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“Factors Affecting the Adoption of Internet Banking in Pakistan during Covid-19”



By:

Fariha Ramal

(01-220191-009)

Supervisor:

Dr. Shahab Aziz

Department of Business Studies

Bahria University Islamabad

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Names of Student(s): Fariha Ramal Enroll # 01-220191-009

Class: MBA 3.5 (7-A)

Approved by:

Dr. Shahab Aziz

Supervisor

Dr. Khalilullah Mohammad

Internal Examiner

Shamsa Khalid

External Examiner

Dr. Syed Haider Ali Shah

Research Coordinator

Dr. KhalilUllah Mohammad

Head of Department

Business Studies

Abstract

The objective of this study is to evaluate the variables that influence the acceptance and usage of IB in Pakistan during the outbreak of Covid 19. In addition, the purpose of this study was to investigate the influence of perceived ease of use (PEOU), trust (TR), perceived usefulness (PU), attitude (AT), and subjective norm (SN) on customers' intentions to embrace IB during the Covid 19 pandemic in Pakistan. In this particular investigation, the quantitative methodology was used. For the purpose of data collection, a questionnaire was distributed. There were a total of 177 replies gathered, and all of the respondents were users of IB. The method known as "Partial Least Square Structural Equation Modelling" (PLS-SEM), which was implemented using "SmartPLS software version 3.3.3," was used in order to conduct the analysis of the descriptive data. According to the findings of the research, the perceived usefulness, trust, and attitude of customers has a substantial effect on their intention to embrace IB in Pakistan. On the other hand, perceived ease of use and subjective norm had little impact on customers' intentions to implement IB.

Keywords: Internet banking, Perceived ease of use (PEOU), perceived usefulness (PU), Subjective norm (SN), Attitude (AT), Trust (TR)

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CHAPTER 1

1. Introduction

1.1 Background

Internet has completely changed the world. Every business is depending on its IT sector if the sector is develop and up to date then there are more chances for success of that business. The banking sector is widely acknowledged as an essential pillar to any nation's economic development and continued survival (Raza, Jawaid, & Hassan, 2015). Like every industry banking industry has also adopted new technologies and offers their services online (Vyas, 2012). Banks invest heavily in Internet banking because it lowers expenses in comparison to other kinds of banking and delivers faster and full consumer information. It improves the quality of services which banks are offering and also help the banks to survive in a competitive market (Hanafizadeh, Keating, & Khedmatgozar, 2014).

Internet Banking helps the users to perform transactions online. Internet banking, commonly known as online banking, is another name for this service. It offers almost every service that a bank provides to its customer such as online payments, deposits, printing statements and transfer of money etc. Nowadays, almost each and every bank is offering online banking services to their customer which reduces transaction cost and save time of customers. Most clients no longer need to physically visit a bank office to do basic financial transactions because of Internet banking (Eriksson, Kerem, & Nilsson, 2005). Customers can use Internet banking whenever they want. Every bank offers different types of online transaction for instance; some banks only offer online payment services while several banks has the options for opening a new account using Internet banking. In recent years, online banking has evolved into a "one-stop service and information unit," providing several benefits including both banks and their consumers (Tan & Teo, 2000).

Banking in the nineteenth century was revolutionised by political, economic, social, and technical advances, resulting in a new competitive market for the banking industry. Internet banking was established in the early 1980s and gained traction in developing nations in the mid-1990s (Jayawardhena & Foley, 2000). In 1980's people were not much aware of the computers they did not know how to use online banking due to which internet banking did not get much attention. After 1990's banking industry has started to grow their Internet banking services which has changed the Banking sector rapidly. Many banks started to provide IB services. Because of that development banks can get benefits such as growing

their business network by offering online banking services. Furthermore, by utilising online banking, banks may erase physical borders and save operational time compared to other banks (Widjana, 2011).

As discussed above, banking industry is increasing their IB services day by day and they are introducing new services to gain competitive advantage in market. When new technology introduces, every industry try to adopt it as soon as possible because they know if they want to be successful they have to make changes in their business. Due to this when online banking technology has introduced in market every bank started to adopt it in almost every country. Although several studies have been undertaken in industrialised nations to examine the scope and significance of internet banking, the concept is still in its infancy in developing nations (Afshan, Sharif, Waseem, & Frooghi, 2018). For instance, India has introduced IB services in the country in 1996 (Khan & Mahapatra, 2009). In the late 1980s, Sri Lanka, too, adopted the concept of IB by introducing electronic cards (Kariyawasam & Jayasiri, 2016). According to (Khatri & Dhungel, 2013) the first bank of Nepal was established in 1937 and it took almost 53 long years for that bank to provide credit card facility to its users. After 53 years the bank has shifted to online banking in early 1990s. Another developing country, Bangladesh has started IB service in 2001 (Hasan, Baten, Kamil, & Parveen, 2010). These are the examples of some South Asian countries which have developed their banking industry according to technology and improved their banking industry by introducing internet banking to its people.

