THE IMPACT OF DIGITAL FINANCIAL SERVICES ON FINANCIAL INCLUSION AMONG YOUNG ENTREPRENEURS IN MALAYSIA

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DEDICATION

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LIST OF ABBREVIATIONS

A	Financial Inclusion
DV	Dependent Variable
DFS	Digital Financial Services
FL	Financial Literacy
FA	Financial Attitude
HCT	Human Capital Theory
IV	Independent Variable
RE	Regulatory Environment
SPSS	Statistical Product and Service Solutions
TAM	Technology Acceptance Model
TI	Technology Infrastructure
TPB	Theory of Planned Behavior
UTAR	Universiti Tunku Abdul Rahman

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PERFACE

This research project was submitted in part to complete the requirements of the Bachelor of Administration (Honours) Banking and Finance course, which is supervised by Mr. Koh Chin Min. The topic was selected as "The impact of Digital Financial Services on Financial Inclusion among young entrepreneurs in Malaysia". This project was written entirely by the authors and supported by references to the research of others.

This study was conceptualised out of a keen interest in understanding how advances in financial technology can empower young people, foster entrepreneurship and contribute to economic growth and social development. Throughout the study the existing literature was examined, current trends were analysed and the multifaceted factors affecting financial inclusion in the digital age were studied. The findings highlight the significant impact of digital financial services, financial literacy, financial attitudes, regulatory environment and technological infrastructure in enhancing access to financial resources for young entrepreneurs. These insights not only contribute to the academic discourse, but also provide practical implications for policymakers, financial institutions, technology companies and aspiring entrepreneurs. The study also contributes to a better understanding of the role of DFS in promoting financial inclusion and fostering the growth of young entrepreneurs.

ABSTRACT

Financial inclusion refers to enabling people of all income levels to access financial products and services that meet their needs and are affordable. Against the backdrop of Malaysia's growing economy, a significant portion of young entrepreneurs, still face challenges in accessing traditional financial services. Digital financial services offer a potential solution by utilising technology to provide financial products and services that are more accessible, efficient and responsive to the needs of these entrepreneurs. This study focuses on examining the role of digital financial services, financial literacy, financial attitudes, regulatory environment, and technological infrastructure in enhancing financial inclusion among young Malaysian entrepreneurs. Data was collected through a self-administered questionnaire which was distributed to a sample of young entrepreneurs across Malaysia and a total of 384 valid responses were received. Statistical analyses were conducted using SPSS software. The research project result concluded the independent variables towards the financial inclusion among young entrepreneurs in Malaysia. The study provides valuable insights for policy makers, financial institutions and academics, highlighting the need for customised financial products and the importance of strengthening digital infrastructure and financial education. By addressing these challenges, the study aims to support the broader goal of achieving sustainable economic development by increasing the financial inclusion of young entrepreneurs in Malaysia.

CHAPTER 1 INTRODUCTION

1.0 Introduction

The background of this study under the first chapter brings a rough idea and insight about digital financial services and financial inclusion for readers. The issues brought up throughout this investigation are then clarified using problem statement. Then, another important contents of this research such as hypothesis and objectives will also be presented. After that, the significance for this research is subsequently explained with theory and result. The chapter arrangement includes an overview of the content in each chapter. Lastly, a conclusion summarizes the important concepts from Chapter one.

1.1 Background of Study

Despite Malaysia's rapid economic growth, a significant proportion of its small business owners continue to face poverty (Hoque et al., 2015). For decades, the prevailing belief in bottom-of-the-pyramid (BOP) studies has shown that impoverished individuals would invariably encounter limited access to financial services (Angot & Plé, 2015). Therefore, this study is conducted to discuss the impact of digital financial service (DFS) such as microfinance on financial inclusion. At the same time, it will provide more relevant information especially focus on financial sector for young entrepreneurs who are interested in starting up small business in Malaysia.

Generally, financial inclusion refers to the accessibility of financial services enabling individuals to accumulate wealth, encompassing savings, credit, loans, equity, and insurance, ensuring universal access for all, regardless of their socioeconomic status (Gálvez-Sánchez et al., 2021; McKinsey, 2023; Ren et al., 2023). United Nations (2016) define financial inclusion as the ongoing provision of affordable financial services that enable individuals with limited resources to reduce poverty and participate in the formal financial system. Additionally, Mushtaq & Bruneau (2019), Lal (2018) and Mondal (2015) stated that the findings of their research demonstrate that financial inclusion brings positive effect on reducing poverty, leading to better economy. In recent years, the importance of financial inclusion has been emphasized by multiple international conferences. According to Cicchiello et al. (2021), United Nations-sponsored event in 2019 stressed the necessity of ensuring sufficient financial inclusion for people in the most undeveloped nations to reduce the scenario like income inequality. The United Nations Capital Development Fund (UNCDF) emphasizes that financial inclusion stands as an essential instrument for realizing the objectives outlined within the 2030 Agenda (Sierra & Rodriguez-Conde, 2021). In short, financial inclusion is widely discussed as it brings significant impact on country development through poverty reduction.

Besides, many authors pointed out that promoting financial inclusion in the Micro, Small, and Medium Enterprises (MSME) sector plays a vital role for local economic development, as it fosters business expansion, job creation, and overall community prosperity (Allen et al., 2016; Hapsari & Puspitasari, 2024; Kim et al., 2018; Santoso et al., 2020; Telukdarie & Mungar, 2023). Mahdzan et al. (2022) and Yan et al. (2021) also stated the importance of understanding the nuances of technology's influence on financial well-being among low-income populations. This is because the increase of financial literacy will not only drive the advancement of digital financial inclusion, but it also contributes to the progress towards achieving the Sustainable Development Goals by 2030 (Tay et al., 2022).

Financial services empower individuals to allocate their funds towards productive endeavors, such as real estate or technology investments, instead of leaving money idle as mentioned by Asmundson (2011) from International Monetary Fund. Intermediaries oversee these transactions,

and regulation is essential in safeguarding the interests of borrowers and lenders, thereby upholding trust in financial systems. Financial services provide a wide range of activities aimed at facilitating monetary transactions, investments, and financial management (Thottoli et al.,2023). Within this spectrum, traditional financial services operate through physical institutions like banks (Harsono & Suprapti, 2024; Liu et al., 2023). Over time, Automatic Teller Machine (ATM) was introduced in the late 1960s (Lyons & Kass-Hanna, 2022). Following the emergence of the Internet, regulated financial institutions initiated the provision of online banking services, accelerating the progression to digital financial service and fintech (Arner et al., 2015).

Digital financial services (DFS) leverage digital platforms and technology to provide access to a wide array of different financial products and services, encompassing banking, payments, and insurance, frequently accessible through mobile devices or Internet (Ozili, 2019). Microfinance, as a subset of digital financial services, includes a wide range of activities electronically focused on providing small loans and insurance products customized to address the specific needs of low-income individuals (Brown et al., 2015; Macchiavello, 2017).

Microfinance is originated in Bangladesh circa 1976, spearheaded by Muhammad Yunus and the Grameen Bank (Westover, 2008). Access to microfinance helps the impoverished to control spending, accumulate assets, create microbusinesses, and boost revenue to enhance living standards (Bakhtiari, 2011). Thus, microfinance is vital for financial inclusion because it provides easier access to credit with more flexible lending criteria compared to traditional banking services (Abrar et al., 2023). For example, microfinance provides small working capital loans to rural poor with minimal investment appraisal, no collateral requirement, enforced savings, and group guarantees based on trust, while extending larger loans to customers with good repayment history (Hussaini & Chibuzo, 2018). Therefore, microfinance is specially designed for individuals with limited collateral or credit history, particularly in developing countries (Milana & Ashta, 2020). For instance, Rasheed et al. (2019) explores how digital micro financial services can enhance access to finance for small and medium-sized businesses (SME) in emerging economies like Pakistan to address challenges of SMEs obtaining bank financing due to lack of collateral and formal documentation.

The study results by Kelikume (2021) indicated that microfinance significantly boosts the development of rural micro-enterprises and digital finance plays a partial mediating role. Consequently, adopting digital finance is recommended for microfinance institutions to enhance productivity by reducing transaction costs for micro-enterprises. According to Buera et al. (2020), the Microcredit Summit Campaign documented 3,098 organizations catering to 211 million borrowers in 2016. In numerous nations, microfinance loans constitute a notable portion of their gross domestic product (GDP). As a result, the accessibility of microfinance encourages entrepreneurship for generation Z, leading to socioeconomic development (AL-Maamari et al., 2022).

Many past studies explore the impact of microfinance on financial inclusion. For instance, Adeola & Evans (2017), Ghosh (2013), Hasan et al. (2021) and Mahmood et al. (2016) conducted investigation on microfinance financial development and financial inclusion across different countries, including Nigeria, India, and Bangladesh and Pakistan. Demir et al. (2020) investigates the relationship between financial inclusion, income inequality, and FinTech across 140 nations. By investigating the research results from the Global Findex surveys carried out in 2011–2014–2017. Islam et al. (2022) assesses the influence of mobile money services on poverty in Bangladesh from 2010 to 2016 while Asif et al. (2023) conducted similar research to analyse the serious effect of DFS and fintech on financial inclusion in India. The findings of their research show that the expansion of microfinance services and advancements in financial development positively impact financial inclusion, leading to the reduce of poverty. By bridging the gap between financial services and entrepreneurship, this study contributes and provides a deeper understanding of how DFS can enhance financial inclusion for economic empowerment.

Furthermore, numerous research primarily explored the impact of enhancing DFS and contrasted traditional and innovative DFS models within rural areas. For instance, Lopez & Winkler (2017) investigated on the challenge of rural financial inclusion while Ebong & George (2021) studied on banking and mobile money channels, analyzing trends and adoption rates to explore opportunities to improve financial inclusion by using the Rate of Change (ROC) approach through DFS in

Uganda. The study by Fernandes et al. (2020) also assesses the impact of DFS on financial inclusion in Mozambique. For their studies, they evaluate traditional digital payment and innovative digital payment channels.

Finally, this study distinguishes itself from past research by shifting the focus from microfinance to digitalized micro financial service and focus on how it can aspire entrepreneurs. Traditionally, most microfinance institutions (MFIs) operated in urban centers, which posed a challenge for rural communities in accessing financial services (Flora, 2015; Gumbo, 2010). However, the innovation of digitalized micro finance services enabled more people from rural areas access to this financial service (Mishra, 2024). As a result, this scenario brings many advantages and convenience for those previously excluded from formal financial systems (Lal et al., 2023; Yasin, 2020). Digitalized microfinance further amplifies the benefits of microfinance by leveraging technology to overcome geographical barriers and enhance outreach (Pal et al., 2021). Based on the research by Hassan et al. (2022) and Kamau et al. (2024), by utilizing digital channels, the delivery of financial services and products including the internet and mobile phones can be delivered more easily and conveniently, thereby extending the reach of microfinance to remote and underserved areas. This digital transformation enables individuals in rural and remote communities to access financial services conveniently, without the need to travel long distances to physical branches (Aziz & Naima, 2021; Tegar & Wibowo, 2022). For instance, young entrepreneurs might access to microfinance through RHB Financing (SME) Mobile App to apply fund up. For other example, Money Top is a mobile application that provides easy and speedy instant loans to residents in India. This application can approve up to RM 500,000 credit amount when the loan is approved.

Digitalized microfinance boosts efficiency and cuts costs for both microfinance institutions (MFIs) and clients by digitizing processes like loan applications, repayments, and transactions (Pal et al., 2021). This streamlining results in faster service delivery and reduced transaction costs, enhancing affordability and accessibility of financial services for a wider population (Raj et al., 2024). Overall, digitalized microfinance represents a transformative force in advancing financial inclusion by increasing the availability of financial services, especially in underdeveloped and remote regions. By leveraging technology to overcome traditional barriers, digital microfinance empowers

individuals and communities to participate more fully in the formal financial and banking system, thereby promoting empowerment and sustainable development of economy (Jalil, 2021).

In short, this study will specifically focus on examining how DFS, such as digitalized microfinance, influence financial inclusion through entrepreneurship. By examining the unique challenges and opportunities faced by young entrepreneurs in accessing microfinance loans, The purpose of this study is to provide further insightful information that will help shape practices and policies that support financial inclusion and entrepreneurship.

1.2 Problem Statement

As financial inclusion is the main point to be discussed in this topic. It is important to define it. When people and businesses have access to affordable, relevant financial products and services that meet their needs, this is often referred to as financial inclusion (World Bank. 2022). All people have access to financial services and products, including transactions, payments, savings, credit, and insurance, irrespective of their socioeconomic status, background, or living location.

Digital financial services (DFS) have changed the landscape of financial inclusion, achieving what the traditional banking system and microfinance have been unable to achieve in recent years (Beck, 2020). The drawbacks of traditional banks are limitations such as minimum transaction amounts, one-size-fits-all risk management techniques, and documentation requirements, resulting in an inability to adequately serve individuals with limited incomes. In addition to this, digital financial services can reach the unbanked and offer more convenient and faster products to meet people's specific needs.

However, despite the abundance of youth talent and entrepreneurial ability, access to business credit remains a major barrier to youth financial inclusion (UNDP, 2018). According to Salim et

al. (2020), young Malaysian entrepreneurs often experience financial problems due to their age. These financial problems include the lack of credibility of young entrepreneurs without a long-term trajectory, lack of collateral, and lack of a compelling business strategy, thus limiting their access to sources of finance. In addition, the causes of youth financial exclusion include personal finances, low levels of financial literacy and lack of access to digital infrastructure.

In addition, the ASEAN Digital Generation Report states that 74% of the population has a savings account and an even larger 84 % use digital payments (World Economic Forum, 2022). However, only 21% have access to advanced digital financial products such as credit, investment, and insurance (World Economic Forum, 2022). The report also states that access to digital financial services is highly dependent on digital and financial literacy, and an elevated level of literacy is required for safe and seamless use of digital financial services (World Economic Forum, 2022). As a result, young Malaysian entrepreneurs have limited access to more advanced digital financial services, which is one of the challenges in advancing financial inclusion.

Furthermore, Aziz and Naima (2021) claimed the fact that the tangible barrier to banking services has been reduced by the emergence of digital services, and their use is limited because of a lack of social awareness, knowledge about finances, and essential connectivity. Kusumawati et.al (2022); Mpofu (2024) outlined the gap to financial inclusion in developing countries include lack of access to digital financial services, literacy challenges, and lack of digital infrastructure. According to the Tay et al. (2022), there are persisting gaps in access to and usage of digital financial services in developing nations based on wealth, and locations with different prosperity. The authors state that improving digital infrastructure, simplifying cumbersome banking procedures, and emphasizing the significance of financial education are all necessary for nations to successfully achieve digital financial inclusion. Moreover, Chamboko (2024) found that people living in urban areas close to mobile banking representatives, with higher levels of education and financial literacy, middle-aged, and those who are self-sufficient are more likely to adopt DFS. The author attributes the lower adoption of the service in rural areas to a variety of issues including the lack of knowledge about digital financial services, limited access to financial infrastructure, and unstable network connectivity.

In conclusion, despite the promising future of digital financial services, young entrepreneurs still face gaps in accessing more advanced digital financial services, mainly due to factors such as personal conditions, personal financial status, level of financial knowledge and the challenge of inadequate digital infrastructure. If financial inclusion for young entrepreneurs is neglected, they might not access to many services related to finance and face problems like the shortage of resources to achieve their entrepreneurial goals. These challenges exclude young entrepreneurs from financial services can exacerbate social inequality, deepen the social class divide, and put the long-term survival and development of the country at risk (Alliance for Financial Inclusion, 2022). Despite these challenges, research on this topic which is the impacts of DFS on financial inclusion for young entrepreneurs in Malaysia remains limited, indicating and emphasizing that further investigation is important and required in this critical area.

1.3 Research Objectives

1.3.1 General Objectives

This study's primary goal is to analyse current trends, circumstances and effectiveness of DFS towards financial inclusion among young entrepreneurs in Malaysia. Besides that, this research also investigates the factors that affect the impact of digital financial services (DFS) on financial inclusion among Malaysia's young entrepreneurs.

