FINANCIAL TECHNOLOGY AND SUSTAINABILITY STRATEGIES: IN THE PERSPECTIVE OF BANKING INDUSTRY IN MALAYSIA

by

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DECLARATION

DECLARATION

This work has not previously been accepted in substance for any degree and is not being concurrently submitted in candidature for any degree.

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STATEMENT 1

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ABSTRACT

The fourth Industrial Revolution features natural deterrents in executing the fourth business unrest model, affecting the banks' sustainability. A system innovation known as disruptive innovation effectively changes an established system or industry by adding practicality, ease of access, comfort, and an economical cost. In the financial services sector, this has entirely changed and enabled the rise of a new financial technology trend (FinTech). However, FinTech problems cause the banks to suffer from adapting to digitalisation without knowing its impacts on their personal, internal, and external assets, which could endanger the survival of the banks. Therefore, this research investigates the effects of FinTech on sustainability strategies with a resource-based view (RBV) as a mediator in Malaysia's banking industry and develops an impact model based on that relationship. The relationship is based on the resource-based view theory and sustainable development theory, in which FinTech is identified as a resource that leads to banking sustainability. The RBV focuses on the company's internal resources to perceive those properties, abilities, and skills with the potential to supply superior competitive benefits. The method used for this study was a questionnaire survey that was given out to 125 employees in the asset, financial, and payment departments of 39 banks, including commercial banks, retail banks, and investment banks. In order to estimate the parameters of the research model and meet the study's goals, the data from the questionnaire was analysed using PLS-SEM path modelling. The findings indicated that FinTech has a favourable impact on RBV and sustainability plans. The RBV also plays a key role in the impact of sustainability measures and serves as a bridge between FinTech and sustainability strategies. This shows that FinTech and sustainability methods are being used in Malaysia's banking sector, which is transforming slowly by delivering a variety of products that can be accessed digitally. The study's shortcomings include the fact that only a small number of factors were examined and that the data was gathered from workers in a single division of the Malaysian banking sector. In future research, it is advised to use other samples in order to obtain a different perspective on the environment of the study and other variables for a fuller analysis and generalisation of the findings.

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INTRODUCTION

1.1 Introduction

Financial institutions have a crucial role in enhancing economic performance by channelling funds from resource surplus components to those with more productive investment opportunities (Amornkitvikai & Harvie 2018; Tabash 2018). According to Schwert (2018), these financial institutions also play a vital role in the trade and payment system by substantially lowering the cost of transactions and increasing convenience. He also mentioned that most financial institutions operated traditionally in ancient times, like banks.

Traditional banking is a financial company committed to handling the money deposited by its clients in custody. On the other hand, the bank uses the money to lend it to individuals or businesses, charging them interest. Essentially, this is the economic practise to which conventional banking has consistently been devoted. A traditional bank has headquarters and branches spread throughout the countries in which it operates. At first, traditional banks were chosen because they were easy to get to and had face-to-face customer service (Me 2017).

According to the 2016 Global Consumer Banking Survey, which polled 55,000 bank clients in 32 countries, 60% said they would like to visit a physical branch or communicate with an actual individual to buy a new financial product or request advice regarding a financial related matter. With their emphasis on in-person customer service,

traditional banks are proven to be more trustworthy than banks that lack brick-and-mortar operations. This is mainly where bank clients would like to open their accounts (Tan, Hamid, & Chew 2017).

As the internet has become an essential part of everyone's existence, it has increased digital-technology development in some countries. According to Tan, Hamid and Chew (2017), the digital era in Malaysia is characterised by the growing use of the internet by society. Malaysia has a population of 32.4 million and, according to Global Digital Report Data (2020), there were 26.69 million internet subscribers in Malaysia in January 2020. The number of internet users in Malaysia increased by 919 thousand between 2019 and 2020, and internet penetration in Malaysia stood at 83% in January 2020.

In other words, over half of Malaysians have internet access (Malaysian Communication and Multimedia Commission 2013). Therefore, modern Malaysians carry out their daily activities through intensive technology use, such as online transactions or online banking via smartphones or laptops. People nowadays carry out their everyday tasks, like purchasing food to eat, booking seats at the cinema, or even booking e-hailing cars, through the convenience of their smartphones and internet access. Due to the presence of these technologies, they feel their activities have become more assisted and efficient.

This phenomenon is due to a system innovation known as a disruptive innovation (Christensen et al. 2018). Disruptive innovation effectively changes an established system or industry by adding practicality, ease of access, comfort, and an economical cost (Schmidt & Druehl 2018). This is also the case in the financial services sector, which has

changed the financial services industry's global landscape. Starting from the structure of its industry, its intermediation technology has become a marketing model for the consumer. This has entirely changed and enabled the rise of a new financial technology trend (FinTech) (Schmidt & Druehl 2018).

Due to this, traditional banking has been displaced, resulting in the rise of FinTech companies that have transformed the economy by introducing cryptocurrency usage in their transactions (Dierksmeier et al. 2018). Indriasari (2019) mentioned that digital banking is of the utmost importance to modern consumers. Traditional banking sectors are when, with emerging technologies, they have to adapt to the latest financial technology concept called FinTech. It is a financial combination of a technology or a computer-based application that makes financial services appear to be more available and flexible to the customer, with or without the intervention of financial institutions (Kasiewicz 2017).

Traditional financial technologies and the banking industry have undergone a massive transition over the last decade, and FinTech, a new form of financial technology, is a creative and evolving field that has drawn attention from both the media and investors. The essence of financial services in banks, insurers, and asset management firms is being redefined by innovations such as artificial intelligence and cryptocurrencies (Feyen et al. 2021). The FinTech Disruptor Report (2017) analysis found that financial institutions estimate that up to one-third of their existing revenues may be at risk from FinTech developments. This effect can make a conventional institution partner with FinTech institutions or become a FinTech solution provider to remain active.

Personnel's banking industry is evolving with many product innovations and solutions. Consumer demands have been primarily driven by these innovative ideas and have continued to increase cost constraints, and varying regulations have significantly affected traditional services. Addressing the banking industry's response to FinTech can be pretty challenging for many bank institutions. Anagnostopoulos (2018) stated that FinTech is a minor warning to the banking industry with its rapid growth and disruptive effects on conventional financial institutions.

Business administration, on the other hand, makes use of knowledge of corporate financial management, capital markets, and risk management concepts and practises in addition to mathematical and strategic skills to promote organisational growth. The resource-based view (RBV) serves as a mediator in the banking industry, and the aim of this study is to determine how FinTech affects sustainability strategies in this context. Therefore, this topic is one of the most significant ones that can provide business professionals with the tools they need to advance and take the lead in the current global business environment.

1.2 Industry Background

Banking is an industry that handles cash, loans, and other financial transactions. Banks can store credit and extra cash in a safe location. We have savings plans, deposit certificates, and account auditing. Banks lend by deposit and borrow externally in the event their deposits weaken. Other loans include mortgages, industrial loans, and car loans. Banks can be categorised according to the commercial enterprises they transact with. Commercial banks offer support forms for personal businesses. Retail banks lend executive credit, shopping, and cash to people and households. There are fewer monetary institutions in the city than commercial ones. These banks are primarily focusing on the local sector, have excellent client support, and build client relationships. Internet banking gives these services throughout the network worldwide. E-banking, online banking, and net banking are also known as the market.

Many other banks also provide services online. Several banks' services are only available online. They can offer a cost savings to the customer because they do not have branches. Savings and loans are specialised bank structures that encourage affordable ownership of residential property. These banks will also give depositors a higher loan fee to collect funds for contract loans. Customers have their own credit unions.

The system of ownership allows them to offer low-cost, more personalised services. Investment banking seeks mutual financing through initial public stock shares or bonds. They also promote acquisitions and mergers. Merchant banking provides the same small business services. They sell mezzanine money, bridge financing, and credit products for corporations. Islamic banks also do not trade with or offer financial support to alcohol

and gambling firms. Borrower's profit-share with the lender, rather than interest fees. For this reason, Islamic banks averted the high-risk asset classes accountable for the financial conflict of 2008.

Throughout three millennia, two key components of banking's historical role in expediting commercial transactions have emerged: geographical bridging and resolving disparities in time preferences. Differences in financial transaction periods are managed where banks take out loans with temporary surplus cash from private individuals and businesses (i.e., from pay check to pay check or if money holders accumulate money for a significant potential outlay) or if entities are setting up or receiving benefits from efficient inventory and equipment investments.

Depositors are paid with free access or low checking fees to their checking accounts. With deposits returnable only over a certain period (i.e., on savings accounts and deposit certificates), they are paid when the banks pay interest. Banks take money received as deposits and lend it to short-term consumers with a cash fee for the service. The gap between the interest (plus fees) earned by the banks and the interest received, lower operating costs, and the costs of defaulted loans influence the banks' profitability.

For at least two centuries, bankers have understood that funds deposited with them are seldom withdrawn concurrently so that they can leverage their cash reserves and lend at several times the interest paid on them (or deposited with private or public central banks). Banking has experienced a surge of deregulation. Congress repealed the Glass-Steagall Act in 1999. The legislation prohibited the use of ultra-secure deposits by commercial banks for risky investments. Even after its repeal, the distinctions between investment and commercial banks continue to be uncertain. Many commercial banks have

started making derivatives investments, including mortgage-subsidized securities.

The 1994 Riegle-Neal International Banking and Branching Improvement Act brought about yet another change in legislation. The Act eliminated international banking restrictions. This abolition required the nationalisation of regional central banks. Big banks were swallowing up smaller ones because they struggled to gain market share. Through the financial crisis of 2008, a small number of large banks in America occupied much of the banking sector's assets. This reorganisation affected the collapse of several banks. These had to be rescued by the federal government. If it had not, the setbacks of the banks would have put the U.S economy itself in jeopardy.

Now, let us look at the Malaysian banking industry. The notion of Islamic finance was first stated in Malaysia on January 1, 1969, with the actions of the regional level of the Islamic saving establishment, known as the Lembaga Tabung Haji, Pilgrims Management and Fund Council, 1969 (Kaleem 2000). Malaysia is the first nation to develop a dual banking structure, i.e., conventional and Islamic finance, and there were 17 Islamic banks in 2013, consisting of six international banks and 11 domestic banks (Ali & Raza 2018). Any Islamic financial institution and banking administration in Malaysia has the authority of the Shariah Advisory Council, which Malaysia's central bank controls, i.e., Central Bank.

The terrible problems and difficulties with Islamic banking in Malaysia are those issues suggested by Islamic banks in Malaysia that typically customers do not completely understand and embrace; the key reason behind them is the insufficiency of Islamic banks' scholarly and trained experts (Muneeza et al. 2019). Islamic banks in Malaysia are using other ideas that clash with Shariah law, such as Bay-al-Dayn and Dawa, to add that a large

number of Islamic researchers in the Middle East cannot help but overlap with Islamic banking researchers in the constant provision of this standard (Mahdzan, Zainudin, & Au 2017).

In 2007, Malaysia was second in Sukuk with a 31% global share (New Horizon 2008). An investigation into Islamic banking in Malaysia has been completed, as Muneeza et al. (2019) stated, and it has been found that Islamic banking has a negative profit-sharing effect. There is no difference between the profits and losses of Malaysia's traditional and Islamic banks. He further argues that the evolution of Islamic banking in Malaysia is due to the revival of Islamic banking around the world.

1.3 Research Background

The Industrial Revolution was a period of significant industrialization and invention in the late 1700s and early 1800s (Mcphee, Hudson, & Allahar 2017). According to McPhee, Hudson and Allahar (2017), the Industrial Revolution started in Great Britain and spread quickly worldwide. History has recorded three phases of the industrial revolution: the First Industrial Revolution used steam and water to mechanise and boost demand.

The Second Industrial revolution used electricity to establish mass production, while advanced electronics and information technology have been utilised to automate production (PwC 2017). The digital revolution began during the Fourth Industrial Revolution, based on the third, and took place in the middle of the last century. It is characterised by a fusion of technologies that blurs the distinction between the economic, physical, biological, and digital realms (World Economic Forum 2016).

The evolution of Industrial Revolution 4.0 (IR4.0) has impacted the world in total. The transformation of manufacturing from the conventional method of work into digitalisation and a sophisticated approach by assimilating computers and machines into the daily routine system (Ellahi, Ali Khan, & Shah 2019; Hussin 2018; Lele & Innovation 2018; Bahrin et al. 2016; Roblek, Meko, & Krape 2016). For example, the adoption of technology and the automation of machine processes in the FinTech industry help people perform their tasks better. MDEC (2022) reported that a global World Bank 2016 study on Digital Adoption Index highlighted that Malaysia was generally competitive in the sub-indexes of Governance and People. However, MDEC (2022) added that there remain areas

that could be improved in the business subindex.

According to MDEC (2022), digitalisation is pervasive, consistently evolving and generally varied across companies in different fields, business domain and perhaps even location. The digitalisation era has changed the way business activities will extend well, acquire more pay, increase the number of clients, and diminish the operational expenses of time, cash, and human mistakes (Tang & Veelenturf 2019; Lee, Falahat, & Porter 2018; Eling & Lehmann 2017). The majority of organisations have shifted to digitalisation to contribute to the economy's advancement and the positive experience of digitalisation, including the financial sector. IR 4.0 would significantly affect each industry. The financial part is not spared from this, as IR 4.0 acquaints digitalisation with banking administrations and procedures that fill in as empowering agents, as well as focusing on a smoother client experience and calibrating internal procedures of the bank itself (Lewkowicz & Liron 2019; Alaloul et al. 2018).

The historical backdrop of the banking industry in Malaysia dates back to the nineteenth century. In those days, in 1867, it was during British local time that the Straits Settlement rose, along with Penang, Malacca, and Singapore. English trader groups have been engaged in exchanging exercises between Penang and Singapore. Because of its vital area and port offices, Penang was a centre point for banks. Graphed Bank was the first to be established in 1875, followed by Hong Kong Bank in 1884. Generally, the Malaysian banking industry's operationalization comprises systems, fit counters, and long lines while bank workers at the counters engage the buyers.

Malaysia is a developing Southeast Asian country with multiracial and strict foundations (Ziegenhain 2018). With a populace of more than 30 million, Malaysia is the world's 44th most crowded nation, as Kuala Lumpur is the national capital and biggest city, while Putrajaya is the seat of the central government (National 2015). Malaysia has experienced rapid monetary and social development, particularly since gaining its freedom in 1957. At first, Head Administrator Tun Dr Mahathir Muhammad wanted to make an advanced economy by 2020. He accepted that an advanced economy would be the principal motor of improvement and development in Malaysia.

Like Japan and the Republic of Korea, Malaysia is driving a computerised economy compared to the other ASEAN nations (Universal Telecommunication Union 2017). According to Prime Minister's Department (2019) through Malaysia Digital Economy Blueprint 2019, the time has come for Malaysia to lay the foundations for the country’s transformation towards an advanced digital economy to ensure that no Malaysian is left behind to catch the wave of digitalisation. Fundamentally, data and communication technology (ICT) have fuelled the whole business by making it more profitable and allowing for more advanced innovation. In the future, these technologies are expected to grow at an exponential rate.

As Malaysia moves towards its objective of turning into a developed country by 2020, an expanding number of Malaysians have gained access to the web or computerised way of life and have joined other advanced residents around the globe. There were roughly 26.69 million internet clients in Malaysia by January 2020. The number of Malaysian internet clients has expanded by 919 thousand between 2019 and 2020, and web infiltration in Malaysia remained at 83% in January 2020 (Global Digital Report Data

2020).

This rapid change in consumer behaviour pushes banks to digitise their business operations rapidly. To remain competitive and relevant, banks need to digitise their front-end rapidly and back-end IT processes to meet today's expected consumer experiences. Most aspects of the banking and financial sectors' global environment are now undergoing digital transformation to improve their customers' experiences and remain essential to their competitive edge. As part of the world economy, Malaysia is also rapidly catching up with these changing trends.

To such an extent that the computerised approach has supplanted the ordinary activity into a robotized banking process, limiting clients' holding time as clients do not need to visit the bank, and the bank itself can extend their support of the outside branch premises (Kasiewicz 2017; Milder, Scherr, & Bracer 2015). For instance, a computerised teller machine and a charge card increase the utilisation of online exchange and instalment entryway exchange. Advanced financial business transformation has improved the quality and sufficiency of banking administrations for the buyer and the global exchange (Zhang, Zuo, & Tao 2018; Lacy et al. 2015).

Harchekar (2018) indicated that online banking is probably the best act of digitalisation in the bank. Online banking is otherwise called virtual banking, web banking, or e-banking, which gives customers scope of administration. For instance, it is helpful for individuals to move cash, direct bill instalments, create virtual stores, and offer the adaptability of dealing with their records using an online methodology. Furthermore, the exchange has moved to cashless, information-driven, energetically advanced investigation, advantageous banking administrations, decreased human blunders, reduced

treatment of huge holes, and closed the gap between rural and urban areas.

As per the ASEAN Channel Strategy 2015, Singapore's exploration indicated that 73% of clients need simple, quick banking access consistently and anywhere. Then again, 69% requested charge and administration transparency, and 62% agreed to customised administrations (Changchit, Lonkani, & Sampet 2017). The findings revealed that clients are now aware of changes in digitalisation and the shift toward computerised services rather than traditional banking administrations.

From different points of view, the use of advanced innovation in the bank has turned into a prerequisite for the bank and its workers themselves. For example, the use of Customer Resource Management (CRM), Human Resource Information Management System (HRIMS), and Enterprise Resources Planning (ERP) to smoothen the bank's working business (Ali et al. 2018; Ahmer 2016; Rul, Magalhes, & Chapter 2015). Adopting a computerised strategy causes the bank to oversize help and update back-office forms with more mechanisation.

Since 1998, banks and money-related establishments in Malaysia have developed and utilised the financial blast. This has brought about the extraordinary rivalry between significant players in the business, each expecting banks to continually see the advantage of building their wallet's offer, income, and eventually gainfulness (Islamic Financial Services Board 2015). The fast advancement of the computerised economy drives up development, intensity, and development openings in the monetary business.

Progressing and receiving advanced advances and coordinating them into action plans are essential for banks to arrive at a more extensive scope, rapidly enter new markets, and comprehend purchasers' necessities entirely, prompting higher gainfulness and

adaptability (Owens 2017; Suri 2016). This incorporates both advertising and digitalisation procedures. So, this study has led to research on the complexity and manageability of money-related innovations (FinTech) systems from the point of view of the banking industry in Malaysia, to make sure they can be kept up and are useful in the banking business.

1.4 Problem Statement

The performance and viability of the business administration sector are improved by FinTech, a biological system of technology-based organisations. The digitalisation of monetary authority could be characterised as FinTech (Masera 2018). The most recent banking innovations in terms of FinTech are chatbots, blockchains, tokens, and bitcoins, all of which have been deemed problematic from a FinTech perspective (Masera 2018). Pradhan et al. (2020) assert that a few advancements in FinTech should probably be detrimental to the company, which is why many branches have been shuttered and employees have been disconnected.

For instance, a disruptor in the commercial industry can damage the management positions and replace them with expensive technology, software, and interiors using other companies. Resource-Based View (RBV) focuses on identifying the internal resources of the organisation that have the potential to offer superior competitive advantages (Lubis 2022; Madhani 2010). Few people are aware of RBV's potential importance for the banking industry in terms of disruptive monetary technology and sustainability measures as of yet.

The sustainability of the bank is impacted by the fourth industrial revolution's (IR4.0) intrinsic barriers (Banna, Hassan & Rashid 2021) to implementing the fourth business unrest model. For instance, issues with data security are incorporated into another system and call for more access to those systems. Additionally, the limits of digital-physical interaction necessitate the use of online communication and correspondence rather than spoken communication to achieve and sustain all correspondence (Manser et

al. 2018). The absence of human asset work, however, could become a barrier to the absence of human jobs that pay well when new computerization replaces it.

Additionally, there is a loss of HR's capacity to grow and integrate into a state-of-the-art mechanisation system. Problems with FinTech may also lead to excessive competitiveness between competitors in the financial industry. Additionally, the bank is having trouble adjusting to digitization since it does not yet understand how it will affect its internal, external, and personal assets (Maresova et al. 2018). This can put the corporate enterprise's survival in peril. Following that, partners and financial specialists are typically unwilling to participate.

The rates of financial development are expected to continue to increase. The contentious issue is that when technology is prioritised by other writers who have access to data, HR tasks are simpler to manage. However, despite the e-HRM model's apparent advantages (Mahfod, Khalifa & Madi 2017), there are still a few possible dangers and problems connected to unauthorised access to and use of information. Anyone can access the databases' data, whether legally or unlawfully, and for a variety of reasons. In other words, staff and other stakeholders must accept the necessary modifications and guarantee that the new methods for applying HR practises are compatible with the technology system (Johnson & Gueutal 2011; Mishra & Akman 2010) before a certain FinTech function is implemented.

Given how technology has improved the organisation's human capital function, this may also have good effects on the workforce. People will be less critical as a result of technology and data use as FinTech intervenes in business operations with faulty technology (Lim et al. 2019). It is important to manage and modify technology while

taking into account the demand for HR within the firm. Therefore, it is crucial to conduct this study to identify long-term, problem-sensitive strategies to apply FinTech in Malaysia's banking sector. This demonstrates how crucial banks are to their clients and how they support their economic growth in Malaysia.

The eminent academics have independently examined these issues with FinTech and sustainable approaches in the interim. These topics are the subject of ongoing discussion, which adds to the body of knowledge. The researcher thus examines these issues from a variety of perspectives from the perspective of Malaysia's banking sector. Every nation in the world recognises the banking sector as being crucial. Financial innovation can benefit the financial system by enabling market completeness, mitigating market friction, boosting the quality and variety of financial services, enhancing risk diversification, and improving market efficiency (Beck et al. 2016). This study's gap could be filled by determining Malaysia's viewpoint on these concerns.

Furthermore, the integration of RBV's social and environmental components with sustainable development makes this study crucial. Other than the issues encircled by both international and Malaysian banking highlighted earlier, earlier studies found that the other researchers looked at these theories individually, and the results were not fully achieved. As past studies have demonstrated, very little work has been done, especially in the Malaysian banking industry, model development is essential to further research in this study. So, by include these pertinent theories in its methodology, this study takes the lead. This explains to readers how the methodology employed in this study was applied to close the gap identified in this study.

The researcher then goes one step further in creating a model that makes use of FinTech to look at how RBV affects sustainability plans in the Malaysian banking sector. This work makes a significant advancement in the body of knowledge by creating a model.

1.5 Research Questions

The research questions were developed according to the objectives outlined. Hence, the research questions for this study are:

i) What is the relationship between FinTech and sustainability strategies in the banking industry?

ii) What is the relationship between FinTech and RBV in the banking industry?

iii) What is the relationship between RBV and sustainability strategies in the banking industry?

iv) How to develop a model that fits the independent variable (FinTech), mediator (RBV) and dependent variables (sustainability strategies)?

1.6 Research Objectives

This study investigates the effects of FinTech on sustainability strategies in which the resource-based view (RBV) is a mediator in the banking industry. In achieving the goal of this study, two principal theories were implemented throughout this study: the fundamentals of RBV and the sustainable development theory that places emphasis on the environment and society. There are specific objectives developed in support of the primary goal of this study. These objectives are:

i) To examine the relationship between FinTech and sustainability strategies in the banking industry

ii) To identify the relationship between FinTech and RBV in the banking industry

iii) To assess the relationship between RBV and sustainability strategies in the banking industry

iv) To determine the model fit among the independent variable (FinTech), mediator (RBV) and dependent variables (sustainability strategies)

1.7 Significance of the Study

This section discusses the significance of the study reflected in the problem statement. Each statement of the problem outlined has a specific outcome that contributes to the body of knowledge. In past studies, prominent scholars independently addressed these FinTech disruption issues and sustainability strategies. The discussion of these issues is continuously debatable in that it contributes continuously towards the body of knowledge. Hence, the researcher looks at different angles to examine these issues from the banking industry's perspective in Malaysia's perspective. The banking industry is known as an imperative industry in any country in the world. By embracing FinTech disruption, organisations may provide a unique experience and perspective to their stakeholders. The identification of Malaysia's perspective on these issues could address the gap that has been highlighted in this study.

Apart from that, this study is significant due to RBV and sustainable development theory, which are concerned with environmental and social aspects. Generally, according to past studies, these theories were examined separately by other scholars, and the results were not comprehensively obtained. So, this study tries to fill the gap it found by putting these important theories together in a way that makes sense and helps readers understand the method used in this study.

Moreover, the researcher takes a different step in developing a model that uses RBV as a mediator in investigating the effects of FinTech's disruption on sustainability strategies in Malaysia's banking industry. This study's model development is crucial to examine further, as previous studies showed minimal research, especially in the Malaysian

banking industry. It takes a giant leap for this study to develop a model that contributes to the body of knowledge.

Another issue that is growing more frequent as the number of financial products and the complexity of those products increases is the requirement for a new skill set for bank employees and advanced business models. The hiring and utilisation of a substantial number of specialists in risk management, information technology, personnel resources, treasury, and foreign exchange, among others, would be required by public sector banks (PSBs). Recruiting and retaining such expertise will be a significant challenge for public sector organisations (Treesa 2021).

To close the gap, employees who constantly emphasise skill development and transformation are required. When it comes to learning new processes and abilities, the process is typically extensive and time-consuming, impacting existing work assignments and having a parallel impact on banking operations. Employees expect support from banks and top authorities during the protracted process of transformation and development and this poses different problems for the workforce (Koch & Hirth 2019; Just & Weber 2015).

While the skill transformation and development process are delayed, employees expect assistance from bank management and senior authorities. This creates an extra challenge for the workforce (Khin & Ho 2019). A decrease in this expense fosters reliance on technological advancement. However, many talented workers are constantly being incredible benefactors who are versatile enough to propel rehearsals with their current responsibility by investing enormous energy in getting to know the progress. However, because of the organised instalment system in the financial industry, workers, despite having advanced abilities, are not viewed as receiving adequate compensation, which

reduces their motivation to pursue higher positions.

One of the weakest links in banking workers' HR policies is career planning, which leads to problems due to a lack of knowledge about their careers and a reluctance to accept new developments. Anagnostopoulos (2018) conforms and sufficient time supply pressures employees to provide items on time, even with a partial understanding of the project, placing project delivery at risk. With both the emergence of technology in the banking business and sufficient training being necessarily based on the strength of the workforce, the workforce must be exposed to training at the appropriate moment.

Employees expressed their discontent with their training and claimed they lacked skilled teachers or training materials. Despite this, it has been demonstrated that training can be deceptive and diverge from the precise job domain. If the effectiveness of the training is not evaluated once it has been done, it will not provide adequate assistance to human resources. Because of that, financial institutions strive to maintain a high level of competence and professionalism to serve their customers better.

As a result of technology improvements, the banking industry has seen substantial transformations in customer service and new product creation. When introducing new human resources practices, private-sector banks are more agile. As a result, the banking industry has recognised that success in the new environment will be defined by the ability of banks to harness and utilise human potential and talents.

The competency-based approach to human resource management focuses on identifying, characterization, and evaluating individual variances in abilities necessary for successful job performance to maximise organisational effectiveness. A further challenging issue has been identified as job management, with existing occupations

requiring first-learning knowledge of advanced fields and then experiencing the consequences of this information on the current work plan.

1.8 Operational Definition

This section lists the operational definition of a few frequently used terminologies in this study.

i) Sustainability strategies: In the banking business, sustainability strategies are decisions that banks make about what products and services to offer customers that take into account the effects their actions will have on the environment and society.

ii) Environmental sustainability: Environmental sustainability is the first element of sustainability strategies. It refers to the preservation of energy resources, access to renewable resources, and improvement in the capacity to deal with events and environmental changes. It also refers to the conservation of ecosystems (land, air, and water).

iii) Social sustainability: Social is the second element of sustainability strategies. It alludes to social fairness and equity in the allocation of economic and natural resources. Additionally, it fosters social interaction and community involvement, increases cultural diversity, and supports the protection of human rights.

iv) Financial technology (FinTech): FinTech is a term for a group of new business models and new technologies that could change the way financial services are provided.

v) Resource-Based View (RBV): RBV examines and analyses an organisation's

resources to determine how it might achieve a competitive advantage over time. The RBV emphasises the company's concept of difficult-to-copy qualities as a source of better efficiency and competitive advantage.

vi) Financial resources: Financial resources is the first element of RBV. It refers to the collection of funds that are at the disposal of the bank and consist of equity capital of the bank, borrowed and borrowed funds, received by the bank on the terms of urgency (a certain date), against compensation, and used to provide the full range of banking services.

vii) Physical resources: Physical resources are the second element of RBV. These resources can be the information technology (IT) infrastructures, such as value-added logistics services (Lai 2004), logistics ICT (Chapman, Soosay & Kandampully 2003), and physical IT assets, as physical resources which enable logistics facilities as a competitive advantage (Abdul Aziz et al. 2015). From the perspective of Friend and Zehle (2009) and Henry (2008), physical capital resources are physical assets that are owned by a firm or organisation, which can be measured by a branch network.

viii) Human resource: Human resource is the third element of RBV. It is the collective skills and knowledge of the total workforce of an organisation that holds economic value for the organisation.

1.9 Thesis Structure

The researcher has organised the whole thesis accordingly to attract the reader's attention to the context and concept of this study. The researcher begins by introducing Chapter 1 with an attentive introduction to seize the reader's mind and give them an overall picture of what the study is all about. Then, the researcher describes the background of the study and organisational background that consists of location, sample, population, and the framework of this study in-depth to ensure the reader understands the overall concept of this study.

Next, the researcher addresses the issues and gaps of this study in the problem statement essential to creating the objectives and research questions of this study. The direction of this study is based on the objectives outlined that would bring the significance of the study towards different angles, especially to the banking industry in Malaysia. The researcher has also explained the exact meaning of the term, which is important for the reader to understand the terms used in this thesis.

In Chapter 2, the researcher enlightens the reader about the literature review of this study. The systematic literature review was conducted in detail to get the overall concept of this study. The researcher deliberates on the study's key concepts, which begin with an explanation of the sustainability strategies as the dependent variable, FinTech as the independent variable, and the resource-based view (RBV) as the mediator. Then, this chapter focuses on the related theories, research framework and a summary of the hypotheses.

Furthermore, in Chapter 3, the researcher elaborates on the methodology that would act as a "heart" for this study. The researcher must be selective and specific in the method used in this study to achieve the objectives. Hence, the quantitative method is a research design that involves 39 banks as a population. Further, the researcher conducts a purposive sampling that focuses on 125 employees in a specific department: an asset, financial, and payment department. Specific instrumentation has been adapted and adopted for this study related to this study's objective: sustainability strategies, FinTech, and the RBV-VRIN questionnaire. Later in this chapter, the researcher discusses the data analysis and data collection technique.

In Chapter 4, the findings obtained were deliberated in detail to answer each research question stated previously in Chapter 1. The researcher conducts descriptive analysis followed by the Pearson Correlation Coefficient for research questions 1 to 3. Meanwhile, for research question 4, the researcher conducts PLS-SEM to develop a specific model that involves all the variables in this study. This chapter was structured with numbers and statements, requiring the researcher to systematically report to avoid missing data or value jeopardising the result. All the results obtained in the previous chapter were comprehensively discussed to assist the reader in understanding every aspect and angle of the research conducted.

Chapter 5 discusses the findings of the study. The discussion begins with the demographic profiles of respondents after recapitulating the study. Then, this chapter discusses the findings based on four research objectives.

Chapter 6 encompasses the recommendations and concludes the study. The study's implications are the focus of this concluding chapter. Theoretical and practical

implications were examined. Then, in this chapter, the limitations are highlighted, with suggestions for future research. The study is then finished with this chapter.

1.10 Conclusion

As many people are concerned about the application of technology and innovation that makes everything seem easy, it also affects the banking industry's ability to act the same in facing the industrial revolution 4.0. All the technologies developed from a physical visit to a few clicks on a smartphone make people feel the difference in dealing with the bank. FinTech evolves in tandem with innovation, bringing new perspectives to the banking industry to provide their customers with the most up-to-date products and services via social media, mobile apps, and so on.

Hence, this study was conducted to examine how the banking industry in Malaysia perceives FinTech and come up with sustainability strategies that could benefit the stakeholders at the end of the process. The main goal of this study is to come up with a model of how financial markets work.

CHAPTER TWO
LITERATURE REVIEW

2.1 Introduction

The chapter deals with analytical interpretations of central concepts and the critical evaluation of current theories on the connection between the theory, model, and variables selected to develop a precise conceptual framework for this study. This chapter also studies the relationship between Resource-Based View (RBV) and the banking sector and sustainability approaches. This chapter also talks about how RBV's role as a mediator in the banking sector affects how financial technologies are used to work toward sustainable development.