In Pakistan, most banks have implemented online banking and are striving for greater competitiveness by updating their technology and services. Foreign banks introduced internet banking in Pakistan in the 1990s. In the early 2000s, the Pakistani government took initiatives to connect business, trade to the internet (Raza, Naveed, & Ali, 2017). There are now 27 banks in Pakistan that provide online and mobile banking services (Siddiqui, 2020). Many Pakistanis, especially those in more remote locations, lacked experience with online banking. Some people from urban areas preferred not to use IB due to lack of trust on banks or online service which was not good for the growth of Pakistan's banking industry because trust and loyalty has a great importance in e-banking (Hameed, 2021). Unfortunately, the IT industry of Pakistan has not that much developed due to which people don't have faith in Internet banking. But after the Covid-19 everything has changed drastically. The outbreak of Covid-19 has changed the way of living because Small droplets created by coughing, sneezing, and talking can spread the corona virus to others in close contact. (Ali, Khalid, Javed, & Zahurul

Islam, 2020). So, it was important for the public to keep distance from one another. The virus can spread through anything like cash and cheques. Due to this reason the government of Pakistan has implemented lockdown in the country. People were not allowed to go outside for work. They were not allowed to do their activities outside. Since everything was closed due to lockdown people can't even go to bank and at that time IB starts growing in Pakistan. People started using IB to clear their payments, bills etc. They are using IB to keep an eye on their finances. Many people started online working and they got payments through IB from foreign countries. During the Covid-19, individuals' use of online banking has developed into an essential component of their lives (Yakean, 2020).

1.2 Problem Statement

As a result of the Covid-19 pandemic in Pakistan, the growth in the number users of IB increased by more than 7 percent to 3.8 million in the quarter (Jan-March 2020), as compared to 3.6 million in the prior quarter, which ended in December 2019; this number represents an increase from the previous quarter's total of 3.6 million (Siddiqui, 2020). With the development of IB, there are multiple barriers. Before Covid 19 individuals were observed with a lack of awareness, lack of confidence in IB, apart from that they also have privacy issues, and the majority of them didn't know how to utilize internet banking. So, the objective of this research is to investigate the variables influencing the adoption and use of IB in Pakistan during the Covid 19 outbreak. This research was also designed to explore the effect of Trust (TR), Perceived Ease of Use (PEOU), Attitude (AT), Subjective Norm (SN) and Perceived Usefulness (PU) on customer's intention to adopt IB during Covid 19 pandemic in Pakistan. Because Covid 19 has changed the intentions of customers towards IB which resulted in increase the number of IB users.

1.3 Research Objectives

- To identify how Perceived Ease of Use (PEOU) and Perceived Usefulness (PU), influences customer's intention to adopt IB during Covid 19 pandemic in Pakistan.
- To identify the variables that influences the adoption and use of IB during Covid 19 pandemic in Pakistan.
- To identify how Attitude (AT), Subjective Norm (SN) and Trust (TR) influences customer's intention to use and adopt IB.

1.4 Research Questions

- How how Perceived Ease of Use (PEOU) and Perceived Usefulness (PU), influences customer's intention to adopt IB during Covid 19 pandemic in Pakistan?
- What are the variables that influence the adoption and use of IB during Covid 19 pandemic in Pakistan?
- How Attitude (AT), Subjective Norm (SN) and Trust (TR) influence customer's intention to use and adopt IB?

1.5 Research Gap

There have only been a few of studies conducted on how the Covid 19 virus has affected people's willingness to use online banking. Those studies have mainly concentrated on service quality, customer's satisfaction and efficiency of IB (Firdous & Farooqi, 2017). No study has been conducted to examine the influences of perceived usefulness, subjective norm, attitude and trust towards customer's intention to adopt IB in Pakistan. To fill this gap this research is focused on these variables.

1.6 Significance of study

Internet banking is gaining momentum from the past few years in the most countries of the world. Especially after COVID Pandemic people became aware about internet banking and the ratio of customers increased as compared to the past including in Pakistan. As many countries of the world saw an increasing numbers of customers of internet banking, beside some countries effected due to Impact of COVID 19. A trust deficit was the leading example in internet banking between the institution and the customer During COVID-19 pandemic. As for as many positive as well as negative aspects of internet banking noticed by people during pandemic which clearly effected the particular institution or customer directly or indirectly. This study will benefit the banking industry because it will give a clear image of the variables that will affect the use of IB. The banks should improve those variables or factors in order to gain competitive advantage and to increase the growth of internet banking in future.

1.7 Scope of Study

This study is conducted in only 3 cities of Pakistan i.e. Islamabad, Karachi and Lahore. The questionnaire was circulated and responses were collected from the users of the IB. The study will identify the variables that can influence the customer's intention to adopt and make use of internet banking in Pakistan.

CHAPTER 2

2. Literature Review

2.1 Intention to adopt Internet Banking (IAIB)

Banking technology literature expanded in the 1980s and 1990s, with the introduction of new innovations that allowed online access to banks. The increasing usage of debit cards, ATMs and the forerunner of online banking were all innovations (Alalwan, Dwivedi, & Williams, 2014). At that time, a large number of individuals were not familiar with the internet technology, and they were not even able to conceive of an online banking system. With the advancement of new technologies banking industry has also expanded and developed their services by using internet. The utilization of internet banking and its expansion during the decade of the 1990s was a primary topic of discussion. There are two distinct categories that may be used to IB adoption: the first category is descriptive and the second one is relational. The descriptive studies seek to uncover the attributes of internet banking adopters, their emotions, behaviour, and the adoption difficulties they confront, as well as the traits that make IB more appealing to potential adopters. Relational studies are solely focused with determining the elements driving IB adoption, and they use one of the new technology acceptance models as their primary research tool (Chaouali, Yahia, & Souiden, 2016).