1.3.2 Specific Objectives

i. To investigate the impact of digital financial service to the financial inclusion among young entrepreneurs in Malaysia.

ii. To investigate the impact of financial literacy to the financial inclusion among young entrepreneurs in Malaysia.

iii. To investigate the impact of financial attitude to the financial inclusion among young entrepreneurs in Malaysia.

iv. To investigate the impact of the regulatory environment on the financial inclusion among young entrepreneurs in Malaysia.

v. To investigate the impact of technological infrastructure to the financial inclusion among young entrepreneurs in Malaysia.

1.4 Research Questions

The research questions below are used to offer a clear direction and useful insight for this investigation.

vi. What is the impact of digital financial service to the financial inclusion among young entrepreneurs in Malaysia?

vii. What is the impact of financial literacy to the financial inclusion among young entrepreneurs in Malaysia?

viii. What is the impact of financial attitude to the financial inclusion among young entrepreneurs in Malaysia?

ix. What is the impact of the regulatory environment on the financial inclusion among young entrepreneurs in Malaysia?

x. What is the impact of technological infrastructure to the financial inclusion among young entrepreneurs in Malaysia?

1.5 Significance of Study

This study provides a deep understanding of how social behaviors will affect the impact of DFS on financial inclusion. Hence, this will benefit some parties, which includes academists, users, banking industry and government or policymakers.

Firstly, this research will assist the academists to increase their understanding about financial inclusion by providing a clear picture of financial inclusion. Throughout the study, they can better understand the significance of digital financial services among young entrepreneurs in Malaysia. Therefore, the academists can gain new knowledge and conduct more interesting research in the future.

In addition, this research will bring some benefits to the users. Users can understand the potential of digital finance in expanding their business. The users who want to start up a small business can prepare a plan to raise their capital in an easier way after they studied some successful case study and practices in microfinance. Therefore, they can learn the ways to access the digital financial services, such as microfinance to streamline their operations and scale the business. Users can take advantage of digital financial services to benefit their business or life. For example, findings on microfinance can help the users to develop innovative products that are customized to the specific needs.

On the other hand, this research can help the banking industry to highlight the emerging trend, current practices and circumstance of digital financial services. After studying this research, banks can make some optimizations to the digital financial services in order to fulfil the specific demand of the consumers. For example, financial institutions can take the opportunity to attract new customers who have unique needs through focus on offering microfinance. To conclude, financial institutions can implement some strategics to improve the trust of the users of digital financial services.

Lastly, this research is also significant to the government or policymakers because this study helps them to examine the awareness of financial inclusion among citizens. Throughout the study, government can identify the priority area to develop, promote and popularize financial inclusion

as they understand the issues and concerns of underserved population. As this research provides indicators to monitor financial inclusion and their impacts, policymakers can develop an effective regulatory framework to safeguard the interest of consumers and assist in promoting financial inclusion. Popularized financial inclusion can bring positive effects to the economy because it creates job opportunities for the people in the country.

1.6 Conclusion

In summary, this study investigates the dynamics of DFS and their impact on financial inclusion among young entrepreneurs in Malaysia. This study investigates the factors affecting financial inclusion for entrepreneurs, including financial literacy, attitudes, regulations, technology, and digital finance adoption. Moreover, this research will provide valuable insight and guidance for academia, users, banks, policymakers and public with interest to gain more insights about this topic.

CHAPTER 2 LITERATURE REVIEW

2.0 Introduction

In this chapter, some theoretical models regarding the impact of DFS on the financial inclusion among young entrepreneurs in Malaysia will be elucidated. Explanation on dependent variable and independent variables, including digital financial services, financial literacy, financial attitude, regulatory environment and technology infrastructure also included in this chapter.

2.1 Theoretical Framework

Past studies have developed some theories to explain the impact of independent variables which are digital financial service (DFS), technological infrastructure, financial literacy, financial attitude, and regulatory environment on dependent variable, financial inclusion. The theories related to this study involve Technology Acceptance Model (TAM), Theory of Planned Behaviour (TPB), Human Capacity Theory and Financial Intermediation Theory.

2.1.1 Financial Inclusion Theory

2.1.1.1 Technology Acceptance Model (TAM)

The first theory that involves in this section is Technology Acceptance Model which is also known as TAM. As mentioned by several researchers, TAM links digital financial services and technological infrastructure to financial inclusion through explanation on individuals' perceptions and initial adoption of digital financial services (DFS) (Koul & Eydgah, 2018; Naeem, 2023). Fred Davis (2024) built the model named Technology Acceptance Model (TAM) in 1986, he contends that perceptions of technology's utility and usability have an influence on attitudes towards it. (Davis, 2024; Davis, 1993; Lala, 2014). According to Davis (1989), TAM model serves as a succinct and practical theoretical framework for investigating how perceptions regarding the ease of use and the usefulness of a new technology or service influence its public acceptance. By then, if the technology's perceived usefulness or perceived ease of use is high in result, which means many users believe technology can improve performance (Khatri et al., 2020). Thus, high usage of digital financial service and technological infrastructure brings positive impact on financial inclusion. For instance, online learning platforms have emerged as a practical method for disseminating educational material, particularly in developing nations since the presence of the pandemic by COVID-19 (Zobeidi et al., 2023). Although TAM has been published for more than 30 years, it can still provide foundation knowledge to many studies. Thus, this model has been cited by numerous authors in journals (Vianne & Murcia, 2017).

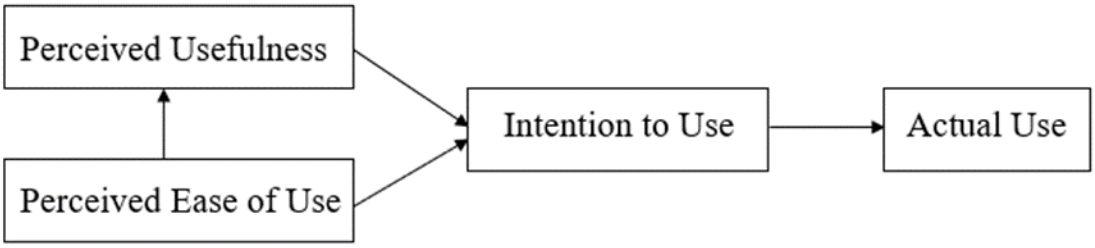
In this study, TAM suggests that individuals' attitudes towards technology, including digital financial services (DFS), are shaped by the two main theory concepts, perceived usefulness and perceived ease of use. If individuals perceive DFS as useful for accessing financial services and find them easy to use, it will be more likely and easily for them to adopt these services (Lee et al., 2023). According to Hasan (2022), higher adoption rates of DFS can lead to increased financial inclusion by providing access to financial and banking products and services for people in areas with limited physical infrastructure.

Moreover, TAM also considers the role of technological infrastructure in shaping perceptions of ease of use. Adequate technological infrastructure, such as internet connectivity and mobile phone penetration, can enhance the usability of DFS (Spangenberg et al., 2010). Thus, a robust technological infrastructure facilitates speedy delivery of DFS, making them more accessible and

convenient for underserved populations (Iheanachor & Umukoro, 2022). By then, it will bring a positive impact on financial inclusion.

In short, DFS can influence financial inclusion by expanding more pathway and access to financial service through technology, especially in underserved areas where traditional banking infrastructure is lacking (Mujeri, 2015). According to Opoku & Francis (2019), certain researchers have concluded that the TAM remains pertinent for determining and evaluating users' behaviors regarding technology usage over time. TAM provides a framework to analyse how individuals' perceived usefulness and user-friendliness brings essential effect on their usage of DFS, which in turn can impact financial inclusion. Moreover, a supportive technological infrastructure can further facilitate the adoption and usability of DFS, contributing to broader financial inclusion efforts.

Figure 2.1 *TAM's Theoretical Framework*



Source: Marikyan & Papagiannidis (2023)

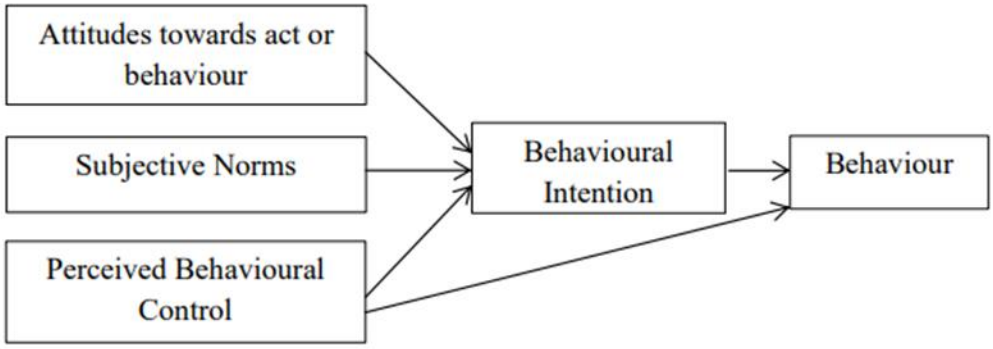
2.1.1.2 Theory of Planned Behavior (TPB)

Moving on, another important theory, Theory of Planned Behavior which is also known as TPB is mentioned in this study for a better understanding on a person's financial attitudes and how it affects financial inclusion. TPB is widely used to investigate the connection between actions and mindsets, demonstrating some level of effectiveness in predicting various behaviors (Ajzen, 1991; Conner & Armitage, 1998). It suggests that attitudes towards a behavior will be affected by perceived social pressure and behavioral intentions (Asyik et al., 2022). According to Panchasara & Sharma (2019), implementing agencies, such as banks, and policymakers can develop

appropriate interventions with application of TPB to encourage residents to voluntarily engage with financial inclusion initiatives.

In short, TPB can explain how financial attitudes will be impacted by other factors. According to previous studies, positive financial attitude will contribute to an enhancement in financial development and financial inclusion (Rai et al., 2019; She et al., 2024).

Figure 2.2 *Theory of Planned Behaviour (TPB)*



Source: Ajzen (1991)

2.1.1.3 Human Capital Theory (HCT)

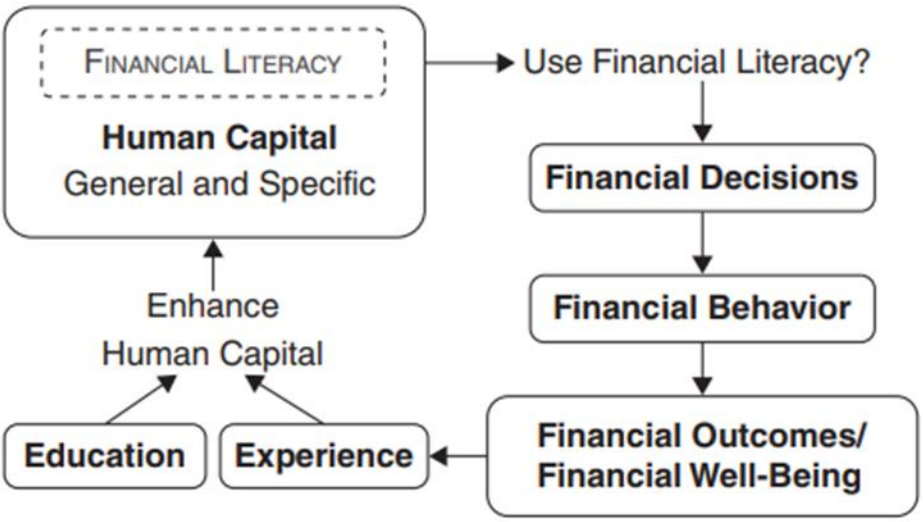
In this study, Human Capacity Theory (HCT) is utilised to explain the connection of financial literacy with financial inclusion. This theory suggests that financial literacy is one of the individuals' investments in education and skills development. It can enhance their earning potential and economic outcomes over time, leading to higher level of financial inclusion (Mengesha & Singh 2023). According to England & Folbre (2023), human capital represents an individual's combined attributes of educational and skills development which includes knowledge, cognitive abilities, and physical skills. Financial literacy, as a subset of human capital, pertains specifically to the knowledge and skills related to personal finances (Huston 2010).

The term "financial literacy" emerged in news coverage around the mid-1990s (Finke & Huston, 2014). It encompasses various aspects including specific knowledge, skills, perceived knowledge,

financial behavior, experience, outcomes, and education (Irman et al., 2023). According to Remund (2010) and Lusardi (2011), American consumers learned about financial management after the financial crisis in 2008. Thus, many studies highlighted the importance of financial education (Lusardi & Messy, 2023).

In short, this theory helps in examining how financial literacy levels impact the adoption of DFS and how it affects financial inclusion. It explains that financial literacy is significant to be used for determining individuals' ability to understand and use financial products and services effectively (Świecka, 2019).

Figure 2.3 *The Nature of Financial Literacy*



Source: Finke & Huston (2014)

2.1.1.4 Theories of Financial Intermediation

Last but not least, financial intermediation theory explains how regulatory environment influences financial intermediary to facilitate the flow of funds between lenders and borrowers in an economy, resulting in different level financial inclusion (Shah & Ali, 2022). Many researchers investigated the relationship of financial intermediation and financial inclusion in developing countries

(Ashenafi & Yan, 2023; Ejinkonye et al., 2023; Kempson, 2006; Okello et al., 2020). However, fewer researchers examine the impact of regulatory environments on financial inclusion (Anarfo et al., 2020; Saifurrahman & Kassim, 2024). Therefore, this theory is applied as many studies proved that regulatory environments would bring significant effect on financial intermediation and subsequent impact on financial inclusion (Buch & Goldberg, 2024; Mia, 2023; Muriithi, 2024; Trapanese & Lanotte, 2023).

The regulatory environment dictates the rules and guidelines under which financial intermediaries operate. Regulations can include capital requirements, lending limits, consumer protection laws, and policies aimed at promoting stability and fairness in financial markets (Shavshukov & Zhuravleva, 2023). For instance, the study by Porta (1998) compiled a dataset encompassing legal regulations concerning investor rights and the enforcement quality of these regulations across 49 countries with publicly traded companies. By focusing on the role of regulations and policies, government and financial intermediaries can shape the financial services landscape. Thus, this theory helps in analyzing how regulatory frameworks influence financial intermediation and subsequently affect financial inclusion (Nutassey et al., 2023).

Besides, the law and regulation will affect how financial intermediaries conduct their operations, manage risks, and serve their customers, resulting in different level financial inclusion (Eichengreen, 2023). The financial intermediaries such as banks, insurance companies, mutual funds and credit unions will gather funds from lenders and channel them to borrowers, thereby enabling efficient allocation of capital in the economy and improve financial inclusion (Omete, 2023). According to Rahim et al., (2021), various regulatory agencies and the government like Malaysia have taken initiatives to promote growth in the fintech to boost DFS and financial inclusion, leading to socio economic development.

In conclusion, this study involves four theories that can offer an useful insight of the impact of different factors on financial inclusion. The first theory, Technology Acceptance Model (TAM), explains how digital financial service and technological infrastructure affects financial inclusion. Secondly, Theory of Planned Behaviour (TPB) provides an insight on the impact of individual financial attitudes on financial inclusion. Thirdly, Human Capacity Theory (HCT) shows the

serious detrimental influence of financial literacy on financial inclusion. Lastly, Financial Intermediation Theory links the relationship of regulatory environment and financial inclusion through financial intermediaries.

2.2 Review of Variables

2.2.1 Dependent Variable

2.2.1.1 Financial Inclusion

Financial inclusion means individuals and companies having access to meaningful and cheap financial goods and services to suit their financial requirements (World Bank. 2022). Everyone, regardless of economic status, history, culture or living location, has access to financial services, such as transactions, payments, savings, insurance, and credit. Grant (2024) also explained that financial inclusion is a way that assists not only individuals but also businesses to get easier access to cheaper financial products and services. It is not only can develop small businesses through providing funding at online platforms, but also introduce innovation. Financial inclusion can develop new technologies and benefit the broader financial system. There are several services provided by financial inclusion, such as credit, housing finance, agriculture, insurance and payment services. Microfinance is one of the services in financial inclusion as it helps entrepreneurs or small and medium enterprises (SMEs) to grow (FinDevGateway, 2023). It also provides conveniences to the consumers because consumers can apply for the loan faster and easier (Raghuwanshi, 2023).