2.2 Financial Technology (FinTech)

Based on Google Trends (2018), the word "FinTech" has been attaining the status of a "breakout" query by more than 5000% worldwide. FinTech is an evolution that changes the current system and advertising to provide functional value, easy access, comfort, and cost adequacy. FinTech is a new economic field that blends technological and financial capacity. Technology applications benefit the financial sector by facilitating business, company, or partnership services delivered to retail consumers.

Financial and technical development (FinTech) gradually changes the financial institution structure. Artificial Intelligence (AI), blockchain, cloud computing, data analytics, and the Internet of Things (ABCD-I) are typically driving innovations in development that include financial services. FinTech is not surprising while paradigms in

many areas of the finance sector are changing. In any case, daily life changes as a third-party consumer who uses FinTech services such as Grab Pay or purchases goods with a credit card online.

FinTech is no longer a passing fad for this type of influence, but rather a true financial game-changer, with 83% of financial firms admitting that FinTech start-ups are sacrificing various aspects of their business (PwC 2017). This makes it important for financial institutions to look at their current business plans and fully understand FinTech (Lee & Jae 2018) in order to stay relevant in this region.

As cloud computing, open applications, and more accessible access to registrants and data servers arise, even small innovative developments can quickly transform new companies into attractive goods or services. FinTech activities cover different structures and elements of the financial sector. Saksonova and Kuzmina-merlino (2017) state that FinTech is an entity that uses technology to generate revenue by offering a financial role to customer service. Several reports clarify that financial innovation is vital for integrating financial services and technology elements.

The conventional financial services sector provides technology-centric new ventures and new business commitments (PwC 2017). Technology can enhance financial services by reducing costs, improving dynamics or productivity, and increasing access. Significantly lower costs for computing, storage, and systems, for example, would make it easier to evaluate and make sense of large amounts of data and improve access to financial services.

Technology and financial services collaboration can take two "directions." First, the advancement of FinTech involves financial services and products receiving technology for better assistance conveyance. Examples of FinTech advancement include the traditional brick-and-mortar banks using technology to maximise their assistance through ATMs, electronic banking, internet banking, mobile banking, and AI-based banking.

According to the study done by Prawirasasra (2018), FinTech is a combination of technology with financial features that shifts the business model and dampens the entry barrier. On the other hand, FinTech's approach to insurgency requires technology companies to revalue the financial action plan through systemic interventions and financial services distribution. Examples of insurgency include quick transactions, marketplace lending, and decentralised networks such as blockchains. However, financial and technological interlinkages have a long history.

Notwithstanding this, financial and technological development have previously been recognised and reinforced. The Global Financial Crisis (GFC) of 2008 was a juncture and is part of why FinTech is now evolving into a new standard. Alt, Beck, and Smits (2018) stated that this development poses difficulties for regulators and market committees alike, particularly in balancing the potential privileges of development with the potential consequences. The obstacle to this balancing act is hardly more critical than in the underdeveloped world, particularly in Asia.

Bower and Christensen (1995) call disruptive innovation "wild and unexpected adjustments that usually reinvent showcases by confronting new technologies." Examples of concerning technologies include (i) cell phones that have almost destroyed fixed-line

telephones (Bower & Christensen 1995), (ii) digital imaging that has sent down camera footage and made Kodak change its business model (Bower & Christensen 1995), (iii) online retail that bruises standard retail; online ticketing that has reinvented travel agents' business models (Bower & Christensen 1995); and (iv) MOOCs that represent a revolution in the business model of higher education (Bower & Christensen 1995).

Nevertheless, emerging innovations are not inherently revolutionary. It can also use existing technologies with a new business model. For example, Netflix has moved from sending DVDs on-demand to streaming content online (Ahmed et al. 2023). Complex and challenging developments usually place their first customers at the market base. They move up the value chain as successive refinements improve them to the point that they start to steal customers.

Over the last decade, the world of finance has noticed an increasing amount of transformative progress due to an empowering aggregate of technology and financial engineering. Tasks previously solved by physical cash and large computer systems are presently being entirely evolved into digital interfaces. Even as late as 2008, one complication was the time needed to clear outstation cheques. Many younger entrepreneurs are training in the middle of the financial sector and are changing how financial trading is completed.

Getting cash through a joint loaning club, shifting cash through autonomous payment networks against a financial institution, and contributing based on online tailored advice custom-built for special needs are entirely rendered conceivable by new companies. The help of a FinTech firm to fight cybercrime, which will track the identity of its customers on all networks (Feyen et al. 2021)—from cell phones to physical

industries—is a perfect example of the emergence of FinTech.

He (2018) reported the (usually) risky potential of a range of digital technologies for financial services, including blockchain, big data, and Robo Councilors, that interest the financial markets business. Not to mention that the number of high-frequency algorithms, new payment systems, online lending, and peer-to-peer credits has also increased. Financial development is an innovative opportunity in all industries. Price Waterhouse Cooperation identifies it as a dominant element of the convergence between financial and technology services divisions. The traditional financial services industry offers products and services to new companies and newcomers to the market that are focused on technology.

However, FinTech is no new paradigm, and more parameters should be understood. FinTech also is not an inherently novel development for the financial services industry (Arner, Barberis & Buckley 2015). The exchange of bonds that promote corporate fundraisers to create wholesale money markets transforms finance, often as a disturbing innovation, into FinTech that combines financial innovation with legal technology. Christensen, Raynor, and McDonald (2015) explained disruption as a process whereby a company with fewer resources is able to successfully challenge established incumbent businesses. Christensen, Raynor, and McDonald (2015) added that many popular writers invoke disruptive innovation to describe any new technology or startup that aims to shake up an industry and alter its competitive patterns; previously successful incumbents facing difficulties or going out of business are routinely said to have been disrupted.

2.3 Sustainability Strategies

One of the main areas related to the discourse on sustainable development is innovation's position in strengthening sustainability. Innovation for sustainable development (SD) is a new phenomenon, specifically technological innovations that are growing rapidly in the financial services industry (Varga 2017). FinTech is a technological innovation for sustainable development in developing countries (Deng, Huang & Cheng 2019). In short, sustainability in business corresponds to the nature or culture of organisations. A sensible business strategy plans to strongly influence either of those territories so that some of the world's most pressing issues, such as environmental change and income inequality, can be resolved. The notion of sustainable progress was mainly expressed in conceptual writing from various perspectives.

The evaluation of various definitions of the concept of sustainable development shows that there is no precise and detailed definition that offers a clear and straightforward picture of the problem. This is due to the dynamic and multi-dimensional topic of sustainability being considered an integrated cultural, environmental, social, and structural viewpoint. In today's intense competition, rapid technological advances, consumer demands, regulatory requirements, and demographic shifts in a dynamic business climate, global strategic managers see sustainable market growth as an alternative and a fully integrated process in their organisations' strategies and activities. Businesses around the world are digitising more and more, which is breaking down market barriers, creating new markets, and weakening traditional business models in the long run (Tornjanski et al. 2017; Tornjanski et al. 2015).

Those underlying forces put tremendous pressure on banks to adapt and adjust, shifting their strategic course and competition worldwide (Propa, Banwet, & Goswami 2018; Weill & Woerner 2013). As a result, the banking industry is undergoing a significant transformation to a structure that embraces the values of flexibility, openness, and customer-oriented focus, primarily on quality assurance and organisational structures of excellence. This is not just to achieve but to meet the needs of a wide range of stakeholders whose customary customer requirements are (Tornjanski et al. 2017).

Meanwhile, profitability from the management board's point of view can be achieved when financial institution organisational managers understand what they need to do and how assets and resources can be used as an integrated system (Agostini et al. 2017). More precisely, operational managers in the banking sector need to develop the ability to customise an efficient strategy with a clear long-term vision and solid short-term executive capacity to significantly improve the transition from the conventional back office to the "strategic" role, with the ability to change the business model not only to sustain business objectives but also to build new approaches for the long-term well-being of the client (Agostini et al. 2017). This action requires careful quality preparation, operational performance, and an effective operations management strategy.

Sustainability work has become a fascinating subject field within the academic world, with experts and policy-makers emerging rapidly from the 1987 Brundtland Report. The Brundtland Report forecasts sustainability as the unyielding demands of present and future generations' economic, cultural, and environmental aspects (Brundtland 1987). After that, numerous sustainability findings were related to living (Agostini et al. 2017); sustainable transitions (Rosca, Arnold, & Bendul 2017); global sustainability

(Nagendra et al. 2018); economic analysis (Lopez-morales 2018); sustainability of the external and fiscal environment (Mahmah et al. 2018; Afonso & Rault 2007); and sustainability and ethical conduct (Liu, Zhu, & Seuring 2020; Dossa & Kaeufer 2014).

Nonetheless, other research in a financial services context has related the concept of sustainability to the functions of financial services. Recent work expatriated the two dichotomies of banking and endorsed sustainability in structural and welfare strategies (Zainuddin 2019; Nurmakhanova & Kretzschmar 2015). The administrative perspective is focused mainly on administrative solvency and operational and financial self-sufficiency (Lensink et al. 2018; Demirgüç-kunt 2009). On the other hand, welfare's main goal is to use banks' financial statements and the distribution of resources to improve social well-being and protect the environment (Weber 2017; UN Economic and Social Commission for Asia and the Pacific 2014; John 2011).

While the economy, society, and environment are all important components of sustainable development (Deng, Huang, & Cheng 2019), the following sub-sections discuss these components in detail. In order to establish a particular management for sustainability and get regulatory approval for this new management, the Brundtland Committee required institutions and businesses to incorporate plans that reflect their environmental and social action within their overall strategy in 1987 (Schallegger & Wagner 2006). In addition to meeting financial goals, social and environmental performance today also determines an organisation's success. Considering the impacts that companies' operating activities leave behind and their impact on the environment and society, this is the key doorway leading to the achievement of sustainability.

Any organisation must integrate this viewpoint into its core goals in addition to its continual efforts to maximise revenues and profits (Rankin et al. 2012). Banks often aim to generate sizable returns from their operations and financial and investment activities. As a result, sustainability should be incorporated into all activities and processes that are related to the environment and society (Zyadat 2016).

2.4 Review of Key Concept

2.4.1 Financial Technology (FinTech) and Sustainability Strategies

Financial Technology (FinTech) refers to new ICT-based business models in the financial services industry that can support long-term company sustainability. According to Schindler (2017), FinTech is financial innovation that is technologically enabled and may lead to new business models, applications, processes, goods, or services with a meaningful impact on financial markets and institutions that lead to their sustainability. According to Kim et al. (2015), FinTech is a broad term that refers to the concepts and methods for providing financial services through internet connectivity and the widespread use of smart mobile technology in the financial sector to assist businesses in managing their financial operations.

According to Dhar and Stein (2017), FinTech is also described as financial sector innovations involving technology-enabled business models that can promote disintermediation, revolutionise the way that current businesses produce and deliver goods and services, address issues with privacy, regulation, and law enforcement, open up new doors for entrepreneurship, and plant seeds for inclusive growth. Indeed, there has recently

been an increase in interest worldwide in creating sustainable and green financial policies. The motivation for the interest stems from the growing risks that climate change poses to the financial industry and the need for the industry to participate in the transition to a green economy. At the time, corporate decision-making in the financial sector barely touched the topic of sustainability. Banks and other financial institutions did not implement a more comprehensive sustainability strategy, despite the fact that the financial sector managed environmental risks in the credit business (Weber, Fenchel & Scholz 2008) and provided some specialised products, like socially responsible investment funds (Weber 2014).

In general, banks were not clear about how they dealt with environmental and social risk factors in their operations and relationships with clients. The need to incorporate sustainability practises into the internal processes of the financial sector has become more apparent in part as a result of the events of the past decade, particularly the global financial and economic crisis in 2007–2008, as has the realisation that the business relationships within the financial sector are subject to environmental and social risks. But the financial sector's sustainability in terms of money, the environment, and society is still largely viewed as distinct. As a result, the relationship between the financial sector and sustainable development, particularly the indirect effects of industry on society and the environment, is frequently overlooked (Weber 2014). Though consumers and other stakeholders are more frequently subjected to non-financial risk analyses than ever before, environmental and social issues are becoming crucial for financial institutions.

Instead of being concentrated on specialised products and in-house environmental initiatives that mitigate direct impacts, the increasing adoption of sustainability practises in banks should be linked to the strategic roles that financial institutions play in a country's

economy and their capacity to foster sustainable development through their own activities. When Jeucken and Bouma (1999) proposed that banks, as significant intermediaries, hold a special and crucial position with regard to sustainable development, they were specific in elaborating on this. They claim that because this intermediate position is "quantitative and qualitative," banks are properly equipped to "assess risks and assign a price to these risks," enabling banks to use "price differentiation" to "promote sustainability." This shows how banks can help the shift to a greener economy by improving the application and integration of environmental and social values into the modern business environment.

In the meantime, the global financial crisis and its aftermath have demonstrated the significant influence the financial sector has on both the economy and society, as well as the fact that a rising number of financial products do not help the real economy. Stakeholder pressure on the financial sector to assist sustainable societies and enterprises should have been anticipated (Korslund 2013; Dore 2008). This is because, in order to grow and prosper, both individuals and organisations require financial resources. Due to this, banks have a huge obligation to contribute to corporate environmental responsibility through financial policies and rules that are favourable to environmental issues, sustainable development, and resource conservation (Chang, Peng & Wang 2008). Stakeholder pressure does not appear to be sufficient to significantly affect the financial industry, and financial authorities are reluctant to include sustainability in their financial laws.

In contrast to other industries like oil, gas, and energy, banks believe their industry to be more environmentally friendly, especially when it comes to emissions and pollution. As a result, banks have not shown a strong interest in proactive strategies with regard to

the environment and sustainability. In light of this, banks would like to cooperate with the legal guidelines established by a specific sector or nation. Most banks feel no obligation to go above and above the legal standards when it comes to environmental and social issues because they believe that regulation should take place "at the source" of harmful environmental and societal repercussions.

To control environmental and social risks in their companies, banks have occasionally embraced voluntary principles and codes of conduct, such as the Equator Principles for project finance (Weber & Acheta 2014). However, typical key performance indicators (KPIs) for banks are not designed to track environmental, social, and governance (ESG) concerns related to financial products and services but rather to track economic performance and financial risks without regard to the environmental cost. According to Kern (2014), the regulatory structure that oversees the current banking system is not being utilised to its full potential, and with a few notable exceptions, systemic environmental concerns seem to be in the collective blind spot of bank supervisors. Kern (2014) also advises that environmental and sustainability standards be incorporated into banking rules.

Financial institutions were reluctant to assess the environmental performance of their clients because they believed that doing so would constitute "interference" with their activities, possibly as a result of the absence of relevant rules and despite significant risk exposure (Richardson 2002). However, recent events show that this trend has reversed (Weber 2012). The last financial crisis, which lasted from 2008 to 2011, showed how important sustainability is to the financial sector. The crisis was partly caused by banks' lack of lending and investment discipline, as well as their failure to take into account

societal issues like homeownership over debt, which was packaged into asset-backed securities products.

This has also drawn criticism, particularly from environmental groups and other stakeholders, along with banks' investments in sectors linked to environmental degradation and climate change. "These combined dynamics have resulted in a focus on increased regulation of the banking and financial industry by state and international players, as well as a focus on bank trust restoration" (Stephens & Skinner 2013). So, a recent inquiry by the United Nations Environment Programme (UNEP) called for a solution to the "tragedy of the horizon" by addressing and getting rid of the short-termism of the financial sector and taking a longer-term view of sustainability into account (Zadek & Robins 2015).

It is a relatively recent strategy for banks to take environmental and social risks into account. As an illustration, consider the UNEP investigation, which focuses on how the financial sector may significantly contribute to mainstreaming the relationship between the ESG issues within its framework. Grigoryeva et al. (2007) claim that a number of voluntary efforts concentrating on the financial industry and the environment, such as the Equator Principles or the United Nations Principles for Responsible Investing, have developed. These rules of conduct are becoming more and more important for examining the risks connected to loans via the environmental and social accountability of firms or projects.

As a result, they could act as a guide for banks as they decide how to proceed with their operations. Even if ESG is starting to appear more frequently in banks, there is still a long way to go because standards and ensuring rules are still required, and these practises

are still primarily promoted by the industry. As Stampe (2014) contends, the banking industry needs to drastically change its attitudes and behaviours to encourage more responsible and sustainable business practises in order to assure long-term global financial stability and economic progress, and this creates a challenge.

Recently, the 2015 World Economic Forum and the UNEP investigation into a sustainable finance sector reinforced this attitude in support of such a sector (Zadek & Robins 2015). The banking industry must make sure that its business practises and the people it partners with have a beneficial impact on the communities and the environment in which it operates, while simultaneously emphasising that the sector has a duty to provide excellent investment returns to its shareholders.

The goal of integrating sustainability into the financial system is to establish a link between the financial sector and sustainable development. According to Stampe (2014), ESG issues have significant effects on enterprises, the economy, and society as a whole, and they present both risks and opportunities that must be handled if long-term economic and social growth and stability are to be sustained. Due to their functions as capital raising agents and financial intermediaries, banks should pay particular attention to them.

So, sustainability strategies need to be a part of the financial sector if risks and opportunities are to be managed both inside the industry and from the inside out. This is because the financial sector is a financial source for other industries.

2.4.2 Financial Disruptive and Sustainability Strategies

Financial disruptive is the first element of FinTech. The development of numerous disruptive technologies, particularly those in the financial services industry, has been fueled by information and communication technology (ICT). ICT is frequently creatively applied to change corporate procedures and create new business models, notably in the financial services sector. Indeed, FinTech are convenient (UNSGSA 2018; Senyo & Osabutey 2020), reliable, user friendly and easy to use (Ryu 2020; Ryu 2018; Ozturk et al. 2017; Al Nawayseh 2020; Ali et al. 2021; Lee & Kim 2020) that can assist the organisation to plan for their sustainability strategies in both environmental and social aspects. This shows how organisations such as banks can help the shift to a greener economy by improving the application and integration of environmental and social values into the modern business environment.

FinTech has already begun to have an impact on our daily lives, from making it easier to pay for products and services to giving financial institutions the infrastructure they need to function. It streamlines financial services while also providing convenience and efficiency to customers, who may get effective services through their cell phones and contribute to the survival of the firm. As some FinTech business models can offer financial products or services while eliminating or downplaying the role of established and traditional financial players, they may be disruptive innovations for those companies.

Customers notice that these FinTech businesses offer alternate means of obtaining the financial services they require, including payment, money transfer, and financial planning (Chiu 2016). A significant uptake of smart mobile devices also sparked the

creation of FinTech. According to Schindler (2017), it can be used for mobile payments, digital cash transfer services, and peer-to-peer lending platforms. This includes a wide range of online transactions, from simple ones like downloading music from iTunes to those involving the purchase of goods from Zalora or FashionValet, where users must enter their credit or debit card information to complete the transaction. Even while it has some effects on financial regulators and contributes to company sustainability, it is related to activities that are involved in financial transactions. Each nation's financial legislation will have a significant impact on the success of enterprises using the FinTech platform.

Recently, the OECD (2020) emphasised that technological advancements on the supply side, which dominate the financial sector, and changes in consumer service expectations on the demand side, which drive digital disruption in the financial sector (Carstens 2018; FSB 2019). Blockchain technology, cloud computing, smartphones, digital currencies, and internet application programming interfaces (APIs) are important elements on the supply side of technology. Faster payments, in particular, have been made possible through APIs, and they have supported the unbundling of services more easily.

In addition to increasing the number of financial services available to users, mobile devices have also developed into a platform for independent developers. They take screenshots of the client interface for a variety of tasks, such as payments (i.e., digital wallets), money transfers, and online shopping. The technological market for digital wallets is one of the fastest expanding. In Asia, where payment applications presently serve 1 billion users and are combined with e-commerce, chat, delivery, restaurant ordering, and ride hailing, their integration is very advanced. Digital currencies have the potential to upend established banking and payment systems. Utilization of cash is

declining.

The second example is the use of electronic and media transmission systems in electronic banking, which offers a variety of financial services to banking clients. Electronic banking, according to Kabanda and Brown (2017), is a means of arranging, managing, and keeping track of financial transactions between banks and their clients. The services offered to customers of commercial banks include automated teller machines, internet banking, mobile banking, phone banking, online funds transfers, and banking agency services. Electronic banking offers banks, customers, and bank regulators many advantages. One benefit is that consumers don't need to go to the bank branch to do a variety of financial tasks, such as paying bills, applying for loans, and trading stocks.

According to the North American Consumer Digital Banking Survey, digital banking in North America is an all-or-nothing affair. The study revealed that although consumers are still using internet banking as their main platform. It also showed that respondents choose banking channels based on different demands rather than always choosing the same channel to acquire the value they want. According to Gichuki and Jagongo (2018), the headquarters-to-corner strategy has aided in the growth of online and mobile banking in the US. According to Gichuki et al. (2018), it is no longer about fighting over which brand has the most physical locations but rather about how well the bank serves its clients and gives them secure access to their accounts whenever and wherever they need it.

Indeed, the positive characteristics of FinTech, such as convenient, reliable, user-friendly, and easy to use (UNSGSA 2018; Senyo & Osabutey 2020; Ryu 2020; Ryu 2018; Ozturk et al. 2017; Al Nawayseh 2020; Ali et al. 2021; Lee & Kim 2020) are able to assist

the service providers to sustain their business.

2.4.3 Financial Perception and Sustainability Strategies

Financial perception is the second element of FinTech. FinTech has a lengthy history in the banking and finance sectors, despite the fact that the phrase is relatively new. A financial service known as FinTech merges finance and technology and is made available by cutting-edge information and communications technology (ICT), according to a clear description provided by Razzaque et al. (2020). Technology enables e-wallets, credit cards, internet and mobile banking, automated teller machines (ATMs), and other financial services. The users perceive FinTech to meet their service needs, improve their efficiency, and be useful (Abdul-Rahim et al. 2022; Ali et al. 2021; Ryu 2020; Ryu 2018; Ozturk et al. 2017; Al Nawayseh 2020; Ali et al. 2021; Lee & Kim 2020).

The range of FinTech services that go beyond online payments includes peer-to-peer lending, crowdsourcing, budgeting, financial planning, and investment (Xie et al. 2021). The most recent advancements in FinTech are backed by the merging of new and old technologies like blockchain, AI, machine learning, and big data in order to develop increasingly intricate and comprehensive financial products and services that are technologically enabled (Schindler 2017). By digitising processes, FinTech offers significant potential to solve a number of sustainability-related issues. Designing a successful FinTech adoption model is essential to maximising the benefits of FinTech services (Xie et al. 2021). This can be accomplished by promoting a broad-based shift away from conventional financial services.

The impact of FinTech on sustainability has been scientifically proven, but it primarily focuses on the supply side (i.e., firms and countries). According to Dubey et al. (2019), who merged dynamic capacity views and contingency theory, big data and predictive analysis have a significant impact on social and environmental sustainability in supply chains. Similar findings were reached in another UNWCED (1987) study regarding the use of FinTech P2P lending, which supports the survival of small food businesses in Indonesia. According to the technical knowledge spillover theory, Meiling et al. (2021) found that FinTech development improves the sustainable performance of 59 healthcare firms in 11 Asia-Pacific countries.

Meanwhile, Deng, Huang, and Cheng (2019) discovered a U-shaped link between China's sustainable growth and FinTech (P2P platforms) on a macroeconomic level. FinTech services are a significant stimulus for sustainable development in Korea's financial and non-financial businesses, according to Shin and Choi (2019). In the scant literature on FinTech on the demand-side, Museba, Ranganai, and Gianfrate (2021) demonstrated that mobile money services had improved financial inclusion and had a positive impact on Uganda's low-income population.

Chikalipah (2020) found solid evidence in a comparable study among low-income households in Zambia that the main function of mobile money was money transfers. If they had used mobile money for saving and paying credit balances, they may have increased investment through savings, reduced shock vulnerability through risk diversification, and boosted consumption through borrowing. Using these channels, mobile money services can assist in achieving the SDGs, according to Chikalipah (2020).

Due to the capacity of FinTech services to address significant logistical challenges with cash transfers, Aker et al. (2016) found that a mobile money cash transfer programme in Niger increased household food diversification and intra-household bargaining power for women. Suri, Bharadwaj, and Jack (2021) assessed the popularity of MShwari, one of the most well-known digital lending services globally, in Kenya. In order to increase their access to money and resilience, 34% of eligible households used the loan, according to Suri, Bharadwaj, and Jack (2021). These results provide evidence for the proposition that FinTech-based financing platforms, such as P2P lending and crowdfunding, can advance financial inclusion (Gomber et al. 2018).

The benefit of using FinTech services for financial inclusion would be greater in developing nations (Buckley & Webster 2016) and business sustainability, as they fill the gap for those who are underserved and unserved in traditional financial services.

2.4.4 Financial Technology (FinTech) on Resource-Based View (RBV)

In recent years, venture capital firms have shown a great deal of interest in FinTech startups. Future market share gains are possible due to their ability to reduce transaction costs in the financial industry and innovate in a number of financial services (Gold 2019). FinTech businesses are located at the nexus of financial services and software technology. In order to be successful, FinTech requires financial resources, physical resources and human resources according to the perspective of Resource-Based View (RBV). A study conducted by Poh et al. (2018) contends that established venture capital networks with experience in finance and software technology are the driving force behind thriving FinTech ecosystems. Teigland et al. (2018) also added that FinTech is a market where VC firms demand in-depth familiarity with a wide range of technology and services, as well as a thorough understanding of the most recent regulatory requirements. Christensen et al. (2018) discovered that nations with larger VC operations produce more FinTech start-ups than nations with lower VC financing.

Meanwhile, Gozman et al. (2018) and numerous authors, including Suryono and Budi (2020) as well as Bomer and Maxin (2018), point out that the firms will benefit more from cooperating than from competing, despite the fact that established financial institutions such as banks and insurance companies can be seen as the main rivals of FinTech start-ups. According to Bomer et al. (2018), banks work with fintech companies in a variety of ways, giving them access to vital resources that enable them to enter new markets, increase their revenue, and create new products. These studies (i.e. Poh et al. 2018; Teigland et al. 2018; Christensen et al. 2018; Gozman et al. 2018; Suryono & Bui

2020; Boomer & Maxin 2018) proved that the application of FinTech demands adequate financial resources, physical resources and human resources as promoted by RBV.

While Prawirasasra (2018) also discovered that banks with a digital strategy, major and listed banks, and digital banks actively explore FinTech cooperation, these banks are particularly attractive to FinTech since they have access to a larger pool of capital than smaller, regional financial institutions. People who work for a sizable financial institution with a digital strategy, for instance, may be viewed as potential FinTech employees because they are likely to be well-versed in consumer needs in the era of digital banking and familiar with the IT systems used by financial institutions. In this situation, human resources play a significant role.

Regarding physical resources, financial companies also seek out cutting-edge technology like blockchain, big data analytics, and artificial intelligence to produce better solutions. In order to stay competitive in the technology adoption process and obtain access to their enormous talent and know-how pools to advance software technology, FinTech start-ups form strategic alliances and business relationships with software technology companies. This allows the software development process for FinTech to be outsourced in order to concentrate on strategic responsibilities (Rainer 2018).

2.4.5 Financial Disruptive and Resource-Based View (RBV)

Financial disruptive is the first element of FinTech. As explained in the earlier section, this study perceives FinTech as disruptive as financial innovation that is convenient, reliable, user-friendly, and easy to use. Several scholars also supported this perspective (UNSGSA 2018; Senyo & Osabutey 2020; Ryu 2020; Ryu 2018; Ozturk et al. 2017; Al Nawayseh 2020; Ali et al. 2021; Lee & Kim 2020). Then, while Barney's (1991) perceived resource-based view (RBV) as resources that include all assets, organisational processes, capabilities, information, firm attributes, and knowledge controlled by a firm, financial resources, physical resources, and human resources are the three main resources considered by this study from the RBV perspective.

As a result, this study concluded that the excellent characteristics of FinTech (such as convenience, dependability, user-friendliness, and ease of use) cost the organisation financial, physical, and human resources. In other words, human resources (such as efficient and skilled employees) combined with adequate financial resources spent and excellent physical resources used to develop and maintain FinTech allow the good innovation of FinTech that is convenient, reliable, user-friendly, and easy to use.

In relation to the financial resources (first element of RBV) used or invested in technology innovation such as FinTech, it is largely determined by the financial resources or investment made in their development, innovation, distribution, and promotion. Aldieri and Vinci (2018) assert that financial resources or investments are seen as a tool for market success. The relationship between R&D, innovations, investments, and advanced technologies is strengthened in the pursuit of greater economic and social efficiency.

Indeed, the corporation benefits from R&D investments, internationalisation, and innovation, as well as creative high-tech business practises (Wach 2016; Gharbi, Sahut &Teulon 2014). Due to the continuous changes in goods and processes in this market segment, R&D activities are vital for high-tech enterprises to maintain their competitiveness (Czarnitzki & Thorwarth 2012). However, these efforts unavoidably require significant financial resources. When any purchases, changes, repairs, or services must be performed with the assistance of contractors or other service providers, financial resources are also crucial for providing human and physical resources.

In relation to the physical resources (second element of RBV) used or invested in technology innovation such as FinTech, it is largely determined by the physical resources used in its development, innovation, distribution, and promotion. The tangible assets that a business or organisation possesses and may quantify through a branch network are called physical resources (Friend & Zehle 2009; Henry 2008). According to scholars, the structures, furnishings, fittings, infrastructure, tools, gadgets, equipment, technologies, vehicles, and other items required to carry out job responsibilities and the effective operation of an organisation as a whole are examples of physical resources. They also include value-added logistics services (Lai 2004), logistics ICT (Chapman et al. 2003), and physical IT assets (Abdul Aziz et al. 2015).

In addition, paper, pens, books, articles, other reading materials, and technologies are utilised in the performance of the job tasks of research and writing. Therefore, it is evident that physical resources make it simpler to complete job duties in a systematic manner. Physical resources being accessible would be very beneficial in lowering barriers. It is now simpler to complete tasks fast thanks to the usage of machinery, tools, gadgets,

and technology. The upshot will be feelings of happiness and fulfilment throughout the populace. In order to achieve the goals of the organisation, the personnel must utilise physical resources effectively and demand proper upkeep (Schofield 2022). As a result, FinTech, a technology innovation, may be effectively developed and maintained with sufficient and effective physical resources. FinTech has good features such as being convenient, reliable, user-friendly, and easy to use.

In relation to the human resources (third element of RBV) used or invested in technology innovation such as FinTech, its success is largely determined by the human resources used in its development, innovation, distribution, and promotion. According to Rainke (2016), the most important resource at a company's disposal for attaining its objectives is its human resources. Even with the most advanced technology and massive resources, a company's ability to regularly execute FinTech at a high level depends on its employees' abilities, motivation, and performance. Since people are responsible for the efficient use, maintenance, and administration of both physical and capital resources, an organization's human capital is essential to attaining a competitive advantage.

Finding, training, and retaining a specialised workforce while maximising productivity and financial gain for the organization's goals is the art of human resources (Snell & Morris 2018). As a result, using human resources effectively is essential to achieving the company's objectives. This necessitates the utilisation of a specialised staff (Al-Sayegh, Hatoum & Hussein 2020). Human capital, according to Rainke (2016), is the total skills and expertise of a company's workforce that are economically valuable to the business. It increases the organization's output and financial success. If human resources are to promote wealth generation and contribute to value development, they must be

employed and managed in an effective and efficient manner. The organisation is valued more when the employees are valued more.

2.4.6 Financial Perception and Resource-Based View (RBV)

Financial perception is the second element of FinTech. As explained in the earlier section, this study believes the users perceive FinTech as a financial innovation to meet their service needs, save their time, improve efficiency, and be useful. Several scholars also supported this perspective (Abdul-Rahim et al. 2022; Ali et al. 2021; Ryu 2020; Ryu 2018; Ozturk et al. 2017; Al Nawayseh 2020; Ali et al. 2021; Lee & Kim 2020). Then, while Barney's (1991) perceived resource-based view (RBV) as resources that include all assets, organisational processes, capabilities, information, firm attributes, and knowledge controlled by a firm, financial resources, physical resources, and human resources are the three main resources considered by this study from the RBV perspective.

