



Article

# The Effect of Perceived Usefulness, Reliability, and COVID-19 Pandemic on Digital Banking Effectiveness: Analysis Using Technology Acceptance Model

Erlane K. Ghani 10, Mazurina Mohd Ali 1,\*0, Muhammad Nazmy Rezzaimy Musa 1 and Akrom A. Omonov 2

- Faculty of Accountancy, Universiti Teknologi MARA, Cawangan Selangor, Puncak Alam 42300, Malaysia
- <sup>2</sup> Department of Banking, Tashkent Institute of Finance, Tashkent 100000, Uzbekistan
- \* Correspondence: mazurina@uitm.edu.my

Abstract: This study examined the digital banking effectiveness of a bank. This study specifically explored the effect of perceived usefulness, banking system reliability, and COVID-19 pandemic on the digital banking effectiveness of a bank in Malaysia based on the technology acceptance model (TAM). Data collection was undertaken using a questionnaire survey involving 228 clients of the bank. The findings indicated that two of the chosen factors, namely, perceived usefulness and reliability of the banking system, significantly influenced digital banking effectiveness. On the other hand, the findings also showed that the COVID-19 pandemic did not influence digital banking effectiveness, per the bank clients' perspective. The study's findings provide insight into the future financial direction and addresses consumers' financial needs. In addition, the findings help develop an overview of the industry based on one of the prominent financial institutions in Malaysia.

Keywords: perceived usefulness; reliability; banking system; COVID-19; bank



Citation: Ghani, E.K.; Ali, M.M.; Musa, M.N.R.; Omonov, A.A. The Effect of Perceived Usefulness, Reliability, and COVID-19 Pandemic on Digital Banking Effectiveness: Analysis Using Technology Acceptance Model. *Sustainability* 2022, 14, 11248. https://doi.org/ 10.3390/su141811248

Academic Editor: Francesco Paolone

Received: 26 July 2022 Accepted: 22 August 2022 Published: 8 September 2022

**Publisher's Note:** MDPI stays neutral with regard to jurisdictional claims in published maps and institutional affiliations.



Copyright: © 2022 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (https://creativecommons.org/licenses/by/4.0/).

## 1. Introduction

Technology advancements in the banking industry significantly implicate a bank's marketing efforts, particularly in digital banking, where customer interfaces are affected. Traditional banking models are challenged as digital banking through telephone, Internet, and mobile has become a major way of delivering multi-channel services to customers. Discovering and retaining customers and increasing profitability have become increasingly important as customer expectations rise continuously [1]. Malaysia is not an exception to this scenario. As Malaysians become more familiar with the Internet and technology, Malaysia's financial industry has begun to recognise the importance of digitising its operations. In line with digitisation, Bank Negara Malaysia (BNM) has issued the Digital Banking Framework, and the first digital banking license is expected in early 2022. This issuance is a positive development for the industry, regardless of the pandemic or pre-planned [2]. Consumers have moved to contactless payment applications and digital banking due to the pandemic, prompting most banks nationwide to lower the number of physical branches to increase the convenience and efficiency of online banking transactions. The CEO of Group Consumer Banking at CIMB Group, Samir Gupta, stated that the pandemic had intensified the transition to digital banking. People were forced to switch to digital platforms to control their finances and perform purchases during the lockdown, creating new shopping preferences resultantly. Banks had to swiftly adapt to these developments to maintain business continuity [2].

One of the banks in Malaysia that is optimistic about digital banking solutions is ABC Bank (due to confidentiality, the name of the bank is changed to ABC Bank). The bank is making efforts to ensure that digital banking pervades everything it undertakes, be it products and services offered to clients or the way it operates internally and communicates

Sustainability **2022**, 14, 11248 2 of 16

and transacts with consumers, following its ethos of 'Digital-at-the-Core'. The bank accomplishes its digitising efforts by continuing to invest in innovative and highly accessible technology, using market partnerships, analysis, and expertise to provide an advanced banking network to personalise solutions to individual customer needs. ABC Bank is able to provide an easy, seamless, and transparent banking experience to its consumers, delighting them with experiences and connections with the bank that empower them to handle their finances and financial management. It was named 'Malaysia Best Digital Bank' for the second year in a row at the Asiamoney's Best Bank Awards 2019 for its consistent efforts in driving digital transformation and increasing consumers' digital interactions. In response to the COVID-19 pandemic, ABC Bank, as a customer-centric bank, saw through the numerous funding relief programmes launched by BNM and the government. The bank's programmes seek not only to secure customers' financial sustainability and market profitability but also to provide comfort. Due to the movement control order (MCO) imposed by the government, the bank streamlined and digitised the application process for BNM's Special Relief Facility for clients by allowing applications to be submitted through email, SMS, or WhatsApp, with permission given by digital signature. Although more people are shifting their financial management to digital, some bank clients believe that digital banking does not meet their needs and prefer to use physical banking instead.

One of the main priority areas of ABC Bank for 2020 was to expand its digital services while concurrently encouraging clients to migrate from conventional branch purchases to its Connect portal. Customers' use of digital platforms and the amounts of digital purchases registered are the key indicators of whether the bank's digital products meet their needs. The overall number of consumers onboarding the bank's Connect retail network increased by 9.3% in 2019. ABC Bank's current digital retail customer base stands at 54%, and it intends to exceed 60% by 2021. The rise in this figure has incited the question of the factors that motivate clients to utilise the bank's digital banking solution. In addition, Ref. [3] claimed that the impact of new technological factors on the digital transformation of business models is relatively low. Previous studies on Malaysia's fintech and technology revolution focused on specific aspects of the financial sector's digital initiatives, such as e-wallets, paper-money substitutes, behavioural changes prior to and after the COVID-19 pandemic, and the shift from auto-teller machines (ATMs) to mobile banking. Nevertheless, these initiatives were fuelled by the financial sector's revolution, which was centred on changes in the financial landscape and banking framework revolution.

This study aims to examine the effect of clients' perceived usefulness, the reliability of the banking system, and the COVID-19 pandemic on the effectiveness of the banking system by focusing on a bank in Malaysia and taking the bank's current digital footprint into consideration. The findings of the study will address the financial needs of consumers and provide valuable insight to the related bank and other interested parties regarding the future financial direction. The next section, Section 2, provides the literature review related to this study. Section 3 explains the research design, and Section 4 provides the results of this study. The last section, Section 5, summarises and concludes this study.