2.2.2 Independent Variables

2.2.2.1 Digital Financial Services

Digital financial services (DFS) utilise digital technology to deliver financial services to consumers, which include payments, credit, remittances, and loans (European Commission, 2024). Fintech-driven digital financial services (DFS) offer the ability to cut costs, boost speed, security, and transparency, and deliver more personalized financial services to the poor on a large scale (World bank, 2020).

There are many studies that have found the significant influence of digital financial services on financial inclusion. According to Ebong and George (2021); Bongomin et al. (2019), the adoption of digital financial services significantly influences financial inclusion. Adugna (2024) also founds that Fintech digital financial services are significant to enhancing financial inclusion. Besides, Tafotie (2020) stated that digital financial services create new, sustainable, and profitable company and employment options while increasing financial inclusion in Africa. Furthermore, Zhou et al. (2015) mentioned that China needs to provide an appropriate regulatory basis for digital financial services, thus contributing to the growth of financial inclusion. According to Hasan et al. (2020), digital financial services have contributed to the development of inclusive finance in China.

However, some researchers argue that digitizing financial services lowers financial inclusion. According to Kanungo and Gupta (2021), bank digitalization has had an insignificant effect on financial inclusion, implying a lack of civic involvement on the part of banks in enhancing the general well-being and quality of life of the poorer and marginalized sectors of the population. In Indian society, digital financial services are unable to reach the poorer portions of the population, whose daily transactions primarily involve cash (Venkataraman and Reddy, 2021). Michelle (2014) found that the adoption of digital financial services has an insignificant impact on financial inclusion in Kenya because banking institutions adopt digital financial services to reduce the

operational costs associated with opening and operating branches to increase their profitability and financial performance rather than promoting financial inclusion.

In conclusion, there are two opposing findings on the impact of digital financial services on financial inclusion. Most research shows there is a significant impact. Hence, the hypothesis developed as follow:

H1: There is a significant impact of digital financial services to the financial inclusion among young entrepreneurs in Malaysia.

2.2.2.2 Financial Literacy

Financial literacy is the knowledge of how, where and when to use money to make informed decisions, including but not limited to budgeting, saving, investing, favorable loan terms, credit and a range of other financial services (Ibor, 2023). Financial literacy is a necessary condition for financial inclusion (Khan et al., 2022). Some situations may occur due to lack of financial literacy, such as poor credit record, bankruptcy and high debt burden (Fernando, 2024).

According to Irman et al. (2023), it suggests that financial inclusion is positively impacted. This is because communities who have knowledge of financial products and services and know how to utilise them encourage people to access capital, so high levels of financial literacy have a significant impact on financial inclusion. Besides, Cuandra and Anjela (2021) which focus on the research in Batam City also supported that financial literacy positively affects financial inclusion. Grohmann et al. (2018) detected that financial literacy has a significant influence on financial inclusion. Apart from that, the study of Nawaz et al. (2023) conducted in Lahore City with a high population of 13.09 million explained that financial literacy will significantly positively influence financial inclusion.

However, there are some studies that show a negative and insignificant relationship of financial literacy towards financial inclusion. For instance, Bongomin et al. (2016) shows the result that financial literacy has a negative and insignificant relationship with financial inclusion. The previous study was conducted on 61.6% of rural poor households in Uganda and utilizing cross-sectional analysis. If there is an absence of social capital, financial literacy will not be able to link with financial inclusion. Furthermore, Robert et al. (2013) revealed that the level of financial literacy did not link to the expansion of microfinance with a positive significant relationship. Previous study has collected 286 respondents who were selected from 30 microfinance institutions in Eastern Uganda. The reason for having insignificant relationships is that people will only improve their financial literacy when they start to save their money (Robert et al., 2013). Liu et al. (2021) also revealed that financial literacy negatively impacts financial inclusion due to religious concerns.

In conclusion, even though both studies from Uganda presented negative and insignificant effects of financial literacy towards financial inclusion, there are a few studies that have supported significant and positive effects of financial literacy towards financial inclusion. Hence, the hypothesis developed:

H2: There is a significant impact of financial literacy to the financial inclusion among young entrepreneurs in Malaysia.

2.2.2.3 Financial Attitude

Financial attitude is defined as the psychological tendency shown while determining indicated financial management strategies with a degree of agreement or disagreement (Parrotta and Johnson, 1998). Other than that, financial attitude is a person's financial mindset that is often influenced by his history and surroundings (Vikram, 2020).

There are many studies that state financial attitude is significant on financial inclusion (Rahadjeng et al., 2023; Setiawan et al., 2024; Akinwale and Kyari, 2022). Arifin et al. (2019) found that financial attitude positively affects financial inclusion in Jakarta. Cuandra and Anjela (2021) stated that financial attitude has a significant effect on the financial inclusion of the people of Batam City. Besides, a study also found that financial attitude has a significant influence on financial inclusion among working women (Stella & Rmachandran, 2022). In Malaysia, there is a significant impact of financial mindset to financial inclusion, according to Razak et al. (2023).

However, Kirana and Havidz (2020) discovered that financial attitudes toward financial inclusion have a negative impact and are statistically insignificant in Indonesia because a person who is not as inclined to plan their funds for the future may use less personal financial management techniques.

Therefore, it showed that distinct outcome for the impact of financial attitude on financial inclusion were found in the existing literature. The different outcomes found in these studies are due to different countries being selected and different respondents in their studies are from different demographics. Hence, a hypothesis is built:

H3: There is a significant impact of financial attitude to the financial inclusion among young entrepreneurs in Malaysia.

2.2.2.4 Regulatory Environment

Regulatory environment is the set of laws, rules, regulations, policies, and guidelines that regulate and influence the actions, practices, and operations of individuals, corporations, organizations, and governments within a certain area or industry (Ansarada, 2024). According to Monash Business School (2023), the regulatory environment represents the legal and political act that affect the efforts of the parties. It can create opportunities or challenges for all parties to achieve their

objectives. For instance, the regulatory environment allows policymakers to promote innovative financial services, such as financial inclusion (De Sousa, 2015).

It was found that the regulatory environment has a significant influence on financial inclusion in Kenya (Momany, 2018). Anarfo et al. (2020) explained that financial regulation has a significant impact on financial inclusion in Sub-Saharan Africa. The previous study found that financial regulation positively affects financial inclusion when financial stability is considered. Besides, Nutassey et al. (2023) also applied regulatory measures from Fraser Institute and proved that regulation had significant and positive impact on financial inclusion because regulation can be a key to promote financial inclusion to the consumers. In addition, Gichuru and Namada (2022) also found that the regulatory environment can significantly impact financial inclusion. The previous study employed multiple regression analysis and used customer protection and investor protection regulation in 27 Fintech companies as the indicators to test the impact of regulation towards financial inclusion. Chen and Divanbeigi (2019) also implied that a regulatory framework can significantly and positively impact financial inclusion because it found that more people prefer to access financial services when there is good quality of regulatory practices.

However, there are some studies that have found that the regulatory environment negatively impacts financial inclusion. Based on the study of Anarfo et al. (2020), capital adequacy regulation can negatively impact financial inclusion. The statement supported by the reasons for tighter capital requirements will increase the cost of borrowings as there are fewer available funds for loans (De Sousa, 2015). Kodongo (2018) also mentioned that some regulations such as know-your-customers rules and capital and liquidity regulations impact negatively on financial inclusion. On the other hand, Anti-Money Laundering regulations negatively impact on accounts ownership, bank branches and deposits with commercial banks in developed countries. This will not benefit financial inclusion because AML regulations in developed countries are more stringent and limit the ability of financial institutions to promote financial inclusion.

In conclusion, most evidence suggests that the regulatory environment plays an important role in promoting the accessibility of financial services. However, different regulations in developed and developing countries will contribute to different results. Since this study found that most previous

studies proved that there is a strong impact of financial regulatory towards financial inclusion, hence, this research proposed the hypothesis as follow:

H4: There is a significant impact of regulatory environment to the financial inclusion among young entrepreneurs in Malaysia

2.2.2.5 Technology Infrastructure

According to Simplilearn (2024), technology brings an enormous impact to our daily life and operations of institutions, such as healthcare industries, communication, business and finance industry. The technology infrastructure consists of hardware and software components that support the business's applications and information management requirements (Accenture, 2024). Financial institutions use technology to offer solutions that are more tailored to client demands at a reduced cost (Thakor, 2020).

Based on the research, this studyfound that Fanta and Makina (2019) conducted the cross-sectional analysis in Africa and supported that there is a significant positive impact of technology towards financial inclusion. Lyons et al. (2017) also stated that technology infrastructure has a significant contribution to financial inclusion in China. Other than that, Hussein (2020) had shown that mobile money, mobile subscribers, and use of the internet had a positive impact on the financial inclusion in Egypt. Both Fanta and Makina (2019) and Hussein (2020) had used SPSS to analyse the data. Furthermore, Menza et al. (2024) also agreed that ATM, point of sales terminals (POS) and mobile banking also have a positive impact on financial inclusion.

However, there are few studies showing the negative and insignificant impact of technology infrastructure on financial inclusion. For instance, Bayar et al. (2021) had stated that internet usage rates had a negative relationship with accessibility of financial institutions and markets. This will impact the effectiveness of financial inclusion. Senou et al. (2019) which explores the impact of digital technology on financial inclusion in West African Economic and Monetary Union

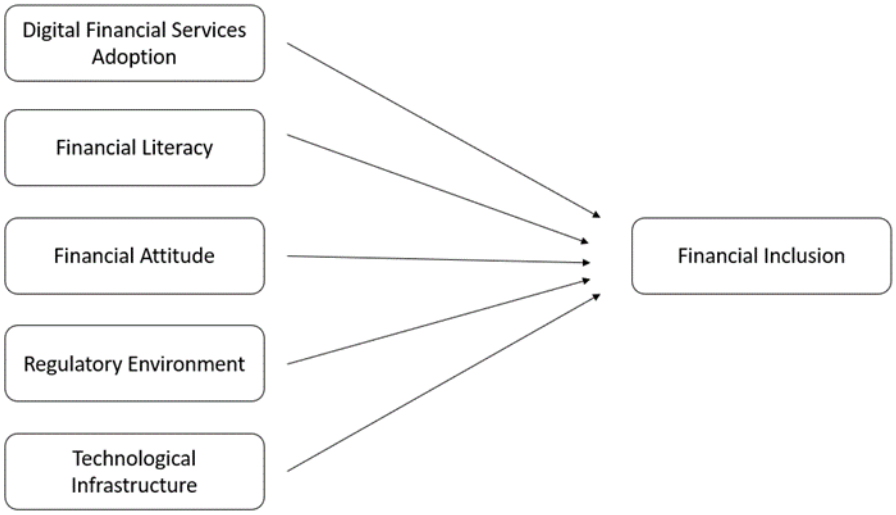
(WAEMU) also mentioned that the internet as a communication technology had a negative impact on financial inclusion even though the internet has been widely used. The reasons for encountering this situation may be due to the limitation of accessibility, availability and affordability.

In conclusion, even most of the researchers agree that technology has a significant contribution to financial inclusion, but there are some studies that also disagree with this statement. In this study, the impact of technology infrastructure on financial inclusion will be further expore. Thus, a hypothesis is created:

H5: There is a significant impact of technology infrastructure to the financial inclusion among young entrepreneurs in Malaysia.

2.3 Conceptual Framework

Figure 2.4 *Conceptual framework for how DFS affect young Malaysian entrepreneurs' access to finance.*



2.4 Conclusion

To conclude, this research has showed and explained five independent variables, which include digital financial services (DFS), financial literacy, financial attitude, regulatory environment and technology infrastructure. These independent variables might influence the impact on financial inclusion among young entrepreneurs in Malaysia. In order to analyse the relationship of financial inclusion with these five independent variables, this study has included some theoretical models, Therefore, research method in this study will be discussed in the next chapter.

CHAPTER 3: RESEARCH METHODOLOGY

3.0 Introduction

This research's purpose is to explore and analyse the influencing factors on financial inclusion in Malaysia. The research design, descriptive research, sample arrangement, study instrument, data collecting strategy and analysis tool are included by the research approach described. It uses a quantitative approach to data collecting, using online surveys and quota sampling.

3.1 Research Design

The the method used this study was designed works like a framework that provides structure and direction to demonstrate how all the study's essential elements interact to tackle the research question. According to Creswell (2007), research design involves mapping out the entire study process, covering data collection, analyzation, interpretation, and result presentation. Quantitative research typically involves using data to describe social phenomena, and subsequently collecting data to explain models in the study. Therefore, it ensures that the study is well-structured and effective, allowing for the derivation of meaningful conclusions (Myers et al., 2013).

3.1.1 Quantitative Research

Numerical data is gathered and analysed to find patterns and relationship, aiming to provide statistically evaluated findings for research inquiries and predictions within the studied population (Kandel, 2020). By employing standardized data collection methods and statistical analyses,

quantitative research aims to offer objective and effective findings (Mohajan, 2020). In this study, quantitative data will be collected through Likert scales from range 1 to 5.

3.1.2 Descriptive Research

Descriptive methods are used to depict target populations, events, or situations within their natural environment. It involves systematically observing, recording, and describing phenomena without manipulating variables. Its function is to provide a detailed description of the characteristics of a population or phenomenon being studied (Siedlecki, 2020). In short, descriptive research aims to provide answers about the process of collecting data through surveys, observations, or existing data sources.

3.2 Design of Sampling

3.2.1 Target Population

Following international standards, Malaysia has revised its definition of ‘youth’, reducing the age limit from 40 to 30 (Awang, 2023). According to Department of Statistics Malaysia (2023), there is a total of 5,323,317 youth who aged 20 to 29 in Malaysia. The restriction of above 18 years old is in line with Malaysia's Guardianship of Infants Act 1961, which stipulates that asset of minors are managed by a guardian (Wong, 2023). As a result, only young adults who have the autonomy to manage their finances freely are included in the study. Therefore, around 5.3 million of the young entrepreneurs aged 20 to 29 years old in Malaysia are chosen as the target population in this study. Another reason of choosing this category of youth is because they are in the age range who are most likely interested in applying for loan through DFS like microfinance to start up their small business.

3.2.2 Location Sampling and Frame of Sampling

Besides, this sampling will be located in 12 states in Malaysia (Johor, Pahang, Melaka, Negeri Sembilan, Kelantan, Terengganu, Perak, Perlis, Kedah, Sabah, Sarawak and Penang). Young adults from these areas are targeted because they have a higher possibility of lacking business start-up capital compared to young adults staying in Kuala Lumpur (KL) and Selangor. The exclusion of these areas in this study's location sampling is due to its high average median income level, which consists of lower probability of financial aid required. According to Department of Statistics Malaysia (DOSM), the highest median income was reported in W.P. Kuala Lumpur at RM10,549, followed by W.P. Putrajaya at RM9,983 and Selangor at RM8,210. In short, these locations chosen will be advantageous for this study to determine the impact of DFS on financial inclusion.

3.2.3 Technique of Sampling

According to Albaity & Rahman (2019), probability sampling and non-probability sampling are the two primary types of sampling techniques. According to Vehovar et al. (2016), probability sampling involves giving every participant of the population an equal chance to be chosen as sample, while non-probability sampling does not ensure equal representation for all population participants. Stratified sampling, clustered sampling, systematic sampling, and basic random sampling are examples of probability sampling techniques. Convenience or haphazard sampling, volunteer sampling, and quota sampling are examples of non-probability sampling techniques. Since it is impossible to collect a name list and contact information of all young adults in Malaysia, random selection by probability sampling is not attainable. As a result, non-probability sampling was chosen. This research employs non-probability sampling technique as it involves selecting participants based on convenience with specific criteria, facilitating the collection of data in a straightforward manner. Therefore, convenience sampling is selected by referring to similar research by Rahman (2023) and its advantages. According to Shantikumar & Barratt (2018), convenience sampling is cost-effective, easily accessible, and time efficient. By applying this technique, researchers can conduct the research easily and conveniently. Additionally, the questionnaires will be distributed to those meeting specific criteria to meet this study's goal.