Therefore, this study believed the good users' perception of FinTech (such as meeting service needs, saving their time, improving efficiency, and being useful) cost the organisation using their financial resources, physical resources, and human resources. In other words, human resources (such as efficient and skilled employees) combined with adequate financial resources spent and excellent physical resources used to develop and maintain FinTech allow the users to experience the best of FinTech.

In terms of financial resources (the first element of RBV), it can help technology innovation, such as FinTech, receive positive user perceptions. In other words, adequate financial resources spent to develop, innovate, distribute, and promote FinTech allow it to

meet the service needs of the users, save their time, improve efficiency, and be perceived by the users as a useful financial innovation. Financial resources are a tool for market success (Aldieri & Vinci 2018), and sufficient financial resources allocated to FinTech allow it to fully execute its intended purpose. In order to preserve innovation, this entails using financial resources for R&D expenditures, internationalisation, and innovation, as well as for improvements, repairs, or services (Wach 2016; Gharbi, Sahut & Teulon 2014). All of these activities (i.e., R&D investments, internationalization, and innovation, changes, repairs, or services to maintain) enable the FinTech to be in good condition that satisfies the users and thus maintain good perceptions from them.

In relation to the physical resources (first element of RBV), it can assist technology innovation such as FinTech to receive good perceptions from the users. In other words, adequate and efficient physical resources used to develop, innovate, distribute, and promote FinTech allow it to meet the service needs of the users, save their time, improve efficiency, and be perceived by the users as a useful financial innovation. Physical resources are actual possessions owned by a corporation or organisation, according to Friend and Zehle (2009), Henry (2008), and Schofield (2022), and staff members are required to use physical resources effectively. Physical resources include things like value-added logistics services (Lai 2004), logistics ICT (Chapman et al. 2003), physical IT assets (Abdul Aziz et al. 2015), structures, furnishings, fittings, infrastructure, tools, gadgets, equipment, technologies, vehicles, and other things necessary for carrying out job duties and the efficient operation of an organisation as a whole.

Physical resources made it simpler for staff to obtain the necessary results from the FinTech. They were also very useful in reducing obstructions. In other words, by

utilising physical resources, personnel are able to carry out their duties more quickly and efficiently in meeting the FinTech's goals, which can give a better user experience and perception. Therefore, it can be argued that the utilisation of contemporary, scientific, and innovative approaches and the facilitation of the efficient completion of job activities are the key qualities of physical resources that are recognised in all sorts of organisations, including in the financial industry in the creation, innovation, and sustainability of FinTech.

In relation to human resources (the first element of RBV), it can assist technology innovation such as FinTech to receive good perceptions from the users. In other words, skilled human resources worked to develop, innovate, distribute, and promote FinTech, which allows it to meet service needs of the users, save them time, improve efficiency, and be perceived by the users as a useful financial innovation. The cumulative talents and knowledge of a company's entire personnel that have economic worth for the company are referred to as human capital. An organization's human capital is essential to achieving a competitive edge because the efficient use, maintenance, and management of both physical and capital resources depends on people.

To achieve the objectives of the business, human resources or specialised staff must be used (Al-Sayegh, Hatoum & Hussein 2020). According to Aidara et al. (2021), human resources are important for the growth and sustainability of an organisation. Cho, Woods, and Jang (2016) emphasised that human resources are important in order to optimise costs, increase productivity, and improve quality, which can result in superior sustainability strategies. Functional groups should be created by human resource management (HRM) to promote collaboration and coordination among a company's

multiple departments.

2.4.7 Resource-Based View (RBV), Financial Technology (FinTech) and Sustainability Strategies

In this study, the researcher chose RBV as a mediator because RBV could explain the relationship between FinTech and sustainability strategies. Because FinTech does not directly influence sustainability strategies, the connection between sustainability strategies and FinTech can exist through the presence of RBV as a mediator. Specifically, the RBV framework views a firm as a collective of cultivable resources. The advocates of RBV contend that all good businesses have resources that are superior and distinct from those of other businesses.

To achieve a sustainable competitive edge that provides the accrual of superior efficiency, the RBV focuses on utilising superior capital in the organisation (Clarke & Macdonald 2017; Wernerfelt 1984). Ownership of superior, unique, and non-tradable capital means disparities in capital and, thus, efficiency between industries. The dominance of a company's stock of capital enables one company to attain better success than others (Yuan et al. 2018).

In addition, resource uniqueness and non-traceability ensure output disparities that remain over time. Resources are considered superior compared to rivals if they benefit an organisation by reducing the organisation's cost structure and increasing the attractiveness of the business's goods to consumers (Kobarg, Stumpf-wollersheim, & Welpe 2018; Deeds & Hill 1996). In addition to particular circumstances or the chances of adhering to

a particular set of policies, an organisation accumulates no tradable wealth through deliberate search efforts (Boone et al. 2018; Rosa 2017; Arbor 2004).

Anginer et al. (2018) analysed the determinants of bank interest margins and profitability in 80 countries from 1988 to 1995. Considering a detailed collection of bank characteristics and environmental factors, some of their results suggest that well-capitalized banks are more profitable than those dependent on deposits to finance them. This may be partial because further branching and other costs are needed for deposits.

The study also indicates that international banks are more profitable in developed countries than domestic banks, indicating that foreign banks introduce superior banking methods. The results of Anginer et al. (2018) show that tangible resources (e.g., financial capital) may not be readily replicable in certain economies, as output disparities occur because of disparities in intangible asset amounts. Their findings also point to the role of skill gaps in performance differences between international and domestic banks as core factors.

Peng (2006) studies the determinants of the success of commercial banks in China using data on the 14 largest banks in the country for the period from 1993 to 2003. A list of 10 essential resources, including tangible assets, intangible assets, and capabilities, was used in the study. The research shows that there is a clear link between the amount of capital a business has and how well it does, regardless of whether the resources are tangible or not.

In another study, using a survey of the 79 largest Finnish savings banks, Suryono and Budi (2020) studied the processes that produce bank performance by examining banks' recorded growth and interviewing job histories. The analysis findings show that the

success of the analysed banks is strongly path-dependent, indicating that bank performance theories are more complex and context-dependent. This study also points to the effect of personal and tacit resources on bank success. Eling and Lehmann (2017) use a cross-sectional sample of 1548 customers and annual observations from 14 institutions from 1994 to 1998 to study the links between efficiency, financial performance, and the quality of customer service in a representative group.

The findings of this analysis indicate that all the metrics of financial success used in the analysis (interest margin, expense/income, return on assets, and adequacy of capital) are significantly correlated with quality scores for customer service. It is implied that providing services has a significant effect on banks' financial performance. Bals et al. (2018) conducted a face-to-face interview with senior management from Australia's reliably high-performing financial services business. The study reveals that the degree to which a financial services company identifies, establishes, and deploys critical intangible assets and capabilities enables the financial service company to succeed and outperform competitors reliably.

Hoskisson, Gambeta, and Green (2018) used in-depth case study interviews with senior management of an Israeli bank subsidiary to study the learning processes in the banking sector for designing brand identity. The study's findings demonstrate that designing an efficient learning process substantially impacts increasing profitability and enhances both employee and consumer satisfaction. The results of this study indicate that for bank success, learning capacity is significant. Analyse the relationship between risk management potential and stock returns using multivariate statistical techniques and accounting data from all 62 Indian banks operating between 1999 and 2006.

The findings suggest that banks' stock returns respond favourably to the capability of risk management. indicating that, for bank success, this skill is necessary. Using a survey of 507 top management employees from 475 bank branches in Jordan, Radwan, Mohamed, and Ahmad (2020) analysed the association between business orientation and efficiency by estimating regression models to test various hypotheses. The findings of this analysis illustrate a good business orientation-performance relationship. indicating that the ability to detect demand is critical for bank performance.

2.4.8 Financial Resources and Sustainability Strategies

The first element of the Resource-Based View (RBV) focused on in this study is financial resources. According to a study by Mishnov (2016), both domestic and international scientists have different definitions of financial resources, but they all perceive the idea of banking financial resources in broadly similar ways. The first group of researchers defines the bank's resources as the whole sum of funds at its disposal that are put to use in running active business operations. The definition of the essence of resource banking provided by the second group of scientists is more comprehensive. They consider the bank to be a combination of their own resources and "foreign" (attracted) funds that are put to use for actual activities. The most precise, comprehensive, and all-encompassing definition of bank resources is led by the third group of scientists. They claim that banking resources, which are kept by a bank and utilised to conduct banking activities, are a combination of their own, attracted, and borrowed funds.

Due to the nature of attraction, Mishnov (2016) reported on the study of the three definitions provided by three groups of authors as the justification for allocating loan and deposit resources. Mishnov (2016) established the following definition of the bank's financial resources using Srokowo, management, and cost of resources. As a result, the bank's financial resources are a group of funds that it has at its disposal. These funds include the bank's equity capital as well as borrowed and borrowed funds that the bank received on the basis of urgency (a specific date) in exchange for compensation and used to provide the full range of banking services.

RBV asserts that the most important resources for a small firm's growth and performance are its financial resources (Wiklund et al. 2009). These resources include the company's ability to raise money internally, its capacity to borrow money from outside sources, and other financing options including cash on hand, supplier credit, advance payments, venture capital, leasing, factoring, and others. Small businesses typically receive funding from both internal and external sources (Osei-Assibey 2013).

A company's ability to obtain financial resources may have a favourable impact on both its financial and non-financial growth. Small businesses frequently struggle to gain better access to the formal financial sector; therefore, their ability to conduct regular company operations and expand is hampered by a lack of such resources (Mertzanis 2017). Without proper access to financial resources, the company's health is likely to be poor, endangering its ability to grow (Adomako et al. 2015).

It is essential to secure the profitability and expansion of the small and medium-sized business sector in order to promote economic growth and development, and access to finance is the necessary prerequisite for such growth (Abdulsaleh & Worthington 2013). According to Beck et al. (2008), small businesses are overly benefited by a country's financial progress. Numerous studies in several nations demonstrate the strong correlation between money and the expansion or success of small businesses.

According to certain studies, the primary factor influencing the growth and success of SMEs is the availability of financing (Cook 2001; Ou & Hayne 2006). According to Mambula (2002) and Yazdanfar (2012), the biggest obstacle to the expansion of micro and small businesses is a lack of financing. Numerous researchers have come to the conclusion that financial restrictions have a detrimental impact on the expansion of an

organisation (Ayyagari et al. 2008; Beck et al. 2005). Although some research indicated a strong correlation between small businesses' ability to seek outside funding and their expansion, other studies found mixed results in this area (Yazdanfar 2012; McPherson & Rous 2010; Akoten et al. 2006; Johnson et al. 2000).

2.4.9 Physical Resources and Sustainability Strategies

The second element of the Resource-Based View (RBV) focused on in this study is physical resources. According to some researchers, the physical resources, such as value-added logistics services (Lai 2004), logistics ICT (Chapman et al. 2003), and physical IT assets, are the information technology (IT) infrastructures that give logistics facilities a competitive advantage (Abdul Aziz et al. 2015). According to Friend and Zehle (2009) as well as Henry (2008), physical resources are tangible items that a company or organisation owns and may quantify through a branch network. Sutanto and Sudarsono (2018) contend that a bank can draw in and keep customers through its branch network. Lamarque (2005) asserts that a branch network is an essential route for the distribution of a bank's goods and services (savings, deposits, credit, etc.). Additionally, a branch network might serve as a reliable infrastructure to assist fundraising efforts.

The staff must use physical resources in an efficient manner (Schofield 2022). These are the physical resources that require good maintenance. These must be kept in tidy and secure locations at work. It is also necessary for people to use physical resources when they start their own firms. These include the structures, furnishings, fittings, infrastructure, tools, gadgets, equipment, technologies, vehicles, and other items required

to carry out job responsibilities and the efficient operation of an organisation as a whole.

In order to provide physical resources, people must manage their funds appropriately. The availability of sufficient financial resources is essential whenever any purchases, modifications, repairs, or services must be carried out with the aid of contractors or other service providers. Physical resources are essential for carrying out different kinds of job responsibilities and boosting productivity and profitability. For instance, if someone's profession involves writing articles and they have a deadline to meet, they may be obliged to produce a certain quantity of articles.

In these situations, the physical resources that are used in the execution of the job task of research and writing include papers, pens, books, articles, other reading materials, and technologies. Therefore, it is clear that physical resources make it easier to carry out job obligations in an orderly fashion. The availability of physical resources would be extremely helpful in removing obstacles. The use of machinery, tools, gadgets, and technology has made it easier to finish jobs quickly. The people will have sentiments of joy and fulfilment as a result.

In some instances, the workers perform manual production and manufacturing tasks. However, they are able to make the execution of job responsibilities faster and more effectively by making use of physical resources. Utilizing technology and technologies would be more efficient than performing job activities by hand (Physical Resources 2014). People are expanding their knowledge and awareness of modern, scientific, and inventive approaches in the current world as developments take place.

Using graphs, charts, maps, models, constructions, designs, photographs, photos, displays, machines, equipment, devices, and technologies are a few examples. The effective execution of job responsibilities would be made possible by the use of these strategies. These are sometimes referred to as physical resources that make it easier to produce desired results. Thus, it can be said that the key characteristics of physical resources, which are recognised in all types of organisations and agencies, are the facilitation of the fulfilment of job activities in an effective manner and the exploitation of modern, scientific, and inventive methods.

2.4.10 Human Resources and Sustainability Strategies

The Resource-Based View (RBV) theory states that organisations can use a variety of resources to enhance service quality, lower costs, produce human resources, and boost human capital in both for-profit and nonprofit businesses (Vasudevan 2021). According to the RBV theory, an organisation's ability to maintain its competitive advantage over time depends on its ability to access extremely valuable, rare, accurate, and non-replaceable organisational resources (VRIN) in settings where resource exploitation policies and procedures are in place (Hitt et al. 2020; Rantanen 2021; Furr et al. 2021).

The third element of RBV focused on in this study is human resources. According to Rainke (2016), human resources are thought to be the most crucial of all the resources at a company's disposal for achieving its goals. As a result, many now refer to workers as human capital, human assets, or human resources. A company may have enormous resources and the most cutting-edge equipment, but it is unlikely to execute at a high level

consistently if its staff are not competent, motivated, and high performers. Since the effective use, upkeep, and management of both physical and capital resources depend on people, an organisation's human capital is crucial to gaining a competitive edge.

The art of human resources involves finding, training, and keeping a specialised staff in ways that maximise productivity and economic benefit for the organisation's objectives (Snell & Morris 2018). As a result, the use of human resources is crucial to fulfilling the goals of business. The cumulative talents and knowledge of a company's entire personnel that have economic worth for the company are referred to as human capital, according to Rainke (2016). It raises the organisation's production and profitability. Human capital must be used and managed in an efficient and effective manner if it is to increase wealth generation and contribute to value development. When people are valued more, the company is valued more as well.

One of the most promising service sectors, banking, facilitates the movement of money throughout the economy and is crucial to the growth of a country. Because they have access to and store highly sensitive client information, being heavily regulated financial institutions helps to stabilise the economy. The industry has placed a lot of emphasis on customer relationship management in an effort to raise service standards, keep existing customers, and draw in new ones. Banks have been forced to differentiate themselves from rivals by incorporating cutting-edge technology into their business models due to strict laws and increased competition (Kokemuller 2017).

The management of economic risks and complex financial resources by human resource departments in banks presents numerous difficulties. This places a focus on effective and skilled human resources that can combine technology and critical thinking

abilities. Interaction with clients and customers can increase sales and bring in money (Josh 2016). Identity theft, bank fraud, accounting crises in corporations, and online embezzlement are all problems that require more scientific solutions and can be avoided by human participation. Additionally, it expands the employment options for fraud analysts in merchant banks.

The most difficult and distinctive area of banking is merchant banking, which necessitates critical personnel to be more proactive in the areas of portfolio management, reconciliation, risk management, and client reporting at different levels of operations, namely front end, middle end, and back end. Because they don't divulge any knowledge about the financial markets, the employees of these banks are playing a very important role. After return analysis, they must have the ability to take calculated risks and conform to regulatory requirements (Grasshodd et al. 2005).

When a client contributes too much cash, they must make sure the money is not left neglected because it is likely to go into overdraft. Experience is necessary for timely communication, establishing credibility, confirming information from multiple sources, and making wise decisions. As the funds are often sown with a sizable sum of money that can only be invested by financial institutions, central banks, and high-net-worth individuals, confidentiality is expected. If any of these employees who provide the banking solutions exhibit any ignorance at any level, the entire organisation might be turned upside down (Ingram 2017).

2.5 Critical Review of Related Concepts and Theories

2.5.1 Financial Technology (FinTech) and Sustainability Strategies

The Covid-19 pandemic issue, which compelled all nations to reconsider the models already in use and rely more heavily on technology and sustainability, serves as evidence of the relevance of the relationship between sustainability, finance, and technology (Macchiavello & Siri 2020). By offering services to the unbanked people at the Bottom of the Pyramid, FinTechs have already begun to close the financial inclusion gap. This is made possible by information and communications technology (ICT) and new business models. A brand-new, developing field of research is the triple-bottom-line impact analysis, which takes economic, social, and environmental sustainability into account (Varga 2018).

Customers are still cautious to adopt and use FinTech since it is creative but inherently unpredictable, which hinders its growth. Because FinTech transactions are more complex and unpredictable than traditional e-banking, uncertainty is more important in the latter than in the former (Ryu & Ko 2020). FinTechs are becoming more significant and prevalent in the financial and banking sector and are evolving into a disruptive innovation that has the potential to upend established financial markets (Lee & Shin 2018).

Startup businesses using information and communications technologies to provide services and financial products are categorised as technological businesses (ICT). With cutting-edge software and algorithms, value chains built on interactive computer platforms, artificial intelligence, and big data, FinTechs reinvent business paradigms. Financial services that emphasise information transmission across digital platforms rely

on cutting-edge processes for real-time data processing and interpretation using automated descriptive, prescriptive, and predictive technology. Gai, Qiu, and Sun's (2018) design of digital financial markets and systems promotes easier access to capital and investment. Because of FinTech, financial inclusion, and sustainable, balanced development, there is a huge potential to revolutionise not only the financial sector but also economies and societies.

FinTech has gained popularity as a result of a variety of driving factors, including technological advancement, corporate and industry innovation, the need for cost savings, and consumer demand (Gimpel, Rau & Roglinger 2018; Piobbici, Rajola & Frigerio 2019). FinTech is a broad and diverse industry that challenges the financial sector by removing friction points for customers and companies to strengthen and sustain the industry as a whole. The banking sector is undergoing fundamental change and reorganisation, as well as a transition to a customer-centric platform that can promote financial inclusion. As more competitors join the market, there will be increased competition, but the long-term effects are less clear. The law will have a significant impact on how FinTechs enter the market and who the key participants are.

Maintaining a level playing field that achieves the correct balance between stimulating innovation and maintaining financial stability, as well as consumer protection, will be a challenge for regulators (Vives 2019). Given the novelty of the industry and the fact that new companies frequently have all the rights of startups, the valuation difficulties of FinTechs must be adjusted to them (in terms of expected growth, survival rate, volatility, etc.). The fundamental company model must be taken into account before the valuation procedures. Their economic and financial viability, which can be determined by

looking at their company strategy and current accounts, is the primary internal driver of sustainability.

They can increase the overall sustainability of their habitat if they are self-sustaining (Sustainability, FinTech and Financial Inclusion 2020). FinTech businesses can be divided into two categories, competitive and collaborative, according to Accenture (2016). Larger, more established companies that are not necessarily hyper-specialized are competitive FinTechs that want to drive out new rivals by offering lower pricing. By working with banks, collaborative FinTechs provide auxiliary services to strengthen the position of rivals (Dorfleitner et al. 2017). The integration of a FinTech application (product-related collaboration) along the supply chain for financial intermediation is the main focus of cooperation (Philippon 2019).

Co-opetition, in which banks and FinTechs work together while also competing, is another pattern that may be seen. Both sustainability and FinTech have achieved significant advancements in recent years. Despite being the two main forces behind development in the financial sector, these two domains have only sometimes combined up until now. Not a single financial institution is uninvolved in it. FinTech is a new financial sector that uses technology to advance financial operations (Shueffel 2016). Theoretically, it might be conceivable to add banks, but this would make it more difficult to distinguish between FinTechs and established market participants.

Sustainability is now a widely shared concern for business, having previously been a specialist interest. Collaboration in innovation between traditional financial and banking institutions can be sparked by established FinTech as a sustainability catalyst (Verhagen 2017). Businesses and stakeholders can collaborate on sustainable development through

the Sustainable Development Goals (Verhagen 2017). FinTech has the potential to speed up the creation of inclusive and environmentally friendly financial markets and realign financial resources to promote sustainable development. There is a chance that the financial system will integrate more quickly with the real economy.

2.5.2 Financial Technology (FinTech) and Resource Based View (RBV)

The capital-based principle frequently emphasises the importance of an old adage: the whole is greater than the sum of its parts. In particular, it is also essential to acknowledge that strategic resources can be developed by using numerous strategies and resources that can be replicated and combined in an imitated way. Southwest's culture is integrated in ways that can be done on your own, such as the company's focus on direct flights, its reliance on one type of plane, and its specific way of boarding passengers. This helps the company make a good business plan with a variety of creative results.

Resource-based ideology may be ambiguous since the term "resources" in the universal language is used in several contexts. Strategic resources must be separated from other resources. Cash is a valuable resource for most people. Frequently, valuable assets are tangible assets such as a car or a home. Nonetheless, when evaluating organisations, common resources such as cash and vehicles are not considered strategic resources. Resources like cash and cars are, of course, valuable, but rivals of a company can readily obtain them. Therefore, a company could not build a sustainable competitive advantage over shared resources.

Financial institutions and banks are economic entities in the money and capital markets. They compete in various industrial fields today. These centres will pursue alternative ideas for managing and distributing information to optimise human, material, and technological resources. They must shift towards integrated structures such as ERP to effectively use their resources on organisational infrastructure, primarily financial and banking institutions, and generally grow powerful through information systems (Etame & Atsa 2018). Therefore, the critical outcomes of these systems are reducing costs through productivity and improving service to customers. For example, ERP systems have been made for FinTech to automate tasks and processes that provide integrated data solutions (information) on an organisation's infrastructure (Delgir 2018).

These systems have been developed following pre-constructed application programmes and the design model in application programme software (Costa, Aparicio, & Raposo 2020). Most organisations provide a distinctly different application system to address the requirements of each of their resources, which are more like multiple islands, with the ability to share and update information that would be challenging. So, ERP brings together services and information to make it easier to manage and develop different systems while reducing costs and increasing productivity (Puthuruthy 2020).

Oyewole (2018) observed in the CIBN that financial institutions must operate effectively in both tangible and intangible assets. The current issues will put pressure on creativity and innovation, speed and flexibility due to various hyper-competition, globalization, and fast-paced technology. As mentioned by Borovitskaya, Sherstobitova, and Shnayder (2018), the importance of the organisation's strength is a significant aspect of the intangible assets, which are embedded in the development of organisational human

resources.

It is commonly acknowledged as a factor for organisational transformation and sustainability in the current distribution. Downing (2018) also mentioned that many organisations had not made critical business decisions for their human capital. Top management also struggles to acknowledge the decision-making authority of employees who need the potential to contribute significantly to goods and services. Current management theory underestimates the output of the workforce. They see human capital management as a cost reduction measure, not the key to profitability. Because the impact is not immediately apparent, there is a low investment in training and growth due to this issue.

2.5.3 Resource Based View (RBV) Theory and Sustainability Strategies

According to the Resource-Based View (RBV) theory, the organisation possesses the resources necessary to gain a competitive advantage and lead itself toward a prosperous future. To ensure that the resources they possess are durable and difficult to copy, transfer, or replace, valuable and scarce resources can be leveraged to establish competitive advantages. RBV is based on two principles, according to (Northnagel 2008): resource heterogeneity and resource immobility. Resource heterogeneity reveals whether a company holds assets or talents that are also possessed by other companies, hence diminishing the value of those assets as a competitive advantage.

Knowing how to keep a competitive advantage is essential for businesses to succeed in today's competitive climate. A competitive advantage is the capacity to regularly achieve returns on investment that are above average for the sector. According to Barney (1991), a business has a competitive advantage when it adopts a value creation strategy that is not also adopted by existing or potential rivals and when other businesses are unable to replicate the advantages of that strategy. RBV evaluates a company's capabilities and resources, giving them a competitive advantage and above-average returns (Barney 1991).

According to Barney (1991), there are three indicators of resources that a company needs to maintain its competitive advantage: valuable resources that enable the company to comprehend or implement strategies that boost efficiency and effectiveness; rare; if the company's resources are not scarce, then many companies will be able to comprehend and implement the strategy so that the strategy is not a source of competitive advantage,

despite the fact that it may be (imperfectly imitable).

Valuable and scarce company resources can only be a source of sustained competitive advantage if other organisations do not have them and cannot acquire them, or, in other words, if they are exceedingly difficult to copy. According to the RBV theory, companies with uncommon and valuable assets will have a competitive advantage, while companies with assets that are difficult to replicate will have a competitive advantage that is durable.

The RBV model explains that resources play a crucial role in assisting businesses in achieving improved organisational performance. There are both tangible and intangible sorts of resources. Real property, buildings, machinery, and equipment are examples of physical assets. In contrast, intangible assets include brand reputation, intellectual property, and trademarks. Consequently, the company's tangible and intangible assets must be heterogeneous and immobile.

Heterogeneous refers to a company's capabilities, capabilities, and other resources that are distinct from those of other companies. Therefore, RBV believes that the corporation acquires a competitive advantage by utilising various resources. The second assumption of the RBV is that resources are static and do not migrate across companies. Due to the immobility of these resources, the corporation cannot reproduce the resources of other enterprises and employ the same approach. Barney (1991) states that not all corporate resources have the potential for a sustained competitive advantage. For resources to have this potential, they must possess four characteristics: they must be valued, scarce, imperfectly imitable, and irreplaceable.

Barney (1991) states that not all corporate resources have the potential for a sustained competitive advantage. For resources to have this potential, they must possess four characteristics: they must be valued, scarce, imperfectly imitable, and irreplaceable. RBV is ideally suited to explain studies on intellectual capital, particularly in the context of Intellectual Capital Performance (ICP) and the market. Companies possess knowledge, skills, values, and solutions (intangible assets) that can be converted into market value. The management of intangible resources can aid businesses in gaining a competitive advantage, boosting their productivity and market value.

Barney (1991) explains that RBV is a concept that arises in strategic management and a firm's competitive advantage, which holds that if a company has superior resources, it will attain greatness. When clarifying the relationship between two resource assumptions in RBV and four potential resource qualities for competitive advantage, Barney (1991) provides further information.

2.5.4 Mediation of Resource Based View (RBV) between Financial Technology (FinTech) and Sustainability Strategies

Most of the previous studies indicate a re-examining and refining of the RBV as an academic goal for evaluating IT interventions that could guarantee their continued relevance in the face of this subsequent paradigm shift (Majeed & Malik 2017). Based on a customer-centered view of "money," which is one of the main ideas behind lean production, this study supports a conceptual paradigm for the extension of RBV theory that encourages competition while also taking into account the bigger issue of economic sustainability.

The technique, known as "operations-as-marketing," involves strong coordination between these two key elements, ultimately converting the company's operations into a strategic instrument. In industrial production (Kumar, Srai, & Minakata 2019) and financial services (Yuliansyah & Jermias 2018), this customer-centric framework was previously tested. As mentioned, the study examines its possible mediating role in guiding IT investment decisions to ensure the attainment of intended strategic objectives while being mindful of the broader doctrine of sustainability.

In virtually every facet of modern industry, information or FinTech plays a significant role and supports asynchronous coordination throughout space and time (Al-omari, Johari, & Choo 2018). Under this definition, a company's value chain activities involve a physical aspect, the required operational tasks, and an information processing component to retrieve, interpret, and channel data (including market-related information) necessary to perform operational tasks (Oyewole 2018).

The literature throughout the scope describes two types of IT tools that are important to our model. The first is explicit IT capital—a standardised information system's hardware and software components. The second is the more recently described implicit IT resources—management skills are thought to play a significant role in utilising explicit IT resources. "IT resources" means IT assets and capacities essential to identify and address market opportunities and threats.

Therefore, "IT resources" can be summarised and defined as the different tangibles (for example, IS hardware, network infrastructure, and intangibles (software patents, managerial competencies etc.). This helps the firm deploy its business processes effectively to produce and allocate its commodities technology "capabilities" (Owens 2017; Clarke & Macdonald 2016). Standard IT hardware and software are the companies' most accessible tools. Thus, although this resource could provide organisational efficiency, it is unlikely to provide a substantial competitive advantage (Chuang & Lin 2019). The second category of tacit IT tools, which is more strategic in nature, focuses on developing socially dynamic, firm-specific traits and capacities that competitors cannot easily imitate (Costa et al. 2020).

Evidence indicates that successful IT managers and line managers exchange information about how IT can maximise the process output and is a crucial factor in performance (Chuang & Lin 2019). Shared information has been related to increased IT usage. Benetoli, Chen, and Aslani (2017) improved the IS party's coordination and organisational and service efficiency, increased IT incorporation in industry and value-chain activities, and improved process efficiency. So, shared knowledge is a firm-specific asset that is very important for figuring out how well IT investments are working (Matar,

Al-Rdaydeh, & Odeh 2018).

2.6 Research Framework

Figure 2.1 illustrates the research framework of this study, respectively. This framework lists out all the variables involved, which are the dependent variable (sustainability strategies), independent variable (FinTech) and mediator variable (RBV). Then, the sustainability strategies consist of two elements: environmental and social. FinTech consists of two elements: financial disruptive and financial perception. The RBV consists of three elements: financial resources, physical resources and human resources.

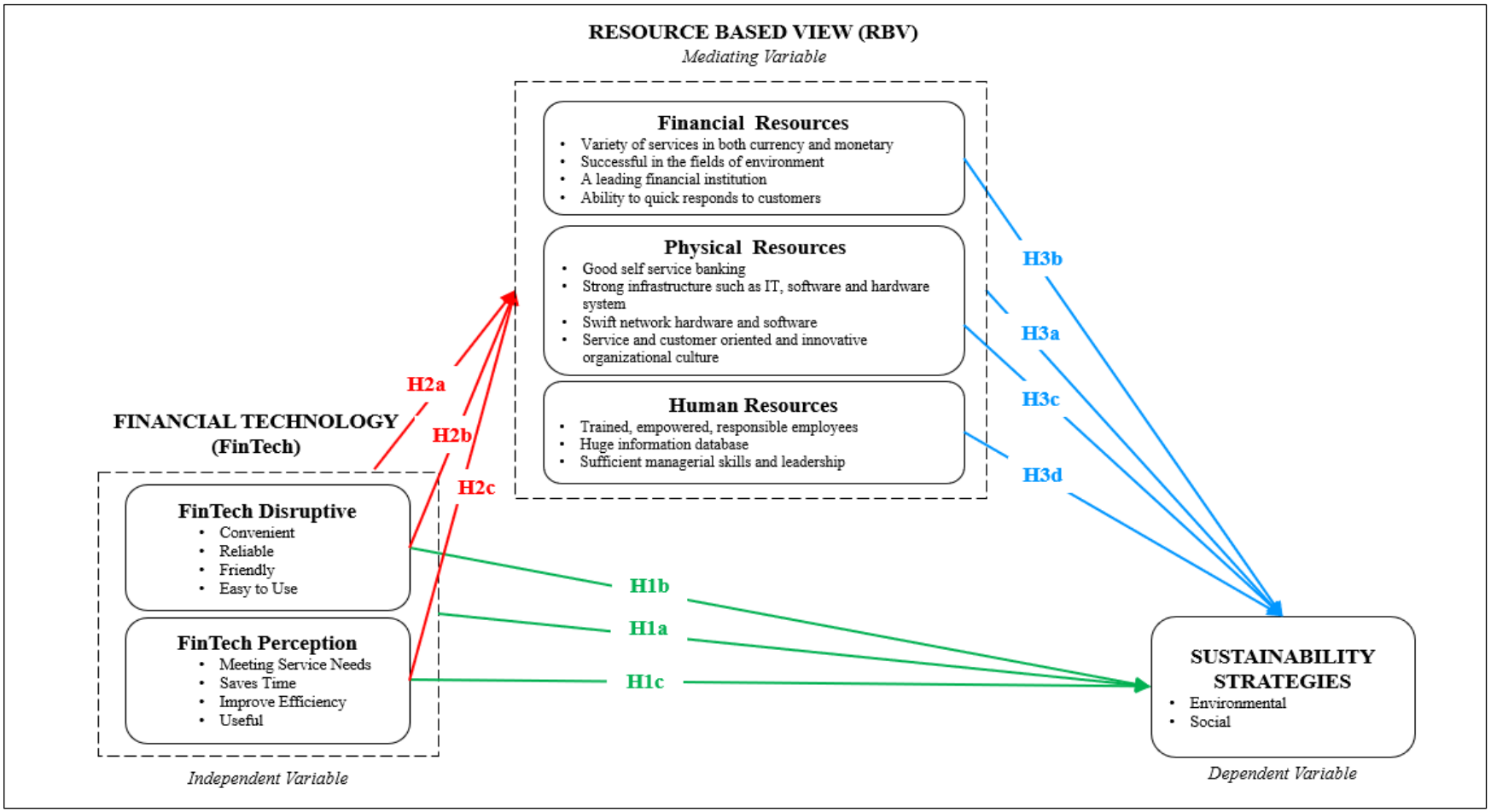

Figure 2.1 Research Framework

2.7 Summary of Hypotheses

2.7.1 Hypothesis 1a: Financial Technology (FinTech) on Sustainability Strategies

Environmental sustainability, as the first element of sustainability strategies, is one of the sustainable developments. Carbon loss is caused by over-reliance on environmental goods for construction purposes. This has necessitated the need for sustainable resource use and environmental protection. It allows humans to satisfy their needs without reaching the ecosystem-supporting carrying ability to continue to regenerate the resources required to meet those needs.