## 2. Literature Review

# 2.1. Digital Banking

Traditional banking activities and programmes have, up until recently, been accessible to customers only when they were physically present inside of a bank branch. Digital banking refers to the process by which these activities and programmes have been digitised or moved online [4]. The transition from traditional to digital banking has been slow but steady, and it will likely continue for some time. This transition is characterised by varying degrees of digitisation across banking services. There are a lot of different solutions that are leading up to the development of digital banking, such as mobile digital wallets, investment management applications, the ability to deposit mobile cheques through banking applications, card-less ATM withdrawals, and a lot more [5]. These are all innovations that have been successful as a result of the emerging technology of digital banking. When

Sustainability **2022**, 14, 11248 3 of 16

compared to traditional banking services, digital banking services come with a number of advantages as well as a variety of other beneficial benefits.

Digital banking began with online banking piloted in the 1980s by Citi, Chemical Bank, Minitel (France), and Prestel (UK). Nevertheless, digital banking did not take off until the 1990s, when Internet usage soared. Traditional banking activities and services can transform into a digital environment through digital banking. Digital banking is a business model that relies on a technological platform to allow banks and consumers to exchange data for executing transactions. This data exchange is accomplished through the use of digital devices linked to computer software over the Internet. Clients are not required to visit physical bank branches to do business, and banks are not required to meet with customers to complete transactions [6]. Through simple browser-based tools, patrons had access to key banking transactions, including money transfers, bank statements, and electronic bill payments. Digital banking incorporates technology and is built to meet the demands of continuous efficiency. Digital banking foregoes a central data repository through seamless integration. Instead, it opts for a secure, encrypted, distributed data system, which is less vulnerable to attack. Personal data stores allow for better digital wallets (grouping, classification), identification, and increased security around personal biometric data crucial to the digital bank's security protocols [7].

Numerous studies have examined digital banking, including comparing traditional and digital banking. For example, a study comparing traditional and digital banking in South Korea found that digital banks outperform traditional banks in terms of usefulness. Customers who favour digital banking appear to value quick service, high interest rates, ease of account opening, low fund transfer fees, high financial service credibility, and easy access to financial products and mobile apps. Nevertheless, in terms of security, digital banking has several disadvantages over traditional banking [8]. Other studies, such as [9], found that consumer behaviour in digital banking was influenced by trust in various situations and services. The behaviour is triggered by various sources, including sociology, economics, philosophy, and business intelligence. Depending on the consumption context or circumstance, the definition of trust varies. Bank-consumer relationships concerning banking services are frequently contractual in nature. The relationships are based on the outcomes of consumer encounters and user-specific characteristics, such as demographics, culture, and lifestyle. Previous studies found that the safety perception of mobile banking services impacts clients' trust, thus influencing clients' behaviour in using digital banking facilities [9]. Studies suggested that banks should utilise online platforms to improve customer experiences across the entire product portfolio by leveraging technology rather than presenting specific products and services. Clients prefer to be in charge of their financial and investment decisions [10].

## 2.2. Digital Banking Effectiveness

The advent of digital banking has become a driving force behind the creation of a more effective banking system by facilitating easier access to banking services. The term "effectiveness" in digital banking refers to the degree to which a bank is successful in meeting the needs of its clients through the provision of digital services [4]. Studies have shown that the effectiveness of digital banking is related to the method of transaction that was made either online or physically, the satisfaction of users with online or mobile banking, and the preference of customers to make online or mobile transactions rather than physically [11].

Several studies have been conducted to investigate the efficiency of utilising digital banking from a variety of viewpoints. For instance, [12] investigated the customer's perception on electronic banking transactions in order to examine the service quality, secure transaction, sufficient mechanism, and regulatory framework of electronic banking. Other studies looked at the cost effectiveness of digital banking. Ease of use, convenience, problem handling, security, and responsiveness are the essential factors that influence customer satisfaction in electronic banking services (such as [4,12]. There are also studies that have

Sustainability **2022**, 14, 11248 4 of 16

investigated the difficulties of utilising digital banking and identified important aspects of utilising digital banking [13].

Another body of the literature has made an attempt to investigate customers' view-points regarding the e-payment system [14,15]. For instance, ref. [15] investigated how customers feel about electronic payment systems and discovered that debit cards have a high level of credibility and are the most widely used type of electronic payment system. In their study on the role of digital banking, ref. [16] found that ATMs were initially developed to allow people to withdraw cash without having to visit bank branches. However, they have since been expanded to include a variety of services, including cash withdrawals, the payment of utility bills and other bills, fund transfers, the booking of tickets, the payment of online purchases, and the retrieval of balance statements.

In a nutshell, many researchers have been active in the field of digital banking throughout its history. These studies have been carried out in order to investigate various aspects of digital banking from a variety of perspectives. This study contributes to the existing body of knowledge by expanding our understanding of the factors that influence the efficiency of digital banking. Specifically, this study focuses on the perceived usefulness of digital banking services to customers, the reliability of the digital banking systems, and the COVID-19 pandemic.

# 2.3. Factors Influencing Digital Banking Effectiveness

The first factor that potentially contributes to digital banking effectiveness is clients' perceived usefulness. Perceived usefulness refers to a situation with a customer's view of the capacity to increase job efficiency, for example, by saving time and accessing services in numerous ways [17,18]. Ref. [17] in his technology acceptance model (TAM) theory, mentioned that perceived usefulness could be used to measure how far a user believes a specific application to increase work performance. When consumers find a service beneficial, they have a good attitude about it and are more likely to utilise it in the future [19].

Ref. [6] studied the factors affecting the intention to use digital banking in Vietnam. He found that perceived usefulness favourably impacts attitude and intention to use the service. The findings indicated that banks could use technological advancements to improve their value by focusing on promoting digital banking services' development. Customers are increasingly cherishing the benefits of digital services, such as time saving and diversity of services compared to performing transactions at a counter. Hence, increasing consumers' perceptions of usefulness through media, promotion, and consultation is important to ensure they completely comprehend the benefits of utilising digital banking services [6,20]. Nevertheless, a study on Alipay, a digital payment platform, revealed an insignificant relationship with perceived usefulness. The study suggested convenience and reliability as better indicators for users to use Alipay [21].

Ref. [22] studied Lebanese bank clients by focusing on the adoption of mobile banking. They found that perceived usefulness has an insignificant relationship with mobile banking adoption. Other researchers such as [23,24] found an insignificant relationship between perceived usefulness, convenience to use, intention to use, and digital banking channels. Perceived usefulness may determine a user's confidence in a certain application's ability to improve task performance. When customers find a service useful, they have a favourable impression of it and tend to use it again. In order to test the relationship between the perceived usefulness of digital banking and the effectiveness of digital banking for ABC Bank's clients, the following hypothesis was posited:

**H1.** The perceived usefulness of digital banking significantly influences the effectiveness of digital banking for ABC Bank's clients.