A variety of factors, such as compatibility, PEOU and PU, and trial ability, all play a role in determining individuals' perspectives towards the adoption of internet banking. Banks will often make efforts to increase awareness of IB; nonetheless, some customers may be hesitant to accept the service due to a lack of knowledge about what it involves (Samar & Mazuri, 2019). On the other hand, several customers struggle with issues of trust in addition to concerns over their privacy and security, which prevents them from embracing any new technology including IB services. Previous studies have investigated a wide range of aspects that have a position in the decision-making process about IB adoption i.e. trust concerns, a lack of security, and so on (Alalwan A. A., Dwivedi, Rana, & Algharabat, 2018). Several elements have been investigated and confirmed as major predictors of customer intention and usage of IB.

Adoption of IB is also connected to employment. Workers at higher levels of an organisation are more prone to utilise IB. Conversely, those with lesser earnings are less inclined to utilize IB services (Camilleri & Grech, 2017). The majority of people who hold higher-level

positions are quite busy in their jobs, and as a result, they don't have a lot of spare time to run errands to the bank or take care of other stuff like paying bills. Therefore, people like internet banking because it helps them save both money and time. On the other side, those with lower incomes are not as well educated about new technologies and how they might be used, and as a result, they tend to avoid trying new things in order to remove the possibility of suffering a loss or making a mistake. The majority of them may not like using IB, they are forced to go to the bank on their own, which not only wastes their time but also costs them money.

Since attitudes and motives are among the most important aspects affecting consumers' purchasing behaviour, so they have captured the interest of academics researching the behaviour and attitude of bank customers and their relationships with these organisations. The use of IB by consumers has also been the subject of much study by several researchers (Rahi, Ghani, & Ngah, 2018). Every firm, in an attempt to sustain their competitive advantage in the market and to keep up with the quick speed of technological innovation, is putting in a lot of effort to incorporate both types of technology that are already in use and those that are in the process of being developed. As a result, the banking sector has also created new features in an effort to attract the attention of clients. It is extremely crucial to take into consideration the factors that might impact a customer's desire to adopt IB since the customer's interest is highly important for the development of banks and the services they provide (Al-Ajam & Nor, 2013). (Chauhan, Yadav, & Choudhary, 2019) Hypothesise that Attitude, Perceived Ease of Use and Perceived Usefulness all impact the Intention of an individual to Use. For instance if a person uses IB and finds it useful plus ease to use then the person will have a positive attitude towards this service which can create an impact on his/her intentions.

There is a possibility that the Technology Acceptance Model (TAM) can be applied to customer's choices about the adoption and utilization of online banking. In developing nations like Pakistan, where internet banking has yet to catch on widely, there is a significant barrier that must first be overcome. For that reason, it is very necessary for clients and banks to have a solid grasp of the key drivers behind the rise of online banking. According to the findings of the research (Rahi & Ghani, 2018), trust and perceived usefulness have a substantial impact on users' intention to utilize internet banking. As per (Rahi S. , Ghani, Alnasera, & Ngah, 2018), all financial dealings should be made over the internet and that online banking is better to its more traditional counterparts.

2.2 Perceived Usefulness (PU)

The term "perceived usefulness" refers to "the extent to which the individual feels that adopting a certain system would enhance his or her experience." This refers to an individual's belief that further application of information technology would boost their efficiency (Davis & Davis, 1989). According to (Kavitha & Gopinath, 2020) Customers' expectations of how valuable the IB will be to them have a significant role in determining whether or not they will utilise the service. The presence of PU suggests that consumers are pleased with the usage of IB and that they considered this innovative technology to be beneficial. People are starting to realise that internet banking has several advantages, including convenience, efficiency, and safety.

The proportion of customers has risen over the last several years because they have come to feel that making use of various technologies will help them become more efficient in their day-to-day work. It has been shown that PU increases consumer satisfaction with IB, and that content consumers are more likely to make use of the technology (George & Kumar, 2013) which not only increase the growth of IB but also helps the banking sector to create competitive advantage in the market. In order to obtain a competitive edge, financial institutions will boost their production and provide services that are both prompt and of a high quality to their clients.

According to (Wu, Jayawardhena, & Hamilton, 2014) for consumers, the PU of IB is measured by the extent to which they feel that adopting IB would improve the efficiency and effectiveness of their banking operations. In other words, PU has an impact on the consumer's intention with regard to internet banking, and consumers feel that using IB would enhance the method of banking transactions, hence saving people time and money. A study (Mutahar, Daud, Thurasamy, Isaac, & Abdulsalam, 2018) showed that the PU is the most essential element in determining whether or not users will accept new technology. IB as a trade has gotten more diverse as one of the obvious examples of how technology advancements have been rapidly transforming sectors over the last few years, and this is one of the clearest examples of those changes. As a result of the findings of numerous surveys conducted by a wide range of institutions, it has become clear that the IB has in some way fundamentally transformed the conventional banking system, and the proportion of IB has increased in many countries around the world in comparison to times gone by, which is obviously having an effect on customer service on a daily basis.

The Technology Adoption Model (TAM), presented by Davis (1986), used to find out how comfortable people feel with adopting and making use of new forms of technology. It is a theory in the field of information systems that describes how a customer's attitude and behaviour change in response to the introduction of new technology, as well as how they adapt to and make use of that technology (DAVIS, BAGOZZI, & WARSHAW, 1989). According to the TAM, PU is the key element in determining customers' attitudes towards new technology. (Raza, Umer, & Shah, 2017) stated that Intentions to embrace new technologies are heavily influenced by PU in a significant way.