Environmental sustainability seeks to balance the environment's development levels with consumption levels. As a percentage of GDP, the cost of climate change adaptation is expected to increase, especially in Africa. Climate change adaptation and mitigation strategies would need everyone to make concerted efforts, including the financial sector. Global risks, such as climate change, have knock-on consequences for primary economic industries such as agriculture, tourism, transport, and electricity.

These consequences include economic recession, unemployment, relocation, food price fluctuations, and property market instability. Institutional investors, such as banks, are increasingly worried about climate change's direct and indirect effects on their investment portfolios, including other financial institutions' shares. The environmental issues that a bank needs to solve include compliance with environmental regulations; pollution and climate change reactions; use of energy and materials; ecological footprint; and product and service-related environmental impacts.

In addition, banks must review their clients' environmental behaviour, possible contingent liabilities resulting from current regulations, and potential new opportunities for environmentally sustainable services and goods. Banks should support internal environmental sustainability schemes, such as using renewable resources, double-sided photocopying, the use of recycled materials, the delivery of buses to workers, and excellent use of water. Externally, banks will restrict funding to environmentally sound projects. Incentives for implementing renewable financing are provided by UNEP FI and a significant number of international climate funds under the United Nations Framework Convention on Climate Change (UNFCCC) (2007).

In the meantime, social sustainability, as the second element of sustainability strategies, refers to the social component of banks' operations and practices. They must ensure parity in the allocation of opportunities, encourage social programmes such as health and education, equality between men and women, government responsibility, openness, and public engagement. Social sustainability also includes preparation and growth of workers; health and safety in the workplace; recruiting workers with programmed backgrounds; maintaining indigenous cultures; distributing goods and services to vulnerable groups; and expressing the needs of customers, local communities, and minority owners.

Furthermore, failure to conduct social and economic screening of projects may harm investment portfolio results. Because most large-scale projects rely on project returns and their investments to repay bank loans, failure to conduct project sustainability screening raises the likelihood of credit default for an economical bank that does not conduct sustainability screening. It may have no recourse to reclaim the extended loan

since the returns of the project and investments are also the security of project financing. Screening is, thus, not only a risk assessment practice but one that influences a bank's long-term profitability.

Furthermore, renewable financing offers banks the ability, in emerging ways, to create creative goods and services. These are products and utilities that provide mutual advantages. Microfinance, financial programmes for disadvantaged communities such as youth and women, organisation lending, and low-income housing are among those prospects. Banks can get new customers, enter new markets, raise new resources, and create goodwill and investment from stakeholders by creating such goods.

Banks adopt sustainability and environmental, social, and governance (ESG) principles to access development finance from institutions. Financial institutions offer pricing incentives for commercial banks to integrate sustainability into their core banking sector. Community banks that conform to the development financial institutions' mechanisms have direct and indirect financing at discounted interest rates.

FMO was the first development bank to create a mechanism that gives borrowers who follow environmental, social, and good governance (ESG) requirements a discounted interest rate within a prescribed time frame. The advantages of embracing sustainability include improved reputation, access to long-term financing from development finance agencies and government, attracting more customers, increased profitability, increased collaboration potential, operating cost control, and improved stakeholder partnerships.

Therefore, the following hypothesis developed:

H1a: FinTech has positive and significant effects on sustainable strategies (environmental sustainability and social sustainability)

2.7.2 Hypothesis 1b: Financial Disruptive and Sustainability Strategies

Some FinTech business models may be disruptive breakthroughs for those organisations since they can provide financial products or services while eliminating or underplaying the role of established and traditional financial players. Customers see that these FinTech companies provide more ways for them to access the financial services they need, such as payments, money transfers, and financial planning (Chiu 2016). The development of FinTech was also fueled by the widespread use of smart mobile devices. Schindler (2017) claims that it can be used for peer-to-peer lending systems, digital currency transfer services, and mobile payments.

This covers a wide range of online transactions, from basic ones like those involving the purchase of goods, where consumers must submit their credit or debit card information to complete the transaction. Even if it has some influence on financial regulators and helps companies stay sustainable, it is connected to activities that entail financial transactions. The effectiveness of businesses using the FinTech platform will be greatly influenced by each country's financial regulations.

Mobile devices have evolved into a platform for independent developers, in addition to expanding the number of financial services available to users. They capture screenshots of the client interface when doing a range of actions, including payments (using digital wallets), money transfers, and online shopping. Digital wallet technology is one of the markets that is growing the fastest. The integration of payment applications with e-commerce, chat, delivery, restaurant ordering, and vehicle hailing is particularly advanced in Asia, where they currently service one billion people. The traditional banking

and payment systems could be completely overthrown by digital currencies. Cash is being used less and less.

The utilisation of electronic and media transmission systems in electronic banking, which provides a range of financial services to banking clients, serves as the next example. According to Kabanda and Brown (2017), electronic banking is a method for organising, administering, and monitoring financial transactions between banks and their clients. Commercial banks provide their clients with automated teller machines, internet, mobile, phone, and phone banking services, as well as online money transfers and banking agency services. Numerous benefits are provided by electronic banking for banks, clients, and bank regulators. One advantage is that customers can perform numerous financial operations like bill payment, loan applications, and stock trading without having to visit a bank location.

Therefore, the following hypothesis has been developed:

H1b: There is a significant relationship between financial disruptive and sustainability strategies.

2.7.3 Hypothesis 1c: Financial Perception and Sustainability Strategies

Even though the term "financial technology" (FinTech) is relatively new, it has a long history in the banking and finance industry. According to a straightforward definition given by Razzaque et al. (2020), a financial service known as FinTech integrates finance and technology and is made available by cutting-edge information and communications technology (ICT). Automated teller machines (ATMs), credit cards, online and mobile banking, and e-wallets are all made possible by technology.

Peer-to-peer lending, crowdfunding, budgeting, financial planning, and investing are all included in the range of FinTech services that go beyond online payments (Xie et al. 2021). In order to create increasingly complicated and comprehensive financial products and services that are technologically enabled, the latest FinTech breakthroughs are supported by the fusion of new and old technologies like blockchain, AI, machine learning, and big data (Schindler 2017). FinTech has a huge potential to address several sustainability-related problems by digitising processes. In order to maximise the benefits of FinTech services, it is crucial to design an efficient FinTech adoption model (Xie et al. 2021). This can be achieved by encouraging a large-scale movement away from traditional financial services.

FinTech's contribution to sustainability has been demonstrated empirically, but it mostly targets the supply side (i.e., firms and countries). According to Dubey et al. (2019), who integrated dynamic capacity views and contingency theory, FinTech (more specifically, Big Data and predictive analysis) has a substantial impact on social and environmental sustainability in supply chains. Another study by UNWCED (1987)

discovered comparable outcomes in the adoption of FinTech P2P lending, which contributes to the viability of small food enterprises in Indonesia. Meiling et al. (2021) discovered that FinTech development enhances the sustainable performance of 59 healthcare enterprises in 11 Asia-Pacific nations, which is consistent with the technical knowledge spillover idea.

In the meantime, FinTech (P2P platforms) and sustainable development in China were found to have a U-shaped link on a macroeconomic level by Deng, Huang, and Cheng (2019). Likewise, Shin and Choi (2019) found that FinTech services are a powerful catalyst for sustainable development in Korea's financial and non-financial industries. In the sparse literature on FinTech, Museba et al. (2021) showed that mobile money services had boosted financial inclusion and had a favourable effect on Uganda's low-income population in the sparse literature on FinTech on the demand-side.

In a similar study among low-income households in Zambia, Chikalipah (2020) discovered convincing evidence that the primary use of mobile money was for money transfers. They could have improved their consumption through borrowing, decreased their exposure to shocks through risk diversification, and raised investment through savings if they had used mobile money for saving and paying credit balances. Mobile money services can help achieve the SDGs through these channels, according to a study by Chikalipah (2020).

Similar to this, Aker et al. (2016) discovered that a mobile money cash transfer programme in Niger boosted household food diversity and intra-household bargaining power for women due to the FinTech services' ability to address important logistical issues with cash transfers. Suri, Bharadwaj, and Jack (2021) evaluated MShwari, one of the most

well-known digital lending services worldwide, to determine its acceptance in Kenya. According to Suri, Bharadwaj, and Jack (2021), the loan was used by 34% of eligible households, improving their access to capital and resilience. These findings support the claim that FinTech-based financing platforms, such as P2P lending and crowdfunding, can promote financial inclusion (Gomber et al. 2018). Utilizing FinTech services for financial inclusion would have a greater impact on developing countries (Buckley & Webster 2016), since they bridge the gap for unserved and underserved individuals in traditional financial services.

Therefore, the following hypothesis has been developed:

H1c: There is a significant relationship between financial perception and sustainability strategies.

2.7.4 Hypothesis 2a: Financial Technology (FinTech) on Resource-Based View (RBV)

FinTech start-ups have drawn considerable interest from venture capital firms in recent years. Given their capacity to minimise transaction costs in the financial sector and reinvent many financial services, they can harvest substantial market shares in the future (Gold 2019). However, prior research has not investigated the spatial distribution of venture capital investments among FinTech companies. They reported that FinTech companies' investments are relatively common in countries with weaker regulatory authority and without significant financial centres.

Subsequently, FinTech companies lie at the intersection of software technology and financial services. This study believes they need a certain amount of capital from both worlds to be effective. First, in line with the above claim, Poh et al. (2018) argue that vibrant FinTech ecosystems (e.g., London, Singapore, and Hong Kong) are powered by well-established venture capital networks with finance and software technology expertise. Teigland et al. (2018) suggest that FinTech is a field in which VC firms need in-depth knowledge of a wide variety of technologies and services, as well as a comprehensive understanding of current regulatory requirements. Accordingly, Christensen et al. (2018) found that countries with higher VC operations generate more FinTech start-ups than countries with low VC funding.

While existing financial institutions (e.g., banks, insurance companies) can be viewed as the key competitors of FinTech start-ups, Gozman et al. (2018) and several authors point out that both will be better off partnering than competing (Suryono & Budi

2020; Bomer & Maxin 2018). For example, Bomer et al. (2018) focus on Commerzbank's Main Incubator GmbH as the first corporate venture capital unit of a German bank that invests explicitly in FinTech start-ups and supplies non-monetary support. Subsequently, Bomer et al. (2018) reveal that banks provide valuable resources to FinTech companies through various partnerships, enabling them to enter the market, increase their revenues, and create new products.

In this context, Prawirasasra (2018) found that large and listed banks, digital banks, and banks with a digital strategy pursue FinTech cooperation. These banks especially appeal to FinTech as they have a broader capital pool than smaller, locally-based financial firms. For example, people working for a large financial institution with a digital strategy may be considered potential FinTech workers since they may have comprehensive knowledge of consumer needs at the age of digital banking and know the IT infrastructure of financial institutions. Accordingly, Masera (2018) estimates that banks or insurance companies initially employed 28% of German FinTech founders.

Finally, FinTech firms pursue the latest technologies to create superior products, such as artificial intelligence, big data analytics, and blockchain. FinTech start-ups build strategic alliances and business partnerships with software technology developers to keep pace with rivals in the technology implementation process and gain access to their vast pools of talent and know-how to improve software technology. In this way, FinTech also sources parts of the software development process to focus on strategic tasks (Rainer 2018). Furthermore, FinTech firms are collaborating with leading IT companies to distribute their products to many consumers and set market expectations.

In this context, it is good to consider the presence of the following regional industries and sectors to be potentially essential providers of FinTech start-up services. These could have a positive effect on VC investors' willingness to invest in local FinTech start-ups: the VC investor base, the business education market, the financial sector, the wireless telecommunications industry, and the information technology industry.

Therefore, the following hypothesis has been developed:

H2a: There is a significant relationship between FinTech and RBV.

2.7.5 Hypothesis 2b: Financial Disruptive on Resource-Based View (RBV)

In relation to the financial resources (first element of RBV) used or invested in technology innovation such as FinTech, it is largely determined by the financial resources or investment made in their development, innovation, distribution, and promotion. Financial resources or investments, according to Aldieri and Vinci (2018), are viewed as an instrument for market success. In the quest for increased economic and social efficiency, the connection between R&D, innovations, investments, and new technologies is enhanced.

The company does really profit from R&D expenditures, internationalisation, and innovation, as well as innovative high-tech commercial methods (Wach 2016; Gharbi, Sahut, & Teulon 2014). R&D operations are essential for high-tech businesses to retain their competitiveness because the products and processes in this market segment are constantly changing (Czarnitzki & Thorwarth 2012). However, large financial resources

are not necessarily needed for these initiatives. Financial resources are also essential for providing human and physical resources when any purchases, upgrades, repairs, or services must be carried out with the aid of contractors or other service providers.

In relation to the physical resources (second element of RBV) used or invested in technology innovation such as FinTech, it is largely determined by the physical resources used in its development, innovation, distribution, and promotion. The tangible assets that a business or organisation possesses and may quantify through a branch network are called physical resources (Friend & Zehle 2009; Henry 2008). They are required to carry out job responsibilities and ensure the effective operation of an organisation as a whole.

It is therefore obvious that physical resources make it easier to carry out job obligations in a methodical manner. Access to physical resources would be very helpful in removing obstacles. Thanks to the use of machinery, tools, gadgets, and technology, jobs may now be completed quickly. The result will be emotions of fulfilment and contentment among the general public. The staff must make optimal use of physical resources and demand regular maintenance in order to accomplish the organization's goals (Schofield 2022). FinTech, a technology breakthrough, can therefore be developed and maintained efficiently with enough and efficient physical resources. FinTech has many beneficial characteristics, including being convenient, dependable, approachable, and simple to utilise.

In relation to the human resources (third element of RBV) used or invested in technology innovation such as FinTech, its success is largely determined by the human resources used in its development, innovation, distribution, and promotion. According to Rainke (2016), human resources are the most crucial tool at a company's disposal for

achieving its goals. A company's capacity to consistently execute FinTech at a high level depends on its people's skills, drive, and performance, even with the most cutting-edge technology and substantial resources. A company's human resources are crucial to gaining a competitive advantage because people are responsible for the effective use, upkeep, and management of both physical and financial resources.

In fact, accomplishing the company's goals depends on using human resources successfully. This calls for the use of a specialised workforce (Al-Sayegh, Hatoum & Hussein 2020). According to Rainke (2016), a company's overall workforce skills and expertise that are economically valuable to the organisation make up its human capital. It boosts productivity and financial success for the company. Human resources must be used and managed effectively and efficiently if they are to encourage wealth creation and contribute to value development. When the people are valued more, the organisation is worth more.

Therefore, the following hypothesis has been developed:

H2b: There is a significant relationship between financial disruptive and RBV.

2.7.6 Hypothesis 2c: Financial Perception on Resource-Based View (RBV)

In terms of financial resources (the first element of RBV), it can help technology innovation, such as FinTech, receive positive user perceptions. The proper financial resources spent on developing, innovating, disseminating, and promoting FinTech enable it to meet the service needs of users, save them time, increase their productivity, and be viewed as a helpful financial innovation. Financial resources are a tool for market success (Aldieri & Vinci 2018), and the allocation of adequate financial resources to FinTech enables it to achieve its intended purpose. This means using financial resources for R&D expenditures, internationalisation, and innovation, as well as for renovations, repairs, or services, in order to preserve innovation (Wach 2016; Gharbi, Sahut & Teulon 2014). All of these efforts (i.e., investments in R&D, internationalisation, innovation, changes, repairs, and maintenance services) allow FinTech to be in satisfactory condition and keep positive user attitudes.

In relation to the physical resources (first element of RBV), it can assist technology innovation such as FinTech to receive good perceptions from the users. In other words, adequate and efficient physical resources used to develop, innovate, distribute, and promote FinTech allow it to meet the service needs of the users, save their time, improve efficiency, and be perceived by the users as a useful financial innovation. According to Friend and Zehle (2009), Henry (2008), and Schofield (2022), physical resources are genuine possessions owned by a firm or organisation, and staff employees are obliged to use physical resources properly. Physical resources include value-added logistics services (Lai 2004), logistics ICT (Chapman et al. 2003), physical IT assets (Abdul Aziz et al.

2015), structures, furnishings, fittings, infrastructure, tools, gadgets, equipment, technologies, vehicles, and other items required for performing job duties and the efficient operation of an organisation as a whole.

The availability of physical resources facilitated the FinTech team's ability to produce the desired outcomes. They were also incredibly handy for preventing blockages. In other words, by utilising physical resources, staff are able to carry out their responsibilities more quickly and effectively in achieving FinTech's goals, which can result in a more positive user experience and perception. Therefore, it can be argued that the utilisation of contemporary, scientific, and innovative approaches and the facilitation of the efficient completion of job activities are the defining characteristics of physical resources that are acknowledged in all types of organisations, including the financial sector, for the creation, innovation, and sustainability of FinTech.

In relation to human resources (the first element of RBV), it can assist technology innovation such as FinTech to receive good perceptions from the users. Human resources invested in developing, innovating, distributing, and promoting FinTech enable it to meet the service needs of customers, save them time, increase their efficiency, and be viewed as a helpful financial innovation. Human capital refers to the talents and expertise of an organization's complete workforce that have economic value for the organisation. Human capital is vital to attaining a competitive advantage because the efficient use, upkeep, and management of both physical and capital resources is dependent on individuals.

Human resources or specialised personnel must be utilised to fulfil the organization's goals (Al-Sayegh, Hatoum & Hussein 2020). According to Aidara et al. (2021), the competencies of human resources are essential for the growth and sustainability of an organisation. Cho, Woods, and Jang (2016) emphasised the significance of human resources in order to optimise costs, boost productivity, and enhance quality, which can result in superior sustainability methods. Human resource management (HRM) should establish functional groupings to foster collaboration and coordination among a company's many departments.

Therefore, the following hypothesis has been developed:

H2c: There is a significant relationship between financial perception and RBV.

2.7.7 Hypothesis 3a: Resource-Based View (RBV) on Sustainability Strategies

In successful organisations, further analysis will contribute to the link between an organisation's performance in the market and that organisation's resources. One of the points of view that aims to address the question is RBV. According to this theory, resources are heterogeneous and heterogeneity can be maintained over time. It explains how specific organisations can generate significant revenues (Rousseau 2019). In other words, RBV is mainly concerned with how businesses generate and retain competitive advantages (Clarke & Macdonald 2017).

Currently, RBV is underpinned by two simple assumptions. Second, companies possess different resources and skills, and specific organisations in the same industry will do better than others based on these disparities in resources (Hazen et al. 2017). Second, resource gaps between organisations may persist because specific resources and capabilities are scarce and difficult to access or imitate (Saksonova & Kuzmina-merlino 2017). According to rival businesses' opinions, their capital and skills competition is based on heterogeneity and immobility (Rutledge et al. 2019).

Monteiro and Foss (2017) have identified ability as a resource category, precisely an organisationally non-transferable resource whose function is to increase the other resources owned by the institution. The resources may be physical, human, or organisational (Gunasekaran et al. 2017). Zeffane and Melhem (2017) assumed that resources could be divided into assets and capabilities, both of which are mechanisms by which the resources are used. It is proposed that tangible assets, intangible assets, and capabilities retain the ability to provide a sustainable competitive advantage for

businesses.

Physical assets include fixed assets, such as machinery, structures, property, real estate, vehicles, equipment, precious metals, and current assets, such as inventory and currencies. Fixed and non-fixed assets are both examples of tangible assets. Intangible assets include all non-physical assets, such as patents, trademarks, copyrights, goodwill, market awareness, and computer systems, including products such as receivables, shares, and securities of value to the business and financial assets. In this regard, skills are used to engage the company's capital, such as tacit protocols for transferring expertise (Vaishnavi, Suresh, & Dutta 2019).

RBV typically argues that resources that are valuable, rare, inimitable, and non-replaceable at the same time (VRIN) are sources of competitive advantage (Sharma et al. 2019). Valuable resources must allow a company to participate in a value creation strategy by either reducing its vulnerabilities or gaining dominance over its rivals (Feldman, Amit, & Villalonga 2019). There are several ways an organisation's essential resources can be measured. The valuable resources of the company, for example, allow it to develop and execute strategies that reduce the pure costs of an organisation or the innovation and innovativeness of an organisation in creating new products (Rutledge et al. 2019).

According to Baek (2017), businesses can achieve a competitive advantage under conditions of high uncertainty and social complexity. Vast numbers of internal resources are used for examples of interpersonal relationships, rituals (Houjeir & Brennan 2017), and isolating mechanisms are expressed in the various aspects of business, such as managerial capacities. According to Rutledge et al. (2019), the emphasis on developing isolating mechanisms may be the source of sustainable rents, company prestige, and track

records of success that have won and accrued over time as a rival could not perfectly imitate them. These features can eventually contribute to a competitive barrier and help to achieve a sustainable competitive advantage.

A company should preserve resources with sustainability characteristics since alternate sources will eventually replace them without doing so. In other words, the longevity of a corporation's asset status depends on how quickly its capital can be replaced. If rivals can easily duplicate the resources possessed by an entity, then the advantage will not last long. RBV should concentrate on its ability to retain a mix of capital that could not be homologously owned or built up by rivals. To achieve SCA, every company should examine in-depth approaches to prevent the imitation of its capital.

Therefore, the following hypothesis has been developed:

H3a: Resource-based view (RBV) is positively associated with sustainability strategies

2.7.8 Hypothesis 3b: Financial Resources on Sustainability Strategies

The first element of the Resource-Based View (RBV) focused on in this study is financial resources. It is good to be noted that adequate financial resources will assist the business with proper development, as well as a performing innovation process and incremental forms of innovation regarding products and services (Perez-Alaniz et al. 2022). Besides, Perez-Alaniz et al. (2022) also stated that they are also capable of radical innovation. All these approaches allow the business to be sustained. With sufficient financial resources, development can be carried out and describes the application of

knowledge to, for example, the creation of innovations (Czarnitzki, Hottenrott, & Thorwarth 2011; OECD 2015).

According to Lee, Wu, and Pao (2014) as well as Cassiman, Veugelers, and Arts (2018), development is an exploitative type of research, and businesses engage in it to convert ideas and concepts into commercially viable technology. Development can be undertaken with adequate financial resources and refers to the application of knowledge to, for instance, the development of innovations (Czarnitzki et al. 2011; OECD 2015). According to Lee, Wu, and Pao (2014) as well as Cassiman, Veugelers, and Arts (2018), development is an exploitative type of research, and firms engage in this activity to transform ideas and concepts into marketable technologies.

Although the development can be expensive in terms of resources, Czarnitzki et al. (2011) also noted that it is more market-relevant and builds on prior knowledge. Accordingly, businesses may plan their internal financial resources differently to finance development projects, especially the most valuable ones that are almost finished (Greve 2003; Berends et al. 2014). Collaboration among businesses can help lower the cost of development (Grimpe & Sofka 2016; De Massis et al. 2018). In addition, they can combine already-existing resources to create new forms of value—a practise known as "bricolage" by Baker and Nelson (2005).

The companies can then continue the innovation process with enough financial resources to maintain their sustainability. Process innovation is the enhancement of production operations through the use of new technology, logistical strategies, and maintenance techniques (Tavassoli & Karlsson 2015). The release of products that are significantly upgraded or new to the company but may already be on the market is referred

to as incremental product innovation (Berends et al. 2014). The simultaneous assessment of process innovations and new product requirements has considerable advantages for businesses because new product developments may demand new processes (Percival & Cozzarin 2008; Hullova et al. 2019).

According to the literature (De Falco & Renzi 2015; González-Bravo, López-Navarro, & Rey-Rocha 2021), financial resources are crucial for process and product innovation efforts. When creating new processes and products, businesses may also need to invest in tangible and intangible knowledge-creating resources, such as capital equipment, software, and licenced technology, in addition to the costs associated with human capital (D'Este, Amara, & Olmos-Peuela 2016; Montresor & Vezzani 2016).

Businesses use service innovation to boost productivity and revenue (Hullova et al. 2019). However, innovation in services diverges from the technological focus of innovation in processes and products. Typically informal, search techniques for service innovation are built on internal and external cooperation (Love, Roper, & Bryson 2011; Mennens et al. 2018). When introducing new services, businesses may collaborate closely with customers to reduce uncertainty and the need for funding (Nijssen et al. 2006; Love, Roper, & Hewitt-Dundas 2010; Mennens et al. 2018).

The companies can then move on with the radical innovation while still having enough funding to sustain them. Radical innovation is the creation of entirely new goods and services for the market (Percival & Cozzarin 2008; Hewitt-Dundas, Gkypali, & Roper 2019). According to Perez-Alaniz et al. (2022), organisations' internal financial resource levels could have a varied causal impact on how actively they engage in product and service innovation. However, Mina, Bascavusoglu-Moreau, and Hughes (2014), as well

as Witell et al. (2017), claimed that these distinctions might disappear if product and service innovation involve a lot of novelty. When introducing fresh products and services to the market, businesses may encounter significant knowledge gaps, and their internal financial resources may have an impact on their decision to carry out these activities (Percival & Cozzarin 2008).

Therefore, the following hypothesis has been developed:

H3b: Financial resources is positively associated with sustainability strategies

2.7.9 Hypothesis 3c: Physical Resources on Sustainability Strategies

The second element of the Resource-Based View (RBV) focused on in this study is physical resources. Physical capital resources are tangible assets that a corporation or organisation possesses and may quantify through a branch network (Friend & Zehle 2009; Henry 2008). Sutanto and Sudarsono (2018) also claim that a bank's branch network can bring in and retain clients. According to Lamarque (2005), a bank's branch network is a crucial pathway for the distribution of its products and services (savings, deposits, credit, etc.). A branch network could also provide a dependable foundation for fundraising initiatives.

Some academics contend that the information technology (IT) infrastructures that provide logistics facilities a competitive advantage are physical resources like value-added logistics services (Lai 2004), logistics ICT (Chapman et al. 2003), and physical IT assets (Abdul Aziz et al. 2015). According to Goodwin (2013), there are two types of physical

capital: natural and manufactured. According to Goodwin (2013), produced capital resources are essentially physical assets that are created by combining natural capital with human productive activities and that are employed to supply a flow of goods or services to the commercial sector. However, according to Kerr and Nanda (2011), a lack of physical cash is one of the biggest obstacles an entrepreneur must face.

Business sustainability may result from using these physical resources to their greatest potential. This claim is further supported by Revuelto and Simón (2015), who argued that larger levels of physical capital will have higher survival odds. As was previously mentioned, IT is one instance of the company's physical capital resources. Today, according to Hack and Berg (2014), no firm, whether it be a major multinational, a medium-sized corporation, or a small business, can function without information technology (IT). Information and communication technologies (ICT) are used by all of them for almost every business process imaginable, including communicating with customers (via email, fax, or letters written with the aid of office IT), financial accounting and control, personnel accounting, and almost all other business processes.

IT business value research has shown that there is a positive association between IT investments, economic productivity, and business sustainability, particularly in creating its value. Several studies have shown how IT may improve firm performance and the creation of business value (Aral, Brynjolfsson & Wu 2012; Aral & Weill 2007; Brynjolfsson & Hitt 1996; Kohli & Devaraj 2003). Enterprise systems, particularly those for enterprise resource planning (ERP), enable considerable performance gains, for example by automating formerly manual procedures (Dewett & Jones 2000; OECD 2011; Nevo & Wade 2011). There has been extensive research on how IT affects a company's

ability to execute sustainably (Erdmann & Hilty 2010; OECD 2010; Erdmann et al. 2004).

Therefore, the following hypothesis has been developed:

H3c: Physical resources is positively associated with sustainability strategies

2.7.10 Hypothesis 3d: Human Resources on Sustainability Strategies

The third element of RBV focused on in this study is human resources. According to Tooranloo Azadi and Sayyahpoor (2017), human resources (HR) are seen as the key component of a company's competitive edge. In addition, Cho, Woods, and Jang (2016) noted that because of HR's significance in cost optimization, productivity enhancement, and quality improvement, firms consider it a crucial resource as it leads to superior sustainability strategies. To encourage cooperation and coordination across the many parts of a company, human resource management (HRM) should establish functional groups.

New strategies stress the importance of HR competencies for an organisation's development and sustainability (Aidara et al. 2021). Researchers define organisational sustainability as meeting current stakeholders' wants while avoiding their direct or indirect demands. They also thought that the idea of sustainability has advanced since the 1990s. However, Ehnert (2009) claimed that the researchers had not entirely recognised its HRM potential. The "triple bottom line," which integrates ecological, economic, and social factors, is a critical component of sustainability in establishing theoretical and practical human resource interactions and creating new perspectives (Elkington 1997).

HRM is the social component of sustainability, according to Enhert, Harry, and Zink (2014). A growing number of workplace health difficulties, a lack of human resources, and an ageing population, in their opinion, make HRM sustainability essential for firms. Researchers have recognised the following explanations for HRM sustainability: efficiency-oriented, context-bound, and substance-oriented. These justifications are based on the HRM definition presented by the WCED (1987) and the difficult task of defining this term (Ehnert 2009; Ehnert et al. 2016).

In light of this, there are three distinct conceptual methods that can be used to differentiate between sustainable resource management, sustainable work systems, and sustainable HRM. The goal of sustainable resource management is to make the connection between an organisation and the environment clear and to suggest solutions for dealing with resource shortages. Work systems emphasise the social component of sustainability and seek to change people's perceptions of the processes that lead to the adoption and development of human resources. Finally, sustainability is seen as a shared benefit for all parties involved that will eventually lead to long-term economic sustainability.

As a result, Cohen, Taylor, and Muller-Camen (2012) defined HR sustainability as a collection of abilities, inspiration, and values developed to prevent negative environmental repercussions by embracing justice, development, and welfare. The financial, social, and environmental goals of an organisation's internal and external stakeholders can be met through the use of sustainable HRM practises. Furthermore, sustainable practises can reduce unintended repercussions and negative feedback and aim for outcomes that satisfy stakeholder expectations, according to Ehnert et al. (2016). For some organisations, these findings might be more important than for others (Jabbour &

Jabbour 2016). A sustainable organisational culture, job security, health promotion, flexibility, participative leadership, a value-added economy, self-responsibility, and work-life balance are all influenced by sustainable human resource management (Ehnert 2009).

The strategy conceptualises sustainability as a win-win situation for all parties involved; in addition, sustainable HRM is seen as a cross-functional undertaking. The core of the workplace in businesses should be people's motivation, according to Gollan and Xu (2014), who refer to this idea as the shift in emphasis from human control to resource management. In the past, experts have held that HRM in times of crisis was linked to sustainability due to a lack of expertise or employees' perceptions of the detrimental effects of HRM (Ehnert 2009). Most businesses today struggle with a lack of motivated, skilled workers. Lis (2012) argued that it is crucial to investigate the idea of HRM sustainability using the "triple-bottom-line" method. As a result, sustainable HRM may result in consistent and positive community impact from employees as well as active participation at work (Mariappanadar 2014).

Therefore, the following hypothesis has been developed:

H3d: Human resources is positively associated with sustainability strategies

2.8 Conclusion

The revolutionary advancements in FinTech and innovation will provide the banking sector with new perspectives in offering their clients the most recent products and administrations by utilising the internet daily and mobile apps. This analysis would look at how the banking company in Malaysia sees money-related technology and considers sustainability strategies to help the partners towards the end of the procedure. A certain number of people are anxious about using technology and innovation, which makes everything seem simple. It also compels the banking industry to act the same way in the face of modern upheaval 4.0. All the developments created from a physical visit to a few instants on a mobile phone make people feel a massive spectrum of involvement in the bank's management.