(1) Aged from 20 to 29 years old

(2) Interested in starting up business

(3) Citizen Malaysia

3.2.4 Size of Sampling

Determining an appropriate sample size is crucial. Oversampling is wasteful and unethical, while sampling that is too small might also be unethical and unscientific (Andrade, 2020). There are lots of methods that can be used to calculate the required sample size based on specified assumptions. In this study, Morgan Table is used to ensure an adequate sample size. This method is used because it provides a systematic approach for researchers to estimate the size of sampling conveniently. Krejcie and Morgan (1970) suggest that when the population exceeds 1,000,000 a maximum sample size of 384 is recommended. Since the target population of this research is around 5.3 million which is more than 1,000,000, a total of 384 responses will be collected through survey among young adults in Malaysia.

3.3 Research Instrument

3.3.1 Questionnaire Design

The purpose of questionnaire aims to distributed to the individual and gather some important information from them (Mcleod, 2023). According to Cleave (2023), most of the time, questionnaires can include open ended questions, close ended questions or combination of open and closed ended questions. In research, questionnaires help researchers to save their costs and reach people quickly because they do not need to distribute the set of questions physically, but distributed to targeted populations through social media, such as e-mail, Facebook and WhatsApp. This research employs closed ended questions in the questionnaire. Thus, the respondent will answer the questions based on some structured answers.

In this research, the questions are separated into 3 parts, which include section A, section B and section C. For section A, it provides 6 questions that focus on demographic information. In this

section, nominal scale is used to measure gender, ethnicity, and state. Other information like income level and age will be analysed and categorized by ordinal scale. In addition, section B includes a total of 25 questions to determine digital financial services, financial literacy, financial attitude, regulatory framework and technology infrastructure. Lastly, section C focuses on dependent variable (financial inclusion), which consists of 5 questions. Interval scale will be used to measure questions in section B and C.

In order to provide structured answers to respond to closed ended questions, this study has used Five-point Likert Scale. Respondents can choose their opinions based on 1 to 5 to answer the questionnaires. A five-point Likert scale has the following values: 1 for "Strongly Disagree," 2 for "Disagree," 3 for "Neutral," 4 for "Agree," and 5 for "Strongly Agree." Participants find it easier to offer comments or responses on a five-point Likert scale. Furthermore, Ijaz et al. (2022), Bire et al. (2019) and Joseph (2014) utilised questionnaires and Five-point Likert Scale in their studies.

3.3.2 Scale of Measurement

Measurement scale plays an important role in the study because it has significant contribution in data collection, analysis and presentation (Mishra et al., 2018). There are different measurement scales used in study which are nominal, ordinal, and interval.

3.3.2.1 Nominal Scale

Based on the research by Stevens (2023), nominal scale categorizes variables based on qualitative labels. In other words, it does not carry numerical value. Nominal scale will be utilised in first section. It can be utilised to calculate number of gender, car brands and marital status (Bhandari, 2023). Therefore, this research used this technique to calculate amount of gender in section A.

Nominal scale example is showed below:

Gender:	
( ) Male	( ) Female

3.3.2.2 Ordinal Scale

Ordinary scale refers to ranking of the data which does not consider the degree of variance among the data (Akman, 2023). Bhandari (2023) also mentioned that the ordinal scale can only categorize and rank the data. The examples of ordinal scale are language ability, age and others. Ordinal scale is used in section A. This technique is utilised to measure the number of respondents with different age range.

Example of ordinal scale:

Age:		
( ) 20-23	( ) 24-26	( ) 27-29

3.3.2.3 Interval Scale

Based on the information from Bhat (2023), interval scale also known as numerical scale in which the variables are familiar and computable. These constant and computable variables will be classified through interval scale measurement or Likert Scale. Section B and Section C of this study both make use of the interval scale. Interval scale can be used to measure test scores, personality inventories and temperature (Bhandari, 2023). Therefore, interval scale is utilised to calculate all the variables in section B and section C.

Interval scale example:

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I would consider using digital financial services due to its convenience.	1	2	3	4	5

3.4 Data Collection Method

Researchers employ data collection methods to measure the interest of variables and address research questions, hypotheses, and evaluate outcomes (Syed, 2016). There are two main types of data collection methods which are primary data and secondary data.

3.4.1 Primary Data

In this study, primary data will be used for data collection method. The questionnaire is created to gather data through surveys as it can assist in collecting data from large numbers of the population in a short time (Marshall, 2005). Since the data will be gathered through our designed Google form which referred to similar past study, the cost spent on data collection will be free of charge and the online survey result can be compiled and analysed right after the collection. In short, primary data is selected due to its convenience, time and cost-effectiveness.

3.4.2 Pilot Test

Pilot test is developed to test the adequacy of the methods that planned for a larger population investigation (Lowe, 2019). Before implementing pilot test, the purpose of the study and sample size should be defined in order to evaluate the result of pilot test (Jaroeducation, 2023). In this study, there are 40 respondents from Malaysia who are young entrepreneurs and aware of financial inclusion will be included in the pilot test.

Table 3.1 *Pilot Test*

	Variables	**Cronbach's Alpha**	**No. of Items**	**Internal Consistency**
Dependent Variables	A	0.831	5	Excellent
Independent Variables	DFS	0.872	5	Excellent
	FL	0.824	5	Excellent
	FA	0.737	5	Good
	RE	0.854	5	Excellent
	TI	0.827	5	Excellent

Based on table above, dependent variable (A) has 0.831 for value of Cronbach's alpha. Different values are also tested for other variables. For instance, DFS (0.872), FL (0.824), FA (0.737), RE (0.854), and TI (0.827). According to Table 3.1, A, DFS, FL, RE and TI presented excellent reliability as their Cronbach's alpha value are within 0.80 to 0.95. Besides, FA also presented good reliability as its value (0.737) is between 0.70 and 0.80. Hence, the results produced from reliability test have good and excellent outcomes.

3.5 Proposed Data Analysis Tool

In this study, all information was collected from 384 respondents through the online questionnaire method. In order to examine the hypothesis of the research, SPSS software has been used. SPSS software is an essential tool for most researchers to analyse data and build a mathematical model to explain the research findings. This software can be used in a wide range of research tasks, including text analytics, regression analysis and basic descriptive statistics (Green, 2023).

3.5.1 Descriptive Analysis

The simplest type of data analysis is descriptive analysis. This is the process of using historical and current data to examine the results (Cote, 2021). There are several types of descriptive statistics, which are central tendency, measures of variability and distribution (Hayes, 2024). The reason most researchers use descriptive analysis is that the data can present different characteristics of the data. Descriptive analysis becomes useful for the researchers because it can provide a broader picture of results in the manner of graphs and charts, so that the researchers are able to collect accurate and useful information from the data. However, it may affect the final result if the data did not match the trend (Rawat, 2021).

3.5.1.1 Reliability Test

The uniformity of the info is evaluated using a reliability test. It uses Cronbach's alpha method to test the reliability of the data or internal consistency (Statistics Solutions, 2024). According to Moran (2021), even though most of the time Cronbach's alpha will provide 0 to 1 in the result, researchers may get the negative result in testing the reliability of the data. Chiang et al. (2015) suggest that cronbach's alpha value of 0.80 and above will be considered as good internal consistency.

Table 3.2 *Cronbach's Alpha Table*

Cronbach's Coefficient Alpha	Reliability
0.80 to 0.95	Excellent
0.70 to 0.80	Good
0.60 to 0.70	Fair
< 0.60	Poor

Cronbach's Alpha is always being applied in the set of survey items, such as a set of questionnaires. It can be utilised to check the consistency and reliability of a collection of items in measuring the same characteristics. High value of Cronbach's Alpha means that responses for each of the respondents are consistent, which also indicates that the measurements are reliable (Frost, 2022). Based on Saidi and Siew (2019), the basic rule from the thumb of Cronbach's Alpha is that the result can be accepted if its value is 0.70 and above. If the value is between 0.60 and 0.70, the result is considered as questionable. However, the result will be indicated as poor when the value is between 0.50 and 0.60. Cronbach's Alpha value of 0.50 and below will not be accepted in the analysis test. In short, more closure to 1 represents the results are more reliable.

3.5.2 Preliminary Screening of Data

3.5.2.1 Multicollinearity

Identifying multicollinearity in the data is the first step in the preliminary screening process. According to Farrar & Glauber, (1967), multicollinearity indicates a strong association between the independent variables. The probability of error increases once the independent variables have

a high correlation with one another (Shrestha, 2020). By then, the regression analysis results will be no longer reliable (Daoud, 2017). Therefore, serious problems should be detected before performing regression analysis. There are two ways to detect multicollinearity.

Firstly, the variance inflation factor was determined with SPSS. If the variance inflation factor is larger than 10, it indicates a high degree of multicollinearity (O'Brien, 2007). Generally, the acceptable range of VIF is below 5, which indicates low multicollinearity (Akinwande et al., 2015). Secondly, the tolerance value will be calculated by SPSS. According to Daoud (2017), the tolerance value of less than 0.1 indicates strong multicollinearity. Thus, tolerance value of more than 0.1 is recommended as it is the minimum level of tolerance.

Table 3.3 *Variance Inflation Factor (VIF)*

VIF	**Multicollinearity**
< 5	Low
5 - 10	Medium
> 10	High

3.5.2.2 Normality

Besides, normality test is another preliminary data screening method. The normality assumption must be met before significant inferential statistical techniques can be applied (Jarque & Bera, 1987). This movement can be explained by the fact that if the data are not regularly dispersed, it shows that the results are not accurate and reliable. Then, researcher cannot make inferences about the parameters of the population (Das et al., 2016). As a result, tests are required to evaluate the possibility that the data distribution is normal.

The first method for determining the normality of data is conduct the skewness and kurtosis. The research data will have normal distribution if skewness is between -2 to +2 and kurtosis is between -7 to +7 when the sample size is larger than 300 (Kim, 2013).

The second method for determining data normality is to examine the histogram. In a frequency distribution graph, the middle has the highest frequency and decreases as it moves towards the ends, thus visualizing if the distribution is bell-shaped or not. The data display of an ideal bell-shaped curve is known as a normal distribution (Das et al., 2016).

Thirdly, A normal probability map shows data on the horizontal axis and the predicted normal distribution values on the Y-axis. (Nisbet et al., 2018). A normal distribution is implied if the graph pattern resembles a straight line.

3.5.3 Inferential Analysis

Moving on, predicting a large population through information obtained from samples within a population is known as inferential analysis. Most researchers utilise sample data to analyse data because that is costly and takes time to collect data from the population. Researchers can use inferential analysis to draw a conclusion and prediction on the findings of the study by using regression analysis (Simplilearn, 2024). Methods that are always used in inferential analysis are correlation tests and comparison tests (Team, 2023). The correlation test that applied in this study is Pearson's R Test, and the comparison tests include T test and Anova Test.

3.5.3.1 Pearson's Correlation Analysis

Table 3.4 *Pearson's Correlation Analysis*

Scale of Correlation Coefficient	Interpretation
0.00 < r < 0.19 / (-0.19 < r < 0.00)	Very low positive / (negative) correlation
0.20 < r < 0.39 / (-0.39 < r < -0.20)	Low positive / (negative) correlation
0.40 < r < 0.59 / (-0.59 < r < -0.40)	Moderate positive / (negative) correlation
0.60 < r < 0.79 / (-0.79< r < -0.60)	High positive / (negative) correlation
0.80 < r < 1.00 / (-1.00 < r < -0.80)	Very high positive / (negative) correlation

This analysis of Pearson's Correlation can be utilised to determine how dependent and independent variables relate to one another. This can be the best way to investigate the correlation between two independent variables because of the emphasis on covariance. (Statistics Solutions, 2024). Table 3.2 above revealed detail interpretation of different ranges of correlation coefficient. However, in simple word, the Pearson's Correlation Coefficient always ranges between -1 and 1. Based on Turney (2024), positive correlation exists when the Pearson Correlation Coefficient is between 0 and 1. However, negative correlation exists when the Pearson Correlation Coefficient is between 0 and -1. If there is no relationship between two variables, the Pearson Correlation Coefficient is 0.

3.5.3.2 Multiple Regression Analysis

Multiple Regression analysis used to test the relationship between dependent variables and independent variables. It is the statistical technique to predict the outcome of more than one explanatory variable (Hayes, 2023). When there is more than one independent variable, the

researcher needs to take into account all independent variables' outcome towards the dependent variables. For instance, when there are three independent variables in the study, the researcher needs to examine the relationship between these three independent variables and dependent variables.

Besides, p-value of 0.01, 0.05 and 0.10 can be used to measure the significance of the relationship between explanatory variables. This study will apply significance level of 0.05 rather than 0.01 and 0.10 is because significance level of 0.05 is widely used in previous studies, hence it more consistency and comparative with previous. By using significance level of 0.05, it will be easier to detect the accurate findings.

Hence, multiple regression analysis will be used to test the impact of five chosen independent variables (digital financial services, financial literacy, financial attitude, regulatory environment and technology infrastructure) on financial inclusion. Therefore, the multiple regression model in this study developed as follow

Equation 1

$$A_i = \beta_0 + \beta_1 DFS_i + \beta_2 FL_i + \beta_3 FA_i + \beta_4 RE_i + \beta_5 TI_i + \varepsilon_i$$

Where A_i = Financial Inclusion

DFS_i = Digital Financial Services

FL_i = Financial Literacy

FA_i = Financial Attitude

RE_i = Regulatory Environment

TI_i = Technology Infrastructure

ε_i = Error Term

3.6 Conclusion

In summary, the method for analysing the data in our study was described and defined in this chapter. Primary data will be applied in this research. This study collected 377 questionnaire surveys from the targeted population, which is young entrepreneurs in Malaysia. The data analysis was done using a software named SPSS. Next part of this research will address the tests utilised and consequences in more detail.

CHAPTER 4: RESEARCH RESULTS

4.0 Introduction

The data interpretation and investigation gathered from questionnaire survey is discussed in this chapter. This study has obtained 416 questionnaires, however, we only used 384 questionnaires after filtering. This chapter will conduct different test for analyzing data. We will conduct descriptive analysis to interpret demographic data. In order to understand relevant and valuable data, several important analytical tests, including reliability test, multiple regression, multicollinearity, normality, and inferential analyses, will also be carried out.

4.1 Descriptive Analysis

4.1.1 Demographic Profile

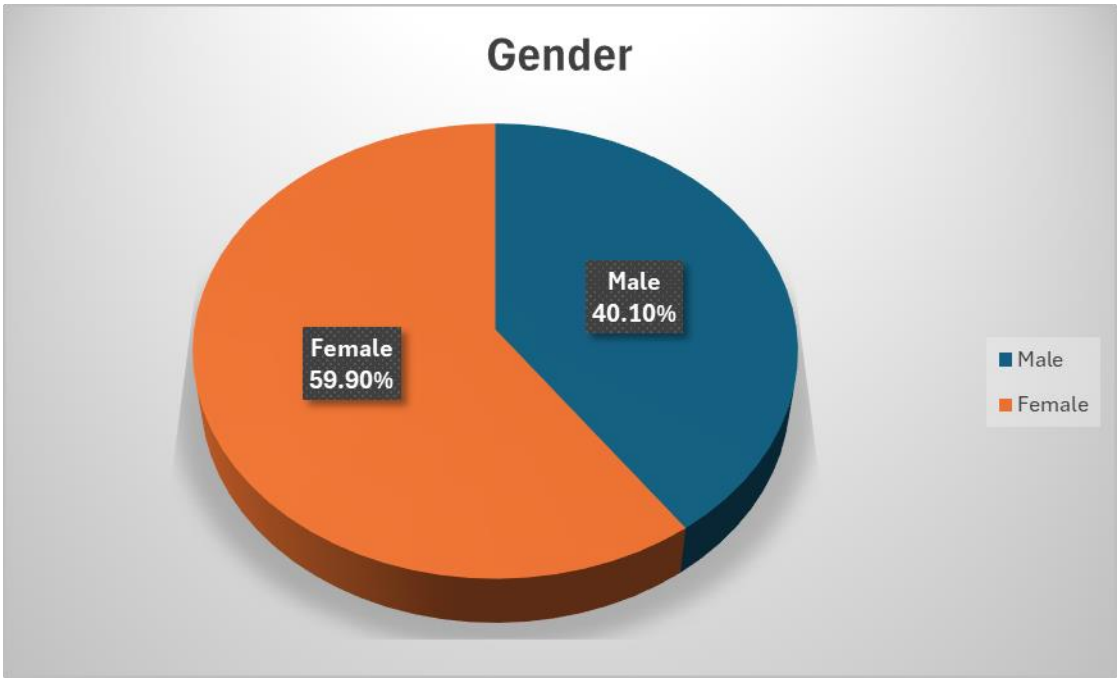
Data presented below includes basic information on those who participated of this survey, which were gender, age group, ethnicity, states, and monthly income level.

