has negative influence by human interpretation or human biases throughout investigation, using methods that produce pure data and facts. Compared to the interpretivist, it is believed that the positivist approach is less likely to offer a holistic and richer view of organisational realities (Saunders et al., 2019), yet applies a highly structured methodology that can facilitate replication through the application of statistical analysis.

3.2.3 Distinctions Between Interpretative and Positivistic Paradigms

The distinctions between positivistic and interpretivist paradigms can be explained by the choice of research methods. Table 1 illustrates the differences between the positivistic and interpretative paradigms.

Ontology (nature of reality or being)	Epistemology (what constitutes acceptable knowledge)	Axiology (role of values)	Typical methods
	Interpr	etivism	
Complex, rich Socially constructed through culture and language Multiple meanings, interpretations, realities Flux of processes, experi- ences, practices	Theories and concepts too simplistic Focus on narratives, sto- ries, perceptions and interpretations New understandings and worldviews as contribution	Value-bound research Researchers are part of what is researched, subjective Researcher interpreta- tions key to contribution Researcher reflexive	Typically inductive. Small samples, in-depth inves- tigations, qualitative methods of analysis, but a range of data can be interpreted
	Posi	tivism	
Real, external, ndependent One true reality universalism) Granular (things) Ordered	Scientific method Observable and measurable facts Law-like generalisations Numbers Causal explanation and prediction as contribution	Value-free research Researcher is detached, neutral and independ- ent of what is researched Researcher maintains objective stance	Typically deductive, highly structured, large samples, measurement, typically quantitative methods of analysis, but a range of data can be analysed

Table 1: Distinctions between Interpretative and Positivistic Paradigm (Saunders et al., 2019, pg 44)

Positivists appear to adopt quantitative data with large sampling sizes in their surveys and the researcher remains unaffected throughout the research. Interpretivists, on the contrary, will opt to use subjective, qualitative, and richer data from case studies, focus group discussions or interviews that include the researcher's own participation and subjective view.

3.2.4 Positivistic Paradigm Employed in Current Research

Current research aims to determine the causal effect of multiple factors of behavioural intentions that can potentially impact business readiness and organisational commitment of e-marketplace retailers in Malaysia. Hypotheses were formulated through extensive reviews of previous academic literature and industry-related experience of the researcher. A conceptual framework is developed and will be tested with data collected, whereby findings will be

discussed. Attempts are made to select samples that can significantly represent e-marketplace retailers in Malaysia. It is reasonable to adopt a positivistic paradigm in this research, due to the following reasons.

Firstly, it is incontestable that businesses will rely on digital marketing competence, knowledge seeking and risk-taking in making business decisions. It is proven in previous research that intentions can translate to actual behaviour, whereby intentions can be measured with attitude, subjective norms, and perceived behavioural control. Second, Saunders et al. (2019) suggest that based on a positivistic paradigm, the research process shall incorporate the study on literature, thereafter establishing appropriate theory and developing hypotheses. The researcher was able to review existing literature before establishing a proposed conceptual model and hypotheses. The items to measure latent constructs like "I am willing to use personal time for the benefit of the company" or "when someone praises my team's effort in acquiring digital marketing skills, I feel good" were identified based on existing literature and publications related to the theory of planned behaviour (Ajzen, 1991), threecomponent of organisational commitment (Meyer and Allen, 1991), and business readiness (Vodafone Enterprise, 2014). Third, adopting a positivistic paradigm, the concept of this research is operational and measurable. To quote an example, this research will test and prove 10 causal relationships through hypotheses. Thus, questionnaires were designed as measurement items within the framework and distributed randomly to respondents who are owners, managers or employees of e-marketplace retailers through WhatsApp group, Facebook community groups, e-marketplace events and during face-to-face interactions. Lastly, the author researcher managed to use large sampling in this study specifically to conduct statistical analysis to test hypotheses. The questionnaire was designed for distribution to an approximately of 400 respondents, selected mainly from e-marketplace leaders – Shopee and Lazada. Structural equation model analysis will be conducted hence, 100% of data collected are quantitative and statistically, results from a large representative sample can significantly represent the whole population.

3.3 Research Design

In general, there are two common types of business research approaches under consideration: exploratory and descriptive. Both are considered non-experimental designs (Fireman Kramer, 1985; Saunders et al., 2019; Winders Davis, 2003). This section observes a different characteristic of both designs and provides justification for the employed research design.

3.3.1 Types of Research Design

Research design consists of a set of decisions that are used to develop a master plan explaining the methods and processes for data collection and analysis (Burns, 2003). Determining the chosen research design highly depends on the researcher's research philosophies, beliefs, and assumptions. Philosophies are based on the researcher's assumption about the nature of reality (ontology), assumption about knowledge legitimacy, validity and acceptability (epistemology) and the role of values and ethics (axiology) (Saunders et al., 2019).

Exploratory research is used when there is no clear direction about what model should be used to understand the dimensions of the problem. Researchers are not able to precisely identify the problem due to no or limited knowledge, therefore required to identify specific objectives or data requirements to be addressed for future research (Malhotra, 2010). On the contrary, descriptive research is structured, more rigid and pre-planned, typically based on the collection of large samples (Hair et al., 2002; Iacobucci and Churchill, 2018). Fireman Kramer (1985) suggests two levels of descriptive research. Level 1 is applied in situations where the problem is identified yet there is little to no previous research exist. Level 2 is

when prior knowledge of the topic exists, with known variables and methods of measurement, including a conceptual basis (Fireman Kramer, 1985). Descriptive research commonly known as causal effect research aims to identify relationships or influences between two variables (Hair et al., 2002; Iacobucci and Churchill, 2018). Both qualitative and quantitative data can be used in descriptive research, and their choice depends on the nature of the topic being studied. Siedlecki (2020) postulates that longitudinal data collection techniques can best be used to explore trends over time, whereas cross-sectional data collection methods can best be used to describe naturally occurring variables such as age, gender and education groups.

3.3.2 Descriptive Research Design Employed in Current Research

With the availability of existing knowledge on this study, the current research will apply descriptive design using a cross-sectional data collection technique to test hypotheses and, thereafter, uncover direct and indirect causal effects between latent constructs and observed variables. The current research process is illustrated in Figure 9.

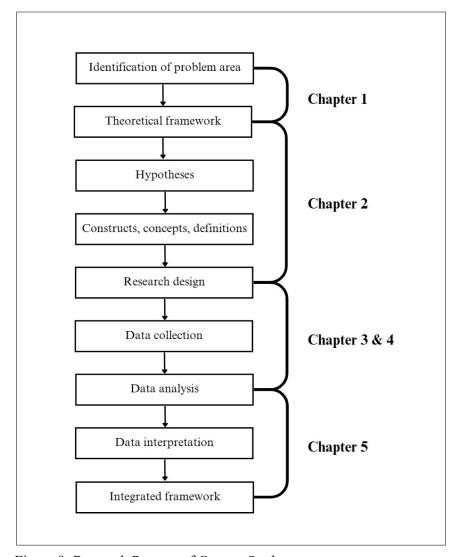


Figure 9: Research Process of Current Study

A tentative idea, hypotheses and a testable theoretical framework were proposed using the deductive approach in scientific research (Saunders et al., 2019). Three core behavioural intentions critical to business readiness and organisation commitment were identified. The indicators of latent constructs and observed variables were selected for further study and testing. The context of this research is based in Malaysia as the researcher aims to build an integrated business readiness framework for Malaysia e-marketplace retailers from the psychological perspective for future testing. Currently, there is no business readiness research on e-marketplace retailers and this study set in Malaysia shall provide an avenue for

replication and future testing. The samples used in this study consist of owners, managers and employees of e-marketplace retailers located in Malaysia.

3.3.3 Ethical Considerations

The author researcher adheres to the guidelines provided by the University of Wales Trinity Saint David Ethics Committee. It is important to receive ethical approval for research, particularly one that involves human participants. In the application for approval from the University Research Ethics Committee, the author researcher explains the research purpose, research questions, aims and objectives, research methodology, sampling, data collection technique and selection of participants, including indicating research and data confidentiality regulations in Malaysia and outlining any potential risks involved. Approval was received on 24 April 2021 via an email from the University Research Ethics Committee. Data obtained from the survey questionnaire is regarded as confidential. Strong assurances of confidentiality and purpose of usage are imprinted on the first page of the questionnaire, so respondents have a full understanding of this research. To protect confidentiality, names were not asked, and neither were respondents requested to sign their questionnaire. Ethical issues are always at the forefront of the researcher's mind throughout the process.

3.4 Data Collection

This study employs a cross-sectional survey questionnaire data collection method, primarily distributing online questionnaires to the intended respondents. It is selected based on the assumption that test results of a large sample size can be implied for the whole population, thus reducing bias. It is also less costly, convenient, and takes less time to complete (Hair et al., 2002; Iacobucci and Churchill, 2018; Miller and Acton, 2002). Furthermore, this method was tested repeatedly in similar studies of causal effect (Lai et al., 2014; Liesa-Orús et al.,

2023; Xu et al., 2023; Zhang, 2019). The research method for this study was designed as per Figure 10.

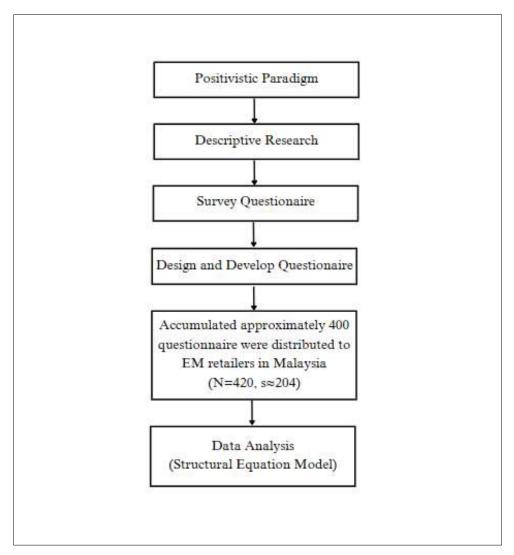


Figure 10: Research Methodology Used in Current Research (Source: Researcher)

3.4.1 Questionnaire Design

Figure 11 attempts to depict the process of the design and development of the questionnaire, demonstrating the linkages between different processes. This questionnaire design process will be used as a guideline in the current study, developed by the researcher (Iacobucci and Churchill, 2018; Minto et al., 2017; "Questionnaire Design," 1998; Roopa and Rani, 2012).

The questionnaire, a tool consisting of a series of questions, can be used by any type of research to collect data for a given topic. It is often used in social science and quantitative marketing research whereby adequacy achieved in questionnaire design can add accuracy to the research (Roopa and Rani, 2012). The researcher decided to adopt questionnaire as a method of data collection other than reasons of similar factor-analysis research using the same methods (Hizam et al., 2023; Lai et al., 2014; Papageorgiou and Marneros, 2023; Xu et al., 2023), it is because a structured format of questionnaire can facilitates standardised data collection, organisation and analysis. This method enables the researcher to reach a wider and broader population, making it possible to gather a more comprehensive insights. The best way to check a questionnaire to accurately capture the intended data or information is to conduct a pre-test on a small fraction of the population.

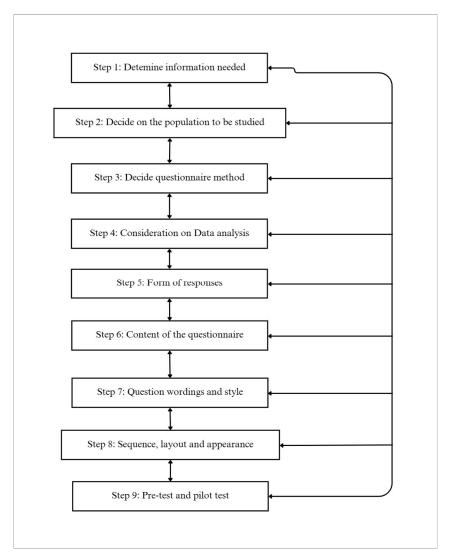


Figure 11: Questionnaire Design Used in Current Study (Source: Researcher)

In general, there are a few types of questionnaires to choose from. Open-ended questions are used when there are too many possible responses, closed-ended questions are used when statistical data is required, and contingency questions are used as a follow-up of previous questions (Minto et al., 2017; Roopa and Rani, 2012). Many researchers opined that the process of questionnaire design is sequential (Rameshbhai Patel and Joseph, 2016; Roopa and Rani, 2012). However, the researcher postulates that the process of questionnaire design is non-sequential from one step to another, yet it is iterative with constant movement between

stages of the process (Baines and Chansarkar, 2002). This is because the problem identified in the later stage might require researchers to rectify it by re-looking into the earlier stage.

The information that is required in Steps 1 and 2 of the questionnaire design was developed based on research questions, a review of literature, constructed hypotheses, conceptual framework and variables discussed in Chapters 1 and 2. The characteristics of target respondents were identified based on the industry they work in and the country this industry was based on. Respondents were randomly selected from sources available to the researcher. Steps 3 to 5 explained the decision made in selecting the questionnaire method, considerations made on data analysis and the form of responses. In the current study, questionnaires were presented using Google Forms, and a web link to the form was shared via WhatsApp groups, and Facebook groups and QR code to the link is printed on a survey card to be given out to a group of target respondents during seminars and events. Data analysis will apply partial least square structural equation modelling. The researcher experienced challenges in achieving a higher response rate throughout data collection. Despite this, by adopting multiple questionnaire distribution channels such as WhatsApp, Facebook, Instagram and on-site events, it is still possible to collect the required numbers of responses and thus facilitate data analysis (Minto et al., 2017).

Questions representing identified indicators were used to measure each variable to provide more reliable and consistent results. Steps 6 to 8 illustrate the process of questionnaire development from content, wordings, and style up to sequence layout, and appearance of the questionnaire. Items for the development of questions to collect data, corresponding to the conceptual framework discussed in Chapter 2, were constructed based on literature reviews and the researcher's personal experience as an e-marketplace retailer.

Pre-test and pilot-test validation are both essential during questionnaire design and must be conducted before initial data collection. It was conducted to check the feasibility of each question, ensuring that they are free from error by detecting ambiguity and misinterpretations (Rameshbhai Patel and Joseph, 2016). For the pre-test, the questionnaire was distributed to 20 respondents who were currently e-marketplace retailers. Feedback from respondents was taken into consideration, making changes to wording to clarify ambiguous questions. The questionnaire took approximately 5 minutes to complete. As for the pilot test, a total of 50 respondents who are e-marketplace retailers completed the questionnaire. Despite the pilot test being part of the plan, however, it was not conducted due to difficulty in obtaining data on time. The researcher therefore decided to focus on data collection without conducting a pilot test.

3.4.2 Target Population

The target population refers to a group of people whereby the researcher aims to collect data and study from. Respondents in this study were owners, managers, and employees of MSME e-marketplace retailers in Malaysia, who are directly involved in the decision-making daily operations of the business.

3.4.3 Sampling Technique

Currently there is no data that indicates the total number of e-marketplace retailers in Malaysia. There is also no open-source directory that published the list of MSME e-marketplace retailers in Malaysia. It is also not possible for the researcher to identify and contact them individually. Due to the confidentiality of seller's identify imposed by e-marketplaces, therefore it's almost impossible for the study to be conducted via a probability sampling method. The researcher attempted to contact a few e-marketplaces via official

writing, however, almost zero response was received. Therefore, the researcher chose a non-probability sampling to be applied on this study, presumed to be representative of the target population. Such method is less objective as compared to probability samplings, and also similarly used in related factor-analysis studies (Hizam et al., 2023; Lai et al., 2014; Xu et al., 2023). It is easier and cheaper to access, and often used in exploratory research, aim to develop an initial understanding of a small or under-researched population which is highly relevant with the current research. However, in the case of current study, due to limitation of the researcher in obtaining retailers' data directly from e-marketplaces, despite this is a descriptive research, non-probability sampling is still employed. Non-probability sampling can be categorized into purposeful sampling, snowball recruiting and convenience sampling. Purposeful sampling happens when participants are referred by a third party and convenience sampling happens when participants enrol voluntarily when an announcement is made by the researcher (Stratton, 2021). In current research, the participants consist of a combination of all the three non-probability sampling methods.

Based on the researcher's understanding of the e-marketplace retailers' industry, four organisations were approached to facilitate data collection. However, none of the organisations responded in writing. Most remain silent on paper and the researcher's requests were rejected via phone calls with reasons either due to policy prohibition or confidentiality issues. To ensure that this research can be successfully implemented, the researcher joined unofficial WhatsApp and Facebook e-marketplace retailers' community groups to seek respondents. Survey questionnaires were periodically shared in these community groups for 12 months. The number of respondents was not satisfactory and therefore the researcher participated in both Shopee and Lazada events to seek respondents.

There is no definite answer to the number of distributed questionnaires, however, the researcher estimated that at least 400 distributions were made either via WhatsApp, Facebook or during e-marketplace events. Due to the challenges faced by the researcher, and time constraints to complete the study, non-probability convenience sampling was therefore adopted.

3.4.5 Sampling Size

Saunders et al. (2019) suggest using a survey questionnaire to explore the views of a large population. Hence, it is used to gain insights into the factors that affect the business readiness of e-marketplace retailers. Statistically, Miller and Acton (2002) believe that a large sample size of questionnaires is designed for unbiased statistical results. These results can become significant in representing the views of the whole population. There is no standard definition of what constitutes a "large sample". A simple model can be analysed with N < 100 despite the basis of the model may be uninteresting (Kline and St, 2022). However, for a more complex model, less sampling is not feasible. In general, reviewers of journal submissions will reject SEM analysis publications where N < 200 with the exception when there is a restricted population size of the study (Barrett, 2007).

The official Facebook group of Lazada University consists of 26,000 members and Shopee University consists of 38,000 members. Most people who joined the Lazada University group will also join the Shopee University group and vice versa. Not all members are active e-marketplace retailers and many ceased businesses after joining, without exiting the group. There is no attempt by both EMs to remove e-marketplace retailers that are no longer active in the business. As observed, there are fewer than 5 discussion topics per day on each platform and fewer discussions on the Shopee University group. The unofficial WhatsApp

community group consist of 150 members with 3 to 4 topic of discussion per day, mostly throwing complaints and frustration.

Taking into consideration the unofficial standards of 200 responses observed by journal publication reviewers, the difficulty of obtaining responses, and also the time constraint to complete this study, the researcher, therefore, adopted Krejcie and Morgan (1970) sampling recommendation as per Table 2. Based on the estimated 400 questionnaires distributed, the researcher uses a total of 201 collected responses as the basis for PLS-SEM analysis. The target age of respondents is between 18 to 55, being 18 is the minimum age of sellers set by e-marketplace in Malaysia.