The second factor examined in this study is the reliability of the bank's banking system. Reliability is considered the combination of trust and security. It indicates that consumers are comfortable using the services without fear of danger or other difficulties. A high level of trust increases the desire to use digital financial services. Customers that

Sustainability **2022**, 14, 11248 5 of 16

have faith in a website or application find it highly useful. A study by [6] indicated that customers would have a negative attitude towards digital banking services if they have poor perceptions of information or transaction security. Customers are infuriated by issues that endanger or cause them harm. In short, customers who have gained confidence in digital banking services are less likely to feel insecure when using the service and vice versa. If the customers' confidence is weakened by lack of information, perceived insecurity, or poor service quality, they tend to take sensible precautions and consider risks when using the service [6,25]. High levels of trust support the urge to utilise digital banking. Customers with unsatisfactory views of information or transaction security would negatively approach digital banking services. The digital banking experience was also shown to be harmed by perceived risk.

Enhancing the quality and reliability of the banking system in terms of security and due diligence has been at the forefront of financial institutions' strategies in recent years. Companies' boards of directors are under tremendous pressure to reduce operating expenses. Regulators demand improved enforcement procedures and requirements from financial institutions, and customers' wants for a better and simpler banking experience drive this focus [26]. Although financial technology has advanced rapidly in recent years, consumers remain sensitive to key issues, such as security, trust, personalisation, ease of use, and various cultural traits, that can influence how mobile technology is accepted in various service consumption contexts, including banking services [1,9].

In a study of customer perceptions of digital banking in the United Kingdom, ref. [1] found that perceived risk negatively impacts the digital banking experience. The study also found that security impacts the quality of digital banking services. Customers' digital banking behaviour is influenced by their perception of risk, which should be reduced through improved security [1,27]. Ref. [28] found a similar link between digital banking and trust in an Indian study. Therefore, trust and perceived risk influence digital banking acceptance. The following hypothesis was developed to determine the link between the reliability and effectiveness of digital banking for ABC Bank's clients.

**H2.** The reliability of the banking system significantly influences the effectiveness of digital banking for ABC Bank's clients.

The third factor examined in this study is the COVID-19 pandemic. The COVID-19 pandemic has significantly impacted the global economy, social interactions, and the financial industry, which must satisfy consumers' and businesses' needs and limitations due to the government's movement restriction orders to control the disease. The COVID-19 pandemic has had numerous effects on the banking sector, including increased use of digital channels and payments, changes in consumer behaviour, relief from regulatory and supervisory provisions, new challenges in operational resilience, and an increase in non-performing loans. Retail consumers have been forced to utilise more digital payments and channels to completely adapt and accept the new channels and technology at the cost of cash and traditional channels [9,29].

According to past studies, the COVID-19 pandemic had already changed public lifestyle and financial administration. The impact of COVID-19 forced authorities and the public to familiarise themselves with digital banking to mitigate infection risk. Indonesian researchers studied the acceptance of digital banking before and after COVID-19 struck Indonesia. In their study, ref. [30] found a drastic increase in digital banking reliance after the COVID-19 pandemic. A study in Malaysia by [31] on digital payments before and after COVID-19 found an upward trend in the usage of non-cash payments through digital means after COVID-19 as the pandemic caused statutory social distancing and control orders in the country. Similarly, in a study of branchless banks in Iran, ref. [32] found that marketing the use of digital facilities to customers became easier due to the COVID-19 pandemic. The third hypothesis to test the relationship between the perceived effect of the COVID-19 pandemic and the effectiveness of digital banking for ABC Bank's clients is as follows:

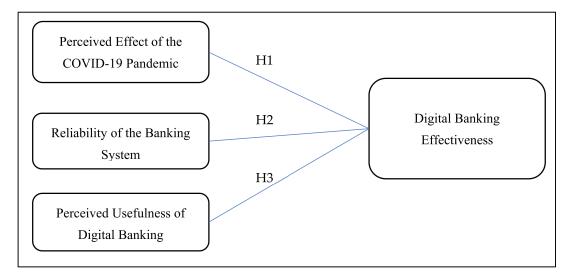
Sustainability **2022**, 14, 11248 6 of 16

**H3.** The perceived effect of the COVID-19 pandemic significantly influences the effectiveness of digital banking for ABC Bank's clients.

The TAM theory, the theory of reasoned action (TRA), and the theory of planned behaviour (TPB) are three main concepts that could represent significant changes in consumer behaviour from a technological standpoint. Of the three theories, TAM is a well-known and influential theory describing how people accept information systems. The TAM theory is based on TRA, which states that an individual's intention towards a particular behaviour invariably influences that behaviour. Moreover, TAM builds on the TRA and TPB foundations by emphasising an innovation's perceived usefulness and ease of use. External factors, such as behavioural intention and behaviour, were eventually included in the model measurements as the model progressed through various validation and testing stages [20]. As perceived usefulness could be predicted by perceived ease of use, behavioural intention, and behaviour simultaneously, it has been used as a dependent and independent variable in previous studies [33].

The applicability of TAM to tasks that were too broad is one of its major flaws. Previous studies have primarily been conducted by assigning a single task to a single information system. On the other hand, many studies of task-technology fit found that people's perceptions of technology differ depending on the task. Mixed results in information system acceptance are possible due to the lack of task focus in evaluating information systems. According to [33], users' perceptions may change when they are more accustomed to information system technology. This finding may be acceptable, but it might no longer be sufficiently accurate. The TAM theory has instigated numerous novel research findings aimed at determining factors influencing user adoption and how innovative technology can be positively perceived by potential users [22].

In the context of the present study, the adoption of factors suggested by [17] was discussed. Individuals evaluate the consequences of their behaviour in terms of perceived benefits, known as perceived usefulness. This perception is based on their decision to behave desirably [17]. A commitment to maintaining digital banking and trust in digital banking applications is referred to as reliability. Reliability is also the polar opposite of perceived risk and uncertainty [24]. In terms of the definition of the COVID-19 pandemic as a variable, the lifestyle concept defined by [19] was adopted. People's lifestyles have changed dramatically, particularly during the MCO. Access to various services, including banking services, has been limited, and online solutions have emerged as an alternative [9]. Figure 1 depicts the study's framework.



**Figure 1.** Theoretical framework for the effect of clients' perceived usefulness, reliability, and COVID-19 pandemic on digital banking effectiveness.

Sustainability **2022**, 14, 11248 7 of 16

## 3. Research Design

# 3.1. Sample Selection

This study's sample was the clients who had signed up for mobile banking solutions in a bank in Malaysia. The choice of using a bank only in this study is to ensure control of the clients' perception on one particular service which is the mobile banking solutions in the particular bank. This is considered appropriate since the unit of analysis used in this study is individual that is the clients of a bank [34]. The population of this study was decided based on ABC bank's Annual Report 2020, which stated that by 30 June 2020, there were 1,847,333 clients registered for HLB's mobile banking solution. Based on the population, this study relied on Sekaran and Bougie's sample size table. According to [35], researchers can decide the size of the sample based on the population. Hence, for 1,847,333 clients of ABC bank, the appropriate sample size is 384. Previous studies have used this approach when determining sample size [36]. However, it is well-known that not all recipients of a questionnaire in a survey would respond. Thus, this study decided to expand the sample size to 450 in an attempt to obtain the number of responses as close as possible to the suggested sample size.