According to TAM, the two most significant elements that influence consumers' perspectives on new innovations are "perceived usefulness" and "perceived ease-of-use." To put it another way, TAM is of the opinion that consumers' perceptions of the "usefulness" of new technologies, such as online banking, are a major factor in determining their attitudes toward these innovations.(Nasir, Wu, Yago, & Li, 2015). Intention to utilise the system and one's perspective on its usefulness are both affected by perceived usefulness in a direct manner (Danurdoro & Wulandari, 2016). Before using innovative technologies like IB, prospective users give primary consideration to PU as the most important component. This is because consumers believe that the utility of a certain system will improve the quality of their experience.

The PU of internet banking is determined by the services given by banks in terms of consumer demands such as bill payment, loan application, mutual fund information, money transfer and monitoring banks accounts. According to the findings of the previous study, customers' views about the adoption and utilization of IB are favourably impacted by their judgments of the utility and convenience to use this method (Nasir, Wu, Yago, & Li, 2015). The decision of whether or not a person will use the information system is impacted by the individual's "attitude." PU is a crucial aspect in establishing attitudes about the implementation of information technology (Ezzi, 2014). According to the study (Safeena R. , Date, Hundewale, & Kammani, 2013) Internet banking adoption is heavily influenced by the perception of PU.

2.3 Perceived Ease of Use (PEOU)

A user's perception of how simple it will be to learn and use a new piece of technology is known as its perceived ease of use. It is in human nature that they prefer those works that is easy to use. It's essential in the development and delivery of online banking services. If a

person uses IB for a long time then he/she will find it easy to use this service (Moslehpour, Pham, Wong, & Bilgiçli, 2018). The confidence of consumers that the specific system and technology which will be implemented and utilised will not have issues in operation or will not demand a large deal of work is a factor that impacts the adoption of IB. To put it another way, if a person has an effortless time interacting with a system, there is a good possibility that such individual will find the system to be beneficial.

PEOU and PU are important elements that influence the usage of new technologies or the adoption of an information system. Previous studies have revealed a relationship among PEOU and PU as two important determinants of e-banking usage. Research findings highlighted the role of PEOU in the spread of internet banking (BenYahia, Al-Neama, & Kerbache, 2018). Banks should keep their online services easy to use because a study (Indarsin & Ali, 2017) showed that "Ease of use" is more essential to daily and consistent IB users. It means those people who are using IB services are satisfied with the easy and less time consumption process of banks.

According to (Yoon & Steege, 2013) the correlation among security risk and IB use is moderated by PEOU. Security or privacy risk can reduce the number of IB users. If the user interface of the website or any programme looks complicated, then people may consider using it to be unsafe since they won't be able to comprehend how it should be used. They will express a strong desire to avoid using the IB service. It is essential to simplify the IB service interface such that it is both easy and simple to use in order to get rid of this hazard. As per research findings (AL-Qahtani & Eid, 2014), IB service acceptance, use, and success were all influenced by levels of awareness and PEOU. PEOU influences customer's intention to adopt IB because people prefer those things which are easy to use.

In previous research (Al-Fahim, Jusoh, & Abideen, 2016) it is believed that the way something is regarded to be easy to use has a positive impact on people's intention about using new technology. A person's perspective on adopting a new technology or system is more likely to be positive if they find it easy to use. According to the study (Abdullah, Ward, & Ahmed, 2016), PU and PEOU are significantly and positively associated to customers' desire to adapt IB. Furthermore, (Singh & Srivastava, 2018) stated that consumers' willingness to quickly try out new technologies and assess their advantages is correlated with their perceptions of how simple they are to use. He also stated that the demand for financial services, the demand for safe, high-quality electronic banking technology, and the perception

that it is easy to use are the elements that are driving the growth of IB services. The availability of trustworthy electronic banking technologies and the comfort that comes from having a quick and reliable internet connection contribute to the impression of PEOU.

The study (Langelo, 2013) concluded that Internet banking adoption was strongly influenced in a positive direction due to variety of variables, including PEOU, perceived threat, and PU. This means that in order to promote the use of online banking, financial institutions will need to enhance the performance of these services by providing more useful advantages to clients and bolstering the safety of online financial transactions. According to the research (Chauhan, Yadav, & Choudhary, 2019), PU and PEOU have an important positive connection with customer's attitude. The efforts made by PEOU to enhance the overall level of service quality provided by the IB have a beneficial effect on the customers' perceptions to use IB.

2.4 Trust (TR)

Trust has been regarded as the most important factor in e-commerce since it is essential anywhere there is uncertainty and interdependence. The level of trust between a specific financial institution and a consumer, as is the case with IB, is one of the most essential aspects of any commercial relationship. When it comes to doing any kind of business online, trust is the most important component. The banking industry is strongly linked and characterised by high levels of trust in relation to both physical safety and personal confidentiality. In any kind of business, trust is an essential component (Skvarciany & Jurevičienė, 2018). When it comes to the study of information systems, trust is widely regarded as one of the most crucial elements, especially when discussing technology that facilitate monetary transaction, such as online banking.