N	S	N	S	N	S
10	10	220	140	1200	291
15	14	230	144	1300	297
20	19	240	148	1400	302
25	24	250	152	1500	306
30	28	260	155	1600	310
35	32	270	159	1700	313
40	36	280	162	1800	317
45	40	290	165	1900	320
50	44	300	169	2000	322
55	48	320	175	2200	327
60	52	340	181	2400	331
65	56	360	186	2600	335
70	59	380	191	2800	338
75	63	400	196	3000	341
80	66	420	201	3500	346
85	70	440	205	4000	351
90	73	460	210	4500	354
95	76	480	214	5000	357
100	80	500	217	6000	361
110	86	550	226	7000	364
120	92	600	234	8000	367
130	97	650	242	9000	368
140	103	700	248	10000	370
150	108	750	254	15000	375
160	113	800	260	20000	377
170	118	850	265	30000	379
180	123	900	269	40000	380
190	127	950	274	50000	381
200	132	1000	278	75000	382
210	136	1100	285	1000000	384

Table 2: Table for Determining Sample Size from a Given Population (Krejcie and Morgan, 1970)

3.4.5 Research Instrument

The research instrument used to collect data for this study is creating a Google Form with a set of questions, to be distributed to participants within a period, whereby data collected will be analysed using PLS-SEM to predict the outcomes and relationships between various

factors under investigation. This method is employed because it's cost-effective and most participants are tech-savvy, therefore able to answer digitally distributed questionnaire. In addition to Google Form, printed cards with a QR code linking to the online form as per Figure 12 were also randomly distributed to the e-marketplace retailers during events.



Figure 12: Invitation to Questionnaire Participation

Source: Researcher

3.4.6 Questionnaire and Measurement

The questions are grouped into two parts, Part 1: Demographic, and Part 2: Variable as per Appendix 1. The demographics questions in Part 1 consisted of gender, age group, job title, number of businesses, revenue, and years of business active, which were included to provide an overview characteristic of the sample population, ensuring representativeness and diversity of the sample. Findings from these questions can aid in formulating strategies, allocating resources and fostering long-term growth.

Questions on demographics will apply either a nominal scale (a value is assigned) or an ordinal scale (value is not assigned, instead rank order is assigned). Questions that apply nominal scale are gender, e-marketplace name, and job title. Questions that apply ordinal scale include age group, number of businesses, revenue, and years of business active as illustrated in Table 3.

Class	Question	Answer	Nominal	Ordinal
Gender	Gender	Male or Female	/	
e-Marketplaces	Pls name the e-	Lazada, Shopee, PGMall, TikTok,	/	
Name	Marketplace(s) that your	Facebook, Instagram, Carousell,		
	business is operating in	Mudah, Amazon, Ebay, Others,		
		Other, Presto Mall		
Job Title	Which one describe you	Business Owner	/	
	in the e-Marketplace	Manager or Supervisor		
	business	Operative employee		
Age Group	Age Group	17 years old & below		/
		18 – 24 years old		
		25-35 years old		
		35 – 44 years old		
		45 – 55 years old		
Number of	The number of e-	Only 1		/
Businesses	Marketplace(s) that your	2 to 3		
	online business is	4 and more		
	operating in?			
Revenue	Your total revenue for the	Less than RM100,000		/
	past 12 months	RM100,000k to RM500,000		
		RM500,001 to RM1,000,000		
		RM1,000,001 to RM2,000,000		
		RM2,000,001 to RM3,000,000		
		RM3,000,001 to RM4,000,000		
		RM4,000,001 to RM5,000,000		
		RM5,000,001 and more		
Years of	No. of years this business	Less than 1 year		/
Business	is operating in the e-	More than 1 year but less than3		
Active	Marketplace industry	years		
		More than 3 years but less than5		
		years		
		More than 5 years		

Table 3: Demographic Questions in Current Survey

Source: Researcher

Part 2 of the questionnaire consists of social economy questions of the five variables namely (1) intention to enhance digital marketing competence, (2) intention to seek knowledge, (3)

intention to take risks, (4) organisational commitment, and (5) business readiness, as per Appendix 1.

A simple five-point Likert scale is best used to test latent constructs such as opinions, attitudes or behaviours that cannot be observed directly. Attitude is popularly assessed using a direct measurement procedure, consisting of a scale starting from 1 to 5 as the basis of factor analysis (Ajzen and Krebs, 1994). The decision to adopt Likert scale is because it was tested successfully in social study, is easier to implement without supervision, is more cost-efficient and produces highly internally consistent data (Ajzen and Krebs, 1994; Ilham et al., 2023; Minto et al., 2017; Rensis Likert, 1932). Furthermore, not all respondents are equally knowledgeable on the questions asked. Therefore, providing a central neutral point in the Likert scale makes it easier for respondents to understand the questions and express their views. Whereas for researchers, it would be easier to construct and administer this scale (Rameshbhai Patel and Joseph, 2016).

The data collected using Likert Scale is normally treated as an interval scale (Rameshbhai Patel and Joseph, 2016), a combination of both ordinal and nominal scales. It measures the magnitude of the variances of an individual respondent's preferences. Interval scale questions indicate from strongly agree (5) to strongly disagree (1). In the current research, objective statements were incorporated in the questionnaires requiring respondents to indicate their view by selecting answers from strongly disagree (1), disagree (2), neutral (3), agree (4) and strongly agree (5). Responses are scored from 1 on the disagreeing side to 5 on the agreeing side.

3.5 Data Analysis

This study will use SPSS to analyse demographic data and conduct preliminary data assessment. SmartPLS will be used to analyse latent constructs and observed variables. The measurement model analysis will examine indicator reliability, construct reliability, composite reliability, convergent validity, and discriminant validity. Whereas, structural model analysis will focus on collinearity assessment, path coefficients hypothesis testing, coefficient of determination, and effect sizes.

3.5.1 Factor Analysis

Factor analysis is a very popular statistical analysis that is used on regression relationship between latent constructs, particularly in the study of behavioural intentions in the theory of planned behaviour (Allen and Meyer, 1990; Hennessy et al., 2012; Hizam et al., 2022; Ilham et al., 2023; MacKenzie et al., 2005). It is one of the multivariate statistical analysis techniques to analyse the multiple relationships among a set of observed variables (Kano, 1997). There researcher decided to adopt factor-analysis in current study as most behavioural studies adopt this method with proven results (García-Lopera et al., 2022; Hizam et al., 2023; Lai et al., 2014; Xu et al., 2023).

In general, there are two main types of factor analysis (1) exploratory factor analysis and (2) confirmatory factor analysis. Exploratory factor analysis is used to find out and determine the number of underlying factors or indicators affecting the observed variables without first predefined any structure to the outcome. Findings from exploratory analysis are meant to make hypotheses on latent structures in a condition with no prior theory, no theoretical model, and no predefined structure for analysis. In exploratory factor analysis, the researcher will apply as many factors as possible to explore and discover relationships among all factors

before conducting factor extraction (Hadi et al., 2016). However, Kano (1997) suggests a minimum of three indicators can sufficiently ensure model identifiability. In contrast, confirmatory factor analysis is meant to test and confirm hypotheses on latent constructs of observed variables and commonly requires a large sample size that can produce inferential statistics. To successfully implement confirmatory factor analysis, the researcher needs to determine prior indicators of each variable in question, commonly obtained through past literature reviews. Both types of factor analysis are applicable to completely different scenarios (Kano, 1997; Nye, 2022; Ondé and Alvarado, 2020; Schmitt, 2011).

Confirmatory factor analysis can further be classified into the traditional approach and structural equation modelling (SEM) approach. The traditional approach, as the name suggests, investigates the relationship between factors and the variable. This relationship is commonly referred to as factor loading which is often used in the study of behaviour (Hadi et al., 2023; Sarstedt et al., 2022b). The traditional approach is based on the principle of component analysis rather than common factor analysis. Component factor analysis assumes no measurement error and the common factor analysis attempts to account for measurement errors (Schmitt, 2011) as in the structural equation model (SEM).

There are two-factor analysis approaches that are worth mentioning which are the effect indicator or reflective indicator, and the causal indicator or formative indicator (Hennessy et al., 2012; Schmitt, 2011). Both are commonly used as measurement models in behavioural research (Hennessy et al., 2012; Sentosa et al., 2019, 2017). Schmitt (2011) associates effect indicators with traditional factor analysis whereby these indicators are considered reflections of latent construct or depend on latent construct, as expressed in Hennessy et al. (2012). The effect indicator model is more appropriate when measures are manifestations of the constructs in a way that they are determined by it (MacKenzie et al., 2005). In this model, the

latent variable is not the only cause of the indicator. To apply effect indicators as an effective measurement model, these indicators must not be highly correlated with indicators of another latent variable (Reise and Waller, 2009). Causal or formative indicators on the other hand cause the existence or formation of latent construct. Therefore, the arrows linking from the indicator to the latent construct in the effect indicator measurement model are reversed compared with the causal indicator. Regardless of which indicator model is adopted, indicators of the same construct must be highly correlated among themselves and must be critically interchangeable when equally reliable (MacKenzie et al., 2005; Podsakoff et al., 2003). Some researchers classify latent measures constructed using effect indicators as "scales" and those constructed using causal indicators as "indices" (Hennessy et al., 2012).

In this study, there are five latent constructs and twenty-two observed variables. Observed variables of each latent construct were adopted and adapted from industry reports and related academic journals of social economics. As seen in Appendix 1, observed variables used to measure intentions were adapted from multiple publications (Blankenship et al., 2022; Bran and Vaidis, 2019; Council Of The European Union, 2018; Lai et al., 2014). Business readiness items were adopted and adapted from the four quadrants of business readiness recommended in Vodafone Enterprise (2014) and competence readiness was synthesise and adapted from Aaron De Smet et al. (2021); Awajan et al. (2013), and Council Of The European Union (2018), as the ability to learn is one of the characteristics of a future-ready business. Lastly, the observed variables of organisational commitment consist of the three components of organisational commitment from Meyer and Allen (1991), and leadership and work ethics from AL-Jabari and Ghazzawi (2019).

The objective of the current study is to ascertain the causal relationship between latent variables through hypothesis testing. With the availability of relevant academic knowledge,

the researcher's personal experience, and a proposed structural model for testing, this study will adopt SEM-based confirmatory factor analysis, applying an effect indicator model to measure each latent variable under observation.

3.5.2 Preliminary Data Assessment

Before conducting measurement model analysis and structural model analysis using the PLS-SEM technique, preliminary data assessment will be conducted to find missing data, and outliers, and evaluate data normality. Preliminary data assessment is an important step in the initial stage of data analysis to understand the dataset's characteristics and identify potential issues or patterns, before proceeding with formal analysis (Kumar, 2018). Missing data, as its name indicates, is also known as incomplete data. It is the absence of one or more values in a dataset whereby such incompleteness can result in biased conclusions (Bell et al., 2018). Outliers are data points that unusually lie far away from most of the data points that can result from errors in measurement and data entry or genuine extreme observations. Data normality is assessed by examining skewness and kurtosis. Skewness of 0 and kurtosis of 3 is considered normal distribution (Zikmund et al., 2013). It is worth noting that PLS-SEM does not necessitate outlier and data normality checks (Sarstedt et al., 2021). However, to ensure integrity of dataset, both outliers and data normality assessment will be conducted. Common method bias will be included in this study to assess data normality.

3.5.3 Structural Equation Model

The term Structural Equation Model (SEM) refers to a variety of statistical techniques, used as a causal inference method, mainly to test hypotheses or theory, investigate causal relationships and for non-experimental research. Some common terms used interchangeably to represent SEM include covariance structure analysis, covariance structure modelling or

analysis of covariance structure (Kline and St, 2022). SEM can be viewed as a strict confirmatory application, alternative model testing, or a model generation tool based on statistical results generated from the input of data (Jöreskog and Sörbom, 1993). It aims to discover a model that makes theoretical sense, is reasonably parsimonious, and reasonably corresponds to the data. Most behavioural research that investigate causal effect adopt SEM as a method for data testing (Hadi et al., 2023; Sentosa, 2013; Sentosa et al., 2017). SEM is therefore adopted as the main method for data analysis in current research, following related past studies (Hizam et al., 2023; Lai et al., 2014; Xu et al., 2023).

There are two key terms in SEM, the observed variable (commonly known as items or indicators) and the latent variable (a variable that is not directly observed e.g.: intelligence). Observed variables also represent your data. The uniqueness of SEM is its ability to analyse both observed and latent variables as compared to multiple regression and analysis of variance that only analyse observed variables. SEM also identifies possible error variance through reliability and validity assessment. Unlike traditional SEM which focuses on covariance-based approaches, Partial Least Squares Structural Equation Modelling (PLS-SEM) is another statistical technique that depends on a variance-based approach. It is suitable in situations where the theoretical model is not well-established and the data size is small (Hair et al., 2002; Sarstedt et al., 2021). Owing to its flexibility, versatility and time-efficient feature, this study will adopt PLS-SEM technique to analyse the proposed model. In general, PLS-SEM allows two types of model analysis, namely measurement model analysis and structural model analysis. The results yielded from the structural model are likely to be valid when there is a good loading of fitting indicators. It is therefore critical to assess the reliability and validity of the measurement model.

3.5.3.1 Measurement Model

The measurement model in PLS-SEM is important to assess the reliability and validity of the latent constructs and their observed variables. Internal consistency of the constructs can be evaluated through Construct Reliability (Cronback's alpha) and Indicator Reliability (outer loading). Outer loading values greater than 0.50 and above can be considered a reliable indicator, yet anything greater than 0.70 is commonly observed (Akter et al., 2022; Hizam et al., 2023). Researchers can investigate overall reliability and consistency through Composite Reliability and Convergent Validity. Similar to the outer loading value, Cronbach's alpha and Composite reliability greater than 0.7 is considered acceptable and anything stronger than 0.8 is highly reliable (Sarstedt et al., 2017a). Convergent validity, assessed through the Average Variance Extracted (AVE), should ideally be greater than 0.5. To ensure that each construct is least correlated with each other, Discriminant Validity is applied. According to Sarstedt et al. (2021), the ideal threshold for discriminant validity is not more than 0.85, indicating higher distinction between constructs.

3.5.3.2 Structural Model

The complete PLS-SEM model combines the measurement and structural model assessment to yield a more accurate result. The structural model is examined when the measurement model is effectively assessed. It combines the latent variables through a string of hypothetical relationships. In this study, the intentions are termed as independent latent variables or predictors, business readiness as a latent dependent variable and organisational commitment swaps between independent and dependent latent variable, depending on the test scenario. In this study, the researcher will adopt four structural model analysis techniques namely collinearity, path coefficients, coefficient of determination and effect size F². Collinearity aims to check for biases in regression results, by calculating the variance inflation factor

(VIF). VIF value close to or below 0.3 will mitigate collinearity issues (Hair et al., 2017). Path coefficients aim to assess the strength and direction of the relationship between latent variables whereby a score above 0.10, with a p-value of 0.05 or lower shows a significant meaningful influence on the path model. Positive value shows positive correlation and negative value indicates negative relationship. The coefficient of determination (R²) is a valuable indicator to explain the variance between the independent latent variable and the dependent latent variable. An R-square value of 0.75 indicates a strong relationship and 0.25 is deemed weak (Hair et al., 2014). The F-square evaluate the extent to which the predictor explains the variance in the latent dependent variable. It shows the relative importance of each predictor on each latent variable. An F² value of 0.02 is considered sufficient to indicate the impact of the predictor on the latent variable.

3.5.6 Data Interpretation

Test results will be presented in Chapter 4 with PSL-SEM framework, showcasing the regression paths, R-squared values, and outer loadings for each item. PLS-SEM bootstrapping analysis, crucial for hypothesis testing will also be presented. Together, these figures present a robust and comprehensive understanding of the PLS-SEM analysis, with the measurement model's reliability, validity, and importance of the structural paths. Discussions on the findings will be made in Chapter 5 highlighting practical implications, research limitations and recommendations.

3.7 Chapter Summary

This chapter presented a comprehensive research methodology from deciding on the research paradigm to developing the research design, data collection and data analysis. Interpretative and positivistic paradigms were explained, whereby the latter was chosen for this study.

Upon assessing various research designs, descriptive design was employed, adopting a quantitative approach. This study decides on a 5-point Likert scale survey questionnaire as a method of data collection. Sampling is based on convenient sampling due to the difficulty in determining the population size. Questionnaires were presented in Google form and distributed digitally to owners, managers and employees of e-marketplace retailers. Data is analysed using PLS-SEM and SPSS software, applying preliminary data assessment, measurement model and structural model. Findings of the dataset is summarised and illustrated in the form of PLS-SEM algorithm and bootstrapping framework.

CHAPTER 4: DATA ANALYSIS

4.1 Introduction

This chapter presents the findings of the quantitative research method applied in this study, involving a survey of e-marketplace retailers in Malaysia, resulting in 201 survey responses. The data analysis process commenced with data coding based on the collected data, followed by data refining to address missing or inaccurate data, and ensuring data normality. Subsequently, the final analysis was conducted on the 201 valid data points. Demographic results were analysed using SPSS Statistics Version 26, while SmartPLS Version 3 was utilised for the partial least squares structural equation modelling (PLS-SEM) analysis. The PLS-SEM analysis comprised two main steps: the measurement model analysis, which examined indicator reliability (outer loadings), construct reliability (α , composite reliability), and construct validity (convergent validity and discriminant validity). The second step focused on the structural model analysis, encompassing collinearity assessment (VIF), hypothesis testing of path coefficients, coefficient of determination (R2), and effect sizes (f-square). Finally, this chapter concludes with a concise summary of the findings and an overview of the data analysis process.

4.2 Preliminary Data Assessment

The initial stage of data analysis, known as preliminary data assessment, plays a vital role in understanding the dataset's characteristics and identifying potential issues or patterns. Its primary goal is to develop a foundational comprehension of the data and address any pertinent concerns before proceeding with a more formal analysis (Kumar, 2018). Various steps are involved in preliminary data assessment, including identifying missing data, outliers, and assessing data normality, among others. This process is iterative, allowing for repeated

evaluations to address any concerns and further explore the data (George and Mallery, 2014). Documenting the preliminary data assessment process and findings is essential to maintain data traceability, provide context for subsequent analysis, and ensure accurate utilization for the intended purpose. In this study, the preliminary data assessment procedures are conducted through multiple steps using SPSS software, with additional examination of common method bias (CMB) and other relevant tests. CMB is a potential issue in research where the method of data collection may introduce bias and result in inflated relationships between variables (Mahmud et al., 2017; Podsakoff et al., 2003).

4.2.1 Missing data

Missing data, also known as incomplete data, refers to the absence of one or more values in a dataset due to various reasons like non-responses, data entry errors, or measurement issues. Handling missing data is crucial as it can lead to biased conclusions (Bell et al., 2018). The approach to address missing data should be selected based on the research question, amount and pattern of missing data, and assumptions about the missing data mechanism (Zikmund et al., 2013). In this study, the researcher employed an efficient online questionnaire method, ensuring a comprehensive approach to data collection. As a result of this detailed process, all participants provided complete responses, resulting in a robust dataset comprising 201 fully completed responses. This meticulousness effectively eliminated any occurrence of missing data cases, enhancing the accuracy and reliability of the study's findings. The use of the online questionnaire method proved instrumental in securing a complete dataset, allowing for a comprehensive analysis, and contributing to the overall validity of the research outcomes.

4.2.2 Outliers

Outliers are data points that deviate significantly from the rest of the data in a dataset. They can be unusually high or low values that lie far away from most of the data points, and they may arise due to various reasons, such as measurement errors, data entry mistakes, or genuine extreme observations. Outliers can potentially skew statistical analyses, leading to biased results and incorrect conclusions (Sarstedt and Mooi, 2019). The Mahalanobis distance method is used to detect outliers in a multivariate dataset. It calculates the distance of each data point from the centre of the data distribution, considering the correlations between variables. The Mahalanobis distance measures how many standard deviations away an observation is from the mean in the multidimensional space of the variables. If an observation has a large Mahalanobis distance compared to a chosen threshold value, it is considered an outlier (Andrew F. Hayes, 2018; Nayyar and Singh, 2017; Sarstedt and Mooi, 2019).