## 3.2. Research Instrument

A questionnaire was used to collect the data. The questionnaire was created in two sections. The respondent's demographic profile was the focus of Section A in Appendix A. Three questions were included in this section to gather details on the respondents' appropriate data. The respondents were asked about their gender, age group, and status as ABC Bank's clients. The elements in Section B (in Appendix A) focused on their experience with financial services. The respondents chose their options using a five-point Likert scale. This section contained elements validated by previous researchers. Elements on digital banking effectiveness (dependent variable) were adapted from [6,9]. The independent variables of perceived usefulness of digital banking, reliability, and perceived effect of the COVID-19 pandemic were derived from refs. [6,9,37,38], respectively. Table 1 presents the variable measurement for all the variables in this study.

Table 1. Variable measurements.

Variable	Measurement	Authors
Independent variable		
Digital banking effectiveness	<ol> <li>Method of transaction that made (online/physical).</li> <li>Users' satisfaction of online/mobile banking.</li> <li>The preference for making online/mobile transactions than physical transactions.</li> </ol>	[6,9]
Independent Variables		
Perceived usefulness	<ol> <li>Perception of customers on online/mobile banking.</li> <li>More financial control and supervision with online/mobile banking.</li> <li>Customers are more efficient in managing finances as online/mobile banking is convenient.</li> </ol>	[9]
Reliability	<ol> <li>Connection to Internet in Malaysia is good.</li> <li>Utilisation of digital financial services before COVID-19 pandemic.</li> <li>The level of trust in financial services security and policy.</li> </ol>	[9,38]
Perceived effect of COVID-19 pandemic	<ol> <li>COVID-19 pandemic has a major influence on lifestyle.</li> <li>COVID-19 pandemic has a major economic impact.</li> <li>COVID-19 pandemic influences users to look for alternatives other than physical contact.</li> </ol>	[9,37]

Sustainability **2022**, 14, 11248 8 of 16

#### 3.3. Data Collection Procedures

Two techniques were used to disseminate the questionnaire. Initially, the survey was physically disseminated to ABC Bank's clients at its branches with permission. Nevertheless, due to the government's movement restriction order, an online survey was constructed using Google Forms to enable data collection. The survey link was emailed to the respondents. Despite distributing 450 questionnaires, only 356 people submitted responses. A total of 228 respondents completed the survey and qualified for data analyses. The remaining 94 responses were incomplete, inaccessible, and discarded from this study.

#### 4. Results

# 4.1. Demographic Profile

Table 2 exhibits the study respondents' demographic profile. The statistics show that 125 respondents (54.8%) were male, while 103 (45.2%) were female. Table 2 also shows the age distribution of the 228 respondents. Most respondents (33.8%) were 21 to 30 years old, and 28.5% were 31 to 40 years old. Respondents in these age groups are far more technologically savvy and financially literate than respondents from other age groups, owing to their exposure and reliance on technology. Furthermore, they have witnessed the emergence of the Internet and the technological revolution since their youth. Of the remaining respondents, 17.5% were 41 to 50 years old, 8.8% were 51 to 60 years old, 7.5% were younger than 20 years old, and 3.9% were older than 61 years old.

Gender	Frequency	Percent (%)
Male	125	54.8
Female	103	45.2
Age		
Less than 20 years old	17	7.5
21–30 years old	77	33.8
31–40 years old	65	28.5
41–50 years old	40	17.5
51–60 years old	20	8.8
More than 61 years old	9	3.9

## 4.2. Descriptive Analysis

All the data for each variable were initially evaluated using descriptive analysis. The respondents selected their options from a five-point Likert scale, with 1 indicating strong disagreement and 5 representing strong agreement. The results are displayed in Table 3. Digital banking effectiveness was measured using three elements. Table 3 shows that the mean score of these elements was 4.3, with a standard deviation of 0.50. The mean score shows that most respondents agreed with the statements, and only a slight variation of the means from the central tendency is observable. This outcome demonstrates that ABC Bank's clients have awareness and have grown accustomed to the penetration and integration of technology known as digital banking in conducting financial transactions with a variety of known parties. The findings also establish that the bank's clients have accepted the Internet's importance as a financial management tool. The result is unsurprising since most of the study's respondents were between 21 and 40 years old. Most online transactions and digital banking users are in this age group [38]. They have become accustomed to efficiently using technology to improve their financial management.

Sustainability **2022**, 14, 11248 9 of 16

	Digital Banking Effectiveness	Reliability of Banking System	Perceived Usefulness	COVID-19
N (Valid)	228	228	228	228
Mean	4.3070	4.0819	4.2398	4.4664
Std. Deviation	0.49992	0.55630	0.52076	0.45270
Minimum	3.33	3.00	3.00	3.00
Maximum	5.00	5.00	5.00	5.00

**Table 3.** Descriptive statistics of variables.

Three statements were used to measure the perceived usefulness of digital banking effectiveness. The results in Table 3 show that the overall mean score of these statements is 4.2, with a standard deviation of 0.52. The mean score shows that most respondents agreed with the statements. In addition, the means do not deviate much from the central tendency. The statements for this variable concern the usefulness, contribution, and efficiency of online or mobile banking. Although most respondents perceived that digital banking is useful, some respondents disagreed with online or mobile banking's contribution. Nevertheless, the variance in the data is only slightly above the mean due to the low number of responses on this subject.

The reliability of the banking system was also measured using three statements. The overall mean score for these statements is shown in Table 3, with a standard deviation of 0.56. The mean score shows that most respondents agreed with the statements. The dispersion of mean scores is fairly small, albeit the largest among the other variables. Reliability of the banking system's statements was about Internet reach, transaction security, and the use of online transaction services. According to the results of the individual statements' descriptive analysis, the respondents agreed that the Internet reach is good, and the financial facility security is decent, if not satisfactory. Nevertheless, some respondents had only recently begun to use the online transaction facility, resulting in a low mean score and higher variance.

Similar to the other two independent variables, the COVID-19 pandemic was also measured using three statements. Table 3 shows that the overall mean score for these statements is 4.5, with a standard deviation of 0.45. The overall mean score shows that most respondents agreed with the statements. Only a slight variation is observable in the mean scores of the statements. The COVID-19 pandemic was measured using statements on lifestyle changes, financial management, and transaction method. The responses ranged from a minimum of 3 (neutral) to a maximum of 5 (strongly agree). Based on the finding, it is fairly presumable that the COVID-19 pandemic has affected ABC Bank's clients.