4.1.1.1 Gender

Table 4.1 *Gender Descriptive Analysis*

Valid	Frequency	Percent	Cumulative Percent
Male	154	40.1	40.1
Female	230	59.9	100.0
Total	384	100	100

Figure 4.1 *Chart for Gender Descriptive Analysis*



All respondents were categorized based on their gender. Based on Table 4.1, there were 384 respondents participating in this study. Furthermore, 59.90% of the participants (230) were all

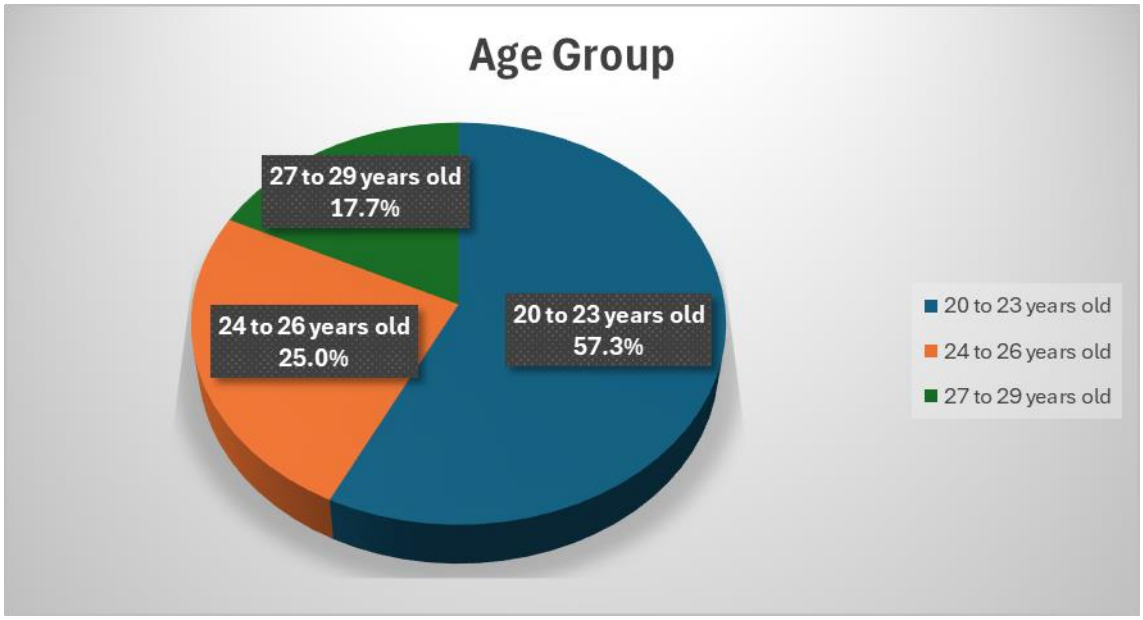
female, and 40.10% of the respondents (154) were all male, as shown by Table 4.1 and Figure 4.1. Therefore, that had a greater number female than male participants.

4.1.1.2 Age

Table 4.2 *Age Group Descriptive Analysis*

Valid	Frequency	Percent	Cumulative Percent
20 to 23 years old	220	57.3	57.3
24 to 26 years old	96	25.0	82.3
27 to 29 years old	68	17.7	100.0
Total	384	100	100

Figure 4.2 *Chart for Age Group Descriptive Analysis*



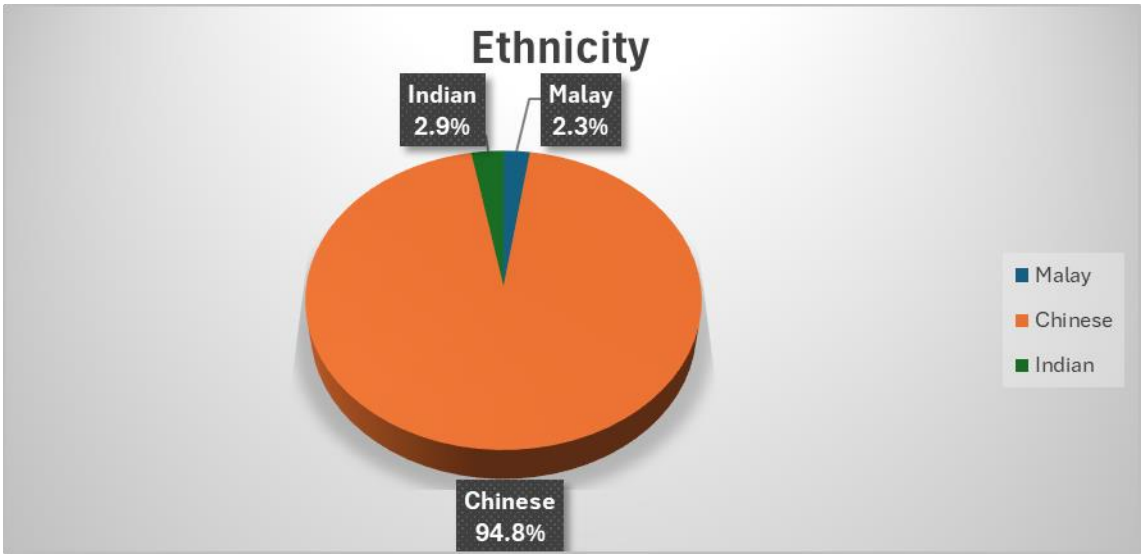
According to Table 4.2 and Figure 4.2, 57.30% of participants of this research were 20 to 23 years old, which amounted to 220 respondents. Besides, respondents aged between 24 to 26 years old consists of 25% or 96 respondents. However, there were only 68 respondents aged 27 to 29 participating in this study, which was 17.70%. For this survey, most of the participants were between the ages of 20 to 23. In contrast, respondents who aged 27 to 29 years old were the least.

4.1.1.3 Ethnicity

Table 4.3 *Ethnicity Descriptive Analysis*

Valid	Frequency	Percent	Cumulative Percent
Malay	9	2.3	2.3
Chinese	364	94.8	97.1
Indian	11	2.9	100
Total	384	100	100

Figure 4.3 *Chart for Ethnicity Descriptive Analysis*



This study has involved three ethics, which were Malay, Chinese and Indian. According to the Table 4.3 and Figure 4.3, majority of the participants of this research were Chinese since it involved 94.80% or 364 participants in this study. Besides, Malay and Indian respondents were equally matched. From the figure and table above, total number of Malay respondents were 9 or 2.30%, while Indian respondents were 11 or 2.90%.

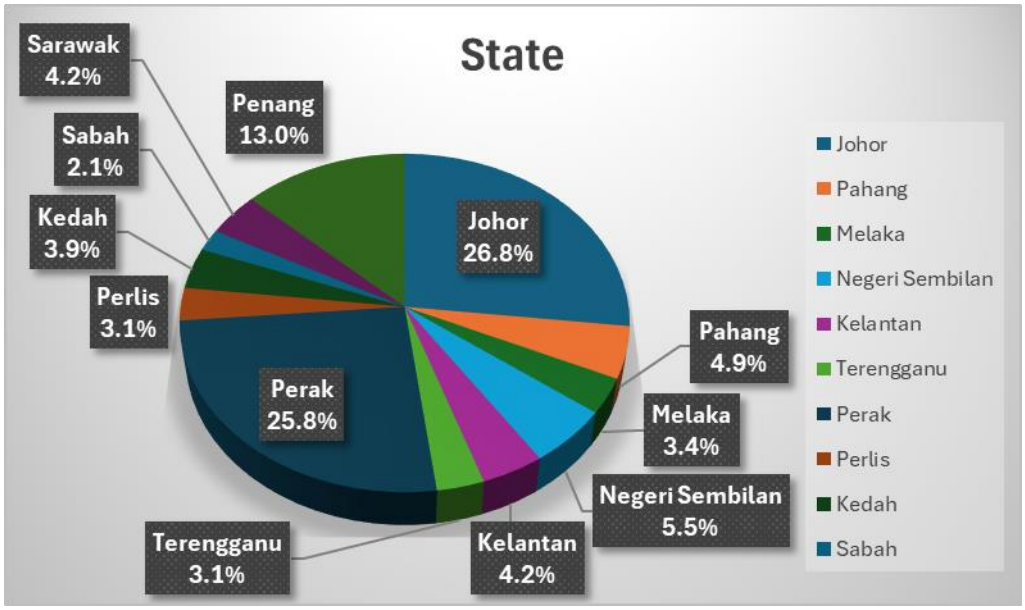
4.1.1.4 State

Table 4.4 *State Descriptive Analysis*

Valid	Frequency	Percent	Cumulative Percent
Johor	103	26.8	26.8
Pahang	19	4.9	31.7
Melaka	13	3.4	35.1
Negeri Sembilan	21	5.5	40.6
Kelantan	16	4.2	44.8
Terengganu	12	3.1	47.9
Perak	99	25.8	73.7
Perlis	12	3.1	76.8
Kedah	15	3.9	80.7
Sabah	8	2.1	82.8
Sarawak	16	4.2	87
Penang	50	13.0	100

Total	384	100	100

Figure 4.4 *Chart for State Descriptive Analysis*



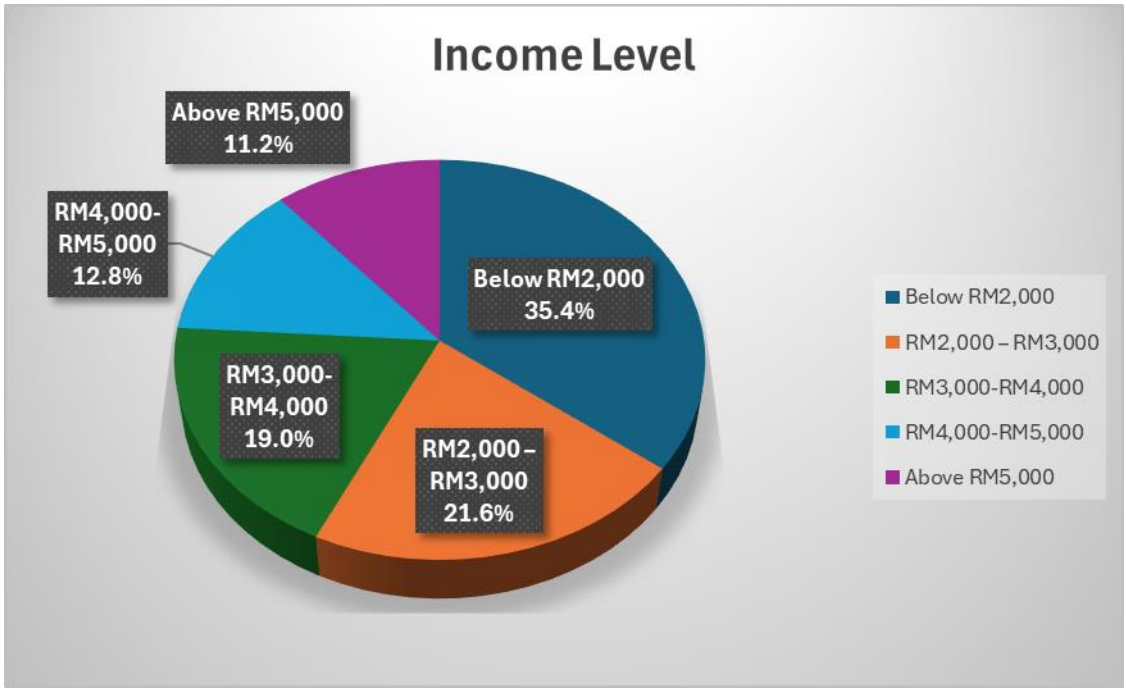
There were 12 states included in this study, which were Johor, Pahang, Melaka, Negeri Sembilan, Kelantan, Terengganu, Perak, Perlis, Kedah, Sabah, Sarawak and Penang. Among these states, Johor had the highest number of respondents compared to others, which was 103 respondents or 26.80%. In addition, Perak had the second highest number of respondents, which was 99 respondents or 25.80%. Furthermore, there were 50 respondents who came from Penang (13%). However, the other 9 states like Pahang, Melaka, Negeri Sembilan, Kelantan, Terengganu, Perlis, Kedah, Sabah and Sarawak had less than 50 participants.

4.1.1.5 Income level per month

Table 4.5 *Income level per month Descriptive Analysis*

Income level	Frequency	Percent	Cumulative Percent
Below RM2,000	136	35.4	35.4
RM2,000 – RM3,000	83	21.6	57.0
RM3,000-RM4,000	73	19.0	76.0
RM4,000-RM5,000	49	12.8	88.8
Above RM5,000	43	11.2	100
Total	384	100	100

Figure 4.5 *Chart for Income level per month Descriptive Analysis*



Based on the data shown in Figure 4.5 and Table 4.5, 35.40% respondents in this research were holding income which below RM2,000 per month, which amounted to 136 respondents. Furthermore, there were 83 respondents (21.60%) and 73 respondents (19%) had RM2,000 to RM3,000 and RM3,000 to RM4,000 per month separately. Besides, 49 respondents (12.80%) had monthly income of RM4,000 to RM5,000. To conclude, the least participants (11.20% or 43 respondents) had monthly income that above RM5,000. In contrast, the highest number of respondents (136 respondents) had monthly income that was below RM2,000.

4.1.2 Measurement of Central Tendencies and Constructs Dispersion

Besides, Sections B and C include data received from participant replies about both independent and dependent variables. It will be examined in the next section. The analysis includes the mean, a measure of central tendency, and the standard deviation, a measure of dispersion. Every variable is examined separately.

4.1.2.1 Financial Inclusion

Table 4.6 *Central Tendencies Measurement of Financial Inclusion*

Question	Sample Size, N	Mean	Standard Deviation	Mean Ranking	Standard Deviation Ranking
A1	384	4.40	0.788	2	3
A2	384	4.38	0.769	3	4
A3	384	4.43	0.755	1	5
A4	384	4.28	0.824	5	2
A5	384	4.32	0.864	4	1

The table 4.6 shows that while A3 is the lowest standard deviation (0.755), it also contains the greatest mean (4.43). Then, A4 gets the lowest mean (4.28), whereas A5 contains the biggest standard deviation (0.864).

4.1.2.2 Digital Financial Services

Table 4.7 *Central Tendencies Measurement of Digital Financial Services*

Question	Sample Size, N	Mean	Standard Deviation	Mean Ranking	Standard Deviation Ranking
DFS 1	384	4.39	0.729	4	3
DFS 2	384	4.48	0.726	2	4
DFS 3	384	4.41	0.776	3	2
DFS 4	384	4.51	0.719	1	5
DFS 5	384	4.31	0.837	5	1

Secondly, Table 7.4 shows that DFS 4 obtains the lowest standard derivative (0.719) and the biggest mean value (4.51). DFS 5 obtains the lowest value of mean, 4.31 and the highest value of standard derivative, 0.837.