The Mahalanobis distance method serves as a statistical technique for detecting outliers in a multivariate dataset by measuring the distance between a data point and the distribution of points, accounting for variable correlations (Nayyar and Singh, 2017). An observation is labelled as an outlier if its Mahalanobis distance exceeds a predefined threshold, commonly derived from a Chi-squared distribution with appropriate degrees of freedom, such as the critical value for p=0.05 and the number of variables in the dataset minus one (Kallner, 2017; Zikmund et al., 2013). This method is particularly valuable for identifying outliers in correlated multivariate datasets, providing insight into the strength of the outlier through the calculation of the Mahalanobis distance, which identifies extreme cases (Bougie and Sekaran, 2019). However, the Mahalanobis distance method assumes normal data distribution and known covariance matrix. When these assumptions are not met, robust Mahalanobis distance methods are recommended. Visualizing the data and assessing Mahalanobis distance against

a scatter plot matrix aids in identifying data points that deviate significantly from the data's centre (Sarstedt and Mooi, 2019). While outliers are often present in large datasets, they may not exert substantial influence on the data's conclusions. In this study, multivariate outliers were retained as they were not found to significantly impact the results, supporting their inclusion in the analysis.

Notably, the Partial Least Squares Structural Equation Modelling (PLS-SEM) method, employed in this study, does not necessitate data normality and outlier checks (Sarstedt et al., 2021). PLS-SEM is robust against non-normality and can accommodate outliers, making it suitable for analysing complex models with small sample sizes. As a result, the focus was directed towards understanding the overall patterns in the data and identifying potential influential data points, rather than excluding multivariate outliers. Through careful examination, it was observed that retaining these multivariate outliers did not significantly impact the results, providing a strong rationale for their inclusion in the subsequent analysis. By incorporating this approach, the study ensures the completeness and integrity of the dataset, allowing for a comprehensive and robust investigation of the research questions.

4.2.3 Data Normality

In this study, the normality of the data was carefully assessed by examining two important measures: skewness and kurtosis. Skewness, which indicates the asymmetry of a distribution, was employed to identify right-skewness (positive values) or left-skewness (negative values). Kurtosis, on the other hand, measured the peakedness or flatness of the data distribution. A normal distribution is characterized by skewness of 0 and kurtosis of 3, and deviations from these values may suggest non-normality (Zikmund et al., 2013).

Moreover, it is worth noting that although Partial Least Squares Structural Equation Modelling (PLS-SEM) does not strictly necessitate the assumption of data normality, a normality test was still conducted as part of the data integrity and validation procedures. The evaluation of normality through skewness and kurtosis offered valuable insights into the shape of the distributions and aided in detecting any potential data anomalies or unusual patterns (Zikmund et al., 2013). While PLS-SEM is known for its robustness against violations of normality assumptions, ensuring that the data reasonably adheres to normality assumptions further enhances the reliability and validity of the analysis.

Table 4 presents the results of the skewness and kurtosis analysis for the variables in the dataset. Skewness measures the degree of asymmetry in the distribution of data, where positive values indicate a right-skewed distribution, and negative values indicate a left-skewed distribution. The variables DM, TR, and OC exhibit negative skewness, suggesting a slight leftward asymmetry in their distributions. On the other hand, SK and BR demonstrate near-zero skewness, indicating relatively symmetrical distributions. Kurtosis measures the degree of peakedness or flatness in the distribution. Positive kurtosis values signify a more peaked distribution with heavy tails, while negative values indicate a flatter distribution. The variables SK and TR have positive kurtosis, indicating peaked distributions, while the variables DM, OC, and BR show negative kurtosis, suggesting relatively flat distributions.

By conducting the normality test, this study ensured the integrity and appropriateness of the dataset for analysis, strengthening the credibility of the findings derived from the PLS-SEM model. While acknowledging the robust nature of PLS-SEM, the adherence to best practices in data analysis, such as assessing normality, instils confidence in the research outcomes and supports the rigorous evaluation of the structural model. Overall, the thorough assessment of normality through skewness and kurtosis contributes to the reliability and validity of the

study's conclusions and provides a solid foundation for the subsequent analysis.

Variables	Ske	Skewness		Kurtosis	
variables	Statistic	Std. Error	Statistic	Std. Error	
DM	384	.172	437	.341	
SK	-1.478	.172	4.401	.341	
TR	714	.172	.944	.341	
ОС	395	.172	.191	.341	
BR	211	.172	135	.341	

Table 4: Skewness and Kurtosis Analysis

4.2.4 Common Method Bias (CMB)

In addition to assessing data normality through skewness and kurtosis, another crucial aspect of data analysis is addressing common method bias (CMB). Common method bias means the potential bias that arises when the same method is used to collect data on both the predictor and criterion variables in a study (Podsakoff et al., 2003). This can lead to an overestimation or underestimation of the true relationships between variables, thereby impacting the accuracy and validity of the study's results.

To mitigate the potential effects of CMB, several strategies were employed in this study. First, the survey design ensured that the respondents could provide their opinions and responses independently for each variable, reducing the likelihood of systematic biases in the data. Additionally, the questionnaire items were carefully crafted to ensure clarity and prevent common method biases, with attention given to minimizing any leading or biased wording. Furthermore, data collection was carried out using an online survey method, which allowed for anonymity and minimized any potential social desirability bias that could have affected responses.

Finally, the Harman's single-factor test was conducted to assess the extent of common method variance. The data were subjected to exploratory factor analysis to determine if a single factor accounted for a substantial portion of the variance in the variables. The results indicated that no single factor explained the majority of the variance, which suggested that CMB was not a significant concern in this study.

The results of Harman's single-factor test indicated (see Appendix 2) that the first component extracted accounted for 31.704% of the total variance, with subsequent components explaining additional proportions of variance. The cumulative variance explained by the first component was 31.704%, indicating that it did not account for a majority of the variance in the data. This finding suggests that common method bias (CMB) was not a major concern in this study, as a single factor did not dominate the variance across the variables (Khan et al., 2020).

4.3 Demographic Results

The demographic results in this study encompass statistics and information related to the characteristics of the sample population. These results are typically presented in a summarized format, such as tables or figures, showcasing the distribution of participants across various demographic factors. Understanding demographic results is crucial as they provide an overview of the sample population's characteristics, ensuring its representativeness of the population of interest. Additionally, these results help verify the diversity of the sample, enabling researchers to generalize the findings to the broader population accurately. By analysing gender distribution, age groups, job levels, the number of businesses owned, revenue brackets, and the number of years in business, the research gains valuable insights into the diverse backgrounds of the participants and their readiness for e-marketplace retailing in Malaysia. These demographic findings serve as a foundation for

formulating targeted strategies, allocating resources effectively, and providing industry and policy recommendations to foster the long-term growth and sustainability of the e-marketplace retail sector while ensuring inclusivity within the market. The demographic results of this study are presented in detail below:

4.3.1 Gender

The gender demographics indicate that the sample comprised 86 male participants, accounting for approximately 42.8% of the total respondents. On the other hand, 115 respondents identified as female, making up approximately 57.2% of the total sample, as illustrated in Figure 13.

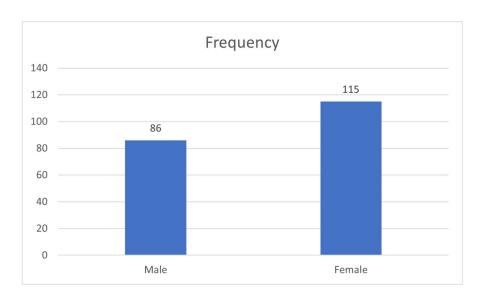


Figure 13: Gender Frequency

4.3.2 Age Group

The age group analysis reveals that the largest proportion of respondents, comprising 29.9% of the total sample, fell within the age range of 35 to 44 years old, with 60 participants in this category. Following closely behind, the age group of 25 to 34 constituted 25.4% of the respondents, with 51 participants. Furthermore, 45 to 54 years old accounted for 26.4% of the total participants, with 53 respondents falling within this range—the age range of 18 to 24 represented 13.4% of the respondents, with 27 participants. Finally, the age group of 55 to 64 had the smallest representation, comprising 5% of the total sample, with 10 respondents falling within this category. Figure 14 shows the frequency of each age group.

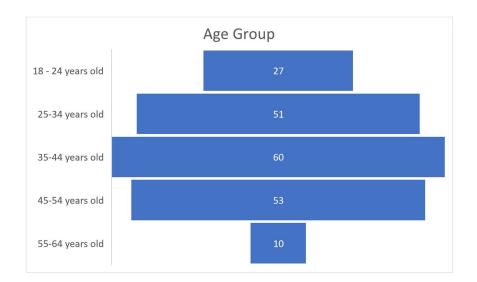


Figure 14: Age Group

4.3.3 Job Title

As per Figure 15, many respondents, accounting for 74.6% of the total sample, identified themselves as "Business Owners." This group comprised 150 participants who were likely entrepreneurs or individuals in senior leadership roles responsible for running their own businesses. Following the business owners, 14.4% of the respondents were "Managers or

Supervisors," with 29 participants falling within this category. These individuals are likely responsible for overseeing teams or departments within their organizations. Lastly, the "Operative Employees" category represented 10.9% of the total respondents, with 22 participants. These individuals are likely front-line workers or staff members involved in day-to-day operations.



Figure 15: Job Level

4.3.4 Number of Businesses

Figure 16 presents the distribution of respondents based on the number of businesses they own. Among the respondents, 12.4% indicated owning "Only 1" business. This group consisted of 25 participants who reported owning a single business. The majority of the respondents, accounting for 63.2% of the total sample, reported owning "2 to 3" businesses. This category included 127 participants who indicated ownership of two or three businesses. Finally, 24.4% of the respondents stated that they own "4 and more" businesses. This group comprised 49 participants who reported owning four or more businesses.

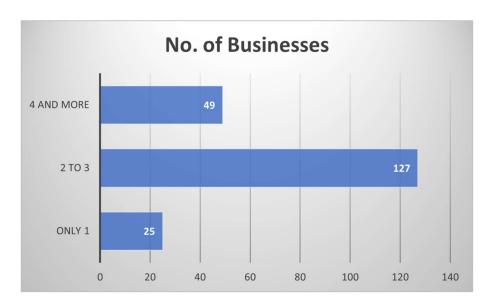


Figure 16: Number of Business

4.3.5 Revenue

Figure 17 presents the distribution of respondents' businesses based on their reported revenue ranges. Among the respondents, 25.4% reported having revenue of "Less than RM100,000." This category consisted of 51 participants whose businesses generated revenue below RM100,000. The largest proportion of respondents, accounting for 30.3% of the total sample, reported revenue ranging from "RM100,001 to RM500,000." This category included 61 participants, with businesses earning revenues within this range. Also, 18.4% of the respondents reported revenue in the "RM500,001 to RM1,000,000 range." This group comprised 37 participants, with businesses falling within this revenue bracket.

Furthermore, 16.4% of the respondents reported generating revenue between "RM1,000,001 to RM2,000,000." This category included 33 participants with businesses earning revenues within this range. The "RM2,000,001 to RM3,000,000" revenue range represented 6% of the total sample, with 12 participants falling within this category. Besides, a smaller percentage, 2% of the respondents, reported revenue in the range of "RM3,000,001 to RM4,000,000."

This group comprised 4 participants with businesses earning revenues within this range. Finally, the highest revenue range, "RM5,000,001 and more," represented 1.5% of the total sample, with 3 participants reporting revenue exceeding RM5,000,001.



Figure 17: Revenue

4.3.6 Years Business Active

Figure 18 depicts the respondents' business distribution based on the years they have been active. Among the respondents, 22.4% reported having their businesses active for "Less than 1 year." This category comprised 45 participants who indicated that their businesses were operational for less than one year. The largest proportion of respondents, accounting for 51.7% of the total sample, reported having their businesses active for "More than 1 year but less than 3 years." This category included 104 participants who have been running their businesses for more than one year but less than three years. Additionally, 18.4% of the respondents reported having their businesses active for "More than 3 years but less than 5 years." This group comprised 37 participants with businesses in operation for over three years but less than five years. Furthermore, 7.5% of the respondents reported having their businesses active for

"More than 5 years." This category included 15 participants with businesses that have been operational for more than five years.



Figure 18: Years Business Active

4.4 Partial Least Squares Structural Equation Modelling (PLS-SEM)

Partial Least Squares Structural Equation Modelling (PLS-SEM) is a statistical technique used in social sciences, business, and other fields to analyse complex relationships between observed variables and latent constructs. Unlike traditional Structural Equation Modelling (SEM), which focuses on covariance-based approaches, PLS-SEM relies on a variance-based approach. PLS-SEM is particularly suitable for situations with small sample sizes, nonnormal data, and when the underlying theoretical model is not well-established (Hair and Alamer, 2022; Hair et al., 2013; Sarstedt et al., 2022a).

PLS-SEM holds significant importance for researchers and practitioners due to its versatility and flexibility. It is particularly helpful in situations with multiple latent variables, complex interconnections, and potential formative indicators (Hair et al., 2013). Moreover, PLS-SEM allows for simultaneous testing of both measurement and structural models, making it

efficient and time-saving. It accommodates non-linear relationships, allowing researchers to explore more intricate real-world phenomena that might not be captured well by traditional linear methods (Sarstedt et al., 2022b).

In the present research context, PLS-SEM can be instrumental in predicting the outcomes and relationships between the various factors under investigation. By creating and validating measurement models, researchers can accurately measure latent constructs, such as attitudes, perceptions, or intentions, and understand their relationships. PLS-SEM also allows for estimating direct and indirect effects, enabling researchers to identify key predictors and mediators influencing the outcome of interest (Hair et al., 2017; Sarstedt and Mooi, 2019). Moreover, PLS-SEM is effective in handling reflective and formative indicators. Reflective indicators are commonly used to measure latent variables, whereas observed variables are viewed as indicators of the underlying construct. On the other hand, formative indicators treat observed variables as indicators that form or cause the underlying construct. The ability to handle both indicators makes PLS-SEM well-suited for exploring complex causal relationships and predicting outcomes accurately (Sarstedt et al., 2022b).

There are two main models in PLS-SEM - the measurement and structural models. The measurement model in PLS-SEM deals with the relationships between the latent constructs and their observed indicators. It is crucial for establishing the reliability and validity of the constructs under study. This model assesses how well the observed variables measure the underlying constructs. The focus is on evaluating the loadings of the indicators on the constructs and their significance, which indicates the strength of the relationships. The structural model in PLS-SEM examines the relationships between the latent constructs themselves. It helps identify the causal relationships and direct and indirect effects between constructs. This model focuses on determining the path coefficients between the latent

variables, which represent the strength and direction of the relationships (Sarstedt et al., 2017). The step-by-step analyses of the PLS-SEM model are explained below:

4.4.1 Measurement Model Analysis

The measurement model in PLS-SEM is a crucial tool for assessing the reliability and validity of the latent constructs and their observed indicators. It enables researchers to evaluate the internal consistency of the constructs through Construct Reliability (Cronbach's alpha) and Indicator Reliability (outer loading). Additionally, Composite Reliability and Convergent Validity provide insights into the overall reliability and consistency of the measurement model. Discriminant Validity ensures that the constructs are distinct and not highly correlated with each other. The measurement model's importance lies in establishing the foundation for subsequent analysis, ensuring that the observed variables accurately represent the underlying constructs and providing researchers with valid and reliable measurements for meaningful interpretations and conclusions in PLS-SEM analyses (Hair et al., 2021, 2017; Sarstedt et al., 2021). The step-by-step analyses of the measurement model used in this study are described following:

a) Indicator Reliability (Outer Loading):

Indicator reliability, also known as outer loading, measures the strength of the relationship between each observed indicator and its corresponding latent construct. It reflects how well the indicator captures or represents the underlying construct. The PLS-SEM analysis results demonstrate that outer loading values greater than 0.70 are commonly used as a threshold to assess the strength of association between observed and latent variables. However, recent studies (Akter et al., 2022; Hizam et al., 2023; Sentosa et al., 2017) suggest that even variables with outer loadings above 0.50 can be considered reliable indicators of the latent

variable under examination. This insight provides additional flexibility in evaluating indicator reliability and reinforces the robustness of the measurement model in PLS-SEM analyses. The outer loading results are presented in Table 5. These results demonstrate the strength of the relationship between each observed item and its corresponding latent construct in the measurement model. For the "Business Readiness" construct (BR), all items show significant outer loadings, with values ranging from 0.707 to 0.856, indicating a robust association between the observed items and the underlying construct. Similarly, for "Intention to Enhance Digital Marketing Competence" (DM), "Organisational Commitment" (OC), "Intention to Seek Knowledge" (SK), and "Intention to Take Risk" (TR) constructs, the observed items display substantial outer loadings ranging from 0.57 to 0.864, affirming their strong connection with the respective constructs. These results validate the measurement model's reliability and suggest that the observed items effectively measure the latent constructs, laying the groundwork for further analysis in the PLS-SEM study.

Variable	Items	Outer Loadings
	DM1	0.811
Intention to Enhance Digital Marketing	DM2	0.636
Competence (DM)	DM3	0.759
	DM4	0.758
	SK1	0.809
Intention to Seek	SK2	0.728
Knowledge (SK)	SK3	0.822
	SK4	0.618
	TR1	0.838
Intention to Take Risk	TR2	0.864
(TR)	TR3	0.651
	TR4	0.764
	OC1	0.708
	OC2	0.570
Organisational Commitment (OC)	OC3	0.682
	OC4	0.745
	OC5	0.833
Business Readiness (BR)	BR1	0.754
	BR2	0.744
	BR3	0.707
	BR4	0.856
	BR5	0.778

Table 5: Outer Loadings

b) Construct Reliability (Cronbach's Alpha):

Construct reliability, often measured using Cronbach's alpha, assesses the internal consistency and reliability of the latent constructs in the measurement model. It indicates the extent to which the observed indicators (items) consistently measure the underlying construct. Cronbach's alpha ranges from 0 to 1, with higher values indicating better reliability. Typically,

a Cronbach's alpha value above 0.7 is considered acceptable, while values greater than 0.8 are preferred for stronger reliability (Sarstedt et al., 2017a; Sentosa et al., 2019). Table 6 shows the Cronbach's Alpha results for each construct in the measurement model to assess their internal consistency and reliability in the PLS-SEM analysis. The construct "Business Readiness" (BR) showed a Cronbach's Alpha value of 0.828, indicating a high level of reliability for the observed indicators representing this construct. Similarly, the construct "Intention towards Digital Marketing Competence" (DM) demonstrated a Cronbach's Alpha of 0.731, while "Organisational Commitment" (OC) had a Cronbach's Alpha of 0.757, both reflecting satisfactory levels of internal consistency. The constructs "Intention to Seek Knowledge" (SK) and "Intention to Take Risk" (TR) displayed Cronbach's Alpha values of 0.734 and 0.804, respectively, indicating strong reliability for their respective observed indicators. These Cronbach's Alpha results affirm the robustness and reliability of the measurement model, providing confidence in the ability of the observed variables to accurately measure the latent constructs in the PLS-SEM analysis.