The precise movements of the market and district should balance the potential for opportunity. Furthermore, financing is not readily feasible, as retail banking segments have broad boundaries (administrative capital requirements, ownership structures, and sector restrictions). The fragmented management structure puts B2C FinTech organisations at a disadvantage over B2B companies, especially those selling to banks, partially shifting the customer's default rates.

Moreover, future research into RBV information systems should focus on new technologies to enhance our understanding of the theory's value for information systems. Researchers will find a particular emphasis on those innovations that challenge current RBV concepts. Big data, cloud computing, crowdsourcing, and the Internet of Things, for example, have all proved essential in creating competitive advantages. However, the

traditional notions of RBV and information systems are challenged.

Based on previous studies, FinTech can be utilised by community banks to create strategic value and improve their assessment by improving one or more of the main aspects: cash flow, risk, and growth. For instance, FinTech can help improve cash flow by increasing income (spreading). Risk management through increased product diversification or potential growth prospects through faster revenue growth. The trade-off between increased cash flow and potential growth rates versus additional risk is essential for measuring and evaluating FinTech's niches and their application impact.

Nevertheless, governments are starting to shift their policies and regulatory regimes to endorse FinTech's development. There is no specific legislation governing the FinTech sector. Depending on the nature of the activities done and the sorts of products or services they provide, fintech companies continue to be subject to the existing laws and regulatory framework applicable to the traditional financial services organisations. When choosing which framework would apply, it is important to thoroughly evaluate the activities.

For instance, if a FinTech business engages in any regulated activity involving banking, investment banking, insurance or takaful, payment systems and payment instruments, or related activities under the Financial Services Act 2013 ("FSA") or the Islamic Financial Services Act 2013 ("IFSA"), and money-changing and remittance businesses governed under the Money Services Business Act 2011 ("MSBA"), then such a FinTech business must observe and comply with the relevant provisos. Effective financial markets and rising economic growth are strongly related, and this is important for both developing and developed nations.

CHAPTER THREE
RESEARCH METHODOLOGY

3.1 Introduction

This chapter presents the methodology used in this study. This chapter concentrates on the specific process that involves identification, selection, and analysing all the related information, primary and secondary data obtained. The primary purpose of this study was to identify the effects of FinTech on sustainability strategies in which RBV is a mediator in the banking industry. The specific objectives of this study are:

i) To examine the relationship between FinTech and sustainability strategies in the banking industry
ii) To identify the relationship between FinTech and RBV in the banking industry
iii) To investigate the relationship between RBV and sustainability strategies in the industry
iv) To develop the model of FinTech, RBV as a mediator, and sustainability strategies in the banking industry

3.2 Research Design

All research has a way of designing and constructing the research or study. Teimouri et al. (2016) stated that research design is an important aspect that needs to be considered by the researcher and refers to a specific plan in manoeuvring the research. The process encompasses problem statement determination, analysing research questions, methodology, result analysis, and writing justification and explanation. In the previous chapters, the researcher selects quantitative approaches to meet the objectives of this study. Therefore, the researcher has chosen quantitative research to be conducted in this study that adapts the statistics, numbers, and values representing the research conceptualization of this study (Hoare et al. 2017).

Besides that, the descriptive design used in this study because no experiment has been conducted. A descriptive research design is a design that describes the present situation, which some people believe and hold. Several types of descriptive research design are survey, cross-sectional, longitudinal, case study, correlational, observational, and causal-comparative (Abutabenjeh & Jaradat 2018). In this study, correlation design were used. This design has been used because the researcher wants to determine the relationship between those variables.

3.3 Instruments Development

This study was carried out using questionnaires from the participants or samples to test the hypotheses. The selection of instrumentation is essential because it drives desired results aligned with the objective of this study. According to Shymko (2018), instrumentation selection is a necessary process that resembles the reality aspects that turn into specific numbers and values that can be interpreted accordingly. They support the statement by emphasising that accurate instrumentation will lead to empirical values that will indicate the proper form of the statistic (Hallingberg et al. 2018).

Therefore, research instrumentation has been adopted and adapted from a previous study (Kamat & Reiter 2020). The justification for the selection of these instruments is for several reasons, such as:

i) The questionnaire constructed illustrates the definite idea discovered previously.
ii) The questionnaire constructed fits with the objective of this study.
iii) The questionnaire constructed can be used generally and has not been developed by focusing on a specific organisation or institution.

According to the justification listed, the instrumentation chosen is appropriate for this study, which has no specific related industries. The questionnaire is practically used in a specific language that individuals can understand. The researcher has taken further action to coordinate all the instruments chosen into one questionnaire design. The questionnaire developed incorporates different segments that could ease the data

collection process.

3.3.1 Instrumentation for Sustainability Strategies

The researcher adopted and adapted the questionnaires from Malik et al. (2019) and consists of 13 questions to measure the effectiveness of the sustainability strategies. In this study, Cronbach's alpha coefficient for the 14 items was measured .89.

Table 3.1: Instrumentation for Sustainability Strategies

No. Item	Sustainability Strategies
1	The understanding of FinTech can lead to banking sustainability
2	The environment-friendly FinTech can contribute to a banking sustainability
3	Energy-efficient FinTech is the contributor to banking sustainability
4	FinTech can be the primary driver towards banking sustainability
5	FinTech can provide automation to various business sectors, especially for banking sustainability.
6	FinTech can aid in living a better and healthy life.
7	FinTech contributes to society by providing information and learning.
8	FinTech can produce economical solutions in the industry.
9	FinTech can help to increase the productivity of organisations.
10	FinTech can contribute to economic sustainability.
11	FinTech to be sustained over a long period is the success of the software.
14	FinTech can be sustained by integrating sustainability aspects in the banking industry
13	FinTech addresses sustainability practices, including code optimization, resource utilization, and energy-efficient coding.

Source: Malik et al. (2019)

3.3.2 Instrumentation for FinTech

FinTech questionnaires developed by Yuan et al. (2012) have been adopted, adapted, and used in this study. This part has two dimensions: FinTech and FinTech perception. The total number of questions in this questionnaire is 20. In this study, Cronbach's alpha coefficient for the 20 items was measured .83, and the range was accepted from .75 to .93. Table 3.2 lists the measurements for FinTech.

Table 3.2: Measurement for FinTech

No. Item	FinTech Disruptive
1	Do you think the application of FinTech is convenient?
2	Do you think FinTech are reliable?
3	Do you think FinTech is fast?
4	Do you think FinTech is available as a payment method?
5	Do you think FinTech are clear?
6	Do you think FinTech provides me guidance?
7	Do you think FinTech is user friendly?
8	Do you think FinTech menus are easy to navigate?
9	Do you think FinTech menus are understandable?
10	Do you think FinTech menus are easy to use?
No. Item	FinTech Perception
1	Using FinTech can meet my service needs.
2	FinTech services can save time.
3	FinTech services can improve efficiency.
4	FinTech services are helpful to me.
5	It is easy to use FinTech services.
6	I think the operation interface of FinTech is friendly and understandable.
7	It is easy to have the equipment to use FinTech services (cellphone, app, Wi-Fi).
8	I believe that the money is easy to be stolen by using FinTech services.
9	I believe personal privacy will be disclosed by using FinTech services.
10	I believe using FinTech services is a good idea.

Source: Yuan et al. (2012)

3.3.3 Instrumentation for Resource-Based View (RBV)

The Questionnaire on Resource-Based View (RBV) was developed by Rivard, Raymond, and Verreault (2006) and adapted and adopted in this study. This part contains 21 items that have been divided into three dimensions. Human resources have seven items, financial resources have seven items, and physical resources have seven items. In this study, Cronbach's alpha coefficient was measured .82 for the questionnaire, and the range was accepted .75 to .90. Table 3.3 lists the measurements for RBV.

Table 3.3: Measurements for Resource-Based View (Financial Resources, Physical Resources and Human Resources)

No.	Financial Resources
1	May provide a variety of services in both aspects of currency and monetary.
2	Has not been successful in the field of investment, such as stocks, deposits, and facilities.
3	It is a leading financial institution among all the banks of the country in the field of market, for example, how many accounts and customers it has.
4	Is in a high position regarding credit and population.
5	Has assumed that creativity, innovation, and cost-saving in the business is a part of its research and development process.
6	Has built a flexible financial by which it can adapt to unexpected changes.
7	Has involved with financial resources with the ability to quickly responding to customers.
No.	Physical Resources
1	Enjoys having a good self-banking service such as POS and ATM.
2	It is barely considered as a vital institution in terms of infrastructure such as IT and software and hardware systems.
3	Has an organisational identity, and there is an explicit Coordination between the internal and external image of the bank.

4	It is equipped with the swift network hardware and software, and also it is a member of it.
5	Has created a service and customer-oriented and Innovative organisational culture which is entirely compatible with market changes.
6	Does not provide organisational learning, which encourages employees to learn more.
7	Has unified all the visions and managerial thoughts through all its senior management.

No.	Human Resources
1	Has involved trained, empowered, and responsible employees.
2	It has a vast information database, and it is vital in the field of information and communication.
3	Has strategic programs in order to create ideas and innovation.
4	Has not been able to successfully make customer satisfaction and make reliability and quick response as well.
5	Has appropriately provided qualified services and new service development.
6	Senior managers have enough managerial skills, and natural leadership is established in the organisation.
7	Does not have efficient skills regarding social capability like teamwork and communication.

Source: Rivard, Raymond, and Verreault (2006)

3.3.4 Measurement Scale Rationale

The Likert scale is one of the most well-known response scales used in the configuration of the study. Rensis Likert, an American social psychologist, first introduced a five-point psychometric scale during the 1930s to estimate the development of suggestions linked to demeanour (Likert 1932). Strongly agree, approve and unsure, disapprove and strongly disapprove were the phrases used in the underlying Likert scale. The phrase changed from "approve" to "accept" over the long term, which led to the Likert scale we know today: "strongly agree" on one side, and "strongly disagree" on the other side, with a midpoint in the middle. The conventional Likert scale ventured into many Likert-type scales due to its effortlessness and popularity.

These are usually used in research tools intended to: estimate representative execution in the workplace (Sabir & Zenaidi 2019), research on interchanges (Karam 2019), research on display (Krosnick 2018), research on political feelings (Bömer & Maxin 2018) and psychometric discovery (Simms, Zelazny, & Williams 2019). In any case, its notoriety is not equal to its credibility as a technique of knowledge assortment. Discussions regarding validity arise from the variety of these applications in Likert-type scales. For examples are:

i) Including or not including a midpoint in the scale?

   a. Strongly disagree, disagree, neutral, agree, strongly agree

   b. Strongly disagree, disagree, agree, strongly agree

ii) Using descending order vs. ascending order of the scale options?

   a. Strongly agree, agree, neutral, disagree, strongly disagree

   b. Strongly disagree, disagree, neutral, agree, strongly agree

iii) Measuring positively and negatively stated survey items with the Likert scale?

   a. The objectives were clear strongly disagree, disagree, neutral, agree, strongly agree.

   b. The objectives were unclear strongly disagree, disagree, neutral, agree, strongly agree.

   c. The objectives were not clear strongly disagree, disagree, neutral, agree, strongly agree.

iv) Using Likert-type scales or slider scales?

   a. Completely dissatisfied 0 1 2 3 4 5 6 7 8 9 10 Completely satisfied

Hence, the researcher chooses a specific ten-point-Likert scale. The justifications for choosing the 10 pt Likert Scale are:

i) Offers more variance than a smaller Likert scale, e.g., 7-point or 5-point Likert scales
ii) Offers a higher degree of measurement precision
iii) Provide better opportunity detect changes and more power to explain a point of view

Source: Adams and Levitan (2019)

The researcher decided to use Times New Roman with 12 points in size to determine the questionnaire's font size. According to Hussin (2018), Times New Roman at 12 points in size helps the respondents' eyes relax while reading all the questions on two pages in total. Meanwhile, the questionnaire is constructed in English as a medium of communication. According to Boyinbode (2018), English has become an essential language in many sectors, such as banking, education, manufacturing, services, and many more.

3.4 Validity and Reliability of Instrument

3.4.1 Instrument Content Validity

Content validity is defined as "how many things in an instrument mirror the content universe from which the instrument will be summed up" (Ai et al. 2019). In the social sciences, content validity is energetically prescribed when a new instrument is being developed. All in all, material validity means reviewing another survey method to ensure that it covers all the essential things and does not bring unfortunate things into a particular building space (Fremantle & Scott 2017). Writing surveys and subsequent meetings with the appraisal of master judges or boards are judgmental in setting up material validity.

To promote acceptance, the policy of a critical approach to content validity expects specialists to be available with specialists. In any case, it is not ordinarily conceivable to have multiple specialists in one field for a particular exploration topic. This impedes lead validity when specialists are on a survey instrument in different geological zones (Shrotryia & Dhanda 2019). Content validity is a real effort in the present evaluation, giving little thought to whether the inquiry is subjective or quantitative (Benoit et al. 2018).

Other than that, Shrotryia et al. (2019) expressed validity as an instrument's scores look fine, are actual, and engage the researcher to arrive at enormous conclusions that the general population has evaluated. Meanwhile, Wineman et al. (2018) found validity as the unique inductions zeroed in on the cumulative data as reasonableness, correctness, importance, and estimation. Once the instruments were adopted for the current study, the tool was validated by an expert in February 2021, Dr Ismail Nizam, who is a PhD holder

in Business Administration. His professional works include corporate training in financial management, accounting and finance, Islamic finance, business analysis, and entrepreneurship and innovation. He examined and approved the instrument to ensure its content and validity.

i) Language: The expert has suggested that the language used in the questionnaire should remain in English to avoid back-to-back translation that might jeopardise the content.

ii) Font: In the beginning, the researcher used Arial font and 11 points for questionnaire instruments, which resulted in more than pages, and psychologically, it affected the respondent's mood while answering the questionnaire. Thus, the expert has recommended that the font be changed to Times New Roman and 12 points for the questionnaire instrument to ease the respondent.

iii) Titles: To avoid misunderstanding either by the researcher or respondent, all the titles of the questionnaires must be kept in English.

iv) Order: A set of questionnaires must be serialised for the researcher to analyse the information better and avoid repetitions by the respondents.

Once the instruments had been checked, the researcher made specific changes to the instrument based on the recommendations made by the expert. To avoid any problems or misunderstandings about the questionnaire in fieldwork, corrections to the instrument are necessary. Before fieldwork, the researcher performed a pilot study.

3.4.2 Instrument Reliability Test

A pilot study is an approach that researchers have used to conduct a survey using a questionnaire instrument (Majid et al. 2017). It is also known as the feasibility of the study. According to Lee and Sung (2018), a pilot study has been conducted to ensure that the researchers can interpret valuable data. The measuring instruments used to collect that data must be valid and reliable. It also serves as a place to test an instrument that was used to collect data for the real study.

Before the actual data collection took place, the researcher conducted a pilot study in early February 2021 among banks' employees, from junior management to senior management. The researcher used Google Forms to distribute the questionnaires among 30 respondents. However, this study only managed to get 18 respondents at the end of February 2021. This study believes that the lower return rate is due to their time constraints to read and complete the questionnaires. Nonetheless, although it was a small number, it did have the same preferences as the actual study (Shahab et al. 2017). According to Shahab et al. (2017) and supported by Kaur et al. (2017), the pilot study requires a small number of respondents, from around 10 to 30 people. The systematic practice of the pilot study helped the researcher understand the process of conducting a survey well (Womack

et al. 2018).

Among these 18 respondents, 12 of them are male (67%). 9 of these 18 respondents are between 18 and 29 years old (50%), 7 respondents are between 30 and 44 years old (39%), and 2 respondents are between 45 and 60 years old (11%). The majority of them are diploma holders (78%), while 2 respondents are bachelor degree holders (11%), and 2 respondents are postgraduate degree holders (11%). Then, 11 of them are senior managers and above (61%), while 6 respondents are managers (33%), and 1 is a senior executive (6%). The majority of them have 6 to 10 years of working experience (83%), and only 3 respondents have 11 to 15 years of working experience (17%). 10 of them are from retail banks (56%), while 8 of them are from both commercial banks (22% each) and investment banks (22% each).

Other than that, the IBM Statistical Package for Social Science (IBM SPSS) was used to look at all the information from the pilot study to find out how reliable the questionnaire was. Data was obtained using internal consistency reliability of coefficient alpha or Cronbach's Alpha co-efficiency and, according to Buaphiban (2015), stated that the instrument is internally consistent and reliable if the test result is over 0.7. A pilot study also led to another look at how consistent the quality of the instrument was.

Additionally, Cronbach's alpha was additionally performed to test the consistency and quality of the more significant measurements gained from the exploratory element examination. The Cronbach's alpha was above 0.80 for a significant portion of the test directed. It demonstrated that the instrument utilised was dependable. An outcome of .70 or more was acknowledged as a cut-off point (Womack et al. 2018). Table 3.4 shows the reliability statistics results of the pilot study. Other than that, the respondents from the

pilot study also did not have any other comments on the questionnaires.

Table 3.4: Reliability Statistics of Pilot Study

Variables	Cronbach Alpha
FinTech	0.930
Resource-Based View	0.799
Sustainability Strategies	0.969

As per Womack et al. (2018), the question's reliability guarantees quality when the scores from an instrument are steady and reliable. Meanwhile, Korkmaz et al. (2017) characterised dependability as the consistency of the scores obtained and how predictable they are for every piece of research involved. For this study, the test-retest system was utilised to have steady and reliable information that included controlling the same test twice for the same gathering after a specific time interval had passed.

Finally, the quality coefficient is figured to demonstrate the relationship between the two sets of scores acquired for reliability. The validity and reliability tests were needed because the researcher had to make sure that the instrument used had been carefully looked at and was in line with the time Womack et al. (2018) had given.

3.5 Study Population, Sampling Frame, Unit of Analysis, Sample Selection and Sampling Techniques

3.5.1 Study Population and Sampling Frame

Every study has a population that they are targeting. A critical approach to conducting research is to use a research population and sampling. Determining population and sampling before starting the research will help the researcher direct this study in alignment with the objective outline. This study was conducted on 125 employees in a specific department: the asset, financial, and payment department in 39 banks, including commercial banks, retail banks, and investment banks.

3.5.2 Unit of Analysis

According to Jiang, Xiong, and Cao (2017), unit analysis can be segmented into three parts: individual, organisation, and a group of people. Apart from that, Wulferth (2017) relates the selection of unit analysis to social and humanities science fields to help the researcher conduct this study with the right approach. So, in this study, the researcher chooses individuals who are employees of various banks in Malaysia as the unit of analysis because it fits with the problem statement, research question, and research objective.

3.5.3 Sample Size and Sampling Technique

The sampling technique is a process to collect a sample from the given sample size. Some sampling techniques can be used in collecting data. The sampling method can

be divided into probability sampling and non-probability sampling. A sampling technique is the condition where the participants are known in probability. It also uses a random process. However, it does not guarantee to represent the population. In non-probability sampling, samples will not be randomly selected, and it is challenging to claim the sample represents the population.

There are five non-probability sampling techniques: quota sampling, convenience sampling, purposive sampling, self-selection sampling, and snowball sampling. In this study, probability sampling was used. Purposive sampling, also called judgmental, selective, or subjective sampling, was used in this study. It is a group of sampling techniques in which the units are chosen based on the researcher's judgment. As explained by Lapan, Quartaroli, and Riemer (2012), it is crucial to seek out people who can give the best answers to each kind of question, and key informants who have the most information should be actively sought. For this reason, this study employed purposive sampling to reach the respondents.

3.6 Data Analysis

After collecting the data, the researcher starts to interpret the data results to ensure the validity of the research. Analysis of information data was broken into three sections using descriptive and inferential statistics. The information data was coded and analysed with the International Business Machine Statistical Package for Social Science 2.0 (IBM SPSS 2.0). The relationship between these three variables was measured, and the result was calculated to give an accurate measurement for the researcher to make. The data analysis includes descriptive statistics and Pearson's Correlation. Descriptive statistics

show the measurement and calculation of mean, median, and variability, which calculates the range, variance, and standard deviation.

The researcher can measure descriptive statistics based on the demographic factors in questionnaires. To achieve the objectives, Pearson's correlation was used to identify the relationship between RBV and sustainability strategies in the banking industry. The last objective of using Pearson's correlation is to examine the relationship between FinTech and the banking industry. Table 3.5 shows the data analysis for research objectives 1, 2, and 3.

Table 3.5: Data Analysis for Research Objectives 1, 2, and 3

No	Objectives	Statistical Analysis
1	To examine the relationship between FinTech and sustainability strategies in the banking industry	Pearson Correlation
2	To identify the relationship between FinTech and RBV in the banking industry	Pearson Correlation
3	To assess the relationship between RBV and sustainability strategies in the banking industry	Pearson Correlation

Table 3.6 shows how to categorise the strength of a relationship based on the r value result based on Guilford's rules of thumb by Guilford and Frucher (1973).

Table 3.6: Guilford's Rules of Thumb

Correlation Coefficient	Strength of relationship
< 0.20	Negligible relationship
0.21 - 0.40	Low correlation, weak relationship
0.41 - 0.70	Moderate relationship
0.71 - 0.90	High correlation, strong relationship
>0.90	Very strong relationship

To achieve objective 4, which is to develop a model of the effects of RBV on sustainability strategies with disruptive FinTech as a mediator in the context of the banking industry. The Statistical Package for the Social Sciences (SPSS) (version 25) is used to insert employees' responses and to test the normality and Common Method Variance (CMV) where the instrument rather than the respondents can induce bias. Once there is no evidence of a standard method variance, the Structured Equation Modelling using partial least squares (PLS-SEM) through Smart PLS is used in this study to develop a model.

As suggested by previous scholars Hair et al. (2020), the predictive measurement model is prepared based on the guideline provided by Hair et al. (2017). This study aims to develop a predictive model by explaining the variance of the dependent variable while accessing the model. Table 3.7 presents the data analysis for research objective 4.

Table 3.7: Data Analysis for Research Objective 4

No	Objective	Statistical Analysis
1	To develop the model of FinTech, RBV as a mediator, and sustainability strategies	Smart PLS-SEM

3.6.1 Demographic Data Analysis Technique

Demographics is the collection and analysis of data on the general characteristics of a particular population. It is often used to assess the best way to engage with clients and analyse their behaviour as a business marketing tool. By using demographics, segmenting a population helps businesses determine the size of a future market. The use of demographics helps decide whether its goods and services are aimed at the most relevant business customers. Most prominent companies perform demographic analysis to decide how to best market a product or service to the best market for the target audience.

Knowing the current customer and where the potential client will come from in the future is valuable. In demographic data, there are "pros" and "cons." There are loads of advantages to organising consumers based on demographic information. However, there are also disadvantages to market segmentation. Table 3.8 lists the advantages and disadvantages of demographic data.

Table 3.8: Advantages and Disadvantages of Demographic Data

Advantages	Disadvantages
Straightforward targeting and analysis	Based on assumptions
Cost-effective	Demographic data is too vague
Easy to measure	Alienates people
Ideal for monitoring trends and social shifts	Misinterpreting data

In this study, the researcher used Google Forms to distribute the questionnaires between April 2021 and May 2021, as illustrated in the Gantt Chart of the study in the appendix section. The questionnaire cannot be distributed face-to-face due to the Covid-19 pandemic. The Google form has been distributed to 130 employees in a specific department: the asset, financial, and payment departments. However, this study only managed to get feedback from 125 respondents. The link was given to the respondents, and if the respondent has any questions, they can ask the researcher through a call or WhatsApp. The questionnaire includes four sections, and the demographics questions are in the first section, section A.

In this section, the respondents answer four questions, which they need to tick in the space provided. The first question asked about their gender. This is important because it helps identify which gender has the highest number of participants in this study. The second question asks about age. It is also essential for the researcher to observe the average age of employees who work in the companies. The third question relates to the employees' highest degree or level of education, and the last questions are asked about their

occupation. In this part, the respondents' tick which department they are from.

3.6.2 Statistical Analysis

This study uses SPSS for Windows software. This analytical software was used to assess and analyse the factor analysis, reliability analysis, descriptive analysis, and regression analysis of the collected data.

3.6.2.1 Descriptive Statistics

Descriptive statistical analysis was used to analyse the characteristics of the data, such as the central tendency, distribution, and variability. For example, this study aims to understand the tendency of respondents towards technology adoption readiness and how the data is distributed across the sampling size, as well as how it deviates from the normal distribution. The data was analysed using descriptive statistics like means, medians, modes, variants, range, and standard deviation as suggested by Sekaran (2016).

3.6.2.2 Factor Analysis

Multivariate data analysis is a collection of statistical models that evaluate patterns in multidimensional data while considering several advanced factors. Multivariate models consider more variables, allowing them to investigate more complicated phenomena and uncover more precise data patterns that can be extended to the real world (Zikmund et al. 2013). Previously, Lawley and Maxwell (1962) explained that factor analysis is a branch of multivariate analysis in which its technique is used to correlate and summarise

information from many variables as a means of describing and examining the structure of the covariances and correlation matrices involved.

Therefore, this means that factor analysis is used to streamline and summarise the analysed data in order to establish construct validity (Sekaran & Bougie 2016).

3.6.2.3 Correlation Analysis

By examining the relationship between two metric variables, correlation analysis is used to disprove hypotheses and determine whether they are supported by the data. The correlations were constructed to evaluate the connections between respondents' organisational, ecosystem, and mindset preparation for business model innovation. The association between business model innovation and technology-ready microentrepreneurs was also determined through correlation calculations.

3.6.2.4 Regression Analysis

Zikmund et al. (2013) explained that regression analysis seeks to determine if one or more independent variables can adequately explain the dependent variable. The relationship between the independent and dependent variables must be linear for regression analysis to be effective. Based on Cronbach (1971), it is also crucial to look for outliers, as regression analysis is sensitive to the impacts of outliers. Following the discovery of the variables' correlations, regression analysis is used to further investigate the relationship. For example, regression analysis was used to find out the effect of technology on sustainable strategies with the resource-based view as a mediator.

3.6.3 Research Objective 1: Paired Samples *t*-Test

A paired t-test is also referred to as a t-test of correlated pairs, a paired t-test of samples, or a t-test of dependent samples where the researcher performs a t-test on dependent samples. Dependent samples are connected, and researchers test the same person or thing twice to compare two meanings. Both meanings can represent such things as:

i) A calculation was performed at two different times: pre-test and post-test.

ii) An analysis is conducted under a control condition and an experimental condition.

The paired sample t-test result shows the T score. The contrast between two groups and the difference between the groups is a ratio. The higher the test score, the more significant the difference between classes. The lower the t ranking, the greater the similarity between groups.

3.6.4 Research Objective 2: Pearson Product-Moment Correlation

Pearson Product-Moment Correlation, also known as Pearson Correlation, is a sample correlation coefficient, r, which tests the linear relationship strength and direction between pairs of continuous variables. The Pearson Correlation assesses whether statistical evidence of a linear relationship between the same pairs of population variables is defined by a coefficient of population correlation ("rho") within the same pairs of variables. To determine the relationship, Guilford's rules of thumb were used for Pearson correlation. Table 3.9 presents the correlation coefficient.

Table 3.9: Correlation Coefficient

Correlation Coefficient	Strength of relationship
< 0.20	Negligible relationship
0.21 - 0.40	Low correlation, weak relationship
0.41 - 0.70	Moderate relationship
0.71 - 0.90	High correlation, strong relationship
>0.90	Very strong relationship

3.6.5 Research Objective 3: One-way Repeated Measures ANOVA

One-way ANOVA compares the means of two or more different populations to determine whether statistical evidence exists that the mean of the related population differs significantly. One-way ANOVA is a parametric test. The variables used in this test are dependent and independent variables. One-way ANOVA includes three types of studies: field studies, experiments, and quasi-experiments. Besides that, one-way ANOVA is commonly used to test the means of two or more groups, the means of two or more interventions, and the means of two or more change scores.

3.6.6 Research Objective 4: Factor Analysis and Principal Component Analysis

Factor analysis and principal component analysis are very similar in many ways. Despite all of these similarities, principal component analysis (PCA) is a linear combination of variables, while factor analysis is a measurement model of latent variables.

3.6.6.1 Factor Analysis

A Factor Analysis approaches data reduction in a fundamentally different way. It is a model for the measurement of a latent variable. This latent variable cannot be directly measured with a single variable. Instead, it is seen through the relationships it causes in a set of Y variables. For example, this study conducted a pilot study. The factor analysis shows that all the variables surpass the minimum cut off value of 0.5. For the variable RBV, factor analysis was conducted and all the factors were above the cut off value of 0.5.

Table 3.10: Factor Analysis

Component Matrix	Factor Loading
HR1	0.816
HR2	0.776
HR3	0.713
HR4	0.768
HR5	0.756
HR6	0.667
HR7	0.748
FR1	0.826
FR2	0.735
FR3	0.735
FR4	0.839
FR5	0.814
FR6	0.843
FR7	0.780
PR1	0.764
PR2	0.789
PR3	0.772
PR4	0.795
PR5	0.743
PR6	0.737
PR7	0.735

Extraction Method: Principal Component Analysis.

a 1 component extracted.

3.6.6.2 Principal Component Analysis

PCA's approach to data reduction is to create one or more index variables from a more extensive set of measured variables. It accomplishes this by employing a predefined variable's linear combination (basically a weighted average). The created index variables are called components. The whole point of the PCA is to figure out how to do this optimally, the optimal number of components, the optimal choice of measured variables for each component, and the optimal weights.

3.7 **Data Collection Technique**

This section discussed the method used to gather the respondents quantitatively to meet the objectives, as illustrated in Figure 3.1. The researcher used questionnaires to complete the survey. According to Saez-Lopez et al. (2017), the goal of using a questionnaire is to collect information about the exact variables or characteristics in some cases where the result is a data matrix or a structured or rectangular set of data. The researcher distributed the questionnaire to 130 respondents. First, researchers need to obtain ethical approval from the university to ensure that the work is primarily ethical and focused.

Second, the researcher must provide the respondents with a briefing on the consent form to clarify the study objectives and the questionnaire that needs to be addressed. Ensure that the researcher has been there to answer the question to avoid questions from the sample. The completed questionnaire was collected after the respondents have answered the questionnaire.

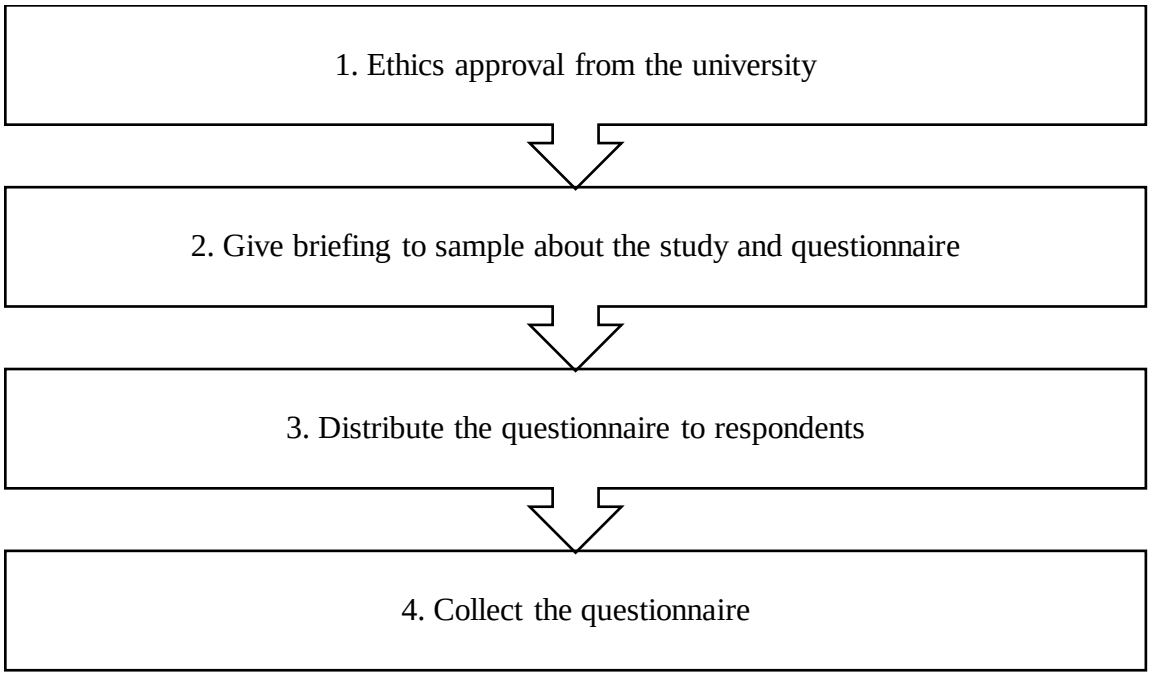

Figure 3.1 Process of Collecting Data

3.8 Conclusion

The methodology is a vital process in meeting the objective of the research. A quantitative approach has been chosen as the research design for this study. Then, the research chose instrumentation that has been adopted and adapted based on previous research that tested the reliability and validity to fit in this study. Next, population and sampling have been determined to be focused on 125 employees in a specific department: an asset, financial, and payment department. In order to meet the goal, the researcher used an online survey and a statistical method that included both descriptive and inferential analysis to collect and analyse the data.