4.1.2.3 Financial Literacy

Table 4.8 *Central Tendencies Measurement of Financial Literacy*

Question	Sample Size, N	Mean	Standard Deviation	Mean Ranking	Standard Deviation Ranking
FL 1	384	4.24	0.874	3	3
FL 2	384	4.38	0.745	1	4
FL 3	384	4.23	0.905	4	2
FL 4	384	4.18	0.926	5	1
FL 5	384	4.38	0.741	1	5

According to Table 4.8, FL2 and FL5 obtain the highest mean of 4.38 and FL5 obtains the smallest standard derivation of 0.741. FL4 has the smallest mean which is 4.18 and the highest standard deviation of 0.926.

4.1.2.4 Financial Attitude

Table 4.9 *Central Tendencies Measurement of Financial Attitude*

Question	Sample Size, N	Mean	Standard Deviation	Mean Ranking	Standard Deviation Ranking
FA 1	384	4.5	0.712	1	5
FA 2	384	4.29	0.842	5	1
FA 3	384	4.37	0.781	3	2
FA 4	384	4.37	0.757	3	4
FA 5	384	4.41	0.763	2	3

Table 4.9 shows that FA 1 obtains the smallest standard deviation (0.712) and the largest mean (4.5).

Then, FA 2 has the lowest average value of 4.29 but the largest standard derivation which is 0.842.

4.1.2.5 Regulatory Environment

Table 4.10 *Central Tendencies Measurement of Regulatory Environment*

Question	Sample Size, N	Mean	Standard Deviation	Mean Ranking	Standard Deviation Ranking
RE 1	384	4.26	0.825	5	1
RE 2	384	4.29	0.814	4	4
RE 3	384	4.30	0.820	3	3
RE 4	384	4.35	0.801	1	5
RE 5	384	4.32	0.823	2	2

Table 4.10 shows that while RE 4 consists of the smallest value for standard deviation (0.801), it has the greatest mean (4.35). Then, RE 1 consists of the smallest value of mean (4.26) and the largest value of standard deviation (0.825).

4.1.2.6 Technology Infrastructure

Table 4.11 *Central Tendencies Measurement of Technology Infrastructure*

Question	Sample Size, N	Mean	Standard Deviation	Mean Ranking	Standard Deviation Ranking
TI 1	384	4.51	0.723	1	4
TI 2	384	4.49	0.726	2	3
TI 3	384	4.49	0.719	2	5
TI 4	384	4.31	0.789	5	1
TI 5	384	4.41	0.780	4	2

Table 4.11 indicates that TI1 has the highest mean (4.51). Furthermore, TI 4 obtains the largest variation based on standard deviation (0.789) but having the smallest mean value (4.31), whereas TI 3 has the lowest standard deviation (0.719).

4.2 Scale Measurement

4.2.1 Reliability Test

Table 4.12 *Cronbach's Alpha Reliability Analysis*

No.	Name of the Variable	Number of Items	Cronbach's Alpha	Reliability Test
1	Financial Inclusion	5	0.839	Excellent
2	Digital Financial Services	5	0.859	Excellent
3	Financial Literacy	5	0.849	Excellent
4	Financial Attitude	5	0.806	Excellent
5	Regulatory Environment	5	0.866	Excellent
6	Technology Infrastructure	5	0.827	Excellent

Based on Table 4.12, most variables were considered to have very good or excellent Cronbach's Alpha. Since all variables had Cronbach's Alpha between 0.80 to 0.90, this study can conclude that the response for each of the respondents was consistent. The variable of regulatory environment had the highest Cronbach's Alpha (0.866). Even the lowest Cronbach's Alpha by financial attitude has value above 0.80 (0.806).

4.3 Preliminary Data Analysis

4.3.1 Multicollinearity Test

Table 4.13 *Tolerance Value and Variance Inflation Factor (VIF)*

Independent variables	Collinearity statistics	
	VIF	Tolerance
Digital Financial Services	2.361	0.423
Financial Literacy	2.298	0.435
Financial Attitude	2.942	0.340
Regulatory Environment	2.577	0.388
Technology Infrastructure	2.586	0.387

Based on the VIF multicollinearity test result, the highest VIF is 2.942 and the lowest VIF is 2.361. Since all VIF values of this research are below 5, it indicates that the problem of multicollinearity is less likely to occur in between all independent variables, which are DFS, financial literacy, financial attitude, regulatory environment and technology infrastructure in the present model.

The results of the tolerance multicollinearity test show that 0.387 is the lowest tolerance and 0.435 is the greatest. All tolerance values in this research are above 0.1, it indicates low multicollinearity and more reliable result.

4.3.2 Normality Test

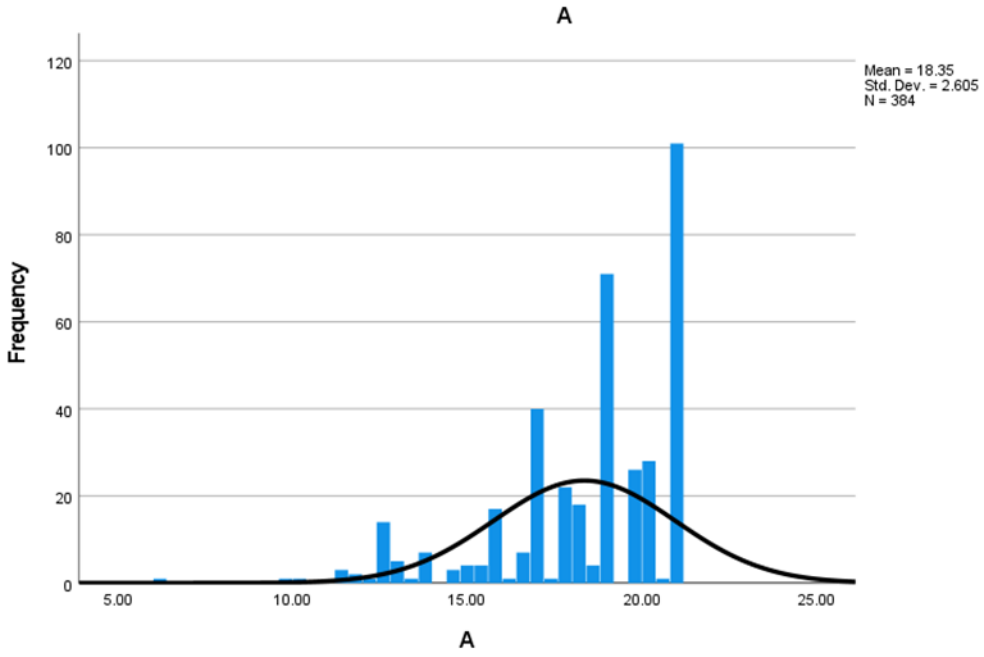
Table 4.14 *Normality Test Result*

Variables	Skewness	Kurtosis
DV: Financial Inclusion	(1.213)	1.436
IV 1: Digital Financial Services	(1.764)	4.819
IV 2: Financial Literacy	(1.057)	0.760
IV 3: Financial Attitude	(1.208)	1.892
IV 4: Regulatory Environment	(1.114)	1.085
IV 5: Technology Infrastructure	(1.354)	1.854

According to the result, the highest skewness is -1.057 while the lowest skewness is -1.764. Since all skewness in this model are in between acceptable range of -2 and +2, it signifies that all data follows a normal distribution.

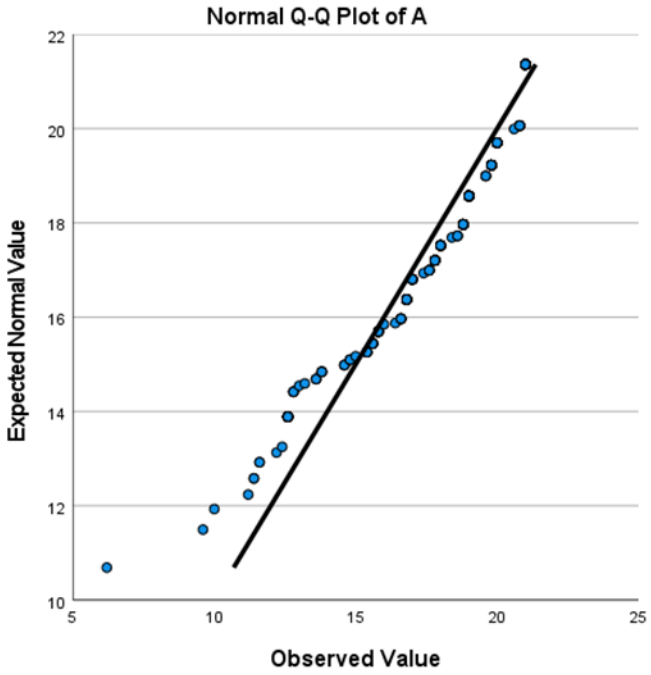
The results of the normality test show that the lowest kurtosis is 0.760 and the highest kurtosis is 4.819. As all the values of kurtosis in this model fall between the acceptable ranges of -7 and +7, the positive outcome indicates that the data obtained is normal and consistent.

Figure 4.6 *Histogram*



Besides, figure above is to check the data obtained meets criteria of standard deviation. In many research articles, newspapers, and other publications, quantitative data is often analysed by a histogram. The histogram was displayed by using the information from the dependent variable, financial inclusion by measuring the assessment of young entrepreneurs to financial support. The distribution plot is approximately bell-shaped, as the diagram illustrates. Consequently, the data is regarded as normally distributed.

Figure 4.7 *Normal Q-Q plot*



Additionally, Q-Q plot, another type of graphical tool is also utilised to determine whether the data is normally distributed. It is plotted to detect the difference between the predicted and observed values (Yue, 2016). All data points in the Q-Q plot are considered to be close to the straight line determined by Figure 4.7. Thus, the pattern shows that the result forms a normal distribution.

4.4 Inferential Analysis

4.4.1 Pearson Correlation Coefficient Analysis

Table 4.15 *Pearson Correlation Coefficient Analysis*

Correlations

		DFS	FL	FA	RE	TI	A
DFS	Pearson Correlation	1	0.637**	0.707**	0.608**	0.637**	0.694**
FL	Pearson Correlation	0.637**	1	0.614**	0.690**	0.623**	0.654**
FA	Pearson Correlation	0.707**	0.614**	1	0.685**	0.729**	0.726**
RE	Pearson Correlation	0.608**	0.690**	0.685**	1	0.678**	0.714**
TI	Pearson Correlation	0.637**	0.623**	0.729**	0.678**	1	0.753**
A	Pearson Correlation	0.694**	0.654**	0.726**	0.714**	0.753**	1

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

The degree of correlation between five independently variable (FL = Financial Literacy, FA = Financial Attitude, RE = Regulatory Environment, and TI = Technology Infrastructure) and dependent variables (A = Financial Inclusion) was displayed in Table 4.15.

Based on the result, digital financial services had a significant correlation with financial inclusion as its P-value is less than $\alpha = 0.01$. In addition, the Pearson Correlation (0.694) indicates that there is a high positive correlation between DFS and financial inclusion among young entrepreneurs in Malaysia.

Besides, the analysis also revealed the significant correlation happens in between the two independent variable, financial literacy and the dependent variable, financial inclusion. The P-value which has a value lower than 0.001 shows there is statistically significant effect on financial inclusion. Moreover, the Pearson Correlation (0.654) also revealed that there is high positive correlation between financial literacy and financial inclusion among young entrepreneurs in Malaysia. However, financial literacy had the lowest level of correlation with financial inclusion compared to other independent variables.

Furthermore, table above shows financial attitude statistically significant impact on financial inclusion since its P-value is below 0.001. Among young entrepreneurs in Malaysia, the results of this research showed that there is a significant and positive correlation between the dependent variable, financial inclusion and the independent variable, financial attitude, as indicated by the Pearson association (0.726).

Apart from this, the result highlights a significant correlation between regulatory environment and financial inclusion among young entrepreneurs in Malaysia. The P-value of lesser than 0.001 emphasises the result is significant in statistics. In detail, its Pearson Correlation (0.714) shows the high positive correlation between regulatory environment and financial inclusion since it falls between 0.6 to 0.79.

Additionally, technology infrastructure also has a significant correlation with financial inclusion. Since the P-value is lower than $\alpha = 0.01$, we can conclude that technology infrastructure has statistically significant impact on financial inclusion among young entrepreneurs in Malaysia. In truth, the Pearson Correlation (0.753) is between 0.6 to 0.79. Therefore, there is high positive correlation between technology infrastructure and financial inclusion. Among all independent variables, technology infrastructure has the highest level of correlation with financial inclusion.

4.4.2 Multiple Regression Analysis

Equation 2

$$A_i = 0.270 + 0.201DFS_i + 0.082FL_i + 0.168FA_i + 0.197RE_i + 0.334TI_i$$

Where A_i = Financial Inclusion

DFS_i = Digital Financial Services

FL_i = Financial Literacy

FA_i = Financial Attitude

RE_i = Regulatory Environment

TI_i = Technology Infrastructure

Table 4.16 *Coefficients Multiple Regression*

	Beta	Std. Error	t	Sig
(C)	0.270	0.626	0.431	0.667
DFS	0.201	0.044	4.520	< 0.001*
FL	0.082	0.038	2.125	0.034*
FA	0.168	0.052	3.258	0.001*
RE	0.197	0.042	4.630	< 0.001*
TI	0.334	0.049	6.867	< 0.001*
R-squared		0.697		
Adjusted R-squared		0.693		
F-test		173.692		
P-value		0.000		
Durbin Watson		1.976		

Notes: * represents significant at $\alpha = 0.05$

According to Table 4.16, adjusted R-squared value (0.697) highlights that all independent variables (DFS, FL, FA, RE, TI) can be explained 69.70% by financial inclusion among young entrepreneurs in Malaysia. Associated to this result, there is 30.30% cannot be explained in this study. All independent variables and dependent variables have positive correlation as F-value and P-value provided in the table above are 173.692 and 0.000 separately. The model is considered

credible as the ANOVA test's p-value is less than the predetermined significance level of 0.05. Durbin Watson value of 1.976 also indicates that there is a positive autocorrelation as 1.976 is below 2.0.

The results revealed that the first independent variable, digital financial services (DFS) have significantly impact on financial inclusion. Since the P-value of DFS (< 0.001), DFS is significantly and positively impact on financial inclusion. This result is proved by many previous studies and DFS is important for financial inclusion because high accessibility of digital financial services can help and encourage undeserved population to explore the financial or banking services compared to traditional banks. The result is similar to Ebong and George (2021) and Adugna (2024) as these studies also found that DFS had positive and significantly impact on the financial inclusion.

In addition, the result also emphasizes that financial literacy has significantly and positively impact on financial inclusion among young businessmen in Malaysia due to the P-value of 0.034. This happens because it can directly affect individual's motivation to make financial decision, hence lead to frequently use of financial services, like financial inclusion. This result is similar to Irman et al. (2021) and Cuandra and Anjela (2021) as these studies found that people who have financial knowledge would encourage them to highly access to financial services.

Moving on, financial attitude also had significant and positively impact on financial inclusion among young entrepreneurs in Malaysia. This can be proved when its P-value is 0.001. The result is similar to some studies, such as Arifin et al. (2019) and Stella and Rmachandran (2022). This is because individuals with positive financial attitude can build their proactive engagement, hence they are more likely to access the financial services for future growth.

Similarly, regulatory environment also had significant and positively impact on financial inclusion among young entrepreneurs in Malaysia with a P-value smaller than 0.001. Results obtained are consistent with Nutassey et al. (2023) and Anarfo et al. (2020). In fact, a stable and secure

regulatory framework can encourage financial institution to expand their services to underserved population, and all individuals will be safe to use.

Technology infrastructure has a strong positive influence on financial inclusion among Malaysia young businessmen, as shown by a p-value of less than 0.001. This finding has been confirmed by Hussein (2020) and Menza et al. (2024). With this intention, technology infrastructure enables widespread of accessibility to financial services. High level of convenience and affordable also add value to technology infrastructure in promoting financial services.

In conclusion, all independent variables are positively and significantly impact on financial inclusion among young entrepreneurs in Malaysia since their P-values are less than the 0.05 level of significance.