Variables	Cronbach's Alpha
Intention to Enhance Digital Marketing Competence (DM)	0.731
Intention to Seek Knowledge (SK)	0.734
Intention to Take Risk (TR)	0.804
Organisational Commitment (OC)	0.757
Business Readiness (BR)	0.828

Table 6: Construct Reliability

c) Composite Reliability (CR):

Composite reliability is another measure of internal consistency, specifically focused on the overall reliability of the measurement model for a specific construct. It considers both the

indicator reliabilities (outer loadings) and the error variances of the indicators associated with the construct. Composite reliability values above 0.7 indicate a reliable measurement model (Sarstedt et al., 2017b; Sentosa et al., 2019). Table 7 presents the Composite Reliability results for each construct in the measurement model. The "Business Readiness" (BR) construct demonstrates a Composite Reliability of 0.878, indicating a high level of internal consistency and reliability for the observed indicators representing this construct. Similarly, the construct "Intention to Enhance Digital Marketing Competence" (DM) exhibits a Composite Reliability of 0.831, while "Organisational Commitment" (OC) shows a value of 0.836, both reflecting satisfactory levels of reliability. The constructs "Intention to Seek Knowledge" (SK) and "Intention to Take Risk" (TR) display Composite Reliability values of 0.834 and 0.863, respectively, further supporting the robustness and reliability of the measurement model. These Composite Reliability results reaffirm the ability of the observed variables to effectively measure their corresponding latent constructs in the PLS-SEM analysis.

Variables	Composite Reliability
Intention to Enhance Digital Marketing Competence (DM)	0.831
Intention to Seek Knowledge (SK)	0.834
Intention to Take Risk (TR)	0.863
Organisational Commitment (OC)	0.836
Business Readiness (BR)	0.878

Table 7: Composite Reliability

d) Convergent Validity (AVE):

Convergent validity evaluates the extent to which the observed indicators consistently and accurately measure the latent construct. It is assessed through the Average Variance Extracted (AVE), which represents the amount of variance in the indicators that can be

explained by the underlying construct. AVE values should ideally be greater than 0.5, indicating that the construct explains more than 50% of the variance in its indicators (Sarstedt et al., 2021). Table 8 displays the Average Variance Extracted (AVE) results for each construct in the measurement model. The "Business Readiness" (BR) construct exhibits an AVE value of 0.592, indicating that approximately 59.2% of the variance in the observed indicators is explained by the underlying construct. Similarly, the construct "Intention to Enhance Digital Marketing Competence" (DM) shows an AVE of 0.553, while "Organisational Commitment" (OC) demonstrates an AVE of 0.508, both representing satisfactory levels of variance explained by the latent constructs. The constructs "Intention to Seek Knowledge" (SK) and "Intention to Take Risk" (TR) display AVE values of 0.560 and 0.614, respectively, further validating the measurement model's ability to explain variance in the observed indicators. These AVE results indicate the convergent validity of the measurement model, suggesting that the constructs effectively capture the variance in their corresponding observed variables in the PLS-SEM analysis.

Variables	Average Variance Extracted (AVE)
Intention to Enhance Digital Marketing Competence (DM)	0.553
Intention to Seek Knowledge (SK)	0.560
Intention to Take Risk (TR)	0.614
Organisational Commitment (OC)	0.508
Business Readiness (BR)	0.592

Table 8: Convergent Validity (AVE)

e) Discriminant Validity (HTMT):

Discriminant validity ensures the distinctiveness of different constructs in the measurement model. It verifies that each construct measures a unique underlying concept and is not highly correlated with other constructs. The Heterotrait-Monotrait ratio (HTMT) is a recent method for assessing discriminant validity in PLS-SEM. It compares the average correlations of items belonging to different constructs (heterotrait) with those belonging to the same construct (monotrait). The HTMT ratio is calculated as the average heterotrait correlation divided by the average monotrait correlation. The ideal threshold for discriminant validity is 0.85 or less, indicating that the constructs are more distinct from each other than they are within themselves (Sarstedt et al., 2021). Table 9 presents the results of Discriminant Validity using the Heterotrait-Monotrait (HTMT) ratio for each pair of constructs in the measurement model. The values in the table represent the HTMT ratios between different constructs. The HTMT ratio assesses the discriminant validity by comparing the correlations between different constructs with the average correlation of each construct with itself. In this table, all the HTMT ratios are less than the threshold value of 0.85, indicating strong discriminant validity. This suggests that the constructs are distinct from each other and are not highly correlated, validating the measurement model in the PLS-SEM analysis.

	BR	DM	OC	SK	TR
BR					
DM	0.833				
ОС	0.804	0.847			
SK	0.504	0.523	0.515		
TR	0.347	0.237	0.438	0.255	

Table 9: Discriminant Validity (HTMT)

4.4.2 Structural Model Analysis

The entire PLS-SEM method combines the structural model and measurement model assessments. Once the measurement model has been assessed effectively, the structural

model is examined. The structural model, or inner model, consists of the connections between the latent variables, which are based on hypothetical relationships. The independent latent variables are known as predictor variables, while the latent dependent variables are recognized as response variables. In the structural model, a response variable can be impacted by multiple predictors. Eliminating a predictor may have an impact on the response variable (Hair et al., 2021). The structural model analysis is followed based on this study's nature. This research uses four structural model analysis techniques. The step-by-step analyses of the structural model are described below:

a) Collinearity

To ensure precise evaluation of structural relationships, it is crucial to examine collinearity, as it can introduce bias in regression results. One way to assess collinearity is by calculating the variance inflation factor (VIF) using the latent variable scores of the predictors in a partial regression. Collinearity concerns may arise when VIF values fall between 3 and 5. To mitigate collinearity issues, it is preferable to aim for VIF values close to or below 3 (Hair et al., 2017). Table 10 presents the results of collinearity assessment using the VIF for each pair of constructs in the model. In this table, all the VIF values are below the threshold of 3, indicating no significant collinearity issues among the latent variables. This suggests that the predictors are not highly correlated with each other, ensuring the reliability of the regression results and the validity of the structural model in the PLS-SEM analysis.

	BR	DM	ОС	SK	TR
DM	1.839		1.205		
SK	1.235		1.209		
TR	1.194		1.065		
OC	2.031				
BR					

Table 10: Collinearity

b) Path Coefficients

In PLS-SEM, path coefficients serve as standardized regression coefficients that quantify the strength and direction of the relationships between latent variables (latent constructs). Positive values indicate a positive relationship, while negative values indicate a negative relationship. Evaluating these path coefficients is a critical step in assessing the structural model's relationships. Experts often consider path coefficient scores above 0.10 as indicative of a meaningful influence on the path model. Moreover, the significance of the path coefficients should be determined using methods like bootstrapping, with a preferred significance level of p-value 0.05 or lower. This process ensures a robust evaluation of the structural relationships in the PLS-SEM analysis (Hair et al., 2020).

In path analysis, beta (β) represents the standardized regression coefficient, which quantifies the strength and direction of the relationship between the predictor variable and the outcome variable. It indicates the amount of change in the outcome variable for each one-unit change in the predictor variable. The t-statistic (t) is a measure of the significance of the beta coefficient and is used to determine whether the relationship between the predictor and outcome variables is statistically significant. A significant t-statistic indicates that the relationship is unlikely to have occurred by chance. The p-value (p) is the probability of

obtaining the observed result or more extreme results if there is no true relationship between the variables. A small p-value (typically below 0.05) suggests strong evidence against the null hypothesis, indicating a significant relationship (Awang, 2015; Hair and Alamer, 2022; Hizam et al., 2022). The path analysis results are presented in Table 11.

In Hypothesis 1a, the path coefficient (β) between "Intention to Enhance Digital Marketing Competence" (DM) and "Business Readiness" (BR) is 0.364. The standard deviation (SD) associated with this path coefficient is 0.053. The t-statistic (t) value for this relationship is 6.919, and the p-value is 0.000, which is highly significant. Based on these results, Hypothesis 1a is accepted. This indicates that there is a strong and positive relationship between digital marketing competence and business readiness.

Hypothesis 1b explores the relationship between "Intention to Enhance Digital Marketing Competence" (DM) and "Organisational Commitment" (OC). The path coefficient (β) is 0.561, and the standard deviation (SD) associated with this path coefficient is 0.049. The t-statistic (t) value for this relationship is 11.569, and the p-value is 0.000, which is highly significant. Therefore, Hypothesis 1b is accepted, suggesting a strong and positive relationship between digital marketing competence and organisational commitment.

Hypothesis 1c investigates the indirect relationship between "Intention to Enhance Digital Marketing Competence" (DM) and "Business Readiness" (BR) through "Organisational Commitment" (OC). The path coefficient (β) for this indirect relationship is 0.226, and the standard deviation (SD) associated with it is 0.036. The t-statistic (t) value for this relationship is 6.251, and the p-value is 0.000, which is highly significant. Therefore, Hypothesis 1c is accepted, indicating that digital marketing competence influences business readiness indirectly through organisational commitment.

Moving on to Hypothesis 2a, which examines the relationship between "Intention to Seek Knowledge" (SK) and "Business Readiness" (BR). The path coefficient (β) is 0.078, and the standard deviation (SD) associated with this path coefficient is 0.054. The t-statistic (t) value for this relationship is 1.458, and the p-value is 0.146, which is not significant. As a result, Hypothesis 2a is rejected, suggesting that intention to seek knowledge does not have a significant influence on business readiness. It can also be explained that knowledge-seeking behaviour and knowledge means differently. Having competence which knowledge form part of it, can positively improve business readiness as in Vodafone Limited (2021). However, acquiring knowledge might not be the case. As knowledge is formed in the mind of the holder, therefore the value of knowledge constructed on individual mind varies. Furthermore, only when knowledge is shared and applied, can it become useful. Not everyone is willing to apply knowledge at workplace due to reasons such as selfishness, insufficient time to share, fear of the negative impact after sharing, mistrust, or naturally just don't like to share. A more detailed explanation will be discussed in Chapter 5.

In Hypothesis 2b, the relationship between "Intention to Seek Knowledge" (SK) and "Organisational Commitment" (OC) is explored. The path coefficient (β) is 0.113, and the standard deviation (SD) associated with this path coefficient is 0.052. The t-statistic (t) value for this relationship is 2.164, and the p-value is 0.031, which is significant. Therefore, Hypothesis 2b is accepted, indicating a positive influence of intention to seek knowledge on organisational commitment.

Hypothesis 2c examines the indirect relationship between "Intention to Seek Knowledge" (SK) and "Business Readiness" (BR) through "Organisational Commitment" (OC). The path coefficient (β) for this indirect relationship is 0.045, and the standard deviation (SD) associated with it is 0.022. The t-statistic (t) value for this relationship is 2.064, and the p-

value is 0.039, which is significant. Thus, Hypothesis 2c is accepted, suggesting that intention to seek knowledge influences business readiness indirectly through organisational commitment.

In Hypothesis 3a, the relationship between "Intention to Take Risk" (TR) and "Business Readiness" (BR) is explored. The path coefficient (β) is 0.08, and the standard deviation (SD) associated with this path coefficient is 0.06. The t-statistic (t) value for this relationship is 1.339, and the p-value is 0.181, which is not significant. Therefore, Hypothesis 3a is rejected, indicating that intention to take risks does not have a significant influence on business readiness. Retail businesses does not require massive capital; therefore, decision-making can be less risky. In fact, small traders who are deprived of adequate resources, are generally rational, mistrustful, and are not extreme risk-takers. Furthermore, most respondents in current research operate the business for less than three years. This short span of business operation might not demand risk-taking, particularly when the duration coincide with the happening of the pandemic where e-commerce industry is booming, therefore require less effort from retailers to achieve profitability. In-depth discussion on current findings can be found in Chapter 5.

Moving on to Hypothesis 3b, which examines the relationship between "Intention to Take Risk" (TR) and "Organisational Commitment" (OC). The path coefficient (β) is 0.251, and the standard deviation (SD) associated with this path coefficient is 0.049. The t-statistic (t) value for this relationship is 5.1, and the p-value is 0.000, which is highly significant. As a result, Hypothesis 3b is accepted, suggesting a strong and positive relationship between intention to take risks and organisational commitment.

Hypothesis 3c investigates the indirect relationship between "Intention to Take Risk" (TR) and "Business Readiness" (BR) through "Organisational Commitment" (OC). The path

coefficient (β) for this indirect relationship is 0.101, and the standard deviation (SD) associated with it is 0.024. The t-statistic (t) value for this relationship is 4.232, and the p-value is 0.000, which is highly significant. Therefore, Hypothesis 3c is accepted, indicating that intention to take risks influences business readiness indirectly through organisational commitment.

Finally, in Hypothesis 4, the direct relationship between "Organisational Commitment" (OC) and "Business Readiness" (BR) is examined. The path coefficient (β) is 0.403, and the standard deviation (SD) associated with this path coefficient is 0.055. The t-statistic (t) value for this relationship is 7.354, and the p-value is 0.000, which is highly significant. Hence, Hypothesis 4 is accepted, suggesting that higher organisational commitment leads to increased business readiness.

	Hypotheses	Path Coeff. (β)	Standard Deviation	T Statistics	P Values	Results
H1a	$DM \rightarrow BR$	0.364	0.053	6.919	0.000	Accept
H1b	$DM \rightarrow OC$	0.561	0.049	11.569	0.000	Accept
H1c	$DM \rightarrow OC \rightarrow BR$	0.226	0.036	6.251	0.000	Accept
H2a	$SK \rightarrow BR$	0.078	0.054	1.458	0.146	Reject
H2b	$SK \rightarrow OC$	0.113	0.052	2.164	0.031	Accept
H2c	$SK \rightarrow OC \rightarrow BR$	0.045	0.022	2.064	0.039	Accept
НЗа	$TR \rightarrow BR$	0.08	0.06	1.339	0.181	Reject
H3b	$TR \rightarrow OC$	0.251	0.049	5.1	0.000	Accept
НЗс	$TR \rightarrow OC \rightarrow BR$	0.101	0.024	4.232	0.000	Accept
H4	$OC \rightarrow BR$	0.403	0.055	7.354	0.000	Accept

Table 11: Path Analysis

c) Coefficient of Determination

In partial least squares (PLS), the coefficient of determination (R2) holds significance as a key measure for assessing the structural model. R2 reflects the proportion of explanatory power of endogenous latent variables to the variance of their response variables. Higher R2 values indicate a more substantial level of explained variance. Typically, R2 values of 0.25 are deemed weak, values of 0.50 are considered moderate, and values of 0.75 are seen as substantial, indicating a strong relationship between the latent variables and their observed responses. Hence, R2 serves as a valuable indicator to gauge the strength of the relationships within the PLS structural model (Hair et al., 2014). Table 12 displays the R Square and R Square Adjusted values for the endogenous variables in the study, where "Business Readiness" (BR) serves as the dependent variable. The R Square represents the proportion of the variance in the dependent variable (BR) that is explained by the exogenous variables in the structural model. For BR, the R Square value is 0.578, indicating that approximately 57.8% of the variance in BR is explained by the exogenous variables. Likewise, for the "Organisational Commitment" (OC) variable, the R Square is 0.508, implying that around 50.8% of the variance in OC is explained by the exogenous variables. The R Square Adjusted, which considers the complexity of the model, is also presented. For BR, the R Square Adjusted value is 0.569, while for OC, it is 0.500. These adjusted values provide a more conservative estimate of the proportion of variance explained in the respective dependent variables. Overall, the R Square and R Square Adjusted values demonstrate a moderate to substantial level of explained variance in the endogenous variables, signifying the meaningful impact of the exogenous variables on BR and OC.

Endogenous Variables	Overall Impact on Endogenous Variables		
Endogenous variables	R Square	R Square Adjusted	
BR	0.578	0.569	
OC	0.508	0.50	

Table 12: R Square and R Square Adjusted

d) Effect size f²

The f-square is a valuable measure in PLS-SEM analysis that assesses the extent to which predictor variables explain the variance in a latent variable. It aids in evaluating the relative importance of these predictors in influencing the variation observed in the latent variable. Higher f-square values indicate a greater explanatory power of the predictor variables. When combined with R^2 values, which measure the total explained variance, f-square values offer a more comprehensive evaluation of the model's strength. Cohen's f^2 is commonly used to calculate effect sizes in path models. It determines the impact of exogenous latent variables on an endogenous latent variable. An f^2 value of 0.02 is considered to have an adequate effect size, indicating the impact of exogenous latent variables on the endogenous latent variable. Additionally, values of ≥ 0.15 suggest a medium effect, while values of ≥ 0.35 indicate a large effect. This approach facilitates the identification of weak relationships within the structural model, enhancing practitioners' understanding of the model's significance and explanatory capacity (Cohen, 1988; Hair and Alamer, 2022; Sarstedt et al., 2022a).

In Table 13, the f-Square values provide insights into the effect sizes of the exogenous latent variables on the endogenous latent variables in the PLS-SEM analysis. For "Business Readiness" (BR), we observe that the exogenous variable "Intention to Enhance Digital Marketing Competence" (DM) has a moderate effect size with an f-Square of 0.178. This indicates that DM significantly contributes to explaining the variance in BR, and it plays a

meaningful role in influencing BR's outcomes. Similarly, "Organisational Commitment" (OC) also has a moderate effect size on BR, as shown by an f-Square of 0.172. This suggests that OC is another important factor that impacts BR, contributing significantly to the variation observed in BR. Furthermore, when examining the endogenous variable "Organisational Commitment" (OC), we find that it is highly influenced by the exogenous variable "Digital Marketing Competence" (DM), as evidenced by a large effect size with an f-Square of 0.526. This highlights the substantial impact of digital marketing on explaining the variance in OC.

On the other hand, the exogenous variable "Intention to Seek Knowledge" (SK) shows a small effect size on both BR (f-Square = 0.013) and OC (f-Square = 0.022). This implies that SK has a relatively weaker influence on both BR and OC compared to the other predictor variables. Similarly, the exogenous variable "Intention to Take Risk" (TR) demonstrates small effect sizes on BR (f-Square = 0.015) and OC (f-Square = 0.121). Although TR has a slightly stronger impact on OC compared to SK, its overall effect on both BR and OC is relatively limited.

	BR	ОС
DM	0.178	0.526
SK	0.013	0.022
TR	0.015	0.121
OC	0.172	
BR		

Table 13: f Square Values

4.4.3 PLS-SEM Framework

Figure 19 presents the PLS-SEM model, showcasing the regression paths, R-squared values, and outer loadings for each item. The model provides valuable insights into the relationships between latent constructs and observed indicators, offering a comprehensive view of the

measurement model's reliability and validity. Figure 20 displays the results of the PLS-SEM bootstrapping analysis, which is crucial for hypothesis testing. The figure illustrates the significance of the path coefficients, providing evidence to support or reject the research hypotheses by showing t-statistic value of each path. The bootstrapping results enhance the robustness of the study's findings and validate the structural model's relationships. Together, these figures offer a comprehensive understanding of the study's PLS-SEM analysis, showcasing the measurement model's reliability, validity, and the significance of the structural paths. The PLS-SEM approach allows for rigorous testing of the research model and provides valuable insights for theory development and practical implications.