The trust that customers place in online banking may be broken down into two distinct categories: faith in the Internet and technology, as well as faith in online banking providers (banks) (Akgül, 2018). Trust is a crucial component that plays a significant role in driving increasing use of IB. It is crucial to find what aspects lead to a larger degree of trust since trust is a key factor in deciding the success of electronic banking and because of this, it is necessary to identify those aspects (Skvarciany & Jurevičienė, 2018). Despite the fact that internet banking offers several advantages, researchers (Rahi, Mansour, Alharafsheh, & Alghizzawi, 2021) believe that when it comes to defining the level of success that can be achieved with online banking, trust is one of the most important variables. Internet banking offers a number of benefits, not just to clients but also to the banks that provide it. One of the

most significant benefits of IB to its users is that it helps clients save both time and money. This is only made possible by a high level of trust that is shared between the bank and its customers.

According to a research that has investigated the trust (Butt & Aftab, 2013) concluded that customer satisfaction is another factor that contributes significantly to improved degree of trust in the financial cyberspace. Within the boundaries of an Internet environment, distant users from all corners of the globe are able to access vital data and files stored on computers and sent via the Internet. As a result, internet banking is inherently dangerous in terms of security (Vetrivel, Rajini, & Krishnamoorthy, 2020). Customers' trust in online financial transactions is a key component in deciding the future of this banking option. Customers' concern over the security of online banking technology causes them to experience an uncomfortable level of unease whenever they are asked for private information such as credit card details. People are reluctant to share their private information with websites or other sources because they believe that technological progress might sometimes pose a security risk. As a result of this, many individuals do not trust websites or other sources. For this reason, a lot of individuals don't put their faith in internet business services (Roy, Balaji, Kesharwani, & Sekhon, 2017). Customers are cautious about disclosing their personal information to websites and are worried that their debit and credit cards may be misused.

However, the large investments made to improve the security of the internet and the channels through which IB transactions occur have not yet achieved economies of scale because of the small number of individuals who use online banking (Akhlaq & Ahmed, 2013). According to (Susanto, Lee, Zo, & Ciganek, 2013), there are a number of elements that influence consumers' initial level of trust in internet banking, including the perceived privacy and security of the service, the reputation of the organisation, the ease of use of the website, and the backing of the government. If financial institutions are interested in spreading their internet banking services to developing countries, they may either enhance the systems that are already in use or create new ones that take these considerations into account. The results of a study (Al-Sharafi, Arshah, Abu-Shanab, Fakhreldin, & Elayah, 2016) showed that perceived trust was impacted by security, perceived utility, and privacy, all of which had a beneficial effect on consumers' behavioural intentions to embrace Internet banking services.

2.5 Subjective Norms (SN)

An individual's response to societal pressures to behave is defined as a subjective norm (Putri & Hariyanto, 2022). It means a person gives more importance to other's opinions. The normative perception of the society that drives an individual to undertake particular behaviours is referred to as subjective norm (Sudarsono, Nugrohowati, & Tumewang, 2020). The subjective norm is an individual's impression of what others in his or her restricted social environment think about whether or not the individual should undertake the task that is the focus of recent investigation. As a result, the subjective norm is positively connected to the customer's behavioural intention (Ahmad, 2018).

The influence that a person believes to have been exerted on them by other organisations or people who are relevant to them or who are close to them is referred to as subjective norms (such as neighbours, friends etc). The impacts of society on individuals' behaviours are referred to as subjective norms. People operate or behave in a manner that is consistent with the viewpoint or point of view of society (Alhakimi & Esmail, 2020). The same way that subjective norm affects one's attitude toward behaviour; it also influences one's intention to perform in a certain way. It's possible that an individual's perception on the surrounding expectations will have a significant impact on how they feel about the IB. In other words, the opinions that individuals who own bank accounts have about the possibility that significant others in their life would support or oppose IB will affect the way in which they feel about IB. (Marakarkandy, Yajnik, & Dasgupta, 2017).

From the past few years due to the technological innovations the internet banking increased in many countries in the world which is clearly affecting the life style of the people especially those who are living in urban areas. According to a study that has been conducted in Uganda (Lujja, Mohammad, & Hassan, 2016) stated that it is anticipated that public opinion in Uganda about the likelihood that those close to them support or oppose IB would have a significant effect on whether or not they embrace it. This indicates that the people of Uganda have the ability to persuade anybody else in their nation to reject the adoption of this technology if they are of the opinion that the technology of IB would have a negative impact on their life. (Liang, 2016) Pressure from society was shown to have a crucial role in understanding Internet adoption, an issue that has gained much attention in recent years. The individual's perspective on the IB service may shift as a result of social pressure. For instance, if people are using IB, they will influence other people to use it. On the other hand, when consumers are dissatisfied with the services they receive from an online bank, it can have a negative impact on the growth of that bank.

In the previous study (Elhajjar & Ouaida, 2019) found that the customer's perception of the subjective norm impacts their intention to embrace IB. If consumers feel that the services provided by IB are simple and helpful, they will encourage others to use it, which will cause an increase in consumers using online banks. In the study which has been done in Thailand, (Kim, Kim, Choi, Seok, & Lee, 2019) found subjective norm as the most relevant component, influenced by perceived utility and self efficacy. The study (Yulianita, 2018) proved that an individual's behaviour and their own subjective norm both have a role in their decision to use Internet banking.