CHAPTER FOUR
RESEARCH FINDINGS

4.1 Introduction

The empirical findings of this investigation are presented in this chapter. The statistical analysis presented in Chapter 3 was used to conduct the analysis. As recommended by prior studies, this chapter follows the generally accepted reporting style of Pearson correlation and the kind of regression analysis (Hair et al. 2017). First, the size version's validity and reliability are evaluated. On the following subtopic, this study explains the structural assessment model that covers the latent construct, effect size, and the predictive structural model. This study reports the result of regression analysis that involves the mediating effect between the independent and dependent variables towards the end of this chapter.

4.2 Demographic Profile

The profiles of the respondents who took part in this study are shown in Table 4.1. This study used an online survey technique to gather all the data. Table 4.1 demonstrates the demographic profiles of the respondents from 39 Malaysian banks. The gender distributions of the respondents are distributed between males with 50.4% (N = 63) and females with 49.6% (N = 62). Most of the respondents who participated in this study were from the commercial bank, with 40.8% (N = 51), followed by the retail bank, with 36.0% (N = 45), and the investment bank, with 23.2% (N = 29).

Most of the respondents have been serving and working in the banking industry between 1 and 5 years, with 32.0% (N = 40), followed by 6 to 10 years, with 28.8% (N = 36), 11 to 15 years, with 19.2% (N = 24), 16 to 20 years, with 12.0% (N = 15), and 21 years and above, with 8.0% (N = 10). Besides that, 32.0% (N = 40) of the respondents were managers, followed by 21.6% (N = 27) who were senior executives, 17.6% (N = 22) who were junior executives, and 16.0% (N = 20) who were senior managers and above, while respondents who were non-executives constitute 12.8% (N = 16).

Furthermore, regarding the number of branches, most of the respondents reported having between 10 and 50 branches, with 44.8% (N = 56), followed by more than 50 branches, with 32.8% (N = 41), and less than 10 branches, with 22.4% (N = 28).

Table 4.1: Demographic Profile

Dimension	Criteria	Frequency	Percent (%)
Gender	Male	63	50.4
	Female	62	49.6
Age	18–29	46	36.8
	30–44	52	41.6
	45–60	26	20.8
	Older than 60	1	0.8
Educational	High School Degree	16	12.8
	Diploma	22	17.6
	Bachelor's Degree	61	48.8
	Postgraduate Degree	21	16.8
	Professional Qualification	5	4.0
Occupation	Non-Executive	16	12.8
	Junior Executive	22	17.6
	Senior Executive	27	21.6
	Manager	40	32.0
	Senior Manager and above	20	16.0
Length of Service	1 – 5 Years	40	32.0
	6 – 10 Years	36	28.8
	11 – 15 Years	24	19.2
	16 – 20 Years	15	12.0
	21 Years and Above	10	8.0
Type of Bank	Retail Bank	45	36.0
	Commercial Bank	51	40.8
	Investment Bank	29	23.2
Number of Branches	Less than 10	28	22.4
	10 to 50	56	44.8
	More than 50	41	32.8

4.3 Normality Test

A normality test is a statistical procedure used to determine a data set's normal distribution. The primary criteria for assessing the normality of trials are the Kolmogorov-Smirnov and Shapiro-Wilk tests. The Kolmogorov-Smirnov test was used to evaluate normality when the sample size was more than 40, while the Shapiro-Wilk test was employed when the sample size was less than 40. The Kolmogorov-Smirnov test was used to establish the normality of the data in this study since the sample size was 125 (which is > 40). A non-significant finding ($p > .05$) shows that the distribution is typical. The parametric test was used for statistical analysis in this case. However, even if the significant values ($p = .05$) are present, the distribution is still deemed normal if the two mean values compared (mean and 5% mean trimmed) are not significantly different, and the values of skewness and kurtosis are within the range of 1.

According to Table 4.2, none of the variables had statistically significant values ($p > 0.05$). Although all variables were not normally distributed, the discrepancies between the two mean values (mean and 5% mean trimmed) were not significant, and the level of skewness and kurtosis was within the range of 1. In conclusion, all data variables were assumed to be regularly distributed using the normality criteria.

Table 4.2: Normality Test

	Kolmogorov-Smirnov						
	Statistic	**df**	**Sig.**	**Mean**	**5% Trimmed Mean**	**Skewness**	**Kurtosis**
Fintech Disruptive (FTD)	0.082	125	0.000	6.0240	6.0267	0.182	0.366
Fintech Perception (FTP)	0.087	125	0.000	6.0272	6.0238	0.143	0.077
Financial Resources (FR)	0.111	125	0.000	6.0011	5.9997	0.087	1.023
Physical Resources (PR)	0.102	125	0.000	5.9909	5.9937	0.153	0.266
Human Resources (HR)	0.118	125	0.000	6.0011	5.9933	0.273	0.156
Sustainability Strategy (SS)	0.096	125	0.000	6.0049	6.0041	0.075	0.627

4.4 Common Method Variance

Additionally, the data demonstrates its potential for standard method variance. This study employed Harman's one-factor test, which has been used before (Tehseen, Ramayah, & Sajilan 2017). This test aims to investigate the unrotated factor solutions to ascertain the number of factors that contribute to the variation in the variables (Kock 2017). SPSS was used to analyse standard method variance. If the proportion is more than 50%, it may be skewed toward the data. According to Table 4.3, the percentage difference is 22.74%, which does not affect the statistics.

Table 4.3: Common Method Variance

Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	**% of Variance**	**Cumulative %**	**Total**	**% of Variance**	**Cumulative**
1	1.348	22.474	22.474	1.348	22.474	22.474
2	1.259	20.986	43.461			
3	1.040	17.341	60.801			
4	0.958	15.968	76.769			
5	0.753	12.558	89.327			
6	0.640	10.673	100.000			

4.5 Descriptive Analysis

Descriptive statistical analysis was used to analyse the characteristics of the data such as central tendency, distribution, and variability. For example, this study aims to understand the tendency of respondents towards technology adoption readiness and how the data is distributed across the sampling size, as well as how it deviates from the normal distribution. The data was analysed using descriptive statistics like means, medians, modes, variants, range, and standard deviation as suggested by Sekaran (2016).

4.5.1 Objective 1: To Identify FinTech and Sustainability Strategies of Banking Industries in Malaysia

Table 4.4 shows the descriptive statistics for FinTech and sustainability strategies of banking industries in Malaysia. The factor of fintech perception (FTP) ranked first, with the highest mean and standard deviation (Mean = 6.0272; SD = 0.30884), followed by fintech disruptive (FTD) second, (Mean = 6.0240; SD = 0.34998), third, financial resource (FR), with (Mean = 6.0011; SD = 0.39186), fourth, human resource (HR) (Mean =6.0011; SD = 0.43486), and fifth, physical resource (PR) (Mean = 5.9909; SD = 0.38304).

Table 4.4: Descriptive Analysis

FinTech and Sustainability Strategies of Banking Industries in Malaysia	N	Mean	Std. Deviation	Rank
Fintech Perception (FTP)	125	6.0272	0.30884	1
Fintech Disruptive (FTD)	125	6.0240	0.34998	2
Financial Resource (FR)	125	6.0011	0.39186	3
Human Resource (HR)	125	6.0011	0.43486	4
Physical Resource (PR)	125	5.9909	0.38304	5

**Correlation is significant at $p<0.05$

4.6 Pearson Correlation Coefficient

4.6.1 Objective 2: To Examine the Relationship Between FinTech, Resource Based View, and Sustainable Strategies of the Banking Industry in Malaysia

In Table 4.5, the data has been summarised accordingly, showing the correlation coefficient between the variables involved in this study. The first relationship between the resource-based view and fintech disruptive was $r = 0.921$, $p < 0.01$. Conversely, the correlation between the resource-based view and fintech perception was $r = 0.167$, $p < 0.01$. Next, the relationship between the resource-based view and sustainable strategies was $r = 0.348$, $p < 0.01$. All variables have solid relationships and significant positive results based on these three relationships.

Table 4.5: Correlations Between Resource-Based View (RBV), Fintech Disruptive (FTD), Fintech Perception (FTP), and Sustainable Strategies (SS)

Resource-Based View (RBV)	1			
Fintech Disruptive (FTD)	.921	1		
Fintech Perception (FTP)	.167	.748	1	
Sustainable Strategies (SS)	.348	.289	.121	1

**Correlation is significant at $p<0.05$

4.7 Regression Analysis

Multiple regression analyses were conductor to evaluate the hypotheses. This statistical approach examines the connection between fintech disruptive, fintech perception (independent variables), and sustainable strategies (dependent variable), as well as the mediator (resource-based view). A preliminary examination and discussion of the basic assumptions of regression were conducted before doing the actual regression analysis. In determining the existence of mediation, the correlation coefficients were compared. This was done to avoid any potential uncertainty caused by the hazards of correlation research, in which an unconsidered variable causes a significant association between two variables.

Complete mediation will happen if there is an effect of the mediating variable. In this study, the mediating variable is gender balance, which will remain significant if the independent variables, fintech disruptive and fintech perception, are under control (Baron & Kenny 1986). Apart from that, partial mediation will probably take charge if the relationship between the independent and dependent variables is significant with the intervening variable being controlled. This study shows that fintech disruptive, fintech perception and the resource-based view are significantly expected for sustainable strategies in Malaysia's Banking Industry. In completing this analysis, some requirements need to be complied with:

i) Step 1, which is the controlled variable and the predicted variable, must be associated significantly.
ii) Step 2, the controlled and mediating variables, must be associated considerably.
iii) Step 3 is the mediator, and the predicted variable must be associated considerably.
iv) Step 4 is that the controlled variable must not affect the predicted variable when the mediator is kept constant or should become significantly smaller.

This study used the Multiple Regression Analysis and the Sobel Test to further analyse the mediation effects. In the area of mediation analysis, the Sobel test is the important statistical method for investigating the causal mechanism of mediation effects (MacKinnon, 2008). The Sobel test is utilized to examine the hypothesis in which the relationship between the independent (X) and dependent (Y) variables is mediated / affected by a third variable (Y); that is, X and Y have an indirect relationship. In other words, Sobel test examines whether the inclusion of a mediator (M) in the regression analysis considerably reduces the effect of the independent variable (X) on the dependent variable (Y) (Preacher & Leonardelli 2020).

4.7.1 Mediating Effects of the Resource-Based View (RBV) between Financial Technology (FT) and Sustainable Strategies (SS)

Table 4.6 shows that FinTech is significant and positively associated with Sustainable Strategies, yielding $\beta = 0.016$, $p < 0.001$. On the other hand, further analysis of the FinTech towards Resource-Based View revealed a significant and positive

relationship with $\beta = 0.024$, $p < 0.001$. Apart from that, Resource-Based View also showed a positive and meaningful relationship with the Sustainable Strategies, with a specific result of $\beta = 0.124$, $p < 0.001$. The previous analysis was satisfied and supported by the first three steps of mediation analysis. Additionally, multiple regressions were conducted to understand the mediating variable of the Resource-Based View with the β weight for FinTech abridged from 0.071 to 0.124, which indicated the result's significance.

Consequently, the Resource-Based View also plays an essential role as a partial mediator between FinTech and Sustainable Strategies. Further, this study conducted the Sobel Test, as shown in Table 4.7, to check the mediation with the obtained results of $z = 0.67041$, $p < 0.001$ also significant. Hence, the result obtained showed that there was no objection to rejecting the hypothesis of H1a, H2a, and H3a, which was a Resource-Based View that would mediate the relationship between FinTech and Sustainable Strategies. Figure 4.1 illustrates this mediating effect.

The results of mediation analysis and Sobel test statistics which are shown in Figure 4.1, Table 4.6, and Table 4.7, reveal that $p < 0.001$ so H1a, H2a, and H3a are accepted, which indicates that Resource-Based View mediates the association among the FinTech and Sustainable Strategies. This indicates that in maximizing the impact of FinTech as a key contributor to growth for the banking industry in Malaysia, FinTech can be maximised by having a Resource-Based View for effective Sustainable Strategies in the banking industry in Malaysia.

Table 4.6: Mediating Effects of the Resource-Based View between FinTech and Sustainable Strategies: Result of Multiple Regression Analysis

Steps of Mediation	Unstandardized β	Coefficients Std. Error	Standardized β	Value of t	Sig.
Step 1	0.024	0.108	0.020	0.225	0.000
Step 2	0.071	0.073	0.088	0.976	0.000
Step 3	0.016	0.108	0.013	0.143	0.000
Step 4	0.124	0.134	0.083	0.922	0.000

Table 4.7: Sobel Test Result

	Effects			Z Score	Level of Significance
	Direct	Indirect	Total		
Partial Mediation	0.071	0.124	0.008804	0.67041	0.000

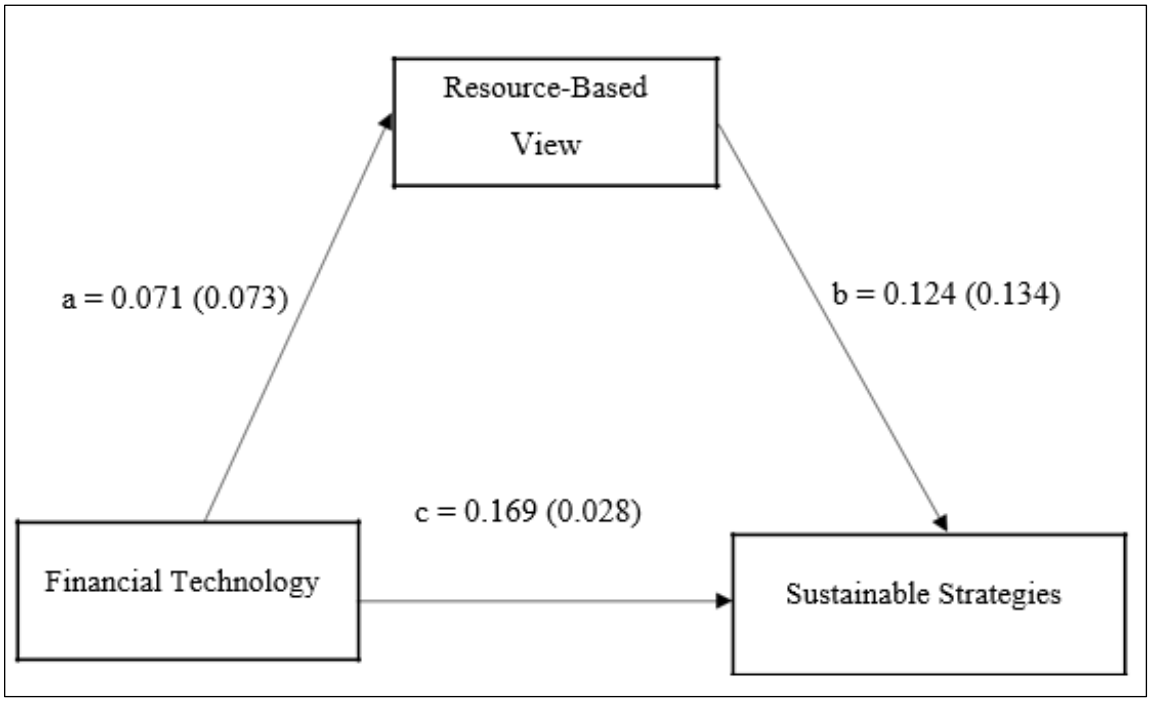

Figure 4.1 Mediating Effects of the Resource-Based View between FinTech and Sustainable Strategies

4.7.2 Mediating Effects of the Financial Resources between Fintech Disruptive and Sustainable Strategies

Table 4.8 shows that Fintech Disruptive is significant and positively associated with Sustainable Strategies, yielding $\beta = 0.077$, $p < 0.001$. On the other hand, further analysis of the Fintech Disruptive towards Financial Resources revealed a significant and positive relationship with $\beta = 0.165$, $p < 0.001$. Apart from that, Financial Resources also showed a positive and meaningful relationship with Sustainable Strategies, with a specific result of $\beta = 0.069$, $p < 0.001$. The previous analysis was satisfied and supported by the first three steps of mediation analysis. Additionally, multiple regressions were conducted to understand the mediating variable of Financial Resources with the β weight for Fintech Disruptive abridged from 0.165 to 0.069, which indicated the result's significance.

Consequently, Financial Resources also play an essential role as a partial mediator between Fintech Disruptive and Sustainable Strategies. Further, this study conducted the Sobel Test, as shown in Table 4.9, to check the mediation with the obtained results of $z = 0.883109$, $p < 0.001$ also significant. Hence, the result obtained showed that there was no objection to rejecting the hypothesis of H1b, H2b, and H3b, which was Financial Resources would mediate the relationship between Fintech Disruptive and Sustainable Strategies. Figure 4.2 illustrates this mediating effect.

The results of mediation analysis and Sobel test statistics which are shown in Figure 4.2, Table 4.8, and Table 4.9, reveal that $p < 0.001$ so H1b, H2b, and H3b are accepted, which indicates that Financial Resources mediate the association among the Fintech Disruptive and Sustainable Strategies. This indicates that in maximizing the

impact of Financial Disruptive as a key contributor to growth for the banking industry in Malaysia, Financial Disruptive can be maximised by having efficient Financial Resources for effective Sustainable Strategies in the banking industry in Malaysia.

Table 4.8: Mediating Effects of the Financial Resources between Fintech Disruptive and Sustainable Strategies: Result of Multiple Regression Analysis

Steps of Mediation	Unstandardized β	Coefficients Std. Error	Standardized β	Value of t	Sig.
Step 1	0.077	0.073	0.096	1.065	0.000
Step 2	0.165	0.100	0.147	1.651	0.000
Step 3	0.089	0.073	0.110	1.210	0.000
Step 4	0.069	0.066	0.096	1.058	0.000

Table 4.9: Sobel Test Result

	Direct Effects	Indirect	Total	Z Score	Level of Significance
Partial Mediation	0.165	0.069	0.0113850	0.883109	0.000

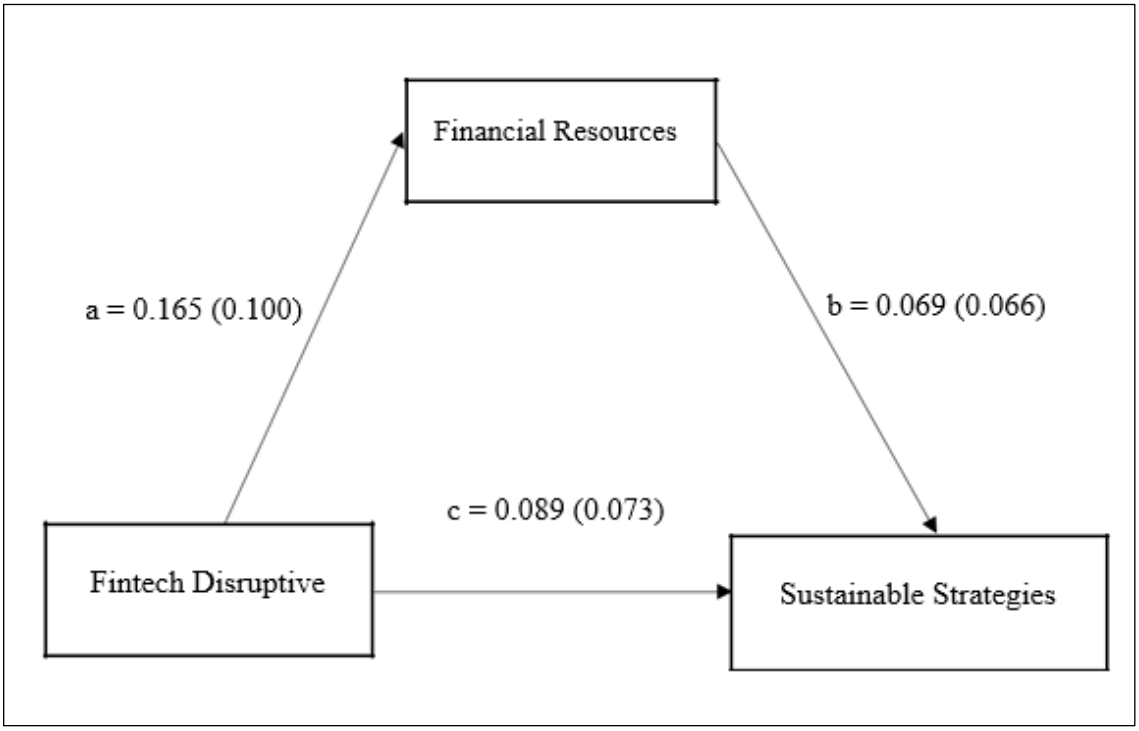

Figure 4.2 Mediating Effects of the Financial Resources between Fintech Disruptive and Sustainable Strategies

4.7.3 Mediating Effects of the Physical Resources between Fintech Disruptive and Sustainable Strategies

Table 4.10 shows that Fintech Disruptive is significant and positively associated with Sustainable Strategies, yielding $\beta = 0.077$, $p < 0.001$. On the other hand, further analysis of the Fintech Disruptive towards Physical Resources revealed a significant and positive relationship with $\beta = 0.098$, $p < 0.001$. Apart from that, Physical Resources also showed a positive and meaningful relationship with Sustainable Strategies, with a specific result of $\beta = 0.027$, $p < 0.001$. The previous analysis was satisfied and supported by the first three steps of mediation analysis. Additionally, multiple regressions were conducted to understand the mediating variable of Physical Resources with the β weight for Fintech Disruptive abridged from 0.098 to 0.027, which indicated the result's significance.

Consequently, Physical Resources also play an essential role as a partial mediator between Fintech Disruptive and Sustainable Strategies. Further, this study conducted the Sobel Test, as shown in Table 4.11, to check the mediation with the obtained results of $z = 0.373776$, $p < 0.001$ also significant. Hence, the result obtained showed that there was no objection to rejecting the hypothesis of H1c, H2c, and H3c, which was Physical Resources would mediate the relationship between Fintech Disruptive and Sustainable Strategies. Figure 4.3 illustrates this mediating effect.

The results of mediation analysis and Sobel test statistics which are shown in Figure 4.3, Table 4.10, and Table 4.11, reveal that $p < 0.001$ so H1c, H2c, and H3c are accepted, which indicates that Physical Resources mediate the association among the Fintech Disruptive and Sustainable Strategies. This indicates that in maximizing the

impact of Financial Disruptive as a key contributor to growth for the banking industry in Malaysia, Financial Disruptive can be maximised by having efficient Physical Resources for effective Sustainable Strategies in the banking industry in Malaysia.

Table 4.10: Mediating Effects of the Physical Resources between Fintech Disruptive and Sustainable Strategies: Result of Multiple Regression Analysis

Steps of Mediation	Unstandardized β	Coefficients Std. Error	Standardized β	Value of t	Sig.
Step 1	0.077	0.073	0.096	1.065	0.000
Step 2	0.098	0.098	0.089	0.994	0.000
Step 3	0.080	0.073	0.099	1.094	0.000
Step 4	0.027	0.067	0.037	0.409	0.000

Table 4.11: Sobel Test Result

	Effects			Z Score	Level of Significance
	Direct	Indirect	Total		
Partial Mediation	0.098	0.027	0.002646	0.373776	0.000

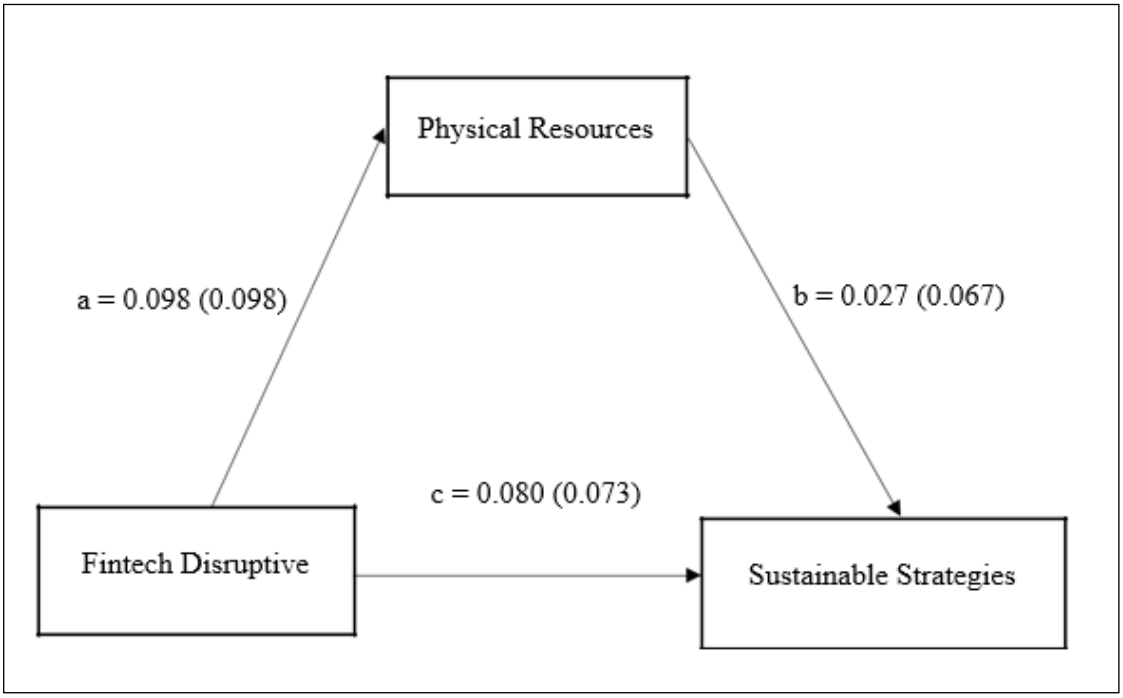

Figure 4.3 Mediating Effects of the Physical Resources between Fintech Disruptive and Sustainable Strategies

4.7.4 Mediating Effects of the Human Resources between Fintech Disruptive and Sustainable Strategies

Table 4.12 shows that Fintech Disruptive is significant and positively associated with Sustainable Strategies, yielding = 0.077, $p < 0.001$. On the other hand, further analysis of the Fintech Disruptive towards Human Resources revealed a significant and positive relationship with $\beta = 0.052$, $p < 0.001$. Apart from that, Human Resources also showed a positive and meaningful relationship with Sustainable Strategies, with a specific result of $\beta = 0.040$, $p < 0.001$. The previous analysis was satisfied and supported by the first three steps of mediation analysis. Additionally, multiple regressions were conducted to understand the mediating variable of Human Resources with the β weight for Fintech Disruptive abridged from 0.052 to 0.040, which indicated the result's significance.

Consequently, Human Resources also play an essential role as a partial mediator between Fintech Disruptive and Sustainable Strategies. Further, this study conducted the Sobel Test, as shown in Table 4.13, to check the mediation with the obtained results of $z = 0.383069$, $p < 0.001$ also significant. Hence, the result obtained showed that there was no objection to rejecting the hypothesis of H1d, H2d, and H3cd which was Human Resources would mediate the relationship between Fintech Disruptive and Sustainable Strategies. Figure 4.4 illustrates this mediating effect.

The results of mediation analysis and Sobel test statistics which are shown in Figure 4.4, Table 4.12, and Table 4.13, reveal that $p < 0.001$ so H1c, H2c, and H3c are accepted, which indicates that Physical Resources mediate the association among the Fintech Disruptive and Sustainable Strategies. This indicates that in maximizing the

impact of Financial Disruptive as a key contributor to growth for the banking industry in Malaysia, Financial Disruptive can be maximised by having efficient Human Resources for effective Sustainable Strategies in the banking industry in Malaysia.

Table 4.12: Mediating Effects of the Human Resources between Fintech Disruptive and Sustainable Strategies: Result of Multiple Regression Analysis

Steps of Mediation	Unstandardized β	Coefficients Std. Error	Standardized β	Value of t	Sig.
Step 1	0.077	0.073	0.096	1.065	0.000
Step 2	0.052	0.112	0.042	0.469	0.000
Step 3	0.075	0.073	0.093	1.033	0.000
Step 4	0.040	0.059	0.061	0.675	0.000

Table 4.13: Sobel Test Result

	Effects			Z Score	Level of Significance
	Direct	Indirect	Total		
Partial Mediation	0.052	0.040	0.002080	0.383069	0.000

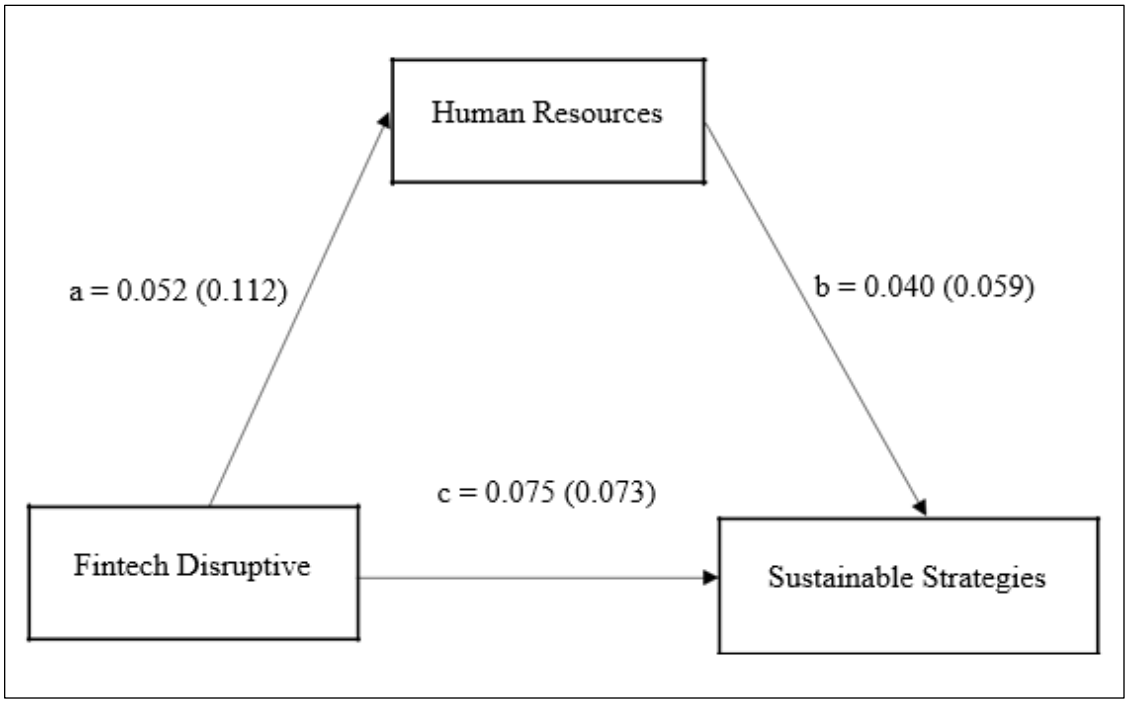

Figure 4.4 Mediating Effects of the Human Resources between Fintech Disruptive and Sustainable Strategies

4.7.5 Mediating Effects of the Financial Resources between Fintech Perception and Sustainable Strategies

Table 4.14 shows that Fintech Disruptive is significant and positively associated with Sustainable Strategies, yielding $\beta = 0.128$, $p < 0.001$. On the other hand, further analysis of the Fintech Perception towards Financial Resources revealed a significant and positive relationship with $\beta = 0.015$, $p < 0.001$. Apart from that, Human Resources also showed a positive and meaningful relationship with Sustainable Strategies, with a specific result of $\beta = 0.057$, $p < 0.001$. The previous analysis was satisfied and supported by the first three steps of mediation analysis. Additionally, multiple regressions were conducted to understand the mediating variable of Human Resources with the β weight for Fintech Perception abridged from 0.015 to 0.057, which indicated the result's significance.