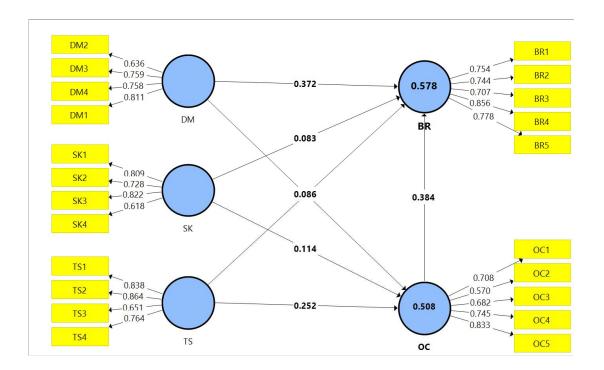


Figure 19: PLS-SEM Algorithm

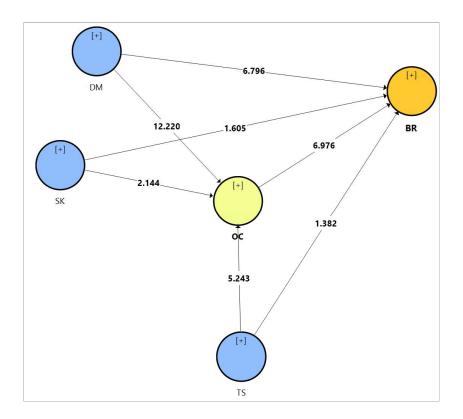


Figure 20: PLS-SEM Bootstrapping

4.4.4 Chapter Summary

This chapter presents a comprehensive analysis of the data collected in the study, ranging from preliminary data assessment and demographic results to the application of Partial Least Squares Structural Equation Modelling (PLS-SEM). The preliminary data assessment involved examining missing data, outliers, skewness, and kurtosis, confirming the dataset's integrity. The demographic results provided insights into the sample's characteristics, enhancing the study's generalizability. Additionally, Harman's single-factor test was conducted to check for common method bias (CMB). The results revealed that no single factor emerged, indicating the absence of significant CMB. The PLS-SEM analysis evaluated the measurement model's reliability and validity. The outer loading values indicated strong relationships between latent constructs and observed indicators, supporting convergent validity. Construct reliability (Cronbach's alpha) and composite reliability demonstrated high

internal consistency. Convergent and discriminant validity were established, confirming the distinctiveness of the latent constructs. Hypothesis testing in the structural model analysis examined the relationships between latent constructs. The path coefficients and effect sizes (f-square) provided insights into the strength and importance of these relationships. In nutshell, the rigorous analysis and consideration of methodological safeguards ensured the reliability and validity of the research findings, supporting the study's research objectives and providing valuable implications for future research and practice.

CHAPTER 5: DISCUSSION ON FINDINGS AND CONCLUSION

5.1 Introduction

In a volatile, competitive, and fast-paced online retailing business environment, it is important for e-marketplace retailers to constantly be prepared to face future challenges, yet at the same time be ready to embrace incoming opportunities. Decisions to embrace digital marketing competence, knowledge-seeking and risk-taking have become more critical in ensuring organisational commitment, and in preparation for a future-ready business. The underpinning theory of planned behaviour stipulates the importance of attitude, subjective norm and perceived behavioural control as indicators to measure and predict behavioural intentions whereby employee behaviour influences organisational commitment and business readiness (Husin and Kernain, 2020; Idris, 2015; Vodafone Enterprise, 2014; Vodafone Limited, 2021).

Research has demonstrated that the study on readiness mostly focuses on a specific aspect of readiness such as readiness to change or adopt digitalisation. The concept of business readiness was rarely discussed holistically in academic research. Only in the industry report that the term business readiness was extensively found (Vodafone Enterprise, 2014; Vodafone Limited, 2021). From the literature reviews, it was discovered that there's some significance in the relationship between digital marketing competence, knowledge-seeking and risk-taking, on business readiness. However, results from the data analysis using PLS-SEM model show that not all relationships initially hypothesised in this study can be accepted. In this study, knowledge-seeking was found not to have a significant direct impact on business readiness. This is the same as risk-taking which is an inherent attribute of a business, critical to facilitating business transformation, and proven to make a profit during a crisis (Abd Razak et al., 2020; Chen and Wu, 2022; Dai et al., 2023), yet does not show direct

significant impact on business readiness. Both intentions were only found to be significant with the moderating factor of organisational commitment.

Since COVID-19 was declared a public health emergency in year 2020, many small retailers in Malaysia were forced to start selling online. This crisis has made people and businesses adopt digitalisation as a means of activities. Most traders that transformed thrive, however, such favourable performance was found not sustainable post-pandemic (The Star Business, 2022). E-marketplace retailers are no longer profitable; revenue started to decline, and many owners ceased to operate and went back to employment, despite government providing further support. As such, this study aims to investigate the business readiness of e-marketplace retailers in Malaysia from a behavioural perspective, combining the theoretical concept of behavioural intentions (Ajzen, 1991), three-component of organisational commitment (Meyer and Allen, 1991), and industry-recommended framework of business readiness (Vodafone Enterprise, 2014).

5.2 Findings and Discussions

Data analysed using PLS-SEM technique revealed that respondents consist of more women (57%) than men (43%) with more than 60% above the age of 35, and only 13% are less than 24 years old. The researcher posits that most respondents will have considerable life experience and, therefore possess a certain level of rationality when making decisions. It is significant to note that most respondents in the current study are business owners (150 respondents or 75%), followed by managers and supervisors (29 respondents or 14%), who are mostly decision-makers. Employees only consist of an insignificant number of 22 people or 11%. Hence, the researcher suggests that respondents are highly probable committed to the business, inherently risk-takers, and therefore acting as leaders and management, can exert a certain level of influence on employees.

Almost 75% of respondents operate in 2 to more than 4 marketplaces with less than 3 years of business operation, while 25% of respondents operate in a single marketplace. Most respondents represented micro and small businesses with only a marginal 3.5% being medium-sized enterprises. More than half of the business did not manage to generate annual revenue of more than RM500k and 18% generated between RM500,001 to RM1,000,000. With operations in multiple marketplaces, the micro and small-sized structure, infancy stage of operation, coupled with low revenue size, the researcher posits that most respondents might be experiencing resource limitation, or having difficulty growing while some might be struggling to sustain.

As such, it is reasonable to assume that respondents are mostly leaders and management teams who are committed to their organisation and make risk decisions upon careful consideration. Most businesses operate in a condition with limited resources, producing less optimal performance.

5.2.1 Relationship of DM on OC and BR

5.2.1.1 Indicators of Intention to Enhance Digital Marketing Competence

Attitude is commonly posited as the most significant influence on behavioural intention. The question on value (DM2) representing attitude investigates respondents perceived cruciality of digital marketing competence in the business. Unlike intention to seek knowledge and intention to take risks that place indicators representing attitude above outer loading of 0.7, DM2 shows the lowest outer loading of 0.636 among competing indicators and the bottom 3 lowest indicators among all indicators in this study. This can be explained by investigating the nature of digital marketing.

Digital marketing is slightly more unique as compared to knowledge-seeking and risk-taking. It extensively involves the awareness of technology, as a disruptive intervention of critical processes (Aziz, 2022; Malesev and Cherry, 2021; Oh et al., 2022). Both knowledge-seeking and risk-taking can be conducted with or without technology, yet digital marketing behaviour directly involves digital technologies. This means acquirer of digital marketing competence must first be aware and learn about related technologies, before integrating knowledge and skill of conventional marketing with technology-enabled solutions to achieve desired goals (CIM, 2019). This adds another layer of difficulty and barrier to the entire learning process.

Positive attitude and willingness to adopt technology hence have become crucial considerations in determining attitude toward digital marketing (Hizam et al., 2022; Yee-Loong Chong et al., 2014). A person who does not favour technology in the very first place will demonstrate a less favourable attitude towards digital marketing competence. Furthermore, most respondents are business owners, aged above 35 years old, with businesses operating at an infancy stage. They started the business during the pandemic and are either baby boomers, Gen X or Millennials falling between digital immigrants and digital natives. It is reasonable to assume that the majority of respondents started or joined the business out of necessity due to the pandemic, or just to follow the trend. Their digital marketing skills are likely not at par with market standards. This is supported by Cham et al. (2022) who postulate the importance of digital marketing activities, yet many SMEs are not doing enough. Vodafone Limited (2021) opined that a future-ready business is a great communicator yet prefers face-to-face communication to digital communication. The opinion of Vodafone Limited (2021) does not reduce the importance of digitalisation in the context of e-marketplace retailers.

The lack of technology acceptance and the limitation of resources inherently present in e-marketplace retailers can render the attitude towards digital marketing adoption less significant. The ambiguity of attitude was also implied in the model of the European Commission (2014) and Vuorikari et al. (2022) that embed attitude across all dimensions in competence assessment, yet without explicitly identifying means of measure. Attitude towards digital marketing competence is complex as it involves both technology acceptance and marketing intervention. The lesser significance of attitude in this study contradicts most claims that attitude has the most significant influence on intention and behavioural achievement as compared to subjective norm and perceived behavioural control (Ajzen, 1991; Lai et al., 2014; Nguyen et al., 2019). Regardless of the explanation, the significance of attitude on intention in this study is affirmed and supports the claim of Oh et al. (2022) that postulates positive attitude toward digital transformation positively influences behaviour.

Both community identification representing subjective norm, and knowledge and skills representing perceived behavioural control, show a higher significance in measuring intention to enhance digital marketing competence, a similar strength of 0.759 and 07.58 respectively. The importance of subjective norm and perceived behavioural control in measuring behaviour correlates with the results in multiple studies (Ahmed, 2023; Ammari et al., 2021; Kim and Manoli, 2023; Lai et al., 2014; Tran Phi Hoang and Vo Huu Khanh, 2016; Vuorikari et al., 2022).

5.2.1.2 Research Objective 1

Research Objectives 1: To study if the intention to enhance digital marketing competence has a positive significant impact on OC and BR

Hypothesis 1a: Intention to enhance digital marketing competence has a positive significant

impact on BR

Findings: Supported

Competences are developed in a lifelong learning perspective for work, employability,

individual fulfilment, and participation in society. It is a person's ability on a subject matter,

measured by knowledge, skills and attitude to achieve specific results (Vuorikari et al., 2022).

There are various types of competencies, and all are interconnected (Council Of The

European Union, 2018; Directorate-General for Education, 2019). A person with digital

competence can access, use, filter, evaluate, create, share, and protect data. One of the digital

or e-competence identified by the European Commission (2014) is digital marketing

competence.

Digital marketing competence consists of the ability to digitally perform tasks related to

marketing strategy, content management, data analysis, social media, email marketing, and

search engine marketing (Beard et al., 2021; CIM, 2019; Huawei Technologies Malaysia and

MDEC, 2022; Papageorgiou and Marneros, 2023). It is the integration of digital technologies

with conventional marketing activities to achieve good marketing results. Digital marketing

competence entails a positive attitude towards digital marketing behaviour such as creative,

collaborative, inspiring, entrepreneurial, innovative, responsible, financially literate,

challenging, and commercially aware postulated in (CIM, 2019).

Current research supports H1a that posits intention to enhance digital marketing competence

has a positive significant impact on the business readiness of e-marketplace retailers, at a path

coefficient of β =0.364. The results of this study conform with the view of Aziz (2022) that

digital marketing skills are crucial for the growth of e-commerce. A business that maximises

growth opportunities is more likely to direct its strategies towards seeking competitive

advantage (García-Lopera et al., 2022). Combining entrepreneurship competence with digital

competence can produce digital innovation, thus creating a competitive advantage that can

improve business performance (Gallart-Camahort et al., 2021). A business with a competitive

advantage is more ready to face future challenges and opportunities than one that's not

(Vodafone Enterprise, 2014; Vodafone Limited, 2021). Hence, digital marketing competence

is important for e-commerce growth, leading to enhanced competitiveness and, thereafter,

impact positively on business readiness.

The industry's high demand for talent in digital marketing, particularly data analysis and

creative content skills, has fully intensified the importance of digital marketing competence

in every business (Huawei Technologies Malaysia and MDEC, 2022). This is also supported

in Ibrahim et al. (2016); Mladenova (2022); Vodafone Enterprise (2014); and Vodafone

Limited (2021) that posit marketing and technology are considerably significant to support

business readiness. Yasynska et al. (2019) similarly posit that businesses that are not ready to

improve marketing technologies will experience low profitability and discourage knowledge-

seeking (Kaaya et al., 2021). Low profitability will render a business less ready for expansion

(Acceler8 Venture Builder, 2022; Yasynska et al., 2019). Lack of knowledge will impede

competence development (Directorate-General for Education, 2019; Vuorikari et al., 2022).

All these support current findings that digital marketing competence is highly crucial to

improving the business readiness of e-marketplace retailers.

Hypothesis 1b: Intention to enhance digital marketing competence has a positive significant

impact on OC

Findings: Supported

Digital marketing competence is highly related to learning, knowledge-seeking, and skills acquisition. It is the lifelong learning behaviour that forms part of competence development (Council Of The European Union, 2018; Lai et al., 2019). Non-contractual offerings from an organisation to its employees, such as career and learning opportunities can make them feel valued (Phungula et al., 2022), and thus improve employee engagement (Chan et al., 2020; Hizam et al., 2023). Employee engagement can positively impact organisational commitment (Baiquni, 2020; Juyumaya and Torres, 2023). Thus, opportunities to enhance digital marketing competence offered to employees of e-marketplace retailers, by giving them access to multiple seller education hubs, virtual community groups and any other online learning platforms, have a positive impact on organisational commitment.

In fact, it is the reciprocal feeling, of moral or indebtedness that makes employees willingly commit to the organisation they work in (Gellatly et al., 2006; Masud et al., 2018; Phungula et al., 2022). The positive impact of the intention to enhance digital marketing competence on organisational commitment (H1b) supported in this study can be explained by the extensive learning opportunities provided via e-marketplaces within the market. When an e-marketplace retailer leverages these trainings and allocates time and resources for employees to join seminars, conferences and webinars, reciprocal feelings among employees will be ignited. To repay the kindness of their company, they will demonstrate actions that show commitment such as willingness to work overtime, or voluntarily take up more tasks to help the business grow.

Furthermore, the low revenue stream observed in most respondents has also implied that the contractual rewards (salary) provided to employees might not be high in value. In the presence of low continuance commitment, the intention to enhance digital marketing competence can still leave a significant positive impact on organisational commitment, owing

to high normative commitment (reciprocal feeling because of training opportunities). The

influence of normative commitment is supported in multiple studies (Gellatly et al., 2006;

Masud et al., 2018; Meyer and Parfyonova, 2009) that posits presence of weak continuance

commitment, strong normative commitment and strong affective commitment will strengthen

voluntary behaviour that can benefit the organisation in the absence of rewards (Ennida and

Allouani, 2023). This explains the highest path coefficient of β =0.5621 shown in H1b, which

is the highest value among path analysis results in this study.

Hypothesis 1c: OC positively mediate between the intention to enhance digital marketing

competence and BR

Findings: Supported

Whether it is a direct impact of intention to enhance digital marketing competence on

business readiness or an indirect impact with organisational commitment mediating between

intention and business readiness, the path coefficient shows a significant positive relationship

in both H1a (β =0.364) and H1c β =0.226). This affirms the criticality of digital marketing

competence for e-marketplace retailers to improve business readiness. Hence, the intention to

enhance digital marketing competence is considered a good predictor for business readiness

in the online retailing industry.

Despite the mediating role of organisational commitment between the relationship of

intention to enhance digital marketing competence and business readiness shows a significant

path coefficient of β =0.226, however, the β value of indirect impact on business readiness

with organisational commitment as the mediating role is not as strong as a direct impact on

business readiness with β =0.364. These can be due to the many internal and external factors

that impact organisational commitment and business readiness.

For example, the study by Al-Douis (2019) posits employee's commitment as a mediating role can positively enhance readiness to change based on an ultimatum purpose of change for a specific objective such as implementing new technology or change in organisation power and structure. However, in the current study of business readiness, the future is not predictable, actions cannot be determined, and there is no specific objective of readiness. Apergis (2017) posits that organisational commitment fluctuates not only based on internal factors (respondent attitude, behaviour, and perception) which were used as items in this study but also external factors such as high unemployment, economic conditions, and subjective evaluation of respondent's living conditions and environment.

According to Henderson et al. (2021), traders or retailers are highly mistrustful in nature. Trust is one of the factors influencing business readiness and employee attachment to the organisation they work for (Bahadori et al., 2021; Gouweloos and McArthur, 2019; Mladenova, 2022). The reduced path coefficient value in H1c as compared to H1a can potentially be caused by the lack of trust, whether it is trust in the employees, personal capability, or the industry prospect. Trust is one of the key determinants of organisational commitment. Regardless, of the differences in path coefficient value, both the direct and indirect influence of digital marketing competence on business readiness is confirmed in current research.

5.2.2 Relationship of SK on OC and BR

5.2.2.1 Indicators of Intention to Seek Knowledge

The current study confirms resource availability (SK4) representing perceived behavioural control with an outer loading of 0.618 as an acceptable indicator to measure knowledge seeking in e-marketplace retailers. Resource in this study refers primarily to training

materials and knowledge in Shopee, Lazada and Facebook community groups. To encourage more people to enrol as online traders, many established e-marketplaces will offer free access to a virtual knowledge depository known as a seller education hub on their platform. This helps those interested gain access to knowledge about online business, thereafter, attracting them to enrol as e-marketplace retailers. Research by Lai et al. (2014) and Sharma and Bock (2005) showed resource availability can positively influence perceived behavioural control of knowledge-seeking in a professional virtual community correlates with the results of the current study.

However, when compared with other competing indicators, resource availability shows the least significant measure of knowledge seeking. This can be reasonably explained as control over access to the e-marketplace seller education hub is insignificant because related knowledge is widely available on competing platforms. Most platforms offer similar content, of similar quality and therefore, knowledge scarcity in the e-marketplace industry is not an issue. The current study correlates with the result of Lai et al. (2014) that perceived behavioural control may be an unimportant concern of knowledge-seeking behaviour in the virtual community setting.

The current research applies knowledge quality (SK2) representing attitude to measure intention to seek knowledge. Knowledge quality is influenced by both usefulness and ease of use (Davis, 1989; Kim, Jae Kyeong, 2014; Liesa-Orús et al., 2023). Information quality is a positive attitude that influences knowledge-seeking intention (Veeravalli et al., 2019). Lai et al. (2014) suggest knowledge quality positively affects attitudes towards predicting knowledge-seeking behaviour. Most studies affirm that attitude is the most influencing predictor of intentions (Carro Saavedra et al., 2017; Oh et al., 2022; Yee-Loong Chong et al., 2014).

Although knowledge quality applied in this study shows a significant measure of intention

with an outer loading value of 0.728, however, it stays behind peer influence, a measure

representing subjective norm with a value of 0.822. Peer influence emerges as the most

significant measure of e-marketplace retailers' intention to seek knowledge as compared to

knowledge quality and resource availability tested in current research. This contradicts a

study conducted by Lai et al. (2014) that implied peer influence does not significantly

influence the subjective norm of intention to seek knowledge. The contradicting results

spread over a decade can be caused by the extensive influence of social networks that allow

information to flow at an unprecedented speed. The current result is further intensified when

the nature of online trading highly depends on digital intervention such as social media, email

marketing, data analytics and the internet of things. When information flows quickly and

freely, social pressure or peer influence will become more impactful. This explains the

significance of peer influence as the strongest indicator of knowledge-seeking in current

research. The importance of peer influence as a measure can further imply that e-marketplace

traders place emphasis on community relationships and posit that conforming to social norms

is important in the workplace.