2.6 Attitude (AT)

Attitude is another essential variable which influence customer's buying behaviour; it might get a lot of interest from researchers who are looking at the behaviour of bank clients and their relations with banks. When customers can clearly identify the ways in which IB has improved their lives, they tend to see IB more positively (Priyangika, Perera, & Rajapakshe, 2016). (Mansour, 2016) an individual's overall emotive reaction to the concept of utilising the internet for banking transactions is referred to as their attitude toward IB. Customers' intentions to use IB may be predicted with high accuracy if they have a favourable opinion about a certain product. In a similar vein, a favourable attitude about a product that is being pushed by social influencers may raise the possibility that use intention will be formed. There is a need for enhanced marketing of banks' IB services to increase their visibility and attract a wider audience. This will also increase the probability that it will attract the attention of social media influencers, which can help people develop a more positive attitude toward using online banking services (Fawzy & Esawai, 2017).

Customers' attitudes on Internet banking were considered as being impacted by their perceptions of how easy it was to use, how valuable it was, and how trustworthy it was. The acceptance of the service, the versatility of its applications, and the compatibility of those applications with the customers' current life are the major aspects that influence adoption (Selase & Benedict, 2021). The Theory of Reasoned Action (TRA) is used in this study that examines the connection that exists between an individual's mindset and their actions towards the adoption of a new technology. This model established by (Ajzen & Fishbein, 1975) outlines the relationships that may be made between a person's ideas, intentions, attitudes, and norms, as well as their behaviours. The majority of the time, it is used to find out how

individuals would behave based on their previous intents and attitudes. It indicates that an individual's intentions are determined by their preceding attitudes.

According to TAM, a user's level of technology usage is determined in large part by his or her behavioural intention, which is affected by users' attitudes about technology. It is also believed that how simple a product is to operate has an impact on people's opinions about how beneficial it is (Bashir & Madhavaiah, 2015). The research (Giao, Vuong, Tung, & Quan, 2020) showed that the attitude that a client has towards the implementation of IB may be influenced by both PU and PEOU. In addition to this, they have an indirect impact on the attitude. According to the research (Maduku, 2013), PU, PEOU, and trust all have strong positive associations with attitude. Because PEOU and PU provides ease to people and gives benefit by saving their time. It was discovered that the degree of trust that consumers had in the internet banking system was the most critical aspect in influencing the perspectives of clients.

If a customer learns to trust IB, they may alter their opinion about online banking and become more willing to utilise it. To change customers' perceptions about online banking, it may be necessary to provide them useful information and provide user-friendly interfaces (Shiferaw & Molla, 2018). The research showed that, PU has an important and positive influence on the consumer's attitude to adopt IB service. (Kariyawasam & Jayasiri, 2016) and (Jehan & Ansari, 2018) found that people's opinions about internet banking's utility had a large and favourable impact on whether or not they used the service. The study (Al-Ajam & Nor, 2013) This study found that people's intentions to utilise online banking were strongly influenced by their attitudes, subjective norms, and perceived degrees of behavioural control.

2.7 Hypothesis

H 1: Perceived Usefulness has a significant influence on customer's intention to adopt IB.

H 2: Perceived Ease of Use has a significant influence on customer's intention to adopt IB.

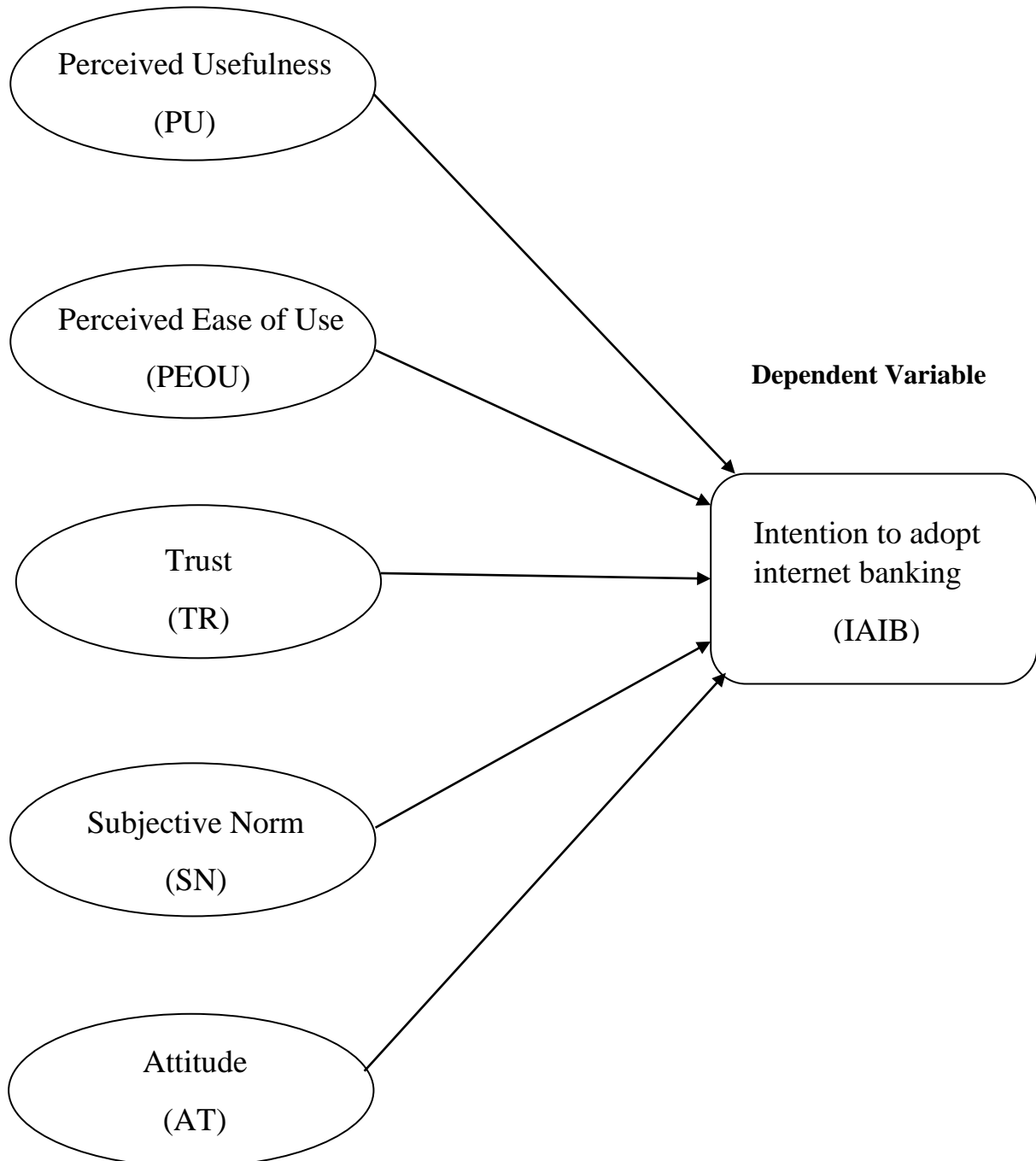
H 3: Trust has a significant influence on customer's intention to adopt IB.