Consequently, Financial Resources also play an essential role as a partial mediator between Fintech Perception and Sustainable Strategies. Further, this study conducted the Sobel Test, as shown in Table 4.15, to check the mediation with the obtained results of $z = 0.000855$, $p < 0.001$ also significant. Hence, the result obtained showed that there was no objection to rejecting the hypothesis of H1e, H2e, and H3e, which was Financial Resources would mediate the relationship between Fintech Perception and Sustainable Strategies. Figure 4.5 illustrates this mediating effect.

The results of mediation analysis and Sobel test statistics which are shown in Figure 4.5, Table 4.14, and Table 4.15, reveal that $p < 0.001$ so H1e, H2e, and H3e are accepted, which indicates that Financial Resources mediate the association among the Fintech Perception and Sustainable Strategies. This indicates that in maximizing the

impact of Financial Perception as a key contributor to growth for the banking industry in Malaysia, Financial Disruptive can be maximised by having efficient Financial Resources for effective Sustainable Strategies in the banking industry in Malaysia.

Table 4.14: Mediating Effects of the Financial Resources between Fintech Perception and Sustainable Strategies: Result of Multiple Regression Analysis

Steps of Mediation	Unstandardized β	Coefficients Std. Error	Standardized β	Value of t	Sig.
Step 1	0.128	0.082	0.139	1.561	0.000
Step 2	0.015	0.114	0.012	0.130	0.000
Step 3	0.127	0.082	0.138	1.549	0.000
Step 4	0.057	0.065	0.078	0.875	0.000

Table 4.15: Sobel Test Result

	Effects			Z Score	Level of
	Direct	**Indirect**	**Total**		**Significance**
Partial Mediation	0.015	0.057	0.000855	0.678607	0.000

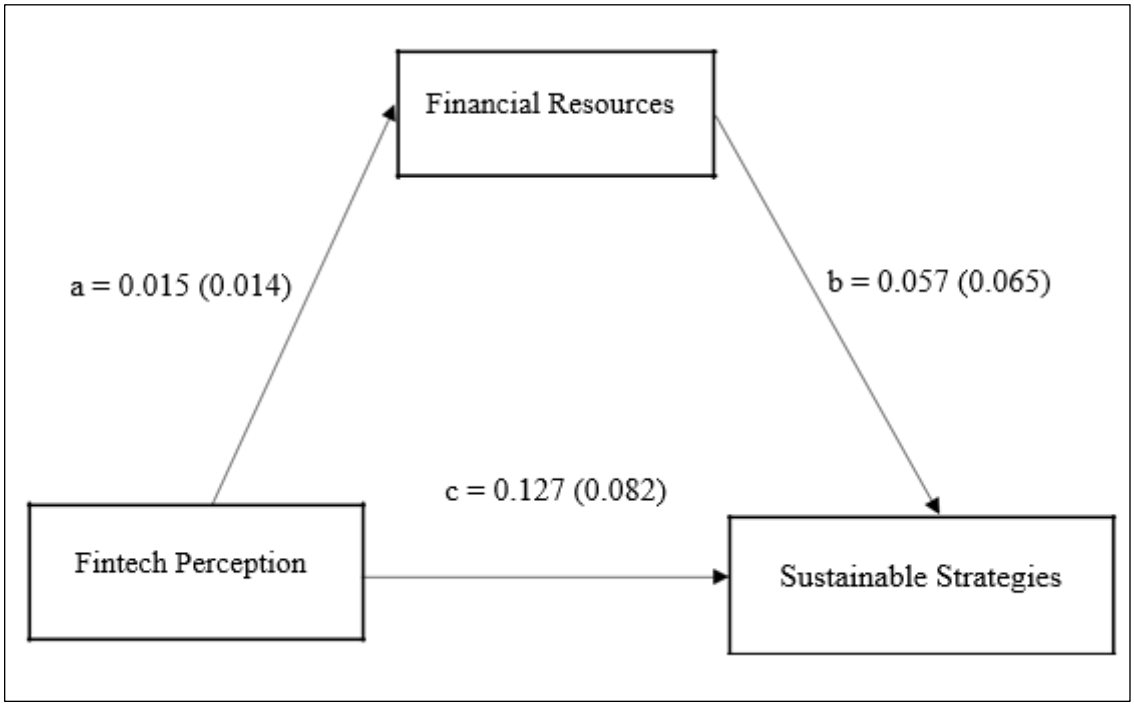

Figure 4.5 Mediating Effects of the Financial Resources between Fintech Perception and Sustainable Strategies

4.7.6 Mediating Effects of the Physical Resources between Fintech Perception and Sustainable Strategies

Table 4.16 shows that Fintech Disruptive is significant and positively associated with Sustainable Strategies, yielding $\beta = 0.128$, $p < 0.001$. On the other hand, further analysis of the Fintech Perception towards Physical Resources revealed a significant and positive relationship with $\beta = 0.027$, $p < 0.001$. Apart from that, Physical Resources also showed a positive and meaningful relationship with Sustainable Strategies, with a specific result of $\beta = 0.019$, $p < 0.001$. The previous analysis was satisfied and supported by the first three steps of mediation analysis. Additionally, multiple regressions were conducted to understand the mediating variable of Physical Resources with the β weight for Fintech Perception abridged from 0.027 to 0.019, which indicated the result's significance.

Consequently, Physical Resources also play an essential role as a partial mediator between Fintech Perception and Sustainable Strategies. Further, this study conducted the Sobel Test, as shown in Table 4.17, to check the mediation with the obtained results of $z = 0.000513$, $p < 0.001$ also significant. Hence, the result obtained showed that there was no objection to rejecting the hypothesis of H1f, H2f, and H3f, which was Physical Resources would mediate the relationship between Fintech Perception and Sustainable Strategies. Figure 4.6 illustrates this mediating effect.

The results of mediation analysis and Sobel test statistics which are shown in Figure 4.6, Table 4.16, and Table 4.17, reveal that $p < 0.001$ so H1f, H2f, and H3f are accepted, which indicates that Physical Resources mediate the association among the Fintech Perception and Sustainable Strategies. This indicates that in maximizing the

impact of Financial Perception as a key contributor to growth for the banking industry in Malaysia, Financial Perception can be maximised by having efficient Physical Resources for effective Sustainable Strategies in the banking industry in Malaysia.

Table 4.16: Mediating Effects of the Physical Resources between Fintech Perception and Sustainable Strategies: Result of Multiple Regression Analysis

Steps of Mediation	Unstandardized β	Coefficients Std. Error	Standardized β	Value of t	Sig.
Step 1	0.128	0.082	0.139	1.561	0.000
Step 2	0.027	0.112	0.022	0.240	0.000
Step 3	0.128	0.082	0.139	1.549	0.000
Step 4	0.019	0.066	0.025	0.281	0.000

Table 4.17: Sobel Test Result

	Effects			Z Score	Level of
	Direct	Indirect	Total		Significance
Partial Mediation	0.027	0.019	0.000513	0.184825	0.000

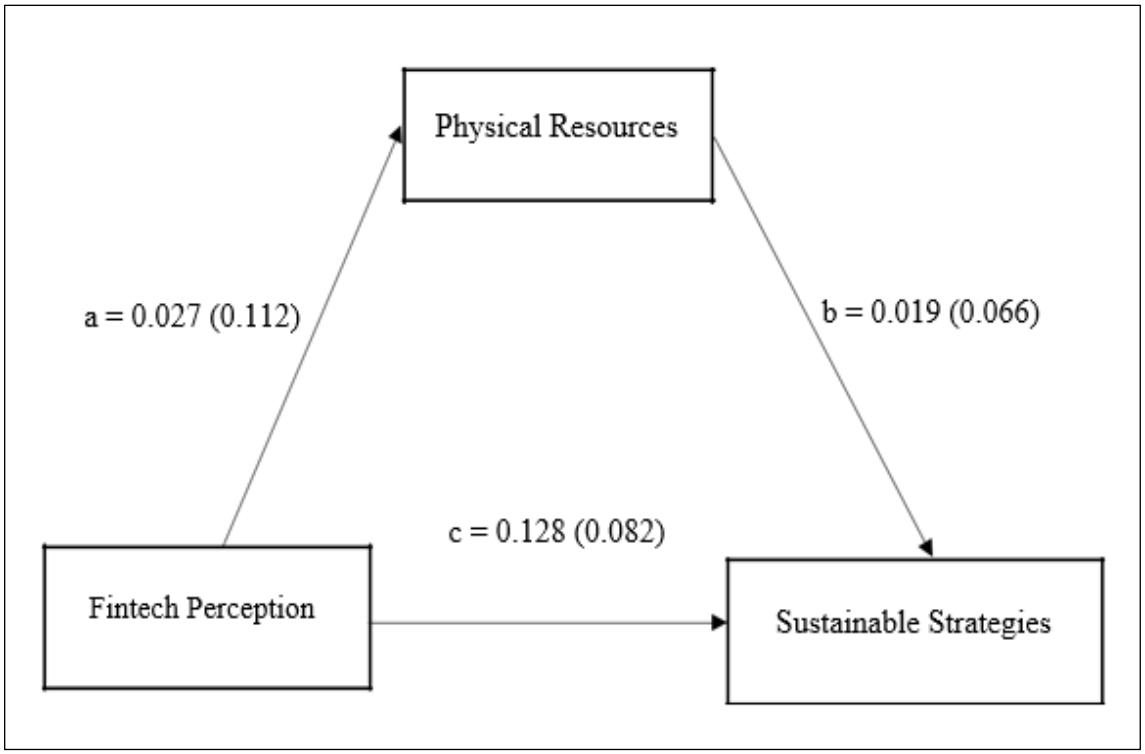

Figure 4.6 Mediating Effects of the Physical Resources between Fintech Perception and Sustainable Strategies

4.7.7 Mediating Effects of the Human Resources between Fintech Perception and Sustainable Strategies

Table 4.18 shows that Fintech Perception is significant and positively associated with Sustainable Strategies, yielding $\beta = 0.128$, $p < 0.001$. On the other hand, further analysis of the Fintech Perception towards Human Resources revealed a significant and positive relationship with $\beta = 0.243$, $p < 0.001$. Apart from that, Human Resources also showed a positive and meaningful relationship with Sustainable Strategies, with a specific result of $\beta = 0.027$, $p < 0.001$. The previous analysis was satisfied and supported by the first three steps of mediation analysis. Additionally, multiple regressions were conducted to understand the mediating variable of Human Resources with the β weight for Fintech Perception abridged from 0.243 to 0.027, which indicated the result's significance.

Consequently, Human Resources also play an essential role as a partial mediator between Fintech Perception and Sustainable Strategies. Further, this study conducted the Sobel Test, as shown in Table 4.19, to check the mediation with the obtained results of $z = 0.006561$, $p < 0.001$ also significant. Hence, the result obtained showed that there was no objection to rejecting the hypothesis of H1g, H2g, and H3g, which was Human Resources would mediate the relationship between Fintech Perception and Sustainable Strategies. Figure 4.7 illustrates this mediating effect.

The results of mediation analysis and Sobel test statistics which are shown in Figure 4.7, Table 4.18, and Table 4.19, reveal that $p < 0.001$ so H1g, H2g, and H3g are accepted, which indicates that Human Resources mediate the association among the Fintech Perception and Sustainable Strategies. This indicates that in maximizing the

impact of Financial Perception as a key contributor to growth for the banking industry in Malaysia, Financial Perception can be maximised by having efficient Human Resources for effective Sustainable Strategies in the banking industry in Malaysia.

Table 4.18: Mediating Effects of the Human Resources between Fintech Perception and Sustainable Strategies: Result of Multiple Regression Analysis

Steps of Mediation	Unstandardized β	Coefficients Std. Error	Standardized β	Value of t	Sig.
Step 1	0.128	0.082	0.139	1.561	0.000
Step 2	0.243	0.125	0.173	1.944	0.000
Step 3	0.121	0.084	0.132	1.453	0.000
Step 4	0.027	0.059	0.042	0.461	0.000

Table 4.19: Sobel Test Result

	Effects			Z Score	Level of
	Direct	**Indirect**	**Total**		**Significance**
Partial Mediation	0.243	0.027	0.006561	0.445451	0.000

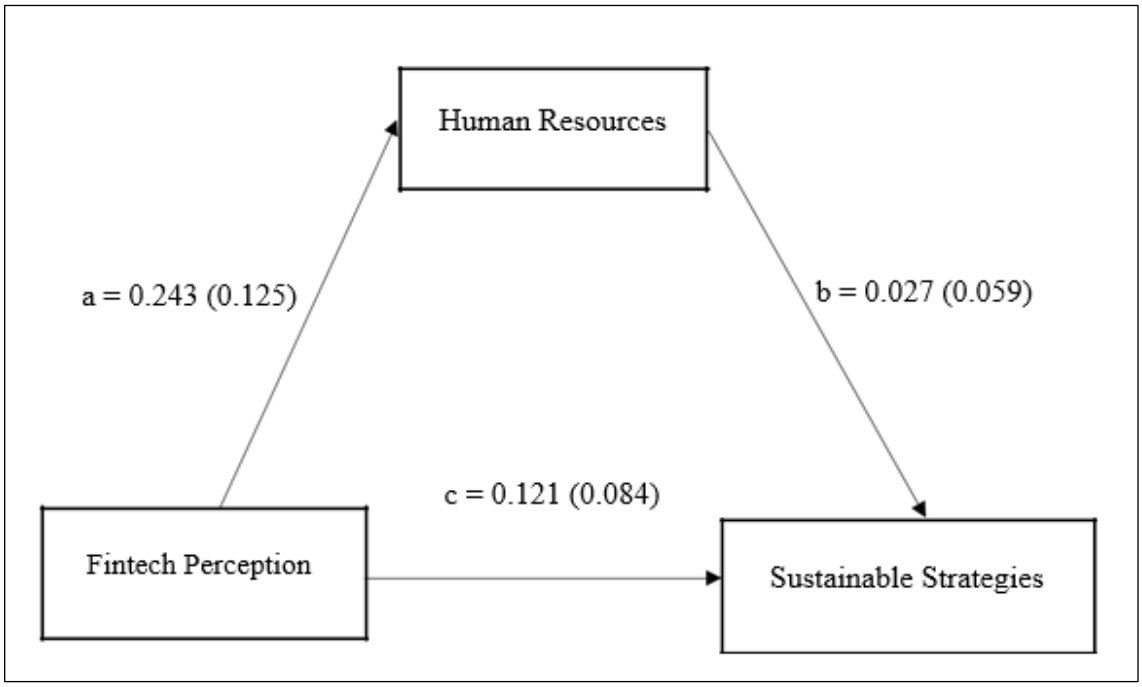

Figure 4.7 Mediating Effects of the Human Resources between Fintech Perception and Sustainable Strategies

4.8 Hypotheses Testing

The summary of hypotheses testing is tabulated in Table 4.20.

Table 4.20: Hypotheses Testing

	Hypothesis Statement	Result
H1a H2a H3a	There is a positive relationship between FinTech, Resource- Based View, and Sustainable Strategies.	Supported
H1b H2b H3b	There is a positive relationship between Fintech Disruptive, Financial Resources, and Sustainable Strategies.	Supported
H1c H2c H3c	There is a positive relationship between Fintech Disruptive, Physical Resources, and Sustainable Strategies.	Supported
H1d H2d H3d	There is a positive relationship between Fintech Disruptive, Human Resources, and Sustainable Strategies.	Supported
H1e H2e H3e	There is a positive relationship between Fintech Perception, Financial Resources, and Sustainable Strategies.	Supported
H1f H2f H3f	There is a positive relationship between Fintech Perception, Physical Resources, and Sustainable Strategies.	Supported
H1g H2g H3g	There is a positive relationship between Fintech Perception, Human Resources, and Sustainable Strategies.	Supported

4.9 Conclusion

In Chapter 4, the results have been analysed. This study was carried out on respondents from various banks in Malaysia. A demographic profile aims to understand the identity of specific respondents better. It also seeks basic information about respondents that allows the survey to know where each person fits into the general population. This chapter shows how regression can estimate the research model and establish rigour in the data analysis technique. Based on the discussion, it is evident that this approach can effectively handle all complexity to provide robust solutions for a model.

Finally, this chapter confirmed the measurement and structural aspects of the study model by proving acceptable reliability and validity. The study also attempted to evaluate the links between the model's constructs and test four primary assumptions. This study used regression path modelling to estimate the research model's parameters to test all these predictions. The result shows that twenty-one hypotheses were supported.

CHAPTER FIVE
DISCUSSION OF RESULTS

5.1 Introduction

The study's findings are discussed in this chapter. After recapitulating the study, the discussion proceeds to the demographic profiles of the respondents. The findings are then discussed in this chapter based on four research objectives. The discussion of the findings is a crucial part of the thesis, whereby all the findings need to be explored and discovered from a different perspective and angle. Therefore, it is imperative to fill the gaps that have been identified in the previous chapter.

5.2 Recapitulation of the Study Based on the New Structure

This study needs to be summarised in this section to tie all the concepts and context of this study together. As in Chapter 1, the researcher begins the research by exploring the background of the study about the applications of technology and innovation that make people's lives more accessible. The evolution of technologies is getting "wilder," with each industry trying to take "advantage" of it. The banking industry has also impacted this revolution 4.0 by shifting from physical transactions to online transactions. The disruption of FinTech and innovation would give their consumers the latest products or services via social media and mobile applications from diverse viewpoints.

Therefore, this study examines the perception of disruptive FinTech by the banking industry in Malaysia and produces sustainable solutions that might benefit stakeholders at the end of the process. As a final objective of this study, it will contribute to the body of knowledge in the banking sector and aid practitioners, bankers, policymakers, and authorities in understanding the effect and impact of disruptive FinTech on the banking industry by developing an impact model for disruptive FinTech on sustainability strategies with RBV as a mediator.

Meanwhile, in Chapter 2, the researcher is discovering the past literature that has been explored in this study area. It gives some connotation to the researcher in identifying which angle can enhance the body of knowledge in the scope of disruptive FinTech. FinTech advancements and innovation will present alternative perspectives to the banking industry in providing their customers with the latest goods and services through the everyday use of the internet and mobile applications. Several individuals, eager to utilise technology and innovation to make it all so simple, force the banking sector, faced with a contemporary revolution 4.0, to respond similarly.

All the advancements made from a visit to a few moments on a mobile phone help customers experience a wide range of participation in bank administration. The stated market and district changes should offset the opportunity potential. In addition, funding is not easily possible since retail banking sectors have vast frontiers (for examples: administrative capital requirements, ownership structures, and sector restrictions). Indeed, B2C FinTech firms, particularly those selling to banks, are disadvantaged due to their fragmented management structures, which partially change the default rates for customers.

More specifically, this part emphasises the insights into the overall study findings in keeping with the research goals. The theoretical framework underpinning this study is based on sustainable development theory and RBV. The scale items from prior research were modified to meet the objectives of this study after a comprehensive assessment of the literature. Future RBV information systems research should focus on innovative and disruptive technology to increase our understanding of information systems and their value theory. In particular, researchers focus on innovations that challenge conventional RBV ideas. For example, big data, cloud computing, crowdsourcing, and the internet have been crucial to establishing competitive advantages. Traditional RBV and IT systems concepts have nevertheless been questioned.

According to prior research, community banks may use FinTech to produce strategic value and enhance their evaluation by enhancing one or more significant areas of cash flow, risk, and growth. For example, FinTech may increase cash flow (spreading) by raising earnings. Non-interest income or cost reductions, risk management through increased product diversification, or improving prospective growth opportunities through faster revenue growth. Combating higher cash flows with potentially high growth rates against new risks is necessary to measure and assess FinTech's niches and their influence on their application.

On the other hand, governments are beginning to alter their policies and regulatory frameworks to promote the rise of FinTech. Growing economic growth, which is essential for both developing and established countries, is closely connected to the functioning of financial markets. This study examines the disruptive FinTech of Malaysia's banking organisation and looks at sustainable methods to aid the partners in getting the process to

a conclusion.

On the other hand, Chapter 3 presents the methodology. The methodology is a critical step in achieving the research goal. For this study, a quantitative method was used as the research strategy. Then, based on past research, researchers picked apparatus that had been accepted and altered to meet this study's reliability and validity. A demographic and sample strategy were devised that targeted 125 employees in a single department, namely the asset, finance, and payment departments. The researcher utilised an online medium to conduct the survey and analyse the results using a statistical technique of descriptive and inferential analysis to fulfil the objectives.

Following that, a pilot examination was conducted with a total of 18 respondents, entirely based on a 10-point interval scale that had been tested via several statistical metrics (item reliability and validity). Furthermore, using Smart-PLS 2.0 SEM software, the number one information series was completed in all contexts of the banking industry, including information screening, estimation of content material validity, element loading significance, and convergent and discriminant validities under the PLS-SEM outer version specification. After establishing the measurement model, three mediator variables (financial resources, physical resources, and human resources) were found to be mediators on the independent variable (FinTech) and dependent variable (sustainability strategies).

Next, in Chapter 4, this study looked into the impacts of FinTech on sustainability plans in the banking industry, using the RBV as a mediator. The goal of a demographic profile is to gain a deeper grasp of a given respondent's identity. It also asks for some basic information about respondents so that the survey can figure out where they fall within the broader population. The researcher examines the pilot study and discriminant validity in

the second table.

This study looks at common method variance, which is crucial when data is obtained using self-reported surveys. If treatments are impacted by CMV or common method bias, their inter-correlations may be exaggerated or deflated depending on various variables. The statistics indicated that the response rate for the questionnaire was less than 50%. This chapter demonstrates how SEM-PLS may estimate the research model and ensure a rigorous data analysis approach. Based on the discussion, it is clear that this technique can successfully manage all levels of complexity to give reliable model answers.

Finally, by demonstrating appropriate reliability and validity, this chapter validated the measurement and structural features of the study model. The study is also intended to evaluate the connections between the model's components and test five hypotheses. The researchers used SEM-PLS path modelling to estimate the research model's parameters and achieve these goals. According to the findings, FinTech positively impacts sustainability strategies and resource-based perspectives ($p<0.05$). Furthermore, RBV also has a significant effect on sustainability strategies ($p<0.05$) and acts as a mediator between FinTech and sustainability strategies ($p<0.05$).

5.3 Discussion for Respondents' Background

In the previous section, the researcher conducted the data analysis to identify the descriptive analysis in terms of the demographic profile. This study seeks feedback from the respondents regarding the influence of FinTech on sustainability strategies in RBV as a mediator. For the sustainability strategies, the researchers looked into the social and environmental aspects of the influence of FinTech. According to the previous research, the results obtained were based on 125 employees who had returned the questionnaires. The result was a bachelor's degree holder, which was the highest in education, with 48.8% (N = 61), while the lowest number was a professional qualification rate of 4.0% (N = 5).

Next, for the position, the highest percentage was from the manager at 32% (N = 40), and the lowest was from non-executive employees at 12.8% (N = 16). Besides that, commercial banks' 40.8% (N = 51) was the highest type of banking, followed by retail banking's 36.0% (N = 45), and the lowest was investment banking's 23.2% (N = 29). For the length of banking shows, 1–5 years was the highest number with 32% (N = 40), compared to 21 years and above with 8% (N = 10). Lastly, for branches, 10–50 shows the highest percentage with 44.8% (N = 56), followed by less than 10 with 22.4% (N = 28), and followed by more than 50 with 32.8% (N = 41).

According to the results obtained, it gives a significant perspective that 125 employees from three crucial departments—asset, financial, and payment—have become familiar with the adoption and usage of FinTech on a daily basis. These are significant findings because, based on the demographic profile, they give a better result in meeting the objective of this study. As per the analysis conducted in the previous chapter, all the

hypotheses outlined were supported. Using FinTech while working daily contributes to sustainability strategies in the banking industry.

As we move towards a cashless generation, the early adoption of FinTech among bank employees in Malaysia seems essential. FinTech utilisation can be spread across all levels and departments since this study only focuses on the payment, financial, and asset departments.

5.4 Discussion for Objective 1: To Examine the Relationship between FinTech and Sustainability Strategies in Banking Industry

With regard to the first objective, the researcher was eager to link FinTech and sustainability tactics in Malaysia's banking sector. FinTech, which was covered in detail in the previous chapter, is a new technology that aims to enhance and automate the provision and use of financial services. At its most fundamental, fintech is used to help businesses, business owners, and people better manage their financial operations, processes, and lives through the use of specialised software and algorithms that run on computers and, increasingly, smartphones. Financial technology and financial innovation have been combined to form the term "FinTech."

As a result, while looking for a link between FinTech and sustainability policies in the banking sector, it becomes clear that there is a strong correlation between these two factors. Everything will change for the better when the industrial revolution 4.0 sweeps the globe. The idea of automation gradually replaces manual, customary actions in carrying out any task. The use of cashless transactions for everyday transactions has demonstrated how the globe is adjusting to the new system. To ensure sustainability in

this world, technical advancement and the revolutionary worldview have continued to change.

This objective is concerned with the relationship between FinTech and sustainability tactics. It demonstrates how technology adoption and adaptation in the banking sector are advantageous to the industry's culture and surroundings. The use of FinTech in the assets, payment, and financial divisions of the bank, despite the fact that Malaysia's banking system is still investigating the idea of FinTech in the banking system, shows that the sector is moving toward sustainability strategies. Similar to how environmental and social goals were incorporated into the context of the previous chapter, sustainability plans do so by generating long-term value for the bank, its stakeholders, and the community.

The majority of the results show that FinTech influences sustainability strategies generally, which is consistent with findings from earlier studies on FinTech and sustainability strategies (Indriasari 2019; Christensen et al. 2018). According to study done in numerous Chinese provinces by Deng, Huang, and Cheng (2019), it is clear that the eastern and central areas had a substantial influence on the way FinTech and sustainability initiatives interacted.

However, there is a negative correlation in the western region. According to Wonglimpiyarat (2017), these findings also support the findings of earlier research that FinTech has a beneficial effect on sustainability measures. He also looked into the interaction between FinTech and the financial services provided by Thailand's five central commercial banks. According to the author, technology could improve financial services by lowering costs, boosting productivity, and expanding access.

Furthermore, the banking industry's use of FinTech not only demonstrates its commitment to sustainability, but also somehow helps its customers. In essence, as a customer of the banking system, incorporating FinTech into daily activities has improved accessibility. Only three departments—payment, financial, and assets—were the focus of the research in this situation. For instance, customers or suppliers only need to make a few clicks to handle their business with these departments, and the outcome or status was displayed promptly. In order to address the increased demand from individuals for more accessible access to their financial needs, FinTech has started to gain traction (Micu 2016). As a result, there have been advances in the financial sector and some disruptive FinTech, such alternative payment systems, which are a challenge to banks and other established providers of financial services.

Additionally, partnerships and joint ventures with other FinTech firms can aid in the modernization and sustainability of the banking sector. According to the research done by Suryono et al. (2020), FinTech involves a lot of personal data, and keeping an eye on the platform is also good for user safety. Additionally, the architecture and quality of data protection need to be long-lasting. In addition, working with a conventional financial institution also requires FinTech. FinTech is needed by banks as a strategic partner since it is thought to follow digital transformation more quickly.

5.5 Discussion for Objective 2: To Identify the Relationship between FinTech and Research-Based View (RBV) in Banking Industry

The application of a resource-based view in identifying the resources accessible inside the organisation and tying them to the firm's capabilities is stressed in this study, as mentioned in the preceding chapter. However, RBV argues that organisations have assets that give them a competitive advantage and improve long-term performance. You can improve your competitive position by using valuable and unusual resources.

Examples of tangible resources that can be touched or felt and have a physical shape include structures, plants, machinery, exclusive licences, patents, stocks, land, and employees. By definition, intangible resources are more challenging to pinpoint. Because it analyses and evaluates an organization's internal resources, focusing on resources and capabilities when creating a strategy to acquire long-term competitive advantages, RBV is a competitive advantage. Resources could be thought of as inputs that help businesses run their operations.

The researcher discovers the link between FinTech and RBV in this context by naming FinTech as one of the resources in the banking sector. Since the introduction of FinTech is still relatively recent in Malaysia's banking sector, it has had a considerable impact on filling in the gaps from both a theoretical and practical standpoint for both academics and practitioners. The resource-based attitude is greatly influenced by FinTech, according to this study's findings. Consequently, it demonstrates that the study's respondents gave thoughtful responses and came to the conclusion that FinTech is a resource for banks that contributes to their sustainability. According to Kamasak's (2017) previous research, FinTech is one of the tangible and intangible resources that a bank must

own and fully utilise in order to satisfy industrial development 4.0.

The findings further support the theory of RBV in that they provide fresh viewpoints, particularly in terms of advancing our understanding of Malaysia's banking sector. In addition, FinTech is beneficial and aids the banking sector in the efficient deployment of its operational processes to generate and distribute its commodity technology capacity (Davradakis & Santos 2019; Kitinoja et al. 2011). Sharma et al. (2019) further noted that seeing FinTech as a resource for banks can assist in firm restructuring and make top-level management more capable of making wise decisions that would propel the bank toward success.

The strong relationship between FinTech and RBV also helps the bank find skilled and potential workers so they can advance their education and gain experience in the fields of evaluation, payment, and finance. This will enable the bank to expand and remain viable. Users of internet banking were impacted by the presentation of FinTech. The attitude toward FinTech was influenced by the fact that employees had a high level of adaptability and were eager to learn at their own pace. Additionally, employees have their own perspectives and may be more favourable if FinTech is advantageous to them and makes it simple to access. This has been demonstrated by the findings on employee acceptance of FinTech.

5.6 Discussion for Objective 3: To Investigate the Relationship between Research-Based View (RBV) and Sustainability Strategies in Banking Industry

The third objective was to investigate the relationship between resource-based views and sustainability strategies. The findings indicate a considerable correlation between a resource-based perspective and sustainability initiatives. Numerous studies on RBV and sustainability tactics have generally been done in this field. Research on RBV and sustainability with regard to governmental authority was conducted by Rousseau (2019). The results demonstrate how these two variables work together and pool their resources to provide services that are sustainable. In addition, Pervez, Abu, and Owee (2020) demonstrate RBV and sustainability analyses for five major Mexican enterprises using actual data. The findings demonstrated that businesses would be better positioned to react to the constraints of the economy, society, and environment.

The level of a company's competitiveness is a reflection of its long-term success and interactions with its competitors and industry peers. Competitive success demands ongoing awareness of the circumstances in which the organisation may experience value loss or creation. By developing a strategy that generates and sustainably captures value, sustainable businesses succeed over the long term despite the limitations imposed by economic, social, and environmental systems. Sustainable practises are essential to a company's business model and longevity since a focused, long-term activity offers competitive benefits.

Nevertheless, according to the banking sector, bank resources—tangible or intangible—help and support the bank to expand in terms of product development, services, corporate viewpoint, and technological improvement. FinTech has been included in this study's list of bank resources that might improve the performance of the bank, particularly in the departments of assets, payments, and finances. Many stakeholders now have a better understanding of how banking operates in the millennial era as a result of technology being introduced into the system.

Since every transaction may be completed online or through a mobile application, new features and updates must be added often to satisfy users. These findings support earlier research that discovered a resource-based perspective influences sustainability efforts in a favourable way (Chavez 2018; Campbell et al. 2016). Using a resource-based holistic approach, to put it another way, can aid the banking industry's sustainability objectives. This is due to the fact that a resource-based approach is useful in assisting businesses in enhancing overall performance and acquiring a long-term competitive edge. A helpful resource-based perspective and sustainable practises have a strong, high-quality relationship, according to research.

As a result, if resource-based perspective practises are in place, market demands can be simply detected and advertising techniques may be improved, leading to an improvement in client value and, thus, firm earnings. Banks are more dedicated to offering smart customer service. Additionally, their efforts may lead to the availability of a carrier that is overly acceptable, enabling business owners to enhance the performance of their organisation as a whole.

By providing sophisticated carrier fees, banks can often satisfy their clients' needs and expectations. In conclusion, banks may be quick, accurate, and dependable when resource-based fully view dimensions are available within the bank, boosting the bank's products and bringing them closer to the customers. They will consequently raise their income, become more productive, and create long-term plans.

5.7 Discussion for Objectives 4: To Develop the Model of FinTech, Research-Based View (RBV) as a Mediator, and Sustainability Strategies in the Context of the Banking Industry

RBV and long-term sustainability are related, as was previously mentioned in the subtopic that came before it. FinTech is also related to both of these concepts. The role of RBV as a bridge between FinTech and long-term strategic goals has thus been investigated. Incorporating mediator factors will help us comprehend how the two variables are related in this study. As a result, RBV will act as a mediator and an explanatory variable to show and describe the connection between FinTech and sustainability.