4.5 Conclusion

In overall, this section includes tables and pie charts to present the findings of all independent and dependent variables. It also interprets respondent demographics, scale measurements, inferential analysis, and the development of a regression equation using SPSS software. The following chapter will delve into the study's primary discoveries, implications, limitations, and recommendations.

CHAPTER 5: DISCUSSION AND CONCLUSION

5.0 Introduction

This section expands outcomes in the previous chapter. First, results of the key discoveries are described. Second, implications for how the findings can be utilised are discussed. At last, the study's shortcomings and recommendations for further research are highlighted.

5.1 Major Findings

5.1.1 Digital Financial Services and Financial Inclusion

According to the results of the inferential analysis, digital financial services have a significant impact to the financial inclusion among young entrepreneurs in Malaysia. The results of Adugna (2024), Ebong and George (2021), and Bongomin et al. (2019) are in agreement with this.

Digital financial services are a key factor affecting financial inclusion as they provide speed and convenience to meet the needs of the public, which leads to easier access to financial services or products such as transactions, credit, payments and savings (European Commission, 2024). Besides that, the rise of digital financial services has narrowed the gap of physical access to financial services, providing easier access to financial services, especially in underserved areas (Aziz & Naima, 2021). Digital financial services promote financial inclusion, but young entrepreneurs still face challenges in accessing digital financial services. Young entrepreneurs often do not have a long-term financial trajectory and lack the creditworthiness, collateral, and other qualifying conditions required by financial institutions (Salim et al., 2020). This hinders

young entrepreneurs from accessing more advanced digital financial services such as credit (Salim et al., 2020). Despite the availability of digital financial services, young entrepreneurs have limited access to more advanced digital financial services (World Economic Forum, 2022). This gap highlights the need for customised financial products and services that specifically address the needs and conditions of young entrepreneurs.

5.1.2 Technology Infrastructure and Financial Inclusion

Lastly, the result of this study also indicated the significant impact of technology infrastructure on financial inclusion among young entrepreneurs in Malaysia. This result is consistent with Hussein (2020), Fanta and Makina (2019) and Menza et al. (2024).

In this study, technology infrastructure has a significant impact on the financial inclusion. This is because technological infrastructure is the driver of digitalisation, providing the hardware and software to support business in the financial sector (Simplilearn, 2024). Digital financial services are used by the public because of the support of digital infrastructure as users need to utilise the software and hardware of digital infrastructure to use digital financial services. It contributes significantly to financial inclusion and has a positive impact (Hussein, 2020; Fanta and Makina, 2019; Menza et al., 2024). Many studies have proved that the lack of digital infrastructure will affect the inability of digital financial services to be fully utilised, thus leading to the failure of the country's financial inclusion to progress (Kusumawati et. al, 2022; Mpofu, 2024; Chamboko, 2024). Therefore, technological infrastructure is one of the important factors in promoting financial inclusion.

5.2 Implications of the Study

Firstly, financial attitude can significantly impact on financial inclusion. A good financial attitude can increase the intention of people to manage finance and explore to financial services. Most people's financial attitude may easily be influenced by their family, friends and education

institutions. However, when people have been educated the benefits of financial services, they can be more likely to access and explore financial services. To increase young entrepreneurs' financial attitude, academist can do more research regarding to financial inclusion and innovative financial services that are customized to their needs. Besides, academist can also facilitate some mentorship and networking program. The program can provide a platform for young entrepreneurs and financial experts to exchange information and access to financial resources. Furthermore, academists can also collaborate with financial institutions to launch the workshops and seminars because it can provide detail finance education and guidelines to young entrepreneurs, such financial management.

In addition, technology infrastructure is also a key to affect financial inclusion. Young entrepreneurs always enjoy the convenience and flexibility of technology infrastructure. High speed of network and user-friendly software will encourage more customers to access to financial products and services. To improve technology infrastructure, it is a need for technology companies to offer more affordable software and internet services that can fulfil the needs of young entrepreneurs. For example, technology companies can provide some discounts or rebates to young entrepreneurs to subscribe the software and services as this can reduce their burden. Technology companies can also provide technical support to their customer to troubleshoot the technical problem. On the other hand, telecommunication companies also play a crucial role to provide and maintain stable internet connectivity by expanding the broadband access in some rural area.

Moreover, digital financial service (DFS) is also a significant factor to influence financial inclusion. Young entrepreneurs prefer to use digital financial services when it is more affordable and convenient to be used. Some benefits of digital financial services such as 24 hours accessible and lower transaction costs will encourage customers to access digital financial services rather than traditional financial services. To improve digital financial services, banking industry can analyse the user behaviour and provide the services that meet the specific needs of young entrepreneurs, which includes digital loans, payment process and financial management tools. Technology companies can also improve the cybersecurity standard to provide higher level of protection against users' financial data. This can help the financial institutions to increase their customer'

confidence, including young entrepreneurs. Technology companies and financial institutions can also collaborate in digital financial services platform. For instance, technology companies can improve the interface by simplifying navigation and providing clear guidelines based on the behavioural data that provided by banks.

Lastly, financial inclusion is also affected by regulatory environment. Effective regulation can encourage users, especially young entrepreneurs to access the financial services. Government regulation can help the customers to build their trust on the financial services. To improve regulatory environment, government or policymakers can encourage young entrepreneurs to access the financial services by distributing subsidies and welfare digital payments. Policymaker can establish a framework to support the development of microfinance to the young entrepreneurs. In order to maintain the effectiveness of policy or framework, policymaker should amend the framework from time to time. Apart from that, government should also set a target to all financial institutions to ensure their services are meet the needs of customers, including young entrepreneurs.

In conclusion, all parties should take their responsibility to develop financial inclusion and make it popular in the whole country, either in city area or rural area. Successful development of financial inclusion will assist more young entrepreneurs to start up and expand their business. This can increase their competitiveness and ability to compete in the domestic and foreign market. However, this study not only can assist users to explore potential digital finance, but also help financial institutions and policymakers to better understand the users' behaviour. Throughout this study, they will be able to implement potential strategies to enhance financial inclusion. Therefore, underserved population will have opportunity to explore and access to the financial services which tailored to their needs.

5.3 Limitations of Study

In this chapter, this study's limitations will be recognised and examined. Firstly, this study only offers basic knowledge about how digital financial services (DFS) affect young entrepreneurs'

access to finance in Malaysia. This research investigates the direct relationship between the dependent variable, financial inclusion and the independent variables, digital financial services (DFS), financial literacy, financial attitude, technological infrastructure and regulatory framework without considering the possibility of moderators and mediators.

Secondly, quantitative research is utilised in this study. Thus, it is difficult to analyse the participants' opinions in detail by applying survey questionnaire as the data collected is limited to options given. Quantitative research is utilised in this research because it not only allows researchers to gather a large volume of data in a more affordable and efficient way, but it also protects participants confidentiality. However, due to the Likert Scale's limitations, the collected data is insufficient to accurately reflect all respondents' satisfied agreement or disagreement degree.

5.4 Recommendations

Moving on, recommendations will be given for the limitations stated above. Since this study provides a basic understanding about the significant impacts of digital financial services on financial inclusion for young entrepreneurs in Malaysia, researchers are encouraged to undertake more comprehensive studies to explore deeper on this topic. The findings of this research prove that financial inclusion is important to be improved for a better overall economy through assistance of the five independent variables, which are digital financial services, technological infrastructure, financial literacy, financial attitude, and regulatory environment. Thus, deeper exploration on relationship between these variables is recommended to be done in future research. For example, future researchers may conduct mediation and moderation to archive advance understanding of this topic, making contributions to academic field and society.

Besides, future studies should consider incorporating qualitative methods alongside surveys to address the limitations of the quantitative research design. Focus groups and in-depth conversations can give fuller, deeper understandings into participants' opinions and observations,

supplementing numerical data from surveys. This mixed-methods approach can assist researchers to overcome the constraints of the Likert Scale, offering a more comprehensive understanding of respondents' attitudes and ensuring that their levels of agreement or disagreement are accurately captured. Additionally, qualitative methods can enhance the interpretation of survey results, leading to more robust and actionable findings.

5.5 Conclusion

In conclusion, this study's primary objective is to investigate how DFS affects young Malaysian entrepreneurs' access to finance. Data were collected and analysed after the distribution of questionnaires, and SPSS was used for data analysis. All the hypotheses, from H1 to H5, are supported by the data. This demonstrates that the digital financial services, financial literacy, financial attitude, regulatory environment and technology infrastructure have significant impacts on the financial inclusion. The implications of these studies are presented, and these results are thoroughly addressed. Lastly, the study's limitations are discussed and suggestions for more research are considered. Therefore, this study might give useful insights for future research on respondent selection, data collection, and variable selection.

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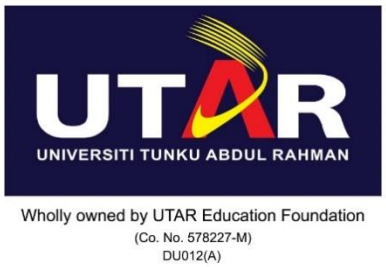
Appendices

Appendix 3.1 *Survey Questionnaire Permission Letter*



UNIVERSITI TUNKU ABDUL RAHMAN

FACULTY OF BUSINESS AND FINANCE

DEPARTMENT OF BANKING AND RISK MANAGEMENT

Final Year Project

Title of Topic: The Impact of Digital Financial Service on Financial Inclusion among Young Entrepreneurs in Malaysia

Dear Respondent,

Greetings! We are final year students of the Bachelor of Business Administration (Hons) in Banking and Finance programme at Universiti Tunku Abdul Rahman (UTAR). We are currently conducting a questionnaire for our final year research project. The purpose of the questionnaire is to study "The Impact of Digital Financial Services on Financial Inclusion among Young Entrepreneurs in Malaysia".

This survey consists of three parts, namely Section A to Section C.

You are kindly invited to answer all the questions. The estimated time to complete the questionnaire is approximately 5 to 10 minutes.

Your cooperation in completing the survey is greatly appreciated. Thank you for your participation.

Feel free to contact us if you have any inquiry:

Gan Xin Ying (017-7854202)
Loh Xin Yi (011-25553314)
Ng Kha Xuan (016-7183188)

PERSONAL DATA PROTECTION STATEMENT

Please be informed that in accordance with Personal Data Protection Act 2010 ("PDPA") which came into force on 15 November 2013, Universiti Tunku Abdul Rahman ("UTAR") is hereby bound to make notice and require consent in relation to collection, recording, storage, usage and retention of personal information.

Notice:

1. The purposes for which your personal data may be used are inclusive but not limited to:-

· For assessment of any application to UTAR
· For processing any benefits and services
· For communication purposes
· For advertorial and news
· For general administration and record purposes

· For enhancing the value of education
· For educational and related purposes consequential to UTAR
· For the purpose of our corporate governance
. For consideration as a guarantor for UTAR staff/ student applying for his/her scholarship/ study loan

2. Your personal data may be transferred and/or disclosed to third party and/or UTAR collaborative partners including but not limited to the respective and appointed outsourcing agents for purpose of fulfilling our obligations to you in respect of the purposes and all such other purposes that are related to the purposes and also in providing integrated services, maintaining and storing records. Your data may be shared when required by laws and when disclosure is necessary to comply with applicable laws.

3. Any personal information retained by UTAR shall be destroyed and/or deleted in accordance with our retention policy applicable for us in the event such information is no longer required.

4. UTAR is committed in ensuring the confidentiality, protection, security and accuracy of your personal information made available to us and it has been our ongoing strict policy to ensure that your personal information is accurate, complete, not misleading and updated. UTAR would also ensure that your personal data shall not be used for political and commercial purposes.

Consent:

1. By submitting this form you hereby authorise and consent to us processing (including disclosing) your personal data and any updates of your information, for the purposes and/or for any other purposes related to the purpose.

2. If you do not consent or subsequently withdraw your consent to the processing and disclosure of your personal data, UTAR will not be able to fulfill our obligations or to contact you or to assist you in respect of the purposes and/or for any other purposes related to the purpose.

( ) I have been notified by you and that I hereby understood, consented and agreed per UTAR above notice.

( ) I disagree, my personal data will not be processed.

Appendix 3.2 *Survey Questionnaire Sample*

Section A: Demographic Profile

1. Gender
- Male
- Female

2. Age
- 20-23
- 24-26
- 27-29
- 29 and above

3. Ethnicity
- Malay
- Chinese
- India
- Others:

4. State
- Johor
- Pahang
- Melaka
- Negeri Sembilan
- Kelantan
- Terengganu
- Perak
- Perlis
- Kedah
- Sabah
- Sarawak
- Penang

5. What is your income level per month?
- Below RM800
- RM800 – RM1200
- RM1300 – RM1500
- Above RM1500

6. Have you heard about financial inclusion?
- Yes
- No

Section B: Independent Variables

i. **Digital Financial Services**

This section aims to know how the digital financial services affect your accessibility to the financial inclusion. Digital financial services refer to a broad range of financial services that accessed and delivered through digital channel.

Kindly respond to each question by putting the tick sign in the box which is best reflects your opinions. The scores are used to shows the degree of strength of your feeling. You may choose any number from 1 to 5, where 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree.

Constructs	Adoption of Measurement Items	
Digital Financial Services	DFS 1	I would enjoy using digital financial services.
	DFS 2	I would consider using digital financial services due to its convenience.
	DFS 3	I believe using digital financial services is a smart idea.
	DFS 4	I intend to continue using digital financial services in the future if it is useful and convenient.
	DFS 5	I believe the application procedure of digital financial services is quite transparent and simple.

(Reference: Lee et al. (2023))

ii. **Financial Literacy**

This section aims to know how the financial literacy affect your accessibility to the financial inclusion. Financial literacy refers to the ability to understand and manage personal finance effectively.

Kindly respond to each question by putting the tick sign in the box which is best reflects your opinions. The scores are used to shows the degree of strength of your feeling. You may choose any number from 1 to 5, where 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree.

Constructs	Adoption of Measurement Items	
Financial Literacy	FL 1	I am knowledgeable with the features and functionalities of digital financial services apps.
	FL 2	I am aware of the risks and security precautions that come with utilizing digital payment methods.
	FL 3	I understand how to handle common issues with digital financial transactions.
	FL 4	I am familiar with the terms and concepts used in digital financial services.
	FL 5	I compare prices when making a purchase.

(Reference : Amnas et al. (2024) & Vieira et al. (2020))

iii. **Financial Attitude**

This section aims to know how the financial attitude affect your accessibility to the financial inclusion. Financial attitude refers to individual's beliefs, feelings, and behaviors towards money and financial matters.

Kindly respond to each question by putting the tick sign in the box which is best reflects your opinions. The scores are used to shows the degree of strength of your feeling. You may choose any number from 1 to 5, where 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree.

Constructs	Adoption of Measurement Items	
Financial Attitude	FA 1	I believe the way that I manage my money will affect my future.
	FA 2	I think it is more satisfying to save money than spend it for the future.
	FA 3	I see the use of digital banking is a good idea.
	FA 4	I find the use of digital banking an interesting idea.
	FA 5	It is important to set goals for the future.

(Reference: Nguyen (2020) & Vieira et al. (2020))

iv. **Regulatory Environment**

This section aims to know how the regulatory environment affect your accessibility to the financial inclusion. Regulatory environment refers to the set of laws, regulations, and policies that govern a particular industry or sector.

Kindly respond to each question by putting the tick sign in the box which is best reflects your opinions. The scores are used to shows the degree of strength of your feeling. You may choose any number from 1 to 5, where 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree.

Constructs	Adoption of Measurement Items	
Regulatory Environment	RE 1	I will be influenced by government initiatives and policies when I use digital financial services.
	RE 2	I will be more inclined to use digital financial services due to the government promoting the advantages of digital financial services.
	RE 3	I will gain greater security and confidence in using digital financial services due to government support.
	RE 4	Government support has led to significant improvements in my accessibility and affordability of digital financial services.
	RE 5	I will be more active in the use of digital financial services due to the education campaigns of the government.