#### 4.3. Preliminary Analyses

In order to determine whether or not the study's variable measures could be trusted, Cronbach's alpha was applied. Cronbach's alpha has been employed, as stated by [39], to test for inter-item consistency in order to determine the average intercorrelation among the items that were used to measure the ideas. The reliability of Cronbach's Alpha suffers when there are gaps in the data. Due to the fact that it is the ratio of two different variations, the potential value of alpha can range anywhere from 0 to 1. Estimates of alpha can, however, take on any value less than or equal to 1, including negative values, although only positive values make sense. This is because the estimating process used determines the range of possible values for alpha. It is preferable to have alpha values that are higher. Before they will employ an instrument, there are certain industry experts that demand that it possesses a dependability of 0.70 or better, which was determined using a sizeable sample [40]. As a consequence of this, alpha is utilised in the manner that is most appropriate when the items measure various substantive regions within the context of a single construct [41,42].

Table 4 presents the result for three items represented by N. The Cronbach's alpha score for digital banking effectiveness is 0.702, denoting an acceptable consistency, as the score falls in the 0.70 to 0.79 score group. Table 4 also presents the result for the three items

Sustainability **2022**, 14, 11248 10 of 16

(N=3) measuring the perceived usefulness of digital banking. The Cronbach's alpha score is 0.846, denoting an excellent consistency, as the score falls in the 0.80 to 1.0 group. In terms of the banking system's reliability, Cronbach's alpha score is 0.644, denoting a weak consistency, as the score falls in the 0.60 to 0.69 score group. Finally, the Cronbach's alpha for the COVID-19 pandemic is 0.640, denoting a weak consistency, as the score falls in the 0.60 to 0.69 score group.

Table 4. Reliability statistics.

Variable	Cronbach's Alpha	N of Items
Digital banking effectiveness	0.702	3
Perceived usefulness	0.846	3
Reliability of the banking system	0.644	3
COVID-19 pandemic	0.640	3

Overall, Cronbach's alpha tests showed that the items adapted for perceived usefulness have an excellent correlation as a group. Next, the items for digital banking effectiveness have a good level of correlation as a group. On the other hand, the statements for reliability have a low correlation as a group. The low scores could cause the data to be biased. Nevertheless, no variables were rejected for further testing and analyses because the alpha scores exceeded the threshold of insignificant correlation of items (all alpha scores are greater than 0.60).

This study focused on the Shapiro–Wilk and Kolmogorov–Smirnov tests to analyse the data distribution normality. The tests' general rule is that the data substantially deviate from a normal distribution if the significance *p*-value is greater than the alpha value of 0.05. The results of these tests are shown in Table 5. Both tests show that all variables' significance *p*-value is less than the alpha value of 0.05. Therefore, the variables were initially assumed as not being normally distributed.

Table 5. Normality statistics.

	Kolmo	ogorov–Sm	irnov	Shapiro-Wilk			
	Statistic	df	Sig.	Statistic	df	Sig.	
Digital banking effectiveness	0.168	228	0.000	0.910	228	0.000	
Perceived usefulness	0.230	228	0.000	0.878	228	0.000	
Reliability of the banking system	0.190	228	0.000	0.923	228	0.000	
COVID-19 pandemic	0.179	228	0.000	0.873	228	0.000	

In addition to the above tests, the Q–Q plots may be used to show whether a distribution is normal. The plots provide a broader view of the distribution. The dots generally follow the trend line if the distribution is normal. Although Q–Q plots may indicate that the data are not far from normal, the *p*-value would be low if the large sample size. For minor deviations from normal, a test with large sample size is likely to indicate considerable deviations from the normal distribution [43]. The data for this study clustered around the trend line, as shown in Figure 2. Hence, the distribution is normal.

Sustainability **2022**, 14, 11248 11 of 16

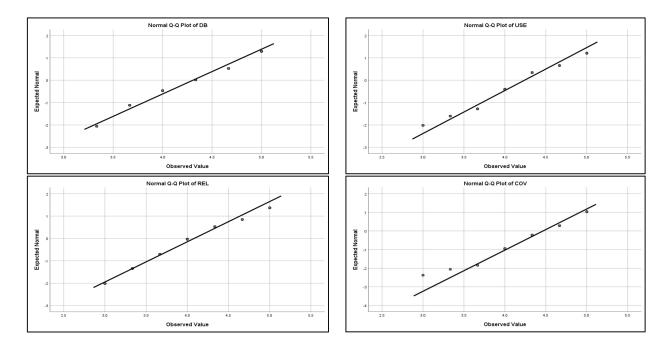


Figure 2. Normal Q-Q plot.

## 4.4. Correlation Analysis

Correlation analysis determines the degree to which two numerically measured continuous variables are related. In this study, the Pearson correlation matrix with a significance level of p=0.05 was used to display the direction, strength, and significance of relationships between the variables. The findings of this analysis are shown in Table 6. Table 6 shows that the relationship between perceived usefulness and digital banking effectiveness is 0.562 at a p=0.00 significant level, indicating a strong, positive relationship between the two variables. The result also shows that the relationship between perceived usefulness and digital banking effectiveness is 0.550 at a p=0.00 significant level, reflecting a strong and positive relationship between the two variables. Nevertheless, the relationship between the COVID-19 pandemic and digital banking effectiveness indicates a small and positive relationship between the two variables with 0.240 at a p=0.00 significant level.

Table 6. Correlation analysis.

Digital Banking	Perceived	Reliability of	COVID-19
Effectiveness	Usefulness	Bank System	Pandemic
1	0.562 **	0.550 **	0.240 **
	0.000	0.000	0.000
0.562 **	1	0.299	0.260
0.000		0.208	0.149
0.550 **	0.299	1	0.389
0.000	0.208		0.340
0.240 **	0.260	0.389	1
0.000	0.149	0.340	
	0.562 ** 0.000 0.550 ** 0.000 0.240 **	Effectiveness         Usefulness           1         0.562 ** 0.000           0.562 ** 0.000         1           0.550 ** 0.299 0.000         0.299 0.208           0.240 ** 0.260	Effectiveness         Usefulness         Bank System           1         0.562 ** 0.000         0.550 ** 0.000           0.562 ** 0.000         1         0.299 0.208           0.550 ** 0.000         0.299 0.208         1           0.240 ** 0.260         0.389

<sup>\*\*</sup> Correlation is significant at the 0.01 level (2-tailed).

## 4.5. Multiple Regression Analysis

Table 7 provides the results of the multiple regression analysis. The results show R<sup>2</sup> value is 0.378. This value indicates that perceived usefulness, reliability of the banking system, and the COVID-19 pandemic together account for 37.8% of the variation in digital

Sustainability **2022**, 14, 11248

banking effectiveness. The remaining 62.2% of the variation in digital banking effectiveness could be explained by other factors not included in this study.