H 4: Subjective Norm has a significant influence on customer's intention to adopt IB.

H 5: Attitude has a significant influence on customer's intention to adopt IB.

2.8 Theoretical Framework

Independent Variables



CHAPTER 3

3. Methodology

3.1 Introduction

The purpose of this study is to investigate the relationship between customers' attitudes about IB and their perceptions of its usefulness, ease of use, trust, attitude and subjective norms during the Covid-19 outbreak in Pakistan.

The chapter provides information on the method, strategy, and research design that were used in the conduct of this research. This research is descriptive in nature, and the survey technique was used to conduct it. This study may be characterised as quantitative due to the use of an "online questionnaire" to collect data from the participants. Methods and techniques for data collection and analysis are described in detail in this section. The chapter has been divided down into sections, and each one is going to focus on a particular aspect of the methodology, such as the population, data source, and study factors, as well as the methods that are being used to examine the data in current research.

3.2 Research Approach

Quantitative and qualitative are the two primary schools of thought when it comes to research methods; nevertheless, researchers sometimes mix the two. The qualitative research method relies on open-ended questions and the interpretative findings of the researchers.

On the other hand, quantitative research collects data that is numerical in form, which is then examined statistically, and hypothesis testing takes place in order to determine whether or not there are links between the variables. The positivist paradigm is the basis for qualitative research, which views reality as objective phenomena to be investigated.

This research aims to measure the effect of (PU), (PEOU), (TR), (SN) and (AT) on customer's intention to use and adopt IB during Covid 19 pandemic in Pakistan. The methodology of quantitative technique was used in this research. This methodology will provide standardised data on all of the factors and their effect on the variable that is the subject of the current study (the dependent variable). Quantification of the findings and a generalisation of those findings from the sample to the population of interest were both accomplished with the use of the numerical data. Quantitative research has its own advantages when it comes to evaluating the influence of certain variables. For instance, the

researcher was able to do a statistical analysis of the data for each variable, and they also made a recommendation for the best way to proceed.

3.3 Population

It is the fundamental component of the universe from which one must pick a sample. The study of population is not an easy task since it demands a significant investment of time and money. We investigate samples to keep from incurring extra time and financial limitations. In this study the researcher has targeted the respondents who are the customers of online banking. The data and information has been collected from the 3 major cities of Pakistan that are Islamabad, Karachi and Lahore.

3.4 Sample size

The proportion of the total population that participates in the survey as a responder is known as the sample size. The type of research being conducted is what actually determines the size of the sample. To conduct this research a questionnaire was circulated among 200 IB users in Islamabad, Lahore and Karachi, out of which 177 responses were received. According to Morgans table, 177 responses represents the population of 320 (Krejcie & Morgan, 1970). A docs file was created and circulated through the online portals.

3.5 Sampling Approach

One method is known as "probability sampling," while the other is known as "non-probability sampling." Both of these methods are used to collect data. Random sampling is the method that is used in probability sampling, and each individual who is a part of the population that is being studied has a probability of being included in the sample. In non-probability sampling, the sample is not drawn at random and instead relies on the knowledge of the researchers or on sampling that is done at the researcher's convenience. The target population for our study, which consists of people who use internet banking, is a pretty large one; nevertheless, we do not have any statistics or a list at our disposal that can adequately represent the number of clients that are using IB. This indicates that the sample frame for IB users is not accessible, and as a result, the researcher relied on non-probability sampling, also known as judgemental sampling, which is based on convenience sampling.

3.6 Data Collection

The primary data was obtained via the use of an online questionnaire that was created on "Google Forms." This was done because "Google Forms" is an easy method to make a questionnaire and share it with others. The use of primary data to support the hypotheses of this study was chosen for a number of reasons, including the fact that it offers superior accuracy in findings, a higher degree of control, and information that is more recent. The vast majority of the secondary data utilised in this research is originated from scholarly journals and other types of research publications. However, some of the information included in this study also came from websites, books, Newspapers, and other online sources.