(Reference : Vieira et al. (2020))

v. **Technology Infrastructure**

This section aims to know how the technology infrastructure affect your accessibility to the financial inclusion. Technology Infrastructure refers to the underlying framework of hardware, software,

networks, and facilities that support the operation of information technology services within an organization or society.

Kindly respond to each question by putting the tick sign in the box which is best reflects your opinions. The scores are used to shows the degree of strength of your feeling. You may choose any number from 1 to 5, where 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree.

Constructs	Adoption of Measurement Items	
Technology Infrastructure	TI 1	Technology allows me easier to access to financial services.
	TI 2	My bank's technology enables me to complete transactions quickly.
	TI 3	My bank's technology enables me to make online transactions conveniently, saving time on going to the physical bank.
	TI 4	My bank's technology provides sufficient information.
	TI 5	My bank's technology is accessible beyond regular business hours.

(Khek et al. (2020))

Section C: Dependent Variable

Financial inclusion refers to the accessibility and availability of financial services to all individuals and businesses. This section is going to understand your acknowledgement about financial inclusion.

Kindly respond to each question by putting the tick sign in the box which is best reflects your opinions. The scores are used to shows the degree of strength of your feeling. You may choose any number from 1 to 5, where 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree.

Constructs	Adoption of Measurement Items	
Financial Inclusion	A1	I have more access to financial products and services due to digital financial services
	A2	I have increased my ability to save and invest more money due to the development of digital financial
	A3	I can now transfer and receive money easier due to the development of digital financial services.
	A4	I have greater availability of credit and loans due to the development of digital financial services
	A5	I use digital financial services without having to consider socioeconomic status.

(Reference : Vieira et al. (2020))

Appendix 4.1 *Descriptive Analysis Result*

Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Female	230	59.9	59.9	59.9
	Male	154	40.1	40.1	100.0
	Total	384	100.0	100.0	

Age

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	20-23	220	57.3	57.3	57.3
	24-26	96	25.0	25.0	82.3
	27-29	68	17.7	17.7	100.0
	Total	384	100.0	100.0	

Ethnicity

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Chinese	364	94.8	94.8	94.8
	Indian	11	2.9	2.9	97.7
	Malay	9	2.3	2.3	100.0
	Total	384	100.0	100.0	

State

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Johor	103	26.8	26.8	26.8
	Kedah	15	3.9	3.9	30.7
	Kelantan	16	4.2	4.2	34.9
	Melaka	13	3.4	3.4	38.3
	Negeri Sembilan	21	5.5	5.5	43.8
	Pahang	19	4.9	4.9	48.7
	Penang	50	13.0	13.0	61.7
	Perak	99	25.8	25.8	87.5
	Perlis	12	3.1	3.1	90.6
	Sabah	8	2.1	2.1	92.7
	Sarawak	16	4.2	4.2	96.9
	Terengganu	12	3.1	3.1	100.0
	Total	384	100.0	100.0	

What is your income level per month?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Above RM 5,000	43	11.2	11.2	11.2
	Below RM2,000	136	35.4	35.4	46.6
	RM2,000 – RM3,000	83	21.6	21.6	68.2
	RM3,000 – RM4,000	73	19.0	19.0	87.2
	RM4,000 - RM5,000	49	12.8	12.8	100.0
	Total	384	100.0	100.0	

Appendix 4.2 *Reliability Test*

Results for Digital Financial Services

Reliability Statistics

Cronbach's Alpha	N of Items
.859	5

Item Statistics

	Mean	Std. Deviation	N
I would enjoy using digital financial services.	4.39	.729	384
I would consider using digital financial services due to its convenience.	4.48	.726	384
I believe using digital financial services is a smart idea.	4.41	.776	384
I intend to continue using digital financial services in the future if it is useful and convenient.	4.51	.719	384
I believe the application procedure of digital financial services is quite transparent and simple.	4.31	.837	384

Results for Financial Literacy

Reliability Statistics

Cronbach's Alpha	N of Items
.849	5

Item Statistics

	Mean	Std. Deviation	N
I am knowledgeable with the features and functionalities of digital financial services apps.	4.24	.874	384
I am aware of the risks and security precautions that come with utilizing digital payment methods.	4.38	.745	384
I understand how to handle common issues with digital financial transactions.	4.23	.905	384
I am familiar with the terms and concepts used in digital financial services.	4.18	.926	384
I can use digital financial services efficiently and securely when I have basic financial concepts.	4.38	.741	384

Results for Financial Attitude

Reliability Statistics

Cronbach's Alpha	N of Items
.806	5

Item Statistics

	Mean	Std. Deviation	N
I believe the way that I manage my money will affect my future.	4.50	.712	384
I think it is more satisfying to save money than spend it for the future.	4.29	.842	384
I see the use of digital banking is a good idea.	4.37	.781	384
I find the use of digital banking an interesting idea.	4.37	.757	384
I think using digital banking makes it easier for me to manage my finances and transactions.	4.41	.763	384

Results for Regulatory Environment

Reliability Statistics

Cronbach's Alpha	N of Items
.866	5

Item Statistics

	Mean	Std. Deviation	N
I will be influenced by government initiatives and policies when I use digital financial services.	4.26	.825	384
I will be more inclined to use digital financial services due to the government promoting the advantages of digital financial services.	4.29	.814	384
I will gain greater security and confidence in using digital financial services due to government support.	4.30	.820	384
Government support has led to significant improvements in my accessibility and	4.35	.801	384

affordability of digital financial services.			
I will be more active in the use of digital financial services due to the education campaigns of the government.	4.32	.823	384

Results for Technology Infrastructure

Reliability Statistics

Cronbach's Alpha	N of Items
.827	5

Item Statistics

	Mean	Std. Deviation	N
Technology allows me easier to access to financial services.	4.51	.723	384
My bank's technology enables me to complete transactions quickly.	4.49	.726	384
My bank's technology enables me to make online transactions conveniently, saving time on going to the physical bank.	4.49	.719	384
My bank's technology provides sufficient information.	4.31	.789	384
My bank's technology is accessible beyond regular business hours.	4.41	.780	384

Results for Financial Inclusion

Reliability Statistics

Cronbach's Alpha	N of Items
.839	5

Item Statistics

	Mean	Std. Deviation	N
I have more access to financial products and services due to digital financial services	4.40	.788	384

I have increased my ability to save and invest more money due to the development of digital financial	4.38	.769	384
I can now transfer and receive money easier due to the development of digital financial services.	4.43	.755	384
I have greater availability of credit and loans due to the development of digital financial services	4.28	.824	384
I use digital financial services without having to consider socioeconomic status.	4.32	.864	384

Appendix 4.3 *Multicollinearity Test*

Coefficients[a]

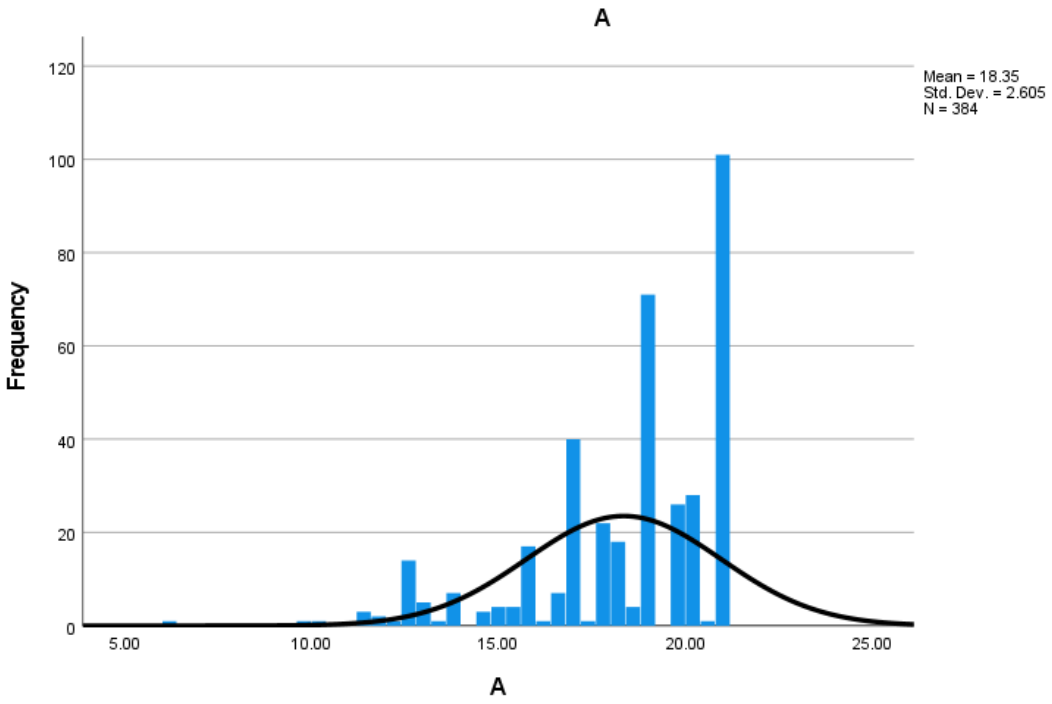
Model		Unstandardized Coefficients		Standardized Coefficients			95.0% Confidence Interval for B		Collinearity Statistics	
		B	Std. Error	Beta	t	Sig.	Lower Bound	Upper Bound	Tolerance	VIF
1	(Constant)	.270	.626		.431	.667	-.962	1.501		
	DFS	.201	.044	.197	4.520	<.001	.113	.288	.423	2.361
	FL	.082	.038	.091	2.125	.034	.006	.157	.435	2.298
	FA	.168	.052	.158	3.258	.001	.067	.269	.340	2.942
	RE	.197	.042	.211	4.630	<.001	.113	.280	.388	2.577
	TI	.334	.049	.313	6.867	<.001	.238	.429	.387	2.586

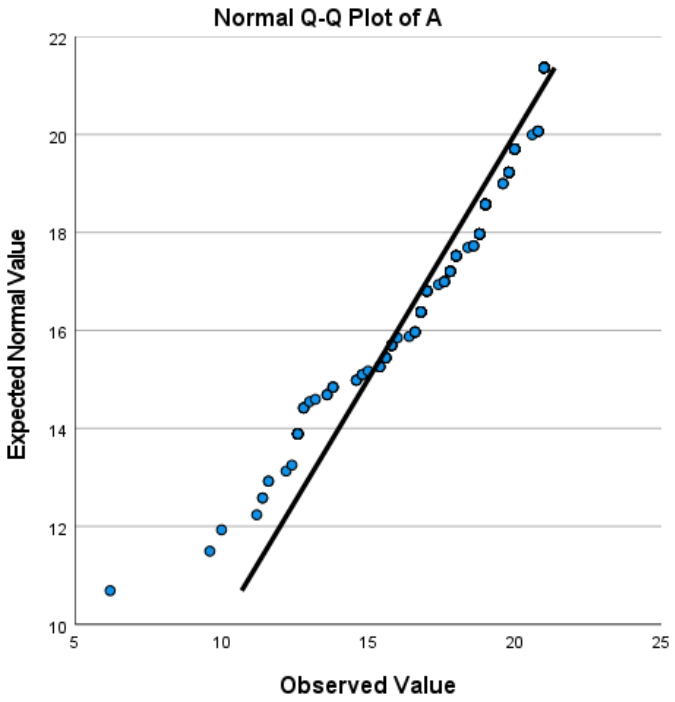
a. Dependent Variable: A

Appendix 4.4 *Normality Test*

Descriptive Statistics

	N	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
DFS	384	18.6542	2.55451	-1.764	.125	4.819	.248
FL	384	17.9073	2.91096	-1.057	.125	.760	.248
FA	384	18.4188	2.45615	-1.208	.125	1.892	.248
RE	384	18.0719	2.78954	-1.114	.125	1.085	.248
TI	384	18.6823	2.44075	-1.354	.125	1.854	.248
A	384	18.3542	2.60483	-1.213	.125	1.436	.248
Valid N (listwise)	384						


A
Mean = 18.35
Std. Dev. = 2.605
N = 384
Frequency
120
100
80
60
40
20
0
5.00
10.00
15.00
20.00
25.00
A


Normal Q-Q Plot of A
Expected Normal Value
22
20
18
16
14
12
10
5
10
15
20
25
Observed Value

Appendix 4.5 *Pearson Correlation Coefficient*

Correlations

		DFS	FL	FA	RE	TI	A
DFS	Pearson Correlation	1	.637**	.707**	.608**	.637**	.694**
	Sig. (2-tailed)		.000	.000	.000	.000	.000
	N	384	384	384	384	384	384
FL	Pearson Correlation	.637**	1	.614**	.690**	.623**	.654**
	Sig. (2-tailed)	.000		.000	.000	.000	.000
	N	384	384	384	384	384	384
FA	Pearson Correlation	.707**	.614**	1	.685**	.729**	.726**
	Sig. (2-tailed)	.000	.000		.000	.000	.000
	N	384	384	384	384	384	384
RE	Pearson Correlation	.608**	.690**	.685**	1	.678**	.714**
	Sig. (2-tailed)	.000	.000	.000		.000	.000
	N	384	384	384	384	384	384
TI	Pearson Correlation	.637**	.623**	.729**	.678**	1	.753**
	Sig. (2-tailed)	.000	.000	.000	.000		.000
	N	384	384	384	384	384	384
A	Pearson Correlation	.694**	.654**	.726**	.714**	.753**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	
	N	384	384	384	384	384	384

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

Appendix 4.6 *Multiple Regression Analysis*

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.835[a]	.697	.693	1.44391	1.976

a. Predictors: (Constant), TI, FL, DFS, RE, FA

b. Dependent Variable: A

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1810.632	5	362.126	173.692	.000[b]
	Residual	788.081	378	2.085		
	Total	2598.713	383			

a. Dependent Variable: A

b. Predictors: (Constant), TI, FL, DFS, RE, FA

Residuals Statistics[a]

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	7.8715	20.8598	18.3542	2.17428	384
Residual	-6.31019	6.47026	.00000	1.43445	384
Std. Predicted Value	-4.821	1.152	.000	1.000	384
Std. Residual	-4.370	4.481	.000	.993	384

a. Dependent Variable: A

*Circle

BF / RK

(APPENDIX G)

UNIVERSITI TUNKU ABDUL RAHMAN
FACULTY OF BUSINESS AND FINANCE
UNDERGRADUATE FINAL YEAR PROJECT [FYP]

FYP Report Assessment Form

Group No: 24BF03J

FYP Title:
The Impact of Digital Financial Services on Financial Inclusion among Young Entrepreneurs in Malaysia

Name of Student:	Student ID	Marks **(100%)**
1. Gan Xin Ying	2106124	
2. Loh Xin Yi	2106041	
3. Ng Kha Xuan	2105931	

	Assessment Criteria	**Maximum Mark**	**Awarded Mark**
1. Introduction [20%]	Research Background	**5%**	
	Research Problem	**8%**	
	Research Objective(s) and/ or Research questions	**3%**	
	Research significance	**4%**	
2. Literature Review [20%]	Review of theories and/ or past empirical model	**5%**	
	Review of variables &/ or construction of conceptual model	**7%**	
	Hypothesis development	**8%**	
3. Research Method [12%]	Research design	**3%**	
	Sampling design/ diagnostic checking	**3%**	
	Data collection procedures	**3%**	
	Proposed data analysis	**3%**	
4. Data Analysis, Findings and	Descriptive analysis*	**5%**	

Interpretation [20%] **Inclusive of tables and figures*	Inferential analysis*	**10%**	
	Interpretation of findings	**5%**	
5. Conclusion and Implications [18%]	Discussion on key findings	**5%**	
	Research implications	**10%**	
	Limitation and recommendation	**3%**	
6. Overall Presentation of the Report [10%]	Referencing style	**5%**	
	Writing skills	**5%**	
Total		**100%**	

Remarks:

Penalty will be imposed on the various forms of academic misconduct. Refer to **Section 12.0** in FYP Guideline for further details.

1st Examiner / 2nd Examiner *

* Delete whichever not applicable.

Remarks:

_____

_____

_____

_____

_____

_____

Name: _____

Signature: _____

Date: _____