Table 7. Multiple regression model.

Model	R	R-Square	Adjusted R-Square	Std. Error of the Estimate
1 <sup>a</sup>	0.615 <sup>b</sup>	0.378	0.370	0.39680

<sup>&</sup>lt;sup>a</sup>. Dependent Variable: Digital banking effectiveness. <sup>b</sup>. Predictors: (Constant): Perceived usefulness, reliability of banking system, and COVID-19.

Therefore, the regression model can be stated as:

Digital banking effectiveness = 1.519 + 0.331(Use) + 0.283(REL) + 0.051(COV)

The linear relationship between the independent variables and the dependent variable is represented by the regression coefficients in Table 8. According to Table 8, perceived usefulness has a significant positive influence on digital banking effectiveness ( $\beta$  = 0.331; p = 0.000, <0.05). The p-value of 0.000 complies with the general rule for regression analysis. The rule states that the p-value should be lower than 0.05. Resultantly, the null hypothesis for H1 is rejected, suggesting that perceived usefulness positively impacts the effectiveness of digital banking for ABC Bank's clients. In other words, H1, which states that there is a positive impact of perceived usefulness of digital banking on the effectiveness of digital banking for ABC Bank's clients, is supported.

Table 8. Multiple regression coefficients.

Model		Unstandardised β	Coefficients Standard Error	Standardised Coefficients Beta	t	Sig.
	(Constant)	1.519	0.301		5.047	0.000
1 a	USE <sup>b</sup>	0.331	0.067	0.345	4.941	0.000
1 "	REL <sup>b</sup>	0.283	0.062	0.315	4.548	0.000
	COV b	0.051	0.062	0.046	0.826	0.409

<sup>&</sup>lt;sup>a</sup>. Dependent Variable: Digital banking effectiveness; <sup>b</sup>. USE = Perceived usefulness; REL = Reliability of banking system; COV = COVID-19 pandemic.

Table 8 also shows that reliability of banking system has a significant positive influence on digital banking effectiveness ( $\beta$  = 0.283; p = 0.000, <0.05). Its p-value of 0.000 complies with the general rule for regression analysis as it is lower than 0.05. Consequently, the null hypothesis for the reliability of the banking system is rejected. The findings suggest that reliability aspects positively impact the effectiveness of digital banking for ABC Bank's clients. Thus, H2 is supported. It highlights the positive impact of reliability on the effectiveness of digital banking for ABC Bank's clients.

Table 8 also displays the results for COVID-19 indicating no significant relationship with digital banking ( $\beta$  = 0.051; p = 0.409, >0.05). Thus, the null hypothesis for H3 fails to be rejected. Therefore, H3, which states that the perceived effect of the COVID-19 pandemic significantly influences the effectiveness of digital banking for ABC's bank clients, is not supported. Hence, this study was unable to verify whether the COVID-19 pandemic impacts the effectiveness of digital banking for ABC Bank's clients.

# 5. Conclusions

This study examined factors influencing ABC Bank clients' acceptance of digital banking. Three factors were identified in this study: perceived usefulness of digital banking, reliability, and perceived effect of the COVID-19 pandemic. The first variable in the study, the perceived usefulness of digital banking, has a significant positive impact on digital banking. Although this finding is consistent with [6,20], several studies contradict the relationship. Refs. [21,22,24] showed different findings because they defined perceived

Sustainability **2022**, 14, 11248 13 of 16

usefulness differently to fit their studies on testing multiple components of perceived usefulness. This study adopted the variable's general definition to assess its overall impact as a whole rather than measuring the variable's niche impact.

The link between the reliability of the banking system and digital banking effectiveness was also examined. The variables were found to have a significant positive relationship. The findings of [1,27,28] supported this conclusion since these authors also found a positive relationship between trust and security and digital banking. The TAM theory claims that reliability moves in the same direction as digital banking effectiveness when technological changes occur. The findings suggest that the effectiveness of digital banking for ABC Bank's clients would continuously increase if the trust and security of the system were not compromised.

This study also shows that COVID-19 has no significant effect on digital banking effectiveness. Although the variable appears to be less likely to produce unfavourable results when first observed, this outcome is a new finding, as previous studies have yet to show a similar result. The finding may be due to ABC Bank clients' adoption of digital banking and familiarity with its existence. Thus, the sudden spread of the COVID-19 pandemic could not significantly affect ABC Bank's clients who use its digital banking facilities. In addition, the bank reported that more than half of its retail clients had chosen digital banking since it was first introduced to the public.

Several limitations were encountered during the undertaking of this study. Firstly, the data were gathered based only in a bank and was conducted during the MCO period. Thus, the researcher was unable to conduct a preliminary survey at various ABC Bank offices to identify respondents who accurately suit the study's purpose. Secondly, the COVID-19 pandemic was still relatively new at the time of the survey. Only a short period could be used to assess its impact. Additionally, future studies should investigate the long-term effects of the broad adoption of digital banking services on consumer behaviours for other digitally based products or services.

In conclusion, this study assists future researchers by providing additional input on a research study in one of the banks, ABC bank in Malaysia. As digital banking is still relatively new, comprehensive research is needed to address the risks and expected outcomes correctly, which would affect end-consumers and may snowball to the disruption of the economy. Since this study was performed in only one bank, it is recommended that future studies can extend this study to cover a larger group of banks in order to increase generalisability. However, this study provides insights into the future financial landscape and addresses the gap in consumers' financial needs in Malaysia.

**Author Contributions:** Conceptualization, E.K.G.; methodology, E.K.G. and M.N.R.M.; software, M.N.R.M.; validation, E.K.G., M.M.A. and A.A.O.; formal analysis, M.N.R.M.; investigation, M.N.R.M.; resources, E.K.G. and M.N.R.M.; data curation, M.N.R.M.; writing—original draft preparation, E.K.G.; writing—review and editing, M.M.A.; visualization, M.M.A. and A.A.O.; supervision, E.K.G.; project administration, E.K.G. and M.M.A.; funding acquisition, M.M.A. All authors have read and agreed to the published version of the manuscript.

**Funding:** The study was supported by the Fundamental Research Grant Scheme (FRGS, Reference code: FRGS/1/2019/SS01/UITM/02/34) provided by the Ministry of Higher Education (MOHE) of Malaysia and the authors thank the Ministry for its research support.

**Institutional Review Board Statement:** The study was conducted in accordance with the UiTM Research Ethics Committee, and approved by the UiTM Research Ethics Committee (reference number REC/06/2021 (MR/451) on 21 June 2021.

Informed Consent Statement: Informed consent was obtained from all subjects involved in the study.