5.2.2.2 Research Objective 2

Research Objectives 2: To study if the intention to seek knowledge has a positive significant

impact on OC and BR

Hypothesis 2a: Intention to seek knowledge has a positive significant impact on BR

Findings: Rejected

Knowledge seeking is the key factor that can improve subject knowledge (Kim, Jae Kyeong,

2014). Businesses that lack critical knowledge, are not ready for emerging change and are not

able to harness growth potential (Bratianu, C. et al., 2020). Tacit knowledge-seeking behaviour has a positive significant impact on creativity and innovation (Constance et al., 2019; Mohammed and Kamalanabhan, 2019). Creativity and innovation create a competitive edge and thus impact positively on business readiness. Knowledge management positively impacts organisation culture, and organisation culture impacts business readiness (Vodafone Enterprise, 2014; Vodafone Limited, 2021). Therefore, it is reasonable to imply that knowledge as an important asset can impact business readiness. However, this contradicts with the result of current study.

Despite knowledge being treated as a key strategic resource in multiple research (Bratianu, C. et al., 2020; Chan et al., 2023; Yee-Loong Chong et al., 2014), the current result shows a path coefficient of β =0.078 and rejects H2a that proposed intention to seek knowledge has a positive significant impact on business readiness. This contradicts Bratianu, C. et al. (2020) that critical knowledge affects business readiness. It is worth noting that knowledge-seeking behaviour and knowledge are not the same. Intention to seek knowledge does not guarantee the construction of useful knowledge, neither the application nor sharing of knowledge within the workplace. As knowledge is constructed in the mind of the holder, the decision to share and apply the knowledge at the workplace is highly dependent on individual employees. Ipe (2003) and Nonaka and Takeuchi (1995) argue that organisations will not reap the benefit of knowledge if it is not transferred from one employee to another. This is supported by Kim, Jae Kyeong (2014) that explained meta-knowledge is meant to be shared to increase knowledge-seeking behaviour.

Despite work-related needs can be critical in the formation of knowledge-seeking behaviour, however, Lai et al. (2014) posit the opposite. This means, not all employees who seek knowledge aim to perform better at work (Byström and Järvelin, 1995). It can be for other

reasons such as out of curiosity, personal growth, fulfilling responsibility, or solely as a habit (Carro Saavedra et al., 2017; Veeravalli et al., 2019; Zhang, 2019). Furthermore, not all employees are willing to share knowledge that they have, unless some reasons motivate voluntary actions, such as organisational commitment (Meyer and Allen, 1991; Nguyen et al., 2022). Nguyen et al. (2019) posit that it is a complex task requesting individuals to share knowledge.

E-commerce is widely known as an industry that is fast-paced and highly competitive. Competitions do not only exist among businesses but also among employees vying for attention. Employees of different divisions can develop a "thoughts world" that prevents inter-departmental knowledge-seeking (Wu et al., 2015). This also implies the possible void in knowledge-sharing. Employees of digital and technological-related companies often experience technostress and psychological exhaustion (Brooks et al., 2023). The stressful environment has likely prevented knowledge sharing due to employees having no extra time to share. Some who are talented might not be willing to reveal hidden knowledge to prevent more tasks from being assigned to them.

Furthermore, some employees with important tacit knowledge are unlikely to share. This can be due to fear of losing workplace competitiveness, making their very own meta-knowledge lose value, as knowledge is viewed as power in Ipe (2003). Owners of e-marketplace retailers on the other hand will not share critical knowledge with their employees for fear of encouraging competition or leaking strategic knowledge. The barrier to entering e-marketplace as retailers are relatively low and therefore, the mistrustful nature of traders (Henderson et al., 2021) further intensifies non-sharing behaviour. Unwillingness to share can also be due to a lack of confidence in the truthfulness of the knowledge (Ipe, 2003). Owners of e-marketplace retailers are more likely to spend their time to formulate strategies, building

network capital, and pursue revenue growth than focus on knowledge seeking. Their priority

is to look at the fundamentals of the business holistically.

The current study shows the significance of knowledge as a measure of competence

development. This correlates with the report by Directorate-General for Education (2019) that

suggests knowledge is a critical factor in competence development. Knowledge alone does

not impact business readiness, but competence as a whole compassing of knowledge, skills

and attitude, is implied in most readiness frameworks (Alolabi et al., 2021; Awajan et al.,

2013; Aziz, 2022; Mladenova, 2022; Papageorgiou and Marneros, 2023), supporting H1a of

current research. The result of this study that rejecting intention to seek knowledge have

positive significant impact on business readiness correlates with most studies and

publications of business readiness (Acceler8 Venture Builder, 2022; Alolabi et al., 2021;

Awajan et al., 2013; Gouweloos and McArthur, 2019; Vodafone Enterprise, 2014; Vodafone

Limited, 2021) that did not address knowledge-seeking behaviour as an antecedent to

business readiness.

Hypothesis 2b: Intention to seek knowledge has a positive significant impact on OC

Findings: Supported

Knowledge-seeking behaviour is considered a learning process as posited by Lai et al. (2019).

It is a proactive act of requesting and looking for information and expertise, whereby the

seeker will determine the nature of knowledge (Carro Saavedra et al., 2017; Kim, Jae Kyeong,

2014). Protean workers are self-directed, value-driven and choose a career based on their own

needs but not organisational needs (Kumar et al., 2023). They emphasise autonomy, personal

freedom, self-growth, and self-learn. An employee with self-development behaviour is likely

more committed to the organisation they work for (Nguyen et al., 2022). Knowledge-seeking

aligns with the self-learn characteristic of protean career employees.

Based on the experience of the researcher, people who work in the digital industry often have

protean career characteristics. Most protean career employees are highly talented, and

talented protean employees are more committed to the organisation they work in (Redondo et

al., 2021). People with digital skills such as data analysis, programming, content creation,

cybersecurity, and machine learning are considered talented because these skills are highly

sought after by the industry yet with highly insufficiently supplied (Huawei Technologies

Malaysia and MDEC, 2022). The result of this study with a path coefficient of β =0.113

signifies that intention to seek knowledge has a positive significant impact on organisational

commitment. Current results support the findings of Nguyen et al. (2022) that personal

development behaviour or voluntary commitment to learning can positively influence

organisational commitment.

Hypothesis 2c: OC positively mediate between the intention to seek knowledge and BR

Findings: Supported

Despite the current result shows knowledge-seeking does not have a direct positive

significant impact on business readiness, however, this result is reversed when organisational

commitment acts as a moderating role. Current research shows a relatively high T-statistic

value of 2.064 and P value of 0.039 on H2c that propose OC positively mediates between

intention to seek knowledge and BR. The result of the P value indicates that the chances of

organisational commitment as a moderator not exerting a positive significant influence

between the relationship of intention to seek knowledge and business readiness is almost null.

Organisational commitment is a relative strength of an individual involvement with an organisation (Mowday et al., 1979), or the power that motivates employees' voluntary action towards delivering organisation goals (Meyer and Herscovitch, 2001). It relates to the committed behaviour of a person who's locked onto the organisation when dealing with processes and challenges (Al-Douis, 2019). Age and gender commonly used to predict organisational commitment (Nguyen et al., 2022), do not apply to employees of the IT industry (Gorgulu et al., 2019; Syed and Tappin, 2019). This indicates age might not be a factor affecting employee commitment in e-marketplace retailers.

Organisation characteristics can impact an employee's commitment towards the organisation they work for (Ennida and Allouani, 2023). Kumar et al. (2023) posit that employees who are given the option to work from home are more committed to their organisation and will voluntarily act for the benefit of the organisation. Based on the researcher's experience, organisation characteristics such as flexible working hours, work-from-home, and informal work settings often form part of an e-marketplace retailers' business. The flexibility offered by e-marketplace traders, might have influence employees work commitment and hence, willingly seek knowledge to perform better at work. Knowledge seeking can only benefit the organisation when it is shared among existing workforces (Lai et al., 2019). Knowledge sharing can potentially enhance employee engagement. Employee engagement can improve operational efficiency (Hizam et al., 2023), and ultimately influence business readiness (Vodafone Enterprise, 2014; Vodafone Limited, 2021).

It is challenging asking people to share their knowledge as it is asking people to do what they are reluctant to do. A person will be more willing to use and share their knowledge for work purposes when they are emotionally attached to the organisation (Goh and Sandhu, 2013a; Mahmod and Rosari, 2020). Lack of learning opportunities can negatively impact job

satisfaction and lead to lowered commitment among employees (Ennida and Allouani, 2023; Gallart-Camahort et al., 2021; Ling et al., 2019). With an abundance of learning materials offered in the seller education hub, learning opportunities should sufficiently serve most employees. As most respondents are business owners, it is impeccable that they are committed to their business. Therefore, affective commitment plays a significant role in overall commitment. The flexible working hours, the option to work from home, informal work settings and the availability of learning opportunities explain why organisational commitment successfully moderates the relationship between intention to seek knowledge and business readiness in e-marketplace retailers.

5.2.3 Relationship of TR on OC and BR

5.2.3.1 Indicators of Intention to Take Risk

Entrepreneurs are inherently risk-takers. Risk-taking propensity is higher for entrepreneurs as compared to an employed person (Abd Razak et al., 2020; Chanda and Unel, 2019; Dai et al., 2023; Spicka, 2020). It is therefore a norm for entrepreneurs to take risks, believing that taking risks is a pre-requisite in every business. Out of the four indicators used to measure intention to take risks, risk-taking propensity (TK3) representing subjective norm shows the least significance with indicator reliability measuring at 0.651 as compared to other indicators measuring at 0.764 to 0.838. The result of the current study is supported by Nguyen et al. (2019) that subjective norm shows the least significance in measuring intention. Rodríguez-Gutiérrez et al. (2020) suggest small traders generally have lower risk-taking propensity because their business requires only a small amount of capital and technical needs. Henderson et al. (2021) postulate traders are not risk-takers, rather their behaviour is more like risk managers who are rational and less emotional when making risk decisions. This

explains why risk-propensity in measuring intention to take risk is less significant as compared to risk-taking attitude (TK2) and risk appraisal (TK4).

Most studies on behaviour posit that attitude exerts the most significant influence on behavioural intentions (Carro Saavedra et al., 2017; Lai et al., 2014; Nguyen et al., 2019; Yee-Loong Chong et al., 2014). This supports current research that risk-taking attitude used to measure intention to take risk emerges as the most significant indicator with outer loading at 0.864, furthermore, ranked as the highest outer loading value among indicators of all latent constructs. Despite risk-taking is inherently for entrepreneurs, however, it is highly contextual (Byrnes et al., 1999; Karsh et al., 2021; Losecaat Vermeer and Sanfey, 2015), and depends on a person's rationality (Fan et al., 2022), and emotion (Ismail et al., 2015). Most respondents fall between 25 to 60 years old, who have started working and acquired some life experience. As a person becomes mature, he or she will accumulate more experience, thus becoming more rational when making decisions. Therefore, people who are older and rationale tend to be more risk-averse or demonstrate unappealing risk-taking attitude as compared to a younger person (Fan et al., 2022; Prince and Kim, 2021; Schildberg-Hörisch, 2018; Wang, 2019).

Risk taking when backed with adequate resources can improve innovation performance (Giaccone and Magnusson, 2022). The key here is "adequate resources" whereby for emarketplace retailers, this might be challenging as most MSME have limitations of resources such as funding, skills, and IT solutions. Despite processes in small businesses being generally flexible and can positively impact risk propensity (Shaheen et al., 2021), however, the inadequacy of resources might explain why attitude toward risk-taking is a more significant measure than risk-taking propensity. In this study, risk-taking propensity among entrepreneurs is weaker as a measure of intention to take risk as seen in Veflen et al. (2020).

Unless e-marketplace retailers are placed under extreme conditions, risk-taking propensity as

a measure will not be highly significant. This study shows that e-marketplace retailers are

still not in dire straits.

Having adequate control over the outcome of risk seems to be one of the key measurements

of risk-taking in this study. This is supported by Zinn (2020) that postulates control as the

main motive, coupled with reflexivity and personal identity can influence risk-taking. It also

corresponds with Henderson et al. (2021) that traders, who are associated with risk manager,

are fearless and calm when facing risk decision as control become the most significant

criterion in decision-making. Risk appraisal representing perceived behavioural control as an

indicator to measure risk-taking intention appears to rank after attitude with a significant

outer loading value of 0.764, above the traditionally acceptable value of 0.7. Despite

differences in indicator reliability observed, it does not negatively affect the construct

reliability, composite reliability, convergent validity, and discriminant validity in this study.

All observed variables can effectively measure respondents' intention to take risks.

5.2.3.2 Research Objective 3

Research Objectives 3: To study if the intention to take risks has a positive significant

impact on OC and BR

Hypothesis 3a: Intention to take risks has a positive significant impact on BR

Findings: Rejected

Businesses must take risks to facilitate transformation (Dai et al., 2023; Vodafone Limited,

2021). During the unprecedented pandemic, businesses that took risks have successfully

made a profit (Chen and Wu, 2022). It shows resilience under extreme pressure and such

business is viewed as future-ready (Vodafone Limited, 2021). A ready business is fundamentally equipped with a competent workforce (Awajan et al., 2013), the right policy and processes, a good culture and management team, effective IT and communication systems, and efficient enabling solutions (Vodafone Enterprise, 2014).

Based on the small path coefficient of β =0.08, risk-taking is found to have no significant impact on the business readiness of e-marketplace retailers. The nature of retailing business requires only minimal capital, and therefore decision-making is less risky as compared to businesses with high capital investment. Henderson et al. (2021) posit traders are generally rational, less emotional, and highly mistrustful when making risky decisions. They are not extreme risk-takers when making business decisions. This is supported by Rodríguez-Gutiérrez et al. (2020) when studying about risk-propensity of Chinese immigrant business in Spain. Risk-taking is less significant among online retailers can be explained as most of the digital solutions such as creative and content tools, marketing automation tools, or social media tools commonly used in online retailing business are cloud-based and highly affordable, and therefore will render risk-taking irrelevant when making business decisions. Trader's risk-taking behaviour contradicts the common belief that entrepreneurs are inherently risk-takers (Abd Razak et al., 2020; Dickason-Koekemoer and Sune Ferreira-Schenk, 2022; Rodríguez-Gutiérrez et al., 2020).

Risk-taking is undeniably a critical force behind innovation that can improve business competitiveness, and thus lead to business readiness (Chanda and Unel, 2019). However, making risky decisions can be detrimental to the sustainability of the business when the outcome is negative. Companies are more likely to take risks when they have adequate resources (Giaccone and Magnusson, 2022). Risk can be more impactful when there is little to no support available (Zinn, 2023). With the low revenue status and difficulty of small

businesses such as e-marketplace retailers in obtaining loans and funding support, taking

risks will not likely be considered in exchange for future readiness. Fear of losing control

over the business sustainability might have prevented e-marketplace retailers from

considering risk-taking as an option to prepare for the future. As explained by Zinn (2020),

control is one of the critical motives in risk-taking, apart from reflexivity and personal

identity.

Adding to the difficulty is the fact that almost 75% of the respondents operated their business

for a short span of less than 3 years. This short business operation duration might not warrant

risk-taking. This is explained by Rodríguez-Gutiérrez et al. (2020) that the longer a business

operates, the higher the risk propensity. In the case of e-marketplace retailers, less than 3

years of business operation can be considered as infancy stage. The low capital-intensive

industry, rational, emotionless, and mistrustful characteristics of traders, the inadequacy of

resources and the short duration of business operation have resulted in risk-taking not being a

good consideration for e-marketplace retailers' in achieving business readiness. The current

result that shows intention to take risk have no significant impact on business readiness also

correlates with multiple publications that omit risk-taking as a factor of business readiness

(Awajan et al., 2013; Idris, 2015; Vodafone Enterprise, 2014; Vodafone Limited, 2021).

Hypothesis 3b: Intention to take risks has a positive significant impact on OC

Findings: Supported

Contrary to business readiness, the current study accepts H1b that risk-taking has a positive

significant impact on organisational commitment, showing a path coefficient of β =0.251. The

result of this study co-relates with Jung et al. (2020) that risk-taking as a moderation can

improve employee commitment, and the effect is even greater when the task is complex.

Risk-taking can influence professionalism, firm performance and employee engagement (Chen and Wu, 2022; García-Lopera et al., 2022; Huguet, 2017; Robert Half, 2022). Encouraging employees to take risks can influence innovation, which in turn drives employee engagement (García-Lopera et al., 2022). Employee engagement motivates job commitment and positively impacts organisational commitment (Baiquni, 2020; Hizam et al., 2023).

In the current study, most respondents are either business owners or employees with self-growth characteristics (protean career). A person with a growth mindset is surrounded by positivity, and a passion for learning, takes calculated risk, and constantly seek out challenges and opportunities. Traders are inherently not a risk-taker, yet with a growth mindset, they are likely to approach risk-taking from an evaluative perspective rather than an affective perspective (Ajzen and Timko, 1986; Henderson et al., 2021), supporting Fan et al. (2022) theory of revolutionary rationality.

The perceived benefits as a positive outcome of risk-taking (Bratianu, C. et al., 2020), and the consideration of negative outcomes make them even more committed to ensuring favourable achievement when taking risks. This commitment is further intensified by the limitation of resources faced by micro and small businesses like the respondents in this study. The owner's personal affection and obligation to make the business thrive further drive committed behaviour (Mahmod and Rosari, 2020; Phungula et al., 2022). Affective commitment, inherently present in most owners is unwavering in the presence of work exhaustion (Mahmod and Rosari, 2020).

Owner's inherent commitment towards their business has resulted in risk-taking having a positive significant impact on organisational commitment. This corresponds with the findings of Jung et al. (2020) that posit risk-taking plays a positive moderating role on the relationship

between empowering leadership and organisational commitment. This role is intensified in

the presence of task complexity.

Hypothesis 3c: OC positively mediate between the intention to take risks and BR

Findings: Supported

Ensuring a committed workforce is of paramount importance in times of mounting challenges

and uncertainties (Bran and Vaidis, 2019). A study conducted by Al-Douis (2019) suggests

organisational commitment can mediate between transactional leadership and readiness to

change. The positive mediating role of organisational commitment is similarly observed

between transformational leadership and job satisfaction (Jabbar et al., 2020), organisational

innovation capabilities and sustainable performance (Alshura et al., 2023), calling

(transcendent summon) and employee engagement (Cao et al., 2019), emotional labour (eg:

teachers) and work engagement (Sezen-Gultekin et al., 2021). The mediating role of

organisational commitment has exerted significant influence in many relationships. Current

research similarly posits that organisational commitment positively mediates between

intention to take risk and business readiness with a path coefficient of β =0.101,

corresponding mediating role of organisational commitment in other research.

Risk-taking is highly relevant when the person who took risk perceives the activity as

important and aligns with their personal value (Fan et al., 2022; Shaheen et al., 2021;

Wakefield et al., 2022; Zinn, 2023). Chan et al. (2020) and Syed and Tappin (2019) opine

that personal values and perceived opportunities can impact committed behaviour. This is

observed in current research when risk-taking attitude has proven its extreme significance in

measuring risk-taking intention, and risk-taking intention is proven to impact organisational

commitment. This implies most respondents acknowledge the importance and value of risk-taking in business construction.