The assessment of the mediator effects of resource-based attitudes on the link between monetary and sustainability strategies among Malaysian banking organisations is the fourth objective. For banking organisations with a high resource-based approach as opposed to those with a low-RBV, this link is more important. Since identifying directing outcomes is a key component of this analysis, more convincing arguments in support of the resource-based interpretation of the directing effect was provided from speculative perspectives and prior observational research.

Based on prior research that suggests FinTech can considerably enhance sustainability strategies in the banking industry, the current study uses a resource-based approach to investigate the relationship between FinTech and sustainability strategies. Creating environmental policies that include sustainability objectives and a vision has been a long-standing practise in establishing and implementing sustainable banking practises (Sharma 2019; Tetik 2017; Clarke et al. 2016; Backman et al. 2015).

When viewed through the lens of an RBV acting as a mediator, financial support for environmental and social causes generates priceless intangible resources such as goodwill, brand value, and reputation that, while initially resulting in higher costs, can be strategically transformed into financial gain. The profit is maximised by socially responsible strategic options, as larger companies in India have recently realised. Thus, this study shows how important FinTech is—especially for larger organisations. In contrast, the environmental and governance aspects of FinTech as a whole, as well as marketing performance, are inversely related.

This study anticipates that if banks perform better over time, all stakeholders will receive a favourable message, which will lead to improved company performance. According to Chang, Amran, and Iranmanesh (2019), large equatorial financial institutions have superior reporting quality, which gets better with time as a member. However, all of these institutions must report on FinTech. According to the study, banks should build a sustainable competitive advantage in the modern economy using strategic resources that are directly related to their capacity for innovation. Those that are most important for a bank to enhance are its departmental finances, assets, and payments. Shih (2008) understood the value of FinTech and sustainability measures, and he found the

research to be significant. The results are in line with earlier research on the banking industry and other markets, which highlighted the value of human capital and employee incentives (Meireles et al. 2020; Tasawar 2017; Flaming 2017). How strategic management affects the capacity to develop long-term client relationships and resource allocation (Flaming 2017). Models of open and user-driven innovation must have this capability (Hoffmann 2018).

The firm's RBV suggests that non-adaptable and non-imitable mechanical skill is a substantial source of sustained advantage in the banking industry since it is derived from internal knowledge and expertise that cannot be transferred across organisations or copied by competitors. Due to intense pressure to outperform rivals in the fiercely competitive banking industry, banking companies with lower levels of creative potential than rivals are driven to submit false financial reports in order to temporarily boost their financial aspects. In this study, the technical efficiency of a corporation in producing creative output from its cumulative R&D resources is compared to that of its competitors in order to gauge its technological ability.

The findings support the RBV by demonstrating a relationship between the possibility of a FinTech model and the scale effectiveness of creative activity. This study includes the RBV of the firm from strategic management into raising the efficiency of department assets, finance, and payment by articulating FinTech as a function of technical competence. It specifically looks at the impact that FinTech and sustainability plans have on the banking sector. Based on the findings in the preceding chapter, it can be said that, when seen from the perspective of the Malaysian banking industry, the resource-based perspective has a substantial influence on the interaction between FinTech and

sustainability plans.

5.8 Conclusion

The conclusions of the study are discussed in this chapter. Following an overview of the survey, the discussion moves on to the demographic profiles of the respondents. The findings are then discussed in this chapter, organised around four study goals. The discussion of the findings is an important component of the thesis because all of the findings must be examined and investigated from various perspectives and angles. As a result, it is critical to address the shortcomings indicated in the previous chapter.

In seeking the connection between FinTech and sustainability strategies in the banking industry, it shows a significant relationship between these two variables. The researcher also finds a link between FinTech and RBV by pointing out that FinTech is one of the banking industry's resources. Then, to investigate the relationship between RBV and sustainability strategies, the results show that sustainability strategies are significantly correlated.

Other than that, this study also found a link between FinTech and RBV and between RBV and long-term sustainability. RBV has been examined as a mediator between FinTech and long-term strategic objectives.

CHAPTER SIX
CONCLUSION AND RECOMMENDATIONS

6.1 Introduction

This final chapter starts the discussion with the implications of the study. The implications were discussed in terms of theoretical and practical parts. Then, this chapter highlights the limitations and provides recommendations for future studies. Then, this chapter concludes the study.

6.2 Implications of the Study

The study's implications are always presented in this chapter to review the significant implications based on the results obtained in the study. As referred to in the previous chapter, five hypotheses have been outlined based on the research objectives. Further action has been taken by analysing all the data obtained using PLS-SEM. Hence, it shows that all the hypotheses were supported and gives an insight into the implications of this study.

As this study focuses on the banking industry in Malaysia's context, the results obtained cannot be generalised to the global banking industry, which differs based on demographic, geographic, social, and economic factors. In presenting the implications of this study, the researcher segregates it into two sections: theoretical and practical.

6.2.1 Theoretical Implications

In previous research, eminent experts separately tackled the concerns of FinTech disruption and sustainability strategies. The debate over these problems is ongoing, adding continually to the corpus of knowledge. As a result, the researcher examines these challenges from various perspectives, including the banking business in Malaysia. In any country on the planet, the banking business is essential. By embracing FinTech disruption, they may be able to provide a unique experience and viewpoint to their stakeholders. This study is noteworthy since it combines RBV and sustainable development theory, both of which deal with environmental and social issues.

In general, previous research has shown that different researchers studied these hypotheses on their own, leading to incomplete results. As a result, by integrating these fundamental ideas, this study takes the initiative to fill the gap discovered in this study, allowing readers to better comprehend the strategy used in this study. Furthermore, the researcher takes a unique approach to construct a model that employs RBV as a mediator in examining the effects of FinTech disruption on sustainability initiatives in the context of Malaysia's banking industry. Previous studies have shown that very little research has been conducted, particularly in the Malaysian banking industry. Therefore, model creation is critical in this study. This study builds a model that adds to the corpus of knowledge and requires a considerable leap.

One of the significant theoretical implications of the present study is that it primarily focused on a specific department, an asset, financial, and payment department, where employees can acknowledge sustainable strategies. So, it comprises the full

FinTech and sustainability strategies mode. In this way, the present research will bridge the theoretical gap by analysing the implications of FinTech and sustainability strategies. Another theoretical contribution of the present study is the analysis of gender differences through partial least squares multi-group analysis, highlighting the differences in sustainability strategies between male and female students, which is a vital addition to existing knowledge.

6.2.2 Practical Implications

The current study provides valuable insights to the Malaysian central bank and the university administration on how to improve employees' FinTech and sustainability strategies. The empirical results of this study show the important factors that make a big difference in how employees who are looking for benefits in the banking context use FinTech.

In 2017, the banking industry saw substantial transformations. Users in underdeveloped nations may now deposit and withdraw money, check account balances, pay bills, and take out loans via a mobile app. As evidenced by the applications seen in the United States, new FinTech-based companies are disrupting the banking landscape. Companies like Affirm, Lending Club, and Acorns are helping customers buy more by offering simple instalment plans, investing and accepting capital through a mobile app, and investing their spare change. These FinTech upheavals can be seen in every corner of the globe and every financial sector, from insurance to asset management and savings. Customer expectations, venture capital financing, the ease of entrance into the sector, and

the rate of technological innovation have all aided the emergence of FinTech disruption (Gomber et al. 2018).

When digitization provided the banking sector with its first technical breakthrough, it transformed the financial world's paradigm. While digital disruption has a growing influence on banking, the next generation of digital natives is expected to enter the workforce, adding to the volume and variety of digital habits and behaviours. When the increasing usage of the internet and cell phones in emerging nations are coupled, a lever effect occurs, with unpredictable repercussions for conventional financial institutions that are not equipped or agile enough to react.

The primary aims that the banking and financial industries try to achieve are performance, profitability, and risk reduction. In today's data-driven environment, big data solutions that can store and manage semi-structured and unstructured data in real-time are critical. Compliance with all the local government requirements is a challenge for banks. Banks are often forced to give loans with reduced interest rates to essential industries like agriculture, housing, and education.

Companies in the financial services industry have been optimising operations across all areas to improve efficiency, improve service delivery models and client engagement, and secure their systems from cyber-attacks. 5. For data analytics-related human resource management, banks must prepare for various delivery models, changing skill sets based on the target job, and training tailored to the competence of associated applicants (Raut et al. 2017).

Since the birth of the internet, the financial industry has been vulnerable to cybersecurity assaults. This danger has risen in recent years due to fast advances in computer hacking technologies. Bot assaults increased dramatically throughout the world in 2015, with a 40% rise in attacks and a new high of 45 million attacks in the last three months of the year. According to industry analysts, disruptive financial technologies such as artificial intelligence (AI) and blockchain will cause between 2 million and 6 million job losses over the next decade.

According to Citigroup research, bank employee reductions are set to increase as more technology takes over activities' humans used to undertake. When all the above-mentioned technological advancements, such as blockchain, artificial intelligence, and cybersecurity, are absorbed into the banking industry, the result is suffering throughout various dimensions of the banking industry. Due to technical interruptions, the banking industry's key areas impacted are operational, functional, strategy, and, most importantly, workforce.

The fast advancement of technology is causing a paradigm shift in the banking industry regarding technology adoption and transformation. Digitization, mobile banking, data analytics, cybersecurity, partnerships with FinTech, open APIs, and blockchain are all hot topics in the banking sector. Banks are being forced to rethink their technology portfolios, operational mechanisms, and service delivery methods due to these disruptive innovations. The banking industry's workforce is set to be reinvented due to these waves of new technology. Chatbots will replace customer service professionals, and blockchain and artificial intelligence will decrease the need for branch banks.

To capitalise on the benefits of technology and manage employee aspirations, banks must take a proactive approach. Workforce problems are both business- and society-related; therefore, focusing on this area is critical. When discussing labour issues, Divya and Chaya (2017) noted how the introduction of IT had changed conventional banking to technology-driven contemporary banking. The rapid use of technology-enabled procedures like core banking, internet and mobile banking, and branchless banking has necessitated acquiring IT skills. As a result, there is a talent gap among employees, particularly among traditionalists, baby boomers, and Gen X to some extent.

Another issue that is becoming more prevalent as the number of financial products and their complexity grows is the need for a new skill set for bank workers and advanced business models. Public sector banks (PSBs) would be needed to hire and utilise many professionals in some areas. Risk management, information technology, human resources, treasury, and foreign exchange are examples of these areas; attracting and retaining such specialists was a major challenge for PSBs (Selvi 2020).

Employees who continuously emphasise skill development and transformation are needed to overcome this gap. The complexity of learning new processes and skills is usually a lengthy and time-consuming procedure, which impacts existing job assignments and directly influences banking operations. Employees expect help from bank management and senior officials during the skill transformation and development process, which is delayed, presenting an additional problem for the workforce (Owens 2017).

Another viewpoint seen by Koch and Hirth (2019) has zeroed in on the remuneration of representatives. As of late, per-worker costs for public area banks have almost multiplied in the last five years, somewhere in the range of 2007 and 2017. A

decrease in this expense builds dependability on technology. In this cycle, not many gifted workers are continually incredible benefactors who are versatile enough to propel rehearsals with their current responsibilities by investing abundant amounts of energy in getting to know the progress. However, because of the organised instalment system in financial business, regardless of having advanced abilities, workers are not perceived to have sufficient pay, which lessens their enthusiasm for additional higher degrees. One of the weakest links in banking workers' HR policies is career planning, which leads to problems due to a lack of knowledge about their careers and a reluctance to accept new developments. Workplace compliance and enough time delivery pressurise employees to provide items on time, even if they only have a partial grasp of the project, putting the project's delivery in jeopardy (Maylor et al. 2018).

With the introduction of technology in the banking industry, enough training is required based on staff strength, and the workforce requires timely training. Employees have expressed dissatisfaction with their training, claiming that it lacks competent trainers or training material. It has been shown that training can be deceptive and diverge from the job domain. If the efficacy of training is not assessed once it is completed, it will not correctly assist human resources. As a result, financial institutions want to ensure competence and professionalism to serve their clients better. Because of technological advancements, banking has seen significant changes in customer service and new product development. Private-sector banks are nimbler when it comes to implementing new HR practices. The banking industry has recognised that, in the new situation, success would be determined by banks' capacity to utilise human potential and talents.

The competency-based approach to human resource management is focused on discovering, describing, and evaluating individual variations in skills that are critical for successful job performance. Work management has been identified as another problematic issue, with current occupations requiring first gaining knowledge of advanced areas and then experiencing the effects on the current work plan.

6.3 Limitations and Recommendation for Future Research

The first limitation of the present study is that it only considers the impact at the individual level by collecting data from employees in a specific department, the asset, financial, and payment departments in Malaysia, which reflects one aspect of the FinTech towards online mobile banking. Future researchers can consider other elements involved in many other banks or focus on employees in the asset, financial, and payment departments. This could be viewed from a different perspective if future researchers involved other departments or employees. The second limitation is the population of the Malaysian banking industry, which represents only Malaysian perspectives.

Future studies can look into cross-cultural and different countries' comparisons, i.e., developing versus developed countries, for detailed analysis and generalised findings. The third limitation is that the present study only involves a few factors that impact FinTech toward sustainability strategies and a resource-based view as a mediator. Hence, more factors can be incorporated in future studies. This is because sustainability strategies are general topics that other researchers can discuss more. Moreover, future studies can include another sector besides the banking sector because they can be more specific to

other financial technologies and sustainability strategies.

6.4 Conclusion

In conclusion, things change both slowly and quickly in the financial industry. On the horizon, potentially disruptive developments are appearing. Only a few potentially disruptive technologies, however, were practical. Being first to market is probably not a good idea for a highly regulated and conservative business-like bank. Banks are still being forced to act by globalisation and regulatory developments. With these changes in the banking industry, all the objectives outlined in the previous chapters have been achieved. It shows that Malaysia's banking industry's FinTech and sustainability strategies are adapting and moving slowly with the transformation by introducing many products that can be accessed virtually.

As a recap, FinTech, also known as FinTech, refers to the application of technology to create new and better financial services. While information technology has made everything cheaper and more beneficial, the unit cost of financial intermediation appears to have remained unchanged for over a century. According to Philippon (2014), the unit cost of financial intermediation in the United States has stayed at about 2% over the past 130 years. As a result, one of FinTech's promises is to discover less expensive solutions to overcome financial contracting factions and reduce the cost of financial services to increase customer welfare.

In the context of the banking industry in Malaysia, FinTech, or FinTech, is a phrase that encompasses how contemporary technology benefits financial systems. Its goal is to help firms organise their financial processes more efficiently. A technical programme will aid e-commerce through software and other computerised systems. Equity crowdfunding (ECF) and peer-to-peer (P2P) lending are examples of FinTech. The latter acts as an internet platform that connects borrowers with lenders while also avoiding banks.

Although the FinTech sector in Malaysia is still in its early stages, it is developing rapidly. Financial institutions may face a revenue threat by 2025, according to the Central Bank of Malaysia, owing to the growth of FinTech innovations, which are now restricted to banking institutions. In other words, banks believe that FinTech interferes with their operations in an unofficial way. As a result, people interested in the FinTech business will either launch their own FinTech firms or work for other FinTech startups.

Based on the findings of the comprehensive study, this observation has added to the growing body of knowledge about the mediating role of resource-based perspectives on the relationship between FinTech and sustainability policies. The findings of this investigation have backed up critical theoretical claims. Despite a few restrictions, it has consistently answered all of the study's questions and addressed all established aims. The four goals that were made based on this observation, which look at the connections between FinTech, methods for sustainability, and a resource-based view, show that they will have a lot of good effects.

Even though a few studies have examined various underlying factors to sustainability plans from the banking industry’s perspective, the current study fills a theoretical gap by including a resource-based perspective as a crucial mediating variable.

This study offered theoretical and empirical support for the mediating role of resource-based ideas in the relationship between FinTech and sustainability initiatives.

Furthermore, it has been attempted to calculate how the RBV theoretically mediates the interactions between the exogenous and endogenous latent variables. Aside from these theoretical contributions, the findings of this study have a few significant practical consequences for the banking business. In addition, numerous future research possibilities were proposed, given the study's limitations.

Prior research by eminent academics independently addressed these sustainability strategies and FinTech disruptive challenges. These topics are constantly being debated because new information is constantly being added to the body of knowledge. As a result, this study considers several perspectives to investigate these challenges from Malaysia's banking industry's standpoint. Any country in the world is aware of the importance of the banking sector. Organizations may provide their stakeholders with a distinctive experience and perspective by embracing FinTech disruption. The vacuum that has been identified in this study could be filled by identifying Malaysia's viewpoint on these topics.

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APPENDICES

Appendix 1: Research Protocol

Conceptual Framework

In this study, the categories of resources which are financial, physical and human are the independent variables and sustainability strategies consider as a dependent variable. Meanwhile, disruptive FinTech plays the role of the mediating variable of this study. The development of the conceptual framework is extended from the underpinning theory of Resource-Based View Theory, sustainability strategies and disruptive FinTech context. As shown in Figure 1.0 is the conceptual framework of this study.

The purpose of the study is to investigate the role of disruptive FinTech in between the resources of financial, physical and human towards sustainability strategy in banking industry. The fundamental of Resource-Based View (RBV) and sustainability development theory are applied in this study. Meanwhile the research seeks to answer the following Research Questions:

i) What is the relationship between FinTech and sustainability strategies in the banking industry?

ii) What is the relationship between FinTech and RBV in the banking industry?

iii) What is the relationship between RBV and sustainability strategies in the banking industry?

iv) What is the model of FinTech, RBV as a mediator, and sustainability strategies in the banking industry?

Based on the research questions raised above the Research Objectives for this study are to:

i) To examine the relationship between FinTech and sustainability strategies in the banking industry

ii) To identify the relationship between FinTech and RBV in the banking industry

iii) To assess the relationship between RBV and sustainability strategies in the banking industry

iv) To determine the model fit among the independent variable (FinTech), mediator (RBV) and dependent variables (sustainability strategies)

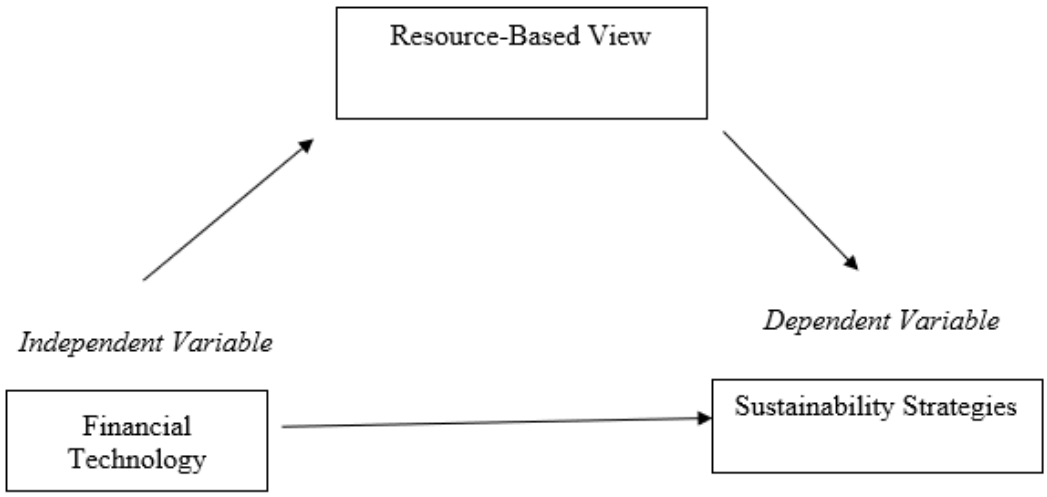

Figure 3.1 Conceptual Framework

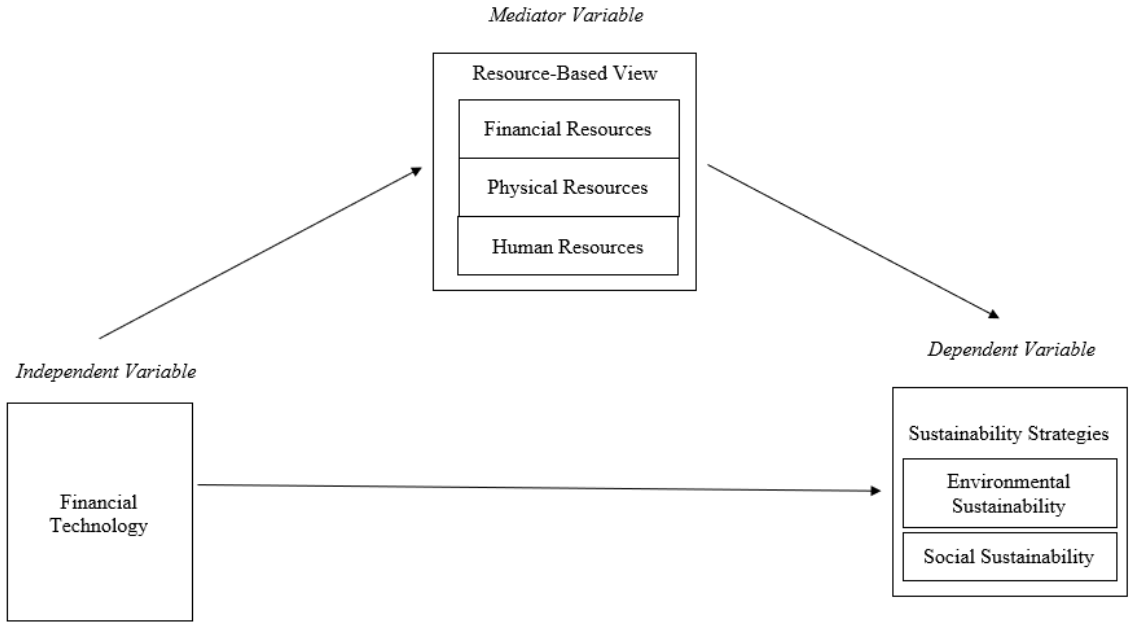

Figure 3.2 Research Framework

Proposed Plan of Work Including Timetable

This study will conduct within two years. For the first year, this study aims to complete the ground study which is literature review analysis A comprehensive literature review analysis was taken to explore and understand the discussion relates to disruptive FinTech, RBV, VRIN and sustainability strategy. In addition, researcher will conduct a survey after obtaining with the developed questionnaire to be distributed to the targeted sample which is to the employees at the operational level to predict and examine the relationship between RBV, sustainability strategy and disruptive FinTech. After data collection, the next step is to analyze the finding on survey and discus by comparing to other studied. In final stage of this study is to report the whole finding and discussion.

Gantt Chart

	Activity	Year 1									Year 2												Year 3												Year 4				
		2020									2021												2022												2023				
		Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
1	Ground Study : Literature Review Analysis																																						
2	Literature Review : Finding and Discussion																																						
3	Research Methodology																																						
4	Questionnaire Preparation																																						
5	Validity and Reliability																																						
6	Pilot Study																																						
7	Distribution of Questionnaire																																						
8	Responses Collection																																						
9	Sorting and Organizing Collected data																																						
10	Analysis of Data																																						
11	Findings																																						
12	Conclusion and Recommendations																																						

Methodology Applied

This study adopted the method as per explain below:

1. Research design: Quantitative approach
2. Population: 39 Banks
3. Sampling: Purposive sampling- 125 employees at asset management, financial and payment department.
4. Instrumentation:
    a) Sustainability Strategy - Adapted from Saunilla, Ukko, Nasiri & Rantala, (2019)
    b) Distruptive FinTech – Adapted from FinTech Survey (2016)
    c) RBV-VRIN from a study of Tajala (2012)

5. Data collection:
    a) First Week: A pilot study was conducted on 18 respondents.
    b) Second Week: Corrective action was taken to revise the wordings of the items to improve the readability, applicability, readability, understandability, operation ability, and content validity.
    c) Third Week: Approach the organisation to distribute the questionnaires, and the completed questionnaires were collected on the same day. Some questionnaires are given to the representative for the workers who were absent. The participants were given one week to complete the survey

d) Forth and Five Week: A follow- up was conducted to ensure that the participants completed the survey and the researcher collected the completed questionnaires.

e) Sixth and Seven Week: The final week to collect the survey from the participants.

f) Eight Week: The data collection was completed and ready for data analysis.

6. Data Analysis: In meeting objective 1 to 4, researcher explain as per below:

a) Objective 1: Descriptive and Pearson Correlation Coefficient

b) Objective 2: Descriptive and Pearson Correlation Coefficient

c) Objective 3: Descriptive and Pearson Correlation Coefficient

d) Objective 4: PLS-SEM

Budget

The overall estimated budget of this study is RM 8,700.00 comprising of items as detailed in Figure below. The total budget is comprising of data collection expenses covering the researcher's travelling cost, focus group and translation services. The researcher is also intending to upskill the software skill on SPSS.

RESEARCH BUDGET

Title : Financial Technology and Sustainability Strategies: In the perspective of Banking Industry in Malaysia
Period : 16 Sept 2020 to May 2023
Duration : 2.8 Years

DATA COLLECTION EXPENSES	**MYR**
Sub-Total Data Collection Expenses	*6,000.00*
SOFTWARE UPSKILLING COURSE	2,000.00
Sub-Total Software Upskilling Course	
PRESENTATION AND DOCUMENTATION	
Sub-Total Presentation and Documentation	*700.00*
TOTAL RESEARCH BUDGET	**8,700.00**

Appendix 2: Details of Questionnaires

FinTech and Sustainability Strategies: In the Perspective Of Banking Industry In Malaysia

Dear Valued Respondents,

The survey is designed to examine how the banking industry in Malaysia perceives FinTech as disruptive and to come up with sustainability strategies that could benefit the stakeholders at the end of the process.

Your participation in this research study is voluntary. You may choose not to participate. If you decide to participate in this research survey, you may withdraw at any time. If you decide not to participate in this study or if you withdraw from participating at any time, you will not be penalized.

This survey is divided into seven (7) sections and would take a total time of about 10 minutes to complete. Your responses will be confidential and we do not collect identifying information such as your name, emails address or IP address.

The information you will provide will be used STRICTLY for academic purposes and should this research be published, none of the information provided will be identifiable as yours.

We would like to express our sincerest gratitude for your kind attention to complete this research survey. Thank you in advance.

Yours sincerely,

Veronica Sebastian

Doctorate of Business Administration Programme

University of Wales Trinity Saint David (UWTSD)

Contact: raniaveronique@gmail.com

ELECTRONIC CONSENT: Please select your choice below:

Clicking on the “agree” button below indicates that:

- You have ready the above information
- You voluntarily agree to participate
- You are at least 18 years of age

If you do not wish to participate in this research study, please decline participation by clicking on the “disagree” button.

- o Agree
- o Disagree

PART A : DEMOGRAPHIC PROFILE

Please tick (√) in the space provided & fill in the appropriate information.

1. Gender: What gender do you identify as?

	Male
	Female

2. Age: What is your age?

	Less Than 20		21 to 30
	31 to 40		41 to 50
	50 to 60		Older than 60

3. Highest Education Level (Please select one): What is the highest degree or level of education you have completed?

	High School Degree
	Diploma
	Bachelor's degree
	Postgraduate degree
	Professional Qualification
	Others

4. Occupation: What is your current employment status?

	Self-employed
	Government Sectors Employee
	Private Sectors Employee
	Retired
	Unemployed

5. Type of Banking Business:

	Retail Bank
	Commercial Bank
	Investment Bank

6. Ownership

	Local
	Foreign

7. Total no. of employees:

	Less than 150
	150 to 500
	501 to 1000
	1001 to 1500
	More than 1500

8. No. of branches in Malaysia:

	Less than 10
	10 to 50
	More than 50

PART B : SUSTAINABILITY STRATEGIES

Good sustainability strategies should have the following attributes. Provide your opinion on the extent to which you agree on the importance of these attributes using the response scale provided.

	Item	Very Strongly Disagree					Very Strongly Agree				
		1	2	3	4	5	6	7	8	9	10
1	The understanding of financial technology (FinTech) can lead to banking sustainability										
2	The environment-friendly FinTech can contribute to a banking sustainability										
3	Energy efficient FinTech is the contributor towards banking sustainability										
4	FinTech can be the main driver towards banking sustainability										
5	FinTech can provide automation to various business sectors especially for banking sustainability										
6	FinTech can aid to live a better and healthy life										
7	FinTech contributes to society by providing information and learning										
8	FinTech can produce economical solutions in industry										
9	FinTech can help to increase productivity of organisations										
10	FinTech can contribute to economical sustainability										
11	Fintech to be sustained for a long period of time is the success of the software										
12	FinTech can be sustained by integrating sustainability aspects in banking industry										
13	FinTech addresses sustainability practices including code optimisation, resource utilisation and energy efficient coding										

PART C : RESOURCE BASED VIEW

Section 3 : Human Resources

The following statements are on Human Resources.
Provide your opinion on the extent to which you agree on the following statements using the response scale provided.

	Item	Very Strongly Disagree					Very Strongly Agree				
	HUMAN RESOURCE	1	2	3	4	5	6	7	8	9	10
1	This organization has involved trained, empowered, and responsible employees										
2	This organization has a huge information data base and it is strong in the field of information and communication										
3	This organization has strategic programs in order to create ideas and innovation										
4	This company has not been able to successfully meet customer's requirement on satisfaction, reliability and quick to respond										
5	This organization has appropriately provided qualified services and developed new services										
6	Senior managers have enough managerial skills and a real leadership is established in the organization										
7	This organization does not have efficient skills with relations to social capability like teamwork and communication										

Section : Financial Resources

The following statements are on Financial Resources.
Provide your opinion on the extent to which you agree on the following statements using the response scale provided.

	Item	Very Strongly Disagree								Very Strongly Agree	
	FINANCIAL RESOURCES	1	2	3	4	5	6	7	8	9	10
1	This organization provides variety of services in both aspects of currency and monetary										
2	This organization has not been successful in the field of investment such as stocks, deposits and facilities										
3	This organization is a leading financial institution among all the banks in the country										
4	This organization is in high position in terms of credit and population										
5	This organization has assumed that creativity, innovation, and cost saving in the business is a part of its research and development process										
6	This organization has built a flexible financial with the ability to adapt with unexpected changes										
7	This organization has involved with financial resources with the ability of quick respond to customers										

Section : Physical Resources

The following statements are on Physical Resource.
Provide your opinion on the extent to which you agree on the following statements using the response scale provided.

	Item	Very Strongly Disagree									Very Strongly Agree
	PHYSICAL RESOURCES	1	2	3	4	5	6	7	8	9	10
1	This organization has a good self-banking services such as POS and ATM										
2	This organization is barely considered as a strong institution in terms of infrastructure such as IT, software and hardware systems										
3	This organization has an organizational identity and there is a clear coordination between internal and external image of the bank										
4	This organization is equipped with the swift network hardware and software										
5	This organization has created a service and customer-oriented and Innovative organizational culture which is quite compatible with market changes										
6	This organization does not provide organizational learning that encourage employees to learn more										
7	This organization has unified all the visions and managerial thoughts through all its senior management										

PART D : FINANCIAL TECHNOLOGY

The following questions are on Financial Technology Distruptive.
Provide your opinion on the extent to which you agree on the following statements using the response scale provided.

Item		Very Strongly Disagree									Very Strongly Agree
FINANCIAL TECHNOLOGY DISRUPTIVE		1	2	3	4	5	6	7	8	9	10
1	I think applications of financial technology are convenient										
2	I think financial technology are reliable										
3	I think financial technology are fast										
4	I think financial technology are available as a payment method										
5	I think financial technology are clear										
6	I think financial technology provide me guidance.										
7	I think financial technology are user friendly										
8	I think financial technology menus are easy to navigate										
9	I think financial technology menus are understandable.										
10	I think financial technology menus are easy to use										

The following questions are on Financial Technology Perception.
Provide your opinion on the extent to which you agree on the following statements using the response scale provided.

Item		Very Strongly Disagree					Very Strongly Agree				
FINANCIAL TECHNOLOGY PERCEPTION		1	2	3	4	5	6	7	8	9	10
1	I feel that using Fintech can meet my service needs										
2	I feel that using Fintech services can save time.										
3	I feel that Fintech services can improve efficiency.										
4	I feel that Fintech services are useful to me.										
5	I feel that it is easy to use Fintech services										
6	I think the operation interface of Fintech is friendly and understandable.										
7	I feel that it is easy to have the equipment to use Fintech services (cellphone, app, wifi)										
8	I believe that the money is easier to be stolen by using Fintech services										
9	I believe that personal privacy will be disclosed by using Fintech services										
10	I believe using Fintech services is a good idea										