**Acknowledgments:** The authors also would like to thank the Universiti Teknologi MARA, for providing this opportunity.

Conflicts of Interest: The authors declare no conflict of interest.

Sustainability **2022**, 14, 11248

App	endix A	A						
	on A: I	onnaire Demograph						
1.	se comp Gende	olete all que	estions.					
1.		Men Women						
2.	Age gı	oup.						
		Under 20 y 21–30 year 31–40 year 41–50 year 51–60 year More than	es es es					
3.	I am a	customer c	of Hong	Leong B	ank/Ho	ng Leon	ng Islamic l	Bank.
		Yes No						
	on B lly prov	ide the mos	t relevar	ıt respon	se that re	eflect you	ur experien	ce with financial services.
4.		of my trans nobile payn		_	ses/pay	ments)	are made	via online channels (on-
Stro	ngly Dis	sagreed	1	2 □	3 □	$\frac{4}{\Box}$	5 □	Strongly Agreed
5.	Online	e/mobile ba	anking is	s more c	onvenie	nt than p	physical ba	nking.
Stro	ngly Dis	_	1	2 □	3 □	$\frac{4}{\Box}$	5 □	Strongly Agreed
6.	_	r to make a branch.	•		_			n physical appearance at
Stro	ngly Dis	agreed	1 □	2 □	3 □	$\frac{4}{\Box}$	5 □	Strongly Agreed
7.	•	sy to get in	ternet c	onnectio	on to acc	ess my l	banking ar	nd financial information
Ctoo		•	1	2 □		4	5	Character Association
Stro.	ngly Dis	_			□ conline /s	□ mobilo b	nling com	Strongly Agreed ices, my data are secured.
0.	TOI EVE	ery transacti	1	2	3	4	arikirig serv 5	ices, my data are secured.
Stro	ngly Dis	agreed						Strongly Agreed
9.	I have	been using	mobile	online	banking	before (	COVID-19	pandemic.
0.	1 D:	,	1	2	3	4	5	
	ngly Dis	O	instad m	∐ v: lifostv	∐ 1o			Strongly Agreed
10.	COVII	D-19 has aff	ectea m 1	y mesty 2	ie. 3	4	5	
Stro	ngly Dis	agreed					Ŏ	Strongly Agreed
11.	The M	ovement C	ontrol C	rder (M	CO) has	affected	l my earnii	ngs and expenses.
Stro	ngly Dis	sagreed	1	2 □	3 □	4 □	5 □	Strongly Agreed
12.	COVID	0-19 pander	nic influ	enced m	e to buyi	ng and n	naking pay	ment via online channels.
			1	2	3	4	5	

Strongly Disagreed

Strongly Agreed

Sustainability **2022**, *14*, 11248 15 of 16

13.	During the COVII	D-19 par	idemic, t	he use o	f online/	mobile ba	anking services is very helpful.
0.	1 5: 1	1	2	3	4	5	
Stron	ngly Disagreed	Ш	Ш	Ш	Ш	Ш	Strongly Agreed
	0				of onlir	ne/mobil	e banking services empower
	my personal fina	ncial m	anagem	ent.			
		1	2	3	4	5	
Stron	ngly Disagreed						Strongly Agreed
15.	During the COV	D-19 pa	ndemic	, the use	e of onlir	ne/mobil	le banking services increases
	my transaction e	fficiency	у.				
		1	2	3	4	5	
Stron	ngly Disagreed						Strongly Agreed
1	End of survey Th	nank vo	u for co	mpletin	o this su	rvev	

## References

- 1. Mbama, C.I.; Ezepue, P.O. Digital banking, customer experience and bank financial performance. *Int. J. Bank Mark.* **2018**, *36*, 230–255. [CrossRef]
- 2. Fintech News Malaysia. Bank Negara Malaysia to Issue up to 5 Digital Banking Licenses in 2022. Available online: https://fintechnews.my/25839/virtual-banking/bank-negara-malaysia-to-issue-up-to-5-digital-banking-licenses-in-2022/ (accessed on 15 March 2021).
- 3. Werth, O.; Schwarzbach, C.; Cardona, D.R.; Breitner, M.H.; Graf Von Der Schulenburg, J.M. Influencing factors for the digital transformation in the financial services sector. *Z. Gesamte Versicher.* **2020**, *109*, 155–179. [CrossRef]
- 4. Ganesan, P.; Meena, R. Customer's perception on effectiveness of digital banking services during Covid 19 lockdown period. *S. Afr. J. Econ. Manag. Sci.* **2020**, *23*, 1–4.
- 5. Chauhan, Y. How Important is Digital Banking? *Tech Funnel.* 2018. Available online: https://www.techfunnel.com/fintech/how-important-is-digital-banking/ (accessed on 1 February 2021).
- Nguyen, O.T. Factors Affecting the Intention to Use Digital Banking in Vietnam. J. Asian Financ. Econ. Bus. 2020, 7, 303–310. [CrossRef]
- 7. The Massachusetts Institute of Technology. *Digital Banking Manifesto: The End of Banks?* The Massachusetts Institute of Technology: Cambridge, MA, USA, 2016.
- 8. Shin, J.W.; Cho, J.Y.; Lee, B.G. Customer perceptions of Korean digital and traditional banks. *Int. J. Bank Mark.* **2019**, 38, 529–547. [CrossRef]
- 9. Baicu, C.G.; Gârdan, I.P.; Gârdan, D.A.; Epuran, G. The impact of COVID-19 on consumer behavior in retail banking. Evidence from Romania. *Manag. Mark. Chall. Knowl. Soc.* **2020**, *15*, 534–556. [CrossRef]
- 10. Barquin, S.; Vinayak, H.V. Digital Banking in Asia: What do Consumers Really Want? McKinsey & Company: Atlanta, GA, USA, 2015; Available online: https://www.mckinsey.com/~{}/media/mckinsey/industries/financial%20services/our%20insights/capitalizing%20on%20asias%20digital%20banking%20boom/digital\_banking\_in\_asia\_what\_do\_consumers\_really\_want.pdf (accessed on 1 January 2021).
- Mohan, M. Customer Satisfaction on Internet Banking Services with Reference to Virudhunagar District. Glacier J. Sci. Res. 2016, 2016, 2349–8498.
- 12. Haque, A.; Ismail, A.Z.H.; Daraz, A.H. Issues of e-banking transaction: An empirical investigation on Malaysian customers perception. *J. Appl. Sci.* **2009**, *9*, 1870–1879. [CrossRef]
- 13. Bahl, S. Emerging challenges in e-banking upheavals in global scenario. J. Radix Int. Educ. Res. Consort. 2012, 1, 1–12.
- 14. Gupta, N.; Yadav, A. The Effect of Electronic Payment on Customer Satisfaction. Int. J. Data Netw. Sci. 2017, 6, 3556–3579.
- 15. Pattan, P.; Agrawal, M. A study of consumer's perception towards frequently use of types of e-payment system in Indore Division. *Int. J. Res. Anal. Rev.* **2018**, *5*, 1884–1894.
- 16. Jain, M.; Popli, G.S. Role of Information Technology in the Development of Banking Sector in India. 2012. Available online: https://papers.ssrn.com/sol3/papers.cfm?abstract\_id=2151162 (accessed on 1 January 2021).
- 17. Davis, F.D. Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology. MIS Q. 1989, 13, 319–340. [CrossRef]
- 18. Ghani, E.K.; Said, J.; Muhammad, K. Enhancing corporate governance via XBRL: Preparers' perception on compatibility expectation. *Procedia Soc. Behav. Sci.* **2014**, *145*, 308–315. [CrossRef]
- 19. Davis, F.D. User acceptance of information technology: System characteristics, user perceptions and behavioral impacts. *Int. J. Man Mach. Stud.* **1993**, 38, 475–487. [CrossRef]
- 20. Bastari, A.; Eliyana, A.; Syabarrudin, A.; Arief, Z.; Emur, A.P. Digitalization in banking sector: The role of intrinsic motivation. *Heliyon* **2020**, *6*, e05801. [CrossRef]
- 21. Kurniasari, F.; Abd Hamid, N.; Chen, Q. The Effect of Perceived Usefulness, Perceived Ease of Use, Trust, Attitude and Satisfaction into Continuance of Intention in Using Alipay. *Manag. Account. Rev.* **2020**, *19*, 131–150.
- 22. Elhajjar, S.; Ouaida, F. An analysis of factors affecting mobile banking adoption. Int. J. Bank Mark. 2019, 38, 352–367. [CrossRef]