Protean career people who are likely to represent the workforce in e-marketplace retailers possess self-directed and value-driven characteristics. They seek learning opportunities and might find flexible work conditions in e-marketplace retailers appealing and highly valuable to them. Flexibility allows them more time to chart their career path. When personal and organisation values align, this can have a positive significant impact on employee commitment, particularly normative commitment (Gellatly et al., 2006; Phungula et al., 2022). This is because personal value is proven as a good indicator of attitude (Ajzen, 1991; Lai et al., 2014; Vuorikari et al., 2022) and risk-taking attitude is a significant measure of risk-taking in the current study.

Emotion such as happiness, anger and fear correlates negatively with risk-taking (Meier, 2022). Fear is associated with risk aversion (Prince and Kim, 2021; Schildberg-Hörisch, 2018) and happiness with risk-neutral (Ismail et al., 2015). Change in emotion can direct changes in risk attitude. Fan et al. (2022) propose a theory of revolutionary rationality that posits risk attitude as a factor of selection intensity or the degree of attention given to a specific risk after severe consideration, weighing between reward and a person's fitness. Zinn (2017) suggests risk-taking to be viewed from positive lenses such as to explore one's limit and confirm one ability. Adopting a growth mindset on risk-taking will encourage behavioural achievement in a positive tone.

Despite organisational commitment as a mediating role being affirmed positively in many studies, however, no research shows organisational commitment can positively mediate between risk-taking and business readiness. Most studies on the relationship between organisational commitment and readiness involve the direct impact of organisational

commitment on readiness to change (Alolabi et al., 2021; Alqudah et al., 2022). This study has become the first to investigate the relationship between risk-taking and business readiness, mediated by organisational commitment. Job challenges can affect organisational commitment, yet challenges often involve risk (Gorgulu et al., 2019; Kumar et al., 2023; Meyer et al., 1990; Meyer and Allen, 1997). Challenges relate to something positive such as interest, motivation or engagement, whereas risks are associated with the capability to hurt, harm or injure (Rajko Sekulovic, 2020; Vritika, 2013). Challenges and risks form part of the process towards achieving business readiness (Chen and Wu, 2022; Dai et al., 2023; Vodafone Limited, 2021). As such, aligning with the current result, it is also reasonable to assume that organisational commitment can potentially moderate between risk-taking and business readiness in other constructs. Hence, future research is encouraged to investigate these relationships.

5.2.4 Relationship of OC on BR

5.2.4.1 Indicators of Organisational Commitment

Despite continuance commitment, as a measure of organisational commitment in current research was significantly represented at outer loadings 0.57, based on the flexible standard of 0.5 suggested in Akter et al. (2022) and Hizam et al. (2023), this indicator shows the lowest value not only among competing indicators but also among all indicators. This implies contractual reward as a measure of organisational commitment is less significant as compared to other competing indicators. Respondents of this study are mainly women (57%) as compared to men (43%). Despite women being more prone to conduct cost analysis (Gorgulu et al., 2019) continuance commitment should legitimately exert more weight, however, it shows the contrary. This might be due to the insignificant reward of working in e-marketplace retailers as most businesses in this study generate an annual revenue of less

RM500,000. Even when rewards are not satisfactory, individuals still prefer to remain status quo when finding an alternative job is perceived as challenging (Apergis, 2017), which is currently happening with the high unemployment rate. When rewards are far reaching, then decision to stay with the organisation is motivated by other factors.

Normative commitment shows the second lowest outer loading value at 0.68, behind affective commitment, work ethics and leadership. This can be explained that attending to work-related matters after working hours is not favourable for respondents, however, due to the normality in this industry and a sense of obligation, they decide to do the same. Motivation to continue serving and remaining in the e-marketplace retaining firms can be highly influenced by emotional attachment (0.708). Psychological exhaustion from prolonged working hours, and inadequate reward, did not hamper the significance of affective commitment as a direct measure of OC. This is supported by Mahmod and Rosari (2020) that posit psychological exhaustion will not impact the affective commitment of an individual. In the presence of low continuance commitment, the combination of higher affective commitment and normative commitment can reduce turnover rate, promote citizenship behaviour and produce stronger positive work performance (Gellatly et al., 2006).

Leadership and work ethics are strong indicators to measure organisational commitment with outer loading values of 0.745 and 0.833 respectively. This is supported by multiple studies that suggest leadership and ethics significantly influence organisational commitment and performance (Bahadori et al., 2021; Brown et al., 2019; Juyumaya and Torres, 2023; Nastavia Putri and Lista Meria, 2022). The differences in strength among the indicators do not affect the overall relationship of organisational commitment with any latent constructs. This is explained by Meyer and Allen (1991) that applying multiple dimensions to measure organisational commitment will produce higher accuracy. In this study, we've applied the

three-component organisational commitment in Meyer and Allen (1991), and leadership and work ethics in AL-Jabari and Ghazzawi (2019) to measure organisational commitment. Internal consistency, construct reliability, convergent validity and discriminant validity of organisational commitment were proven via Cronbach Alpha, Average Variance Extracted, and Heterotrait-Monotrait ratio. Composite reliability at 0.836 shows a high level of internal consistency for observed indicators of organisational commitment.

5.2.4.2 Indicators of Business Readiness

All indicators (BR1, BR2, BR3, BR4 and BR5) representing business readiness show significant outer loadings value of more than 0.70 with the lowest represented by enabling solutions (BR3) at 0.707. Item of BR3 is represented by the availability of a social media page that can be "effectively" used to perform marketing activities. Despite social media is critical to increase brand equity, enhance customer relations, and increase revenue as explained in previous studies (Harun and Husin, 2019; Parveen et al., 2015; Universiti Utara Malaysia et al., 2018), however, it takes tremendous time and monetary investment to make it effective (Malesev and Cherry, 2021). With the current small revenue scale of e-marketplace retailers, it might be too challenging to focus on social media marketing as posited by Malesev and Cherry (2021). Based on the researcher's experience, most e-marketplace retailers have a social media page but do not actively engage on a daily basis. This is supported by Malesev and Cherry (2021) that propose businesses pursue social media so they won't be left behind and this explains the lower significance of BR3 as compared to other competing indicators.

Operating an online business in both established e-marketplaces such as Shopee and Lazada has encouraged e-marketplace retailers to actively use digital tools and technological systems.

To leverage the uprising trend of e-marketplaces in Malaysia, many productivity software

such as inventory, accounting, and website content management have started to integrate with Shopee and Lazada. A few to mention include SQL accounting system integrating with e-marketplace e-commerce module, Zetpy an inventory management system integrating with e-marketplace order processing, and EasyStore, a website content management software integrating with e-marketplace content and order processing module. All these integrations have simplified work processes and improved the productivity of e-marketplace retailers. This explains why IT and communication fundamentals (BR4) emerged as the highest outer loading value (0.856) in measuring business readiness. The importance of BR4 is further emphasised by its achievement in being the second highest value among indicators of all latent constructs, behind risk-taking attitude (TS2). Current results strongly affirm the criticality of choosing and using the right digital tools and systems to improve process, productivity and effectiveness, thereafter enhance business readiness in e-marketplace retailers, as supported in Aaron De Smet et al. (2021), Vodafone Limited (2021), and Yasynska et al. (2019).

A new indicator (BR5) to measure business readiness was introduced in this research, termed competence readiness. BR5 item evaluates the state of preparation of a person in acquiring new knowledge and skills. Surprisingly, despite being relatively new, this indicator emerged as the second most significant indicator, behind BR4, in measuring the latent construct. A good predictor of business readiness is having a competent workforce (Awajan et al., 2013; MDEC, n.d.; Vodafone Limited, 2021), supported in the form of knowledge, skills and the right attitude.

In the fast-paced and competitive online retailing business, employees are compelled to acquire new knowledge and skills to become more competitive. The nature of this industry demands continuous learning, as there will be new information, tools, processes, and training

videos introduced by Shopee and Lazada almost every day. With competence readiness

related to attitude, mindset and the capacity of a person to continuously enhance current

competencies and build new competencies, the researcher opined that this indicator is highly

critical in measuring intention. This is supported by Aaron De Smet et al. (2021) that posit

improving the ability to learn is important to create a future-ready business. The current

finding with high outer loading of BR5 is hence validated. Wu et al. (2017) similarly

recommend using knowledge, skills and ability to measure the success of SMEs in adopting

e-commerce.

Internal consistency, construct reliability, convergent validity and discriminant validity of

business readiness were proven via Cronbach Alpha, Average Variance Extracted, and

Heterotrait-Monotrait ratio. Composite reliability at 0.878 shows high level of internal

consistency for observed indicators of business readiness.

5.2.4.3 Research Objective 4

Research Objectives 4: To study if OC has a positive significant impact on BR

Hypothesis 4: OC has a positive significant impact on BR

Findings: Supported

As expected by the researcher, the current study also revealed stronger organisational

commitment in e-marketplace retailers can lead to improved business readiness, thus H4 is

accepted. This result is supported by multiple research (Al-Douis, 2019; Mladenova, 2022),

that suggest commitment can influence readiness, affirming (Mowday, 1984) that explained

employees' commitment demonstrates their readiness to work hard. An employee who is

committed will be more willing to search, acquire and apply their knowledge and skills for

the benefit of the organisation they work for. In the context of e-marketplace retailers, this can imply that a committed employee will initiate personal initiative to seek solutions in the seller education hub or any other means to solve challenges related to their current work.

Organisational commitment was proven as an effective mediator in multiple studies (Cao et al., 2019; Gelaidan and Ahmad, 2013; Sezen-Gultekin et al., 2021, 2021). The mediating role of organisational commitment was further affirmed in the current study that showed a positive significant impact on the relationship between all three intentions and business readiness with H1c at β =0.226, H2c at β =0.045 and H3c at β =0.101. Organisational commitment can directly enhance business readiness, yet at the same time mediate positively the relationship between transactional leadership and readiness to change (Gelaidan and Ahmad, 2013). The significant positive impact of organisational commitment is highly critical in current research and warrants more attention from business owners.

5.3 Theoretical Contributions

Previous studies that have used the theory of planned behaviour to understand and predict behavioural intentions and achievement mostly apply structural equation modelling (Chan et al., 2023; Nguyen et al., 2019). Among them, the theory of planned behaviour is used to predict knowledge sharing (Nguyen et al., 2019), knowledge seeking (Kaaya et al., 2021; Lai et al., 2014), and risk-taking (Bran and Vaidis, 2019). Indeed, the theory of planned behaviour is a solid theoretical framework to examine psychological factors driving behaviour. Current research adopts the theory of planned behaviour to measure intention to enhance digital marketing competence, seek knowledge and take risks. A meta-analysis conducted by Nguyen et al. (2019) posits that scholars are interested in extending the original theory of planned behaviour model to find more determinants of attitude and subjective norm. This is applied in the current study adopting items representing attitude, subjective norm and

perceived behavioural control as factors to measure intentions. Table 14 shows the significance of each item impacting intentions.

Intention	Significance (Outer Loading)		
	Atttiude	SN	PBC
Digital Marketing Competence (DM)	•	•••	••
	Value (β=0.636)	Community Identification $(\beta=0.759)$	Knowledge & Skill (β=0.758)
Seek Knowledge (SK)	●● Knowledge Quality (β=0.728)	Peer Influence (β=0.822)	Resource Availability (β=0.618)
Take Risk (TS)	Risk-Taking Attitude (β=0.864)	Risk-Taking Propensity (β=0.651)	Risk Appraisal (β=0.764)

Table 14: Measures of Intentions

Knowledge and skills are two critical determinants of competencies suggested in well-established reports (Council Of The European Union, 2018; Vuorikari et al., 2022, 2022). Both Papageorgiou and Marneros (2023) and Yulia Segarwati et al. (2020) emphasise the availability of knowledge and skills as important indicators to measure digital marketing competence. Aligning with most publications, the criticality of perceived behavioural control, represented by knowledge and skill was similarly observed. Attitude was the least significant measure of intention to enhance digital marketing competence, aligning with most digital marketing frameworks that failed to provide a conclusive measure of attitude.

However, review of the literature on knowledge management revealed that attitude exerts the strongest effect on the intention to share knowledge (Nguyen et al., 2019). Lai et al. (2014) again emphasise the importance of attitude by considering six indicators to measure attitude as compared to two for perceived behavioural control and two for subjective norm when studying knowledge-seeking intention. Chan et al. (2023) adopt enthusiasm and anxiety as

^{*}one dot=minimal significant, two dots=medium significant, three dots=highly significant

two emotions representing attitude to predict knowledge-sharing intentions on knowledge-seeking behaviour, as compared to only applying single item of relative knowledge representing subjective norm. All these suggest the importance of attitude as a measure of intentions related to knowledge.

Surprisingly, current research contradicts previous research (Chan et al., 2023; Lai et al., 2014; Nguyen et al., 2019), and revealed significance of attitude as an indicator to measure knowledge-seeking intention was weaker compared to the indicator of subjective norm. Items representing subjective norms in both digital marketing competence and knowledge-seeking emerge with the highest significance among components of the theory of planned behaviour.

The researcher posits that subjective norm shows the highest significance on intentions related to knowledge and competence development due to the nature of e-marketplace retailers that favour community ties. When an organisation is community-driven, peer influence and community identification can potentially become more important to each member of the organisation. Despite all these, attitude still exerts as the most significant measure of risk-taking intention, although having a positive attitude toward risk-taking alone might not translate to achievement of risk-taking behaviour. This is because traders are inherently having lower risk-propensity as observed in the indicator, supported in Henderson et al. (2021)

This study makes several important contributions to research. First, it is the pioneer study on e-marketplace retailers in Malaysia, investigating organisational commitment and business readiness, from the perspective of behavioural intentions, as an extended theory of planned behaviour. Second, current research combines academic research and industry findings to make sense of the current results. Unlike most academic study on readiness that focuses on a specific object, current research offers a holistic view of business readiness, that align with

industry recommendations, thus involving a high degree of practicality (Aaron De Smet et al., 2021; Acceler8 Venture Builder, 2022; Vodafone Enterprise, 2014; Vodafone Limited, 2021). Finally, this research opens opportunities for researchers to consider behavioural belief, particularly the attitudinal aspect when assessing a business's level of readiness to prepare for the future. This is because having a strong positive attitude and belief can create miracles as posited in Wheat et al. (2022) that people who believe they are genetically inclined to risky behaviour will tend to take risks. Risk-taking was proven in extreme conditions to deliver profits (Chen and Wu, 2022). Therefore, the researcher posits that having a strong belief is critical to ensure the development of a future-ready business.

5.4 Practical Implications

The results of this study have important implications for Malaysian government, e-marketplaces, and MSME e-marketplace retailers in Malaysia. All the three intentions were found to positively impact on business readiness of MSME e-marketplace retailers. Digital marketing competence exerts the highest significant direct positive impact whereas knowledge-seeking and risk-taking exert indirect positive influence with organisational commitment as a strong mediator. Regardless of the level of significance implied by each intention, all three are important in preparing for a future-ready business.

Based on the result of this study, e-marketplace retailers must truly embrace technology and digital marketing in their business process. They should provide conducive facilitating conditions to their employees such as leisure time with technology to encourage adoption, critical yet up-to-date digital marketing tools to facilitate efficiencies thus reducing exhaustion, high-quality learning resources to motivate knowledge-seeking and learning, and adequate IT, communication hardware and connectivity as the fundamental in engaging

digitally (Ahmed, 2023; Lai et al., 2014; Nguyen et al., 2019; Ojo et al., 2022; Sharma and Bock, 2005; Veeravalli et al., 2019; Yasynska et al., 2019).

In fact, based on the experience of the researcher, many effective and user-friendly digital marketing tools are affordable, cloud-based and readily available in the market (Vodafone Limited, 2021; Yasynska et al., 2019). Some that are critical, and a must-have for MSME include Canva designing tool, Hootsuite social management tool, Google Keyword Planner, MailChimp email tool, CapCut video editing tool, Snagit screen recording tool, and Grammarly writing assistant tool. More advanced digital marketing tools include ZenDesk, All-in-One SEO, KWFinder, AWeber, GetResponse, Pretty Links, Camtasia, and social listening and marketing analytics tools such as Metionlytics, Salesforce, Hubspot, and Semrush. With the recent introduction of WhatsApp API, chat messaging tools such as Sleekflow will prove to be critical to engage customers, knowingly that Malaysian typically use WhatsApp on a daily basis.

Businesses must make sure that their workforce cultivates the habit of leveraging digital tools to perform daily activities, yet at the same time acquire additional knowledge of the latest digital trends. As posited by Kaaya et al. (2021) and Yasynska et al. (2019), the improvement of new tools will improve market competitiveness, thus forcing people to learn and compete. Knowing the latest trends in digital marketing will help e-marketplace retailers be prepared for future changes, thus making planning easier (Aaron De Smet et al., 2021). Therefore, the researcher suggests MSME e-marketplace retailers subscribe to digital marketing and industry-specific publications and make them accessible to all employees. This can encourage continuous learning and explore the fixed mindset of any person.

Malaysian government, through NESR, on the other hand, should consider collaborating with e-marketplaces to conduct an assessment on the level of digital marketing proficiency of Malaysian MSME e-marketplace retailers and designed a targeted development program to level up their competence, benchmarking the digital marketing competence level of Singapore firms. Only by levelling up with the best within the region, Malaysian MSME can achieve competitive edge, thus making their business more ready for any disruptive changes. The researcher suggested to start assessing the digital marketing competence of MSME e-marketplace retailers but not on employees of larger firms because of the gaining popularity of e-marketplaces and because this sub-sector of e-commerce has become an important shopping platform for a typical Malaysian. There's also a need for the Malaysian Competition Commission to consider setting up an independent watchdog to ensure transparency and algorithm fairness in their optimisation model observed by all e-marketplaces. Ignoring platform fairness can resulting in the imbalance between seller satisfaction and platform profitability, resulting in negative impact in the long run.

E-marketplaces in Malaysia such as Shopee, Lazada, TikTok Shop, PGMall and including related stakeholders, can forged a partnership towards spearheading the creation of industry standards pertaining to their marketing and promotion mechanism, equitable fee structure, regulated data protection, scam prevention and any other measures that can collectively encourage onboarding of MSME, and providing them a safe, fair and equitable ecosystem to compete in. There is a need for e-marketplace leaders to explore the overly frequent monthly sales campaign that is exerting tremendous pressure on e-marketplace retailers, forcing them to reduce price to the extent that it greatly reduces profit margin. The researcher believes that protecting the interest of fellow Malaysians should be the priority not only of government but also of any businesses operating in Malaysia. A publication pertaining to the news and market trend within the industry should become an item this partnership can consider, thus encouraging knowledge seeking among stakeholders.

Carro Saavedra et al. (2017) and Mohammed and Kamalanabhan (2019) suggest fostering interpersonal relationships with co-workers who have prior experience using the knowledge management system will increase trust in both the person and system. Teamwork, collaboration, and training are factors that can influence knowledge creation, knowledge sharing and knowledge seeking. The management of e-marketplace retailers should provide support by creating an environment in which employees are free to learn, collaborate, interact and produce results in a manner that works best for them and the interest of the company (Alolabi et al., 2021; Vodafone Enterprise, 2014). With extensive support from the top management, employees are more open to new ideas, willing to forge collaboration, acquire new knowledge and ultimately innovate and be ready to face future uncertainties.