Sustainability **2022**, 14, 11248 16 of 16

- 23. Larsson, A.; Viitaoja, Y. Building customer loyalty in digital banking. Int. J. Bank Mark. 2017, 35, 858–877. [CrossRef]
- 24. Mufarih, M.; Jayadi, R.; Sugandi, Y. Factors Influencing Customers to Use Digital Banking Application in Yogyakarta, Indonesia. *J. Asian Financ. Econ. Bus.* **2020**, *7*, 897–907. [CrossRef]
- 25. Nel, J.; Boshoff, C. "I just don't like digital-only banks, and you should not use them either": Traditional-bank customers' opposition to using digital-only banks. J. Retail. Consum. Serv. 2021, 59, 102368. [CrossRef]
- Thomson Reuters. Reducing the Cost of Compliance: A Bold Move Towards Know Your Customer (KYC) Managed Services; Thomson Reuters: Toronto, ON, Canada, 2018; Available online: https://ctmfile.com/assets/ugc/documents/FINAL\_Reducing\_the\_cost\_of\_compliance.pdf (accessed on 1 February 2021).
- 27. Payne, E.H.M.; Peltier, J.; Barger, V.A. Enhancing the value co-creation process: Artificial intelligence and mobile banking service platforms. *J. Res. Interact. Mark.* **2021**, *15*, 68–85. [CrossRef]
- 28. Rana, N.P.; Luthra, S.; Rao, H.R. Key challenges to digital financial services in emerging economies: The Indian context. *Inf. Technol. People* **2019**, 33, 198–229. [CrossRef]
- 29. Mansour, H. How successful countries are in promoting digital transactions during COVID-19. *J. Econ. Stud.* **2021**, 49, 435–452. [CrossRef]
- 30. Sudarsono, H.; Nugrohowati, R.N.I.; Tumewang, Y.K. The Effect of Covid-19 Pandemic on the Adoption of Internet Banking in Indonesia: Islamic Bank and Conventional Bank. *J. Asian Financ. Econ. Bus.* **2020**, *7*, 789–800. [CrossRef]
- 31. Ahmad, N.W.; Bahari, F.; Ripain, N.; Atan, N.S. The influence of COVID-19 outbreak on digital payment in Malaysia. In Proceedings of the 8th International Conference on Management and Muamalah 2021 (ICoMM 2021), Online, 8 June 2021; pp. 9–16.
- 32. Shahabi, V.; Azar, A.; Razi, F.F.; Shams, M.F.F. Simulation of the effect of COVID-19 outbreak on the development of branchless banking in Iran: Case study of Resalat Qard–al-Hasan Bank. *Rev. Behav. Financ.* **2020**, *13*, 85–108. [CrossRef]
- 33. Lee, Y.; Kozar, K.A.; Larsen, K.R. The Technology Acceptance Model: Past, Present, and Future. *Commun. Assoc. Inf. Syst.* **2003**, 12, 01250. [CrossRef]
- 34. Tarigan, N.M.R.; Setiawan, H. The effect of employee competence on increasing employee motivation in Sumut Bank of Sharia Unit, North Sumatera. *Bp. Int. Res. Crit. Inst. Humanit.* **2020**, *3*, 858–868. [CrossRef]
- 35. Sekaran, U.; Bougie, R. Research Methods for Business; John Wiley & Sons Ltd.: Hoboken, NJ, USA, 2009.
- 36. Almaiah, M.A.; Al-Khasawneh, A.; Althunibat, A.; Khawatreh, S. Mobile Government Adoption Model Based on Combining GAM and UTAUT to Explain Factors According to Adoption of Mobile Government Services. *Int. J. Interact. Mob. Technol.* **2020**, 14, 199–225. [CrossRef]
- 37. Che Omar, A.R.; Ishak, S.; Jusoh, M.A. The impact of Covid-19 Movement Control Order on SMEs' businesses and survival strategies. *Malays. J. Soc. Space* **2020**, *16*, 2–11. [CrossRef]
- 38. Department of Statistics. *ICT Use and Access by Individuals and Households*; Survey Report; Department of Statistics: Putrajaya, Malaysia, 2021.
- 39. Bougie, R.; Sekaran, U. Research Methods for Business: A Skill-Building Approach, 8th ed.; John Wiley & Sons Inc.: Hoboken, NJ, USA, 2019.
- 40. Malhotra, N.K. Marketing Research: An Applied Orientation, 4th ed.; Pearson Education, Inc.: Upper Saddle River, NJ, USA, 2004.
- 41. Bajpai, S.; Bajpai, R. Goodness of measurement: Reliability and validity. Int. J. Med. Sci. Public Health 2014, 3, 173–178. [CrossRef]
- 42. Tavakol, M.; Dennick, R. Making sense of Cronbach's alpha. Int. J. Med. Educ. 2011, 2, 53–55. [CrossRef] [PubMed]
- 43. Field, A. Discovering Statistics Using IBM SPSS Statistics, 5th ed.; SAGE Publications Ltd.: Newbury Park, CA, USA, 2018.