Competence-oriented education, training and learning should be implemented to fill the gap of supply and demand for talent (Council Of The European Union, 2018). Despite the availability of an abundance of training on e-marketplace seller education hub, however, most trainings are basic in nature, sufficient for the new business to start trading on e-marketplace but not to escalate growth and achieve performance breakthrough. Most respondents have operated the business for 1 to 3 years, yet many are still depending on learning resources provided by Shopee and Lazada. In fact, most content provided on the platforms is repeating and of basic quality. This creates boredom for existing learners, and they will gradually lose interest and cease to learn. As suggested by Vuorikari et al. (2022), insufficient knowledge can impede competence development.

The researcher further recommend e-marketplace retailers, who have limited resources, scout for new training opportunities for their employees by searching through affordable online learning platforms like Udemy, LinkedIn Learning, Coursera and Skillshare (Raouna, 2023). Most are cloud-based subscriptions, affordable and can be accessed by anyone who has the

login details. The type of training provided in these platforms varies from academic-based and skill-based such as photography and videography, content creation, web development, languages, finance, accounting and many more. Learners have the option to choose one-off courses or those that offer continuity learning, with or without certification. With carefully selected training courses made available to employees, they will be more inclined to learn and seek knowledge, thus enhancing personal competence.

The human resource manager can implement psychological assessment when selecting new recruits, evaluating their attitude and affinity towards new technology in multiple constructs, whether it is related to joy, challenge, or difficulty. People who relate technology to joy and challenge are less negative and possibly positive, and those who relate to difficulty tend to be more negative (Rajko Sekulovic, 2020; Vritika, 2013). A psychological assessment can preliminarily determine prospective talent's inclination towards adopting and learning new technology. A person who feels positive and favours new technology will be more mentally prepared to acquire new digital skills as compared to a person who does not favour new technology. By doing this, e-marketplace retailers can reduce the nuisance of having to create more activities to motivate technology adoption before acquiring digital marketing competence. Similarly, a person who demonstrates openness, dynamism and interest in the task details tends to approach learning on a positive note as compared to a person who does not. Therefore, recruiting a person with a positive attitude not only encourages learning but at the same time can potentially create a happy working environment for other members of the company.

Henderson et al. (2021) suggest that traders are generally not risk-takers. Rodríguez-Gutiérrez et al. (2020) posits small traders are less inclined to risk-taking. Risk-taking propensity shows the least significance as a measure of risk-taking in current research. All

these supports the norm that traders generally do not consider risk-taking as part of their business strategy. Risk-taking is important if e-marketplace retailers want to achieve something of greater value (Bratianu, C. et al., 2020; Giaccone and Magnusson, 2022; Zhao and Min, 2021). Risk-taking was proven effective in making a profit when facing the unprecedented pandemic (Chen and Wu, 2022). There is a need for retailers to start challenging the norm and consider risk-taking as part of their business strategy. The researcher opined that post-pandemic is the best time for businesses to consider new approaches to risk-taking, possibly a co-sharing of the risk outcome with a suitable collaborator. This way, business owners can solve the problem of resource inadequacy, mitigate the impact of possible negative risk outcomes, and if successful, reap the benefits from taking the risk. Owners can also start taking incremental risks by investing in higher-value SKUs to generate better profit for the business. Successful outcomes will strengthen the confidence of business owners to continuously make riskier decisions, and negative outcomes can provide valuable lessons to avoid pitfalls in the future

Work ethics and leadership are two critical components that can enhance organisational commitment (Al-Douis, 2019; Bahadori et al., 2021; González-Cruz and Guillén Parra, 2008; Muhajir et al., 2023, 2023). Effective leaders are ones who take risks (Frost et al., 1983), and leadership behaviour plays a critical role in making employees more committed (Bran and Vaidis, 2019; Ennida and Allouani, 2023). A transformational leader and an ethical leader can leave a stronger positive impact on organisational commitment as compared to transactional leadership (Bahadori et al., 2021; Nastavia Putri and Lista Meria, 2022). They consider the needs of their employees, listen to their voices, help them achieve success, can consider individual differences in every construct (Jabbar et al., 2020). An ethical leader who demonstrates equity and fairness can establish mutual respect and trust with their subordinates (Bahadori et al., 2021), thus leading to a committed workforce (Bran and Vaidis,

2019) and can exert a positive influence on their followers. It is therefore critical for owners, managers and supervisors to consider exerting good work ethics and practice empowering leadership in motivating employee commitment.

With the limitation on earnings, rather than focusing on increasing continuance commitment that involves salary increment, e-marketplace retailers should focus on enhancing employee normative and affective commitment. When continuance commitment is weak, strong normative commitment and strong affective commitment can increase the voluntary behaviour of employees to benefit the organisation (Ennida and Allouani, 2023; Masud et al., 2018; Meyer and Parfyonova, 2009). To achieve this, e-marketplace retailers can consider increasing non-contractual offerings such as opportunities for learning, career advancement, recreational, and network development to make them feel valued (Baiquni, 2020; Chan et al., 2020; Phungula et al., 2022). The researcher opined that opportunities to network will offer more value to employees as e-marketplace retailers place emphasis on community relationships, as shown in the high significance measure of subjective norm on digital marketing competence and knowledge seeking. This also supports the findings in Vodafone Limited (2021) that a future-ready business prefers conventional face-to-face communication than digital communications, making personal networking sessions even more important.

The objective is to increase feelings of indebtedness, reciprocity, and affinity towards the business. Giving employees full access to multiple online learning platforms, opportunities to attend workshops, conferences, and networking events, sponsoring informal lunches, and workplace celebrations, and occasionally offering small gifts to the employees will help to increase employee commitment and strengthen relationships between co-workers. Rather than rewarding employees with money which might be difficult for e-marketplace retailers, rewarding employees occasionally with extra days off can create time affluence, thus driving

employee engagement (Stein et al., 2021). The researcher suggests providing informal or occasional rewards is more effective and sustainable than formal rewards in making employees more committed. When employees are happy and feel appreciated by the company they work for, they will be more willing to perform for the best benefit of the company. This includes being more willing to share knowledge, help co-workers, use personal time to fulfil work-related obligations and seek knowledge to solve task-related problems. All these engagements enhance organisational commitment.

Recommendations discussed earlier are highly relevant yet require active intervention of effective leadership. A good leader can significantly influence work ethics, employee engagement, and organisational commitment. Before any business start discussing the topic of business readiness, owners need to be aware of future threat and opportunities. The owner's awareness, acknowledgement, and active participation in creating a future-ready business will motivate employees to develop the right mindset. As suggested in Vodafone Limited (2021), a future-ready business focuses primarily on building a forward-thinking attitude, and one important characteristic is the ability to learn (Aaron De Smet et al., 2021). Therefore, e-marketplace retailers must proactively seek beyond the current, and prepare for the future.

5.5 Limitation of the Study

The researcher acknowledges that the present study has some methodological limitations. First, to increase the statistical power of the analyses, the sample size should be larger, and respondents should be demographically analysed. One way is to analyse the intentions of owners and employees separately. Another way is to classify respondents into digital immigrants and digital natives as intentions to enhance digital marketing competence can be significantly different between the 2 groups of respondents. Business owners and employees

have different perceptions, orientations, and objectives. Therefore, their intentions can give different meanings to the observed variables.

Second, self-reported measures of intentions can potentially involve intrinsic biases as a person's cognitive and psychological states create discrepancies between perception-based answers and happening of the actual behaviour. For example, a person having the intention to take risk might not end up taking the risk as risk-taking is influenced by not only personality but also locus of control, reflexivity and impulsivity that can be triggered at contextual moment. Risk preference is not stable and highly fluctuates based on situational changes (Meier, 2022; Schildberg-Hörisch, 2018; Veflen et al., 2020).

Thirdly, the researcher opined that the number of items adopted from the theory of planned behaviour to measure intentions in current research is not sufficiently represented. The proposed scale is adapted from items in multiple publications of past behavioural studies and based on researcher industry experience, yet it does not encompass all the situations in which the three intentions can be studied. As current research is relatively unexplored, the researcher suggests an exploratory factor analysis of qualitative approach be adopted to identify significant items that are relevant to the behavioural intentions of e-marketplace retailers before applying selected items to the current quantitative study to present a richer result.

Lastly, which in the researcher's opinion is critical, is to assess the financial and resource stability of the respondents' businesses as a sampling consideration. This is because, businesses that are not financially stable, might have little consideration for risk-taking and competence development as both require a minimum level of resource capability. Capabilities and resources are fundamental implications on readiness to change (Alolabi et al., 2021; Mladenova, 2022). Capacity is defined as the capability that evolved around that situation

(Mladenova, 2022) and when it goes beyond the individual level, described as the collective capabilities of a business (Judge and Blocker, 2008). Alolabi et al. (2021) postulate that capabilities are grounded based on the foundation of competitive edge, relating to skills, competence, and managerial process. The researcher further suggests that reasonable financial stability is one critical prerequisite to discussing the topic of readiness. This is supported by Vodafone Limited (2021) which shows financial stability as the top five priorities in the business readiness survey.

5.6 Further Research Directions

Much of the academic research focuses on a single object when conducting a study on readiness. It either focuses on technology adoption, change management, or project management. Such research might provide clarity and objectiveness, however, with the constant market volatility, unpredictability, and enormous changes happening as a result of digitalisation, war, disease outbreaks, and environmental threats, that can negatively affect sustainability, the researcher opined that studying readiness from a single object is no longer feasible. It is never so important post-pandemic to study business readiness in a holistic manner. The researcher suggests future research to consider adopting a holistic approach in the study of business readiness, rather than separating this topic based on specific objective. It is in the view of the researcher that holistic approach to study business readiness can potentially bridge the gap between academic research and business reports.

Current research is one of the pioneer research projects that consider the impact of behavioural intentions on business readiness. In fact, throughout this research journey, no research was found to consider how having the correct belief can enhance business readiness of MSME that constantly facing inadequacy of resources. Most academic research focus on resource-based approach when assessing readiness. With MSME commonly facing

inadequacy in getting resources, hence, the researcher believe approaching business readiness from the perspective of intentions might open a new horizon for future research direction. Businesses must be prepared for the unpredictability of the future, starting from having the right attitude and mindset (Aaron De Smet et al., 2021; Acceler8 Venture Builder, 2022; Vodafone Limited, 2021). Attitudes determine action, attitudes determine preparedness, and attitudes determine sustainability. Just as in most business reports that consider attitude as the most important factor in creating a future ready business, it's therefore feasible for future research to consider such alignment. As mentioned earlier, the researcher would like to further reiterate that since current research is relatively new, therefore, identifying other behavioural intentions that can potentially impact business readiness can give more insights to the study.

Lastly, the researcher observes that despite the mediating role of organisational commitment was proven to leave a significant positive impact on most relationships, however, impact of digital marketing competence on business readiness was reduced when organisational commitment mediated. This means, the intention to enhance digital marketing competence will have less impact on readiness of a business in a situation when the team is highly committed to their firms. The researcher argue that this result is contradicting and has challenged the norm. In view of this, there is a need to investigate the reasons that caused these phenomena and understand how different components of organisational commitment moderate between intentions to enhance digital marketing competence and business readiness. The researcher suggests future research to consider separating affective commitment, normative commitment and continuance commitment, as independent mediating role when use to investigate the relationship between digital marketing competence and business readiness.

5.7 Conclusion

The results of this study have proven that intentions alone can impact business readiness. All the three identified intentions consisting of intention to enhance digital marketing competence, intention to seek knowledge and intention to take risks affect both organisational commitment and business readiness of Malaysian MSME e-marketplace retailers. Intention to enhance digital marketing exerts a direct positive significant impact on both organisational commitment and business readiness, yet the intention to seek knowledge and intention to take risks only have a direct significant impact on organisational commitment, but not business readiness. The positive impact of the intention to seek knowledge and the intention to take risks on business readiness was only observed in the presence of organisational commitment as the mediating factor.

This is because having the intention to seek knowledge might not imply that the person will apply the knowledge at the workplace or share the knowledge for the benefit of the company. On risk-taking, there is no direct impact on business readiness because traders are inherently not high risk-takers. Furthermore, the capital required to start a small retail business is significantly minimal and therefore, less risk is involved. However, when organisational commitment acts as the mediating role, both intentions affect business readiness. When employees are more engaged and attached to the organisation they work for, they tend to perform more for the benefit of the business. Hence, more willing to seek knowledge and take risks to deliver better results for the organisation.

The findings of current research suggest the importance of digital marketing competence in contributing towards the readiness of e-marketplace retailers. It also suggests the importance of making employees more committed in contributing towards business readiness. Hence, the

researcher recommends e-marketplace retailers to consider incorporating digital marketing competence, knowledge-seeking and risk-taking as part of future business strategy.

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APPENDICES

Appendix 1: Constructs and Questionnaire

Variable	Item	Code	Question	Reference
Demogra	aphic Qu	estion	is	
		D1	Gender	
		D2	Age	
		D3	Which one describe you in the eMarketplace	
			business?	
		D4	The number of eMarketplace(s) that your online	
			business is operating in.	
		D5	Please name the eMarketplace(s) that you	
			business is operating in	
		D6	Your total revenue for the past 12 months	
		D7	No. of years this business is operating in the	
			eMarketplace industry	
F. L.	BL 11 1 1		V 0	
			ting Competence	
		DIVIT	The management intend to send us for digital	
n 	on		marketing seminar/workshops	
Attitude	Value	DM2	Digital marketing competence is crucial to	Blankenship et al 2022
CNI	C	D142	continuously creates value for the business	
SN		DIVI3	When someone praises my team's effort in	
	unity Identif		acquiring digital marketing skills, I feel good	Lai. H. M, 2014
PBC		DM4	I am familiar with pay-per-click advertisement,	
	edge		social media and keyword research including using	Council of The European Union,
	& Skill		promotional, traffic and analytics tools inside	2018
			Shopee and Lazada.	
Seek Kno	_		1 interest to 1	
Intentio	Behavi	24.1	I intend to improve my knowledge by searching for	
n	our		educational content online or join training workshops/seminar.	
Attitude		SK2	I am happy with the quality of knowledge	
Attitude	edge	JILZ	provided inside Shopee/Lazada seller center and	
	Qualit		Facebook community group.	
CNI	Peer	cva		
SN		2//2	I felt the need to join training workshops or watch	
	Influe		online trainings when my colleagues were doing it.	Lai. H. M, 2014
PBC	nce Resou	SKA	I can access to all the training materials and	
r bC	rce	31/4	educational videos provided inside Shopee/Lazada	
	Availa		seller centre and Facebook community group.	
	bility		sener centre and racebook community group.	
	Dinty			

Variable	Item	Code	Question	Reference
Take Risk				
ntentio	Risk-	TR1	I intent to take bigger risk in future decision for	
n taking			the company.	
Attitude		TP2	It is a must to take risk in order to achieve greater	
Attitude	taking	111/2	success.	
	ŭ			
SN	Risk-	TR3	I am willing to make risky decisions that can yield	
	taking		high return solely based on gut feeling.	D
	Prope			Bran and Vaidis, 2019
	nsity			
PBC	Risk	TR4	I am capable of mitigating risk in every decision	
	Apprai		made.	
	sal			
Organisa	tion Cor	nmitn	ent	
Affective		OC1	I am willing to use personal time for the benefit of	
			the company.	
Continua	nce	OC2	Financial benefit I received from the company is	
			rewarding.	Allen and Meyer, 1990
Normativ	re	OC3	It is normal for me to attend work-related matters	
			during non-working hours.	
Work Eth	ics	OC4	I always feel obligated to make decisions with the	
		7.7	best interest of the company.	
Leadersh	in	OC5	My company leader always finding ways to grow	Al jabari. B & Ghazzawi. I, 2019
Leadership			the business.	
_				
Business			_0 0 0 0 0 0	
Culture 8	Mgmt	BR1	The company always respond to the request of	
		22.2	our customers, suppliers or partners.	
Policy & I	rocess	BR2	There is adequate human resource, stock control	
			or return/refund policy in my company.	
Enabling		BR3	My company has an active social media page that	SAN STATE STATES AN ASSESSMENT
Solutions			can be used to effectively perform marketing	Vodafone Enterprise, 2014
			activities.	
T and		BR4	The company efficiently use digital tools/systems	
communication			to perform activities related to marketing,	
fundamentals			accounting, stock control or human resource	
			management.	
Compete	nce	BR5	Overall, my team members are qualified to	Awajan et al., 2013
Readines	s		perform individually assigned task and ready to	Aaron De Smet et al. (2021)
			acquire new skills and knowledge.	Council of the European Union
			100	Seamen of the European Office

Appendix 2: Hypothesis & Related References

Hypothesis	Details	Related References	
H 1 a	Intention to enhance digital marketing competence has a positive significant impact on BR	Council of The European Union (2018)	
H1b	Intention to enhance digital marketing competence has a positive significant impact on OC	Alolabi et al. (2021) Mladenova (2022) Vodafone Enterprise (2014) Vodafone Limited (2021)	
H 1 c	OC positively mediate between the intention to enhance digital marketing competence and BR	Allen and Meyer (1990) Al Jabari. B & Ghazzawi. I (2019)	
H2a	Intention to seek knowledge has a positive significant impact on BR	Lai. H. M. (2014) Lai et al. (2019)	
H2b	Intention to seek knowledge has a positive significant impact on OC	Carvalho et al. 2021) Chung and Al-Khaled (2022) Vodafone Enterprise (2014) Vodafone Limited (2021)	
H2c	OC positively mediate between the intention to seek knowledge and BR	Allen and Meyer (1990) Al Jabari. B & Ghazzawi. I (2019)	
НЗа	Intention to take risks has a positive significant impact on BR	Bran and Vaidis (2019) Gouweloos and McArthur (2019)	
H3b	Intention to take risks has a positive significant impact on OC	Jung et al. (2020) Vodafone Enterprise (2014) Vodafone Limited (2021)	
НЗс	OC positively mediate between the intention to take risk and BR	Allen and Meyer (1990) Al Jabari. B & Ghazzawi. I (2019)	
H4	OC has a positive significant impact on BR	Alqudah et al. (2022) Idris et al. (2017)	

Appendix 3: CMB Test Results

	Initial Eigenvalues			Extraction Sums of Squared Loadings		
Component	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	6.975	31.704	31.704	6.975	31.704	31.704
2	2.356	10.710	42.414			
3	2.105	9.567	51.981			
4	1.691	7.686	59.667			
5	.987	4.486	64.153			
6	.965	4.385	68.538			
7	.730	3.318	71.855			
8	.716	3.256	75.111			
9	.580	2.637	77.748			
10	.556	2.527	80.275			
11	.525	2.386	82.661			
12	.491	2.233	84.894			
13	.462	2.099	86.993			
14	.422	1.917	88.910			
15	.412	1.874	90.784			
16	.363	1.648	92.432			
17	.338	1.536	93.968			
18	.312	1.417	95.385			
19	.284	1.293	96.678			
20	.263	1.194	97.872			
21	.241	1.097	98.969			
22	.227	1.031	100.000			