3.7 Research Type

The method used in this study is called cross-sectional. Its primary objective is to gather information from a certain population at a particular time. It includes in quantitative research. In cross sectional study the data is collected from questionnaire, interviews etc.

3.8 Measurement of variables

A standardised adaptive questionnaire was employed as a means for collecting information in order to examine the sensitivity of respondents to the factors that were of interest in this study. In a variety of ways, data collecting has been carried out. The Questionnaire has been divided down into two sections i.e. Section A and Section B. The respondents' demographic information was included in Section A of the questionnaire. The researchers did not make any inquiries regarding a person's name, email address, or phone number. Nor did they request any other personally identifiable information. The replies were not made public at any time. The demographic data that were taken into account were things like gender, age, education level, and occupation. While Section B includes 24 items in 6 constructs such as PU, PEOU, TR, AT, SN and IAIB. Considering the quantitative nature of the research, a questionnaire based on Likert scales ranging from "1" (Strongly Disagree) to "5" (Strongly Agree) was used to compile the necessary information for analysis. In order to acquire primary data for this thesis, the author followed the standardised questionnaire, which has already been tested and examined. The data were collected using the standardised questionnaire that was used in the earlier investigations.

3.8.1 Intention to adopt IB

Variable	Code	Items Statement	Reference
Intention to adopt IB	IAIB1	I intend to enhance the use of my Internet Banking service in the future.	(Cheng, Lam, & Yeung, 2006)
	IAIB2	I hope my transaction through Internet Banking will be enhanced in the future.	
	IAIB3	I will encourage my friends and family to use Internet Banking service.	
	IAIB4	I would highly recommend others to use Internet Banking.	

3.8.2 Perceived Usefulness

Variable	Code	Items Statement	Reference
Perceived Usefulness	PU1	The use of Internet Banking improves the functions of my banking activity.	(Ngai, Chau, & Chan, 2011)
	PU2	Internet Banking enables me to manage my banking activity more efficiently.	
	PU3	Internet Banking enables me to do my banking activity comfortably.	
	PU4	Internet Banking enables me to do my banking activity quickly.	

3.8.3 Perceived Ease of Use

Variable	Code	Items Statement	Reference
Perceived Ease of use	PEOU1	It is very easy to use Internet Banking.	(Davis, 1989)

PEOU2	Learning to use Internet Banking is easy.
PEOU3	Instruction provided on the Internet Banking website is clear and understandable.
PEOU4	I feel that it is easy to remember how to use Internet Banking.

3.8.4 Trust

Variable	Code	Items Statement	Reference
Trust	TR1	I believe that it is always safe to transfer money using Internet Banking.	(Gefen, Karahanna, & Straub, 2003)
	TR2	I believe I can count on transferring money using Internet Banking.	
	TR3	My bank immediately notifies me if there are problems with my transaction.	
	TR4	I believe that my transaction through Internet Banking will always be transparent.	

3.8.5 Subjective Norm

Variable	Code	Items Statement	Reference
Subjective Norm	SN1	Most of the people who are important to me would think that I should use Internet Banking.	(Khalid, Kassim, Ismail, Noor, Rahman, & Zain, 2003)
	SN2	People who influenced me would think that I should use Internet Banking.	
	SN3	People whose opinions I value would think I should use Internet Banking.	

3.8.6 Attitude

Variable	Code	Items Statement	Reference
Attitude	AT1	Using Internet Banking service is a good decision.	(Khalil, Firoozian,

AT2	Using Internet Banking service is a wise decision.	Bakare, Akil,
AT3	Using Internet Banking service is a positive move.	& Noor, 2010)
AT4	I like to use Internet Banking Service.	(Han, Zhang, Li, Widjojo, & Chung, 2012)

3.9 Data Analysis Technique

3.9.1 Cronbach's Alpha

Due to the fact that this study makes use of a questionnaire that contains a number of different items, as was previously mentioned, in order to gather primary data, it was essential to verify the accuracy of the questions. The reliability of the items used as variables may be calculated with the greatest accuracy using Cronbach's Alpha. Following Figure provides an explanation of how to understand the Cronbach's Alpha statistic.

Cronbach's alpha	Internal consistency
$\alpha \geq 0.9$	Excellent
$0.9 > \alpha \geq 0.8$	Good
$0.8 > \alpha \geq 0.7$	Acceptable
$0.7 > \alpha \geq 0.6$	Questionable
$0.6 > \alpha \geq 0.5$	Poor
$0.5 > \alpha$	Unacceptable

3.9.2 PLS-SEM

There are two types of approaches that may be used while working with structural equation modelling (SEM). The first method is known as the "covariance-based structural equation approach" (CB-SEM), and the second method is known as the "variance-based structural equation approach" (PLS-SEM). The method known as "Partial Least Square Structural

Equation Modelling" or "PLS-SEM" was used in this research for the purpose of conducting data analysis. This method should be used because of the complexity of the model that needs to be tested, the ability to predict and explain differences between the target variables, and the exploratory nature of the model, which lets new variables be added to the theory that has already been set up. PLS-SEM is a method for data analysis that consists of 2 steps. The measurement model is the first step, and its goal is to figure out how valid and reliable the data are. The structural model is the second phase, and it is used for the testing of hypotheses as well as for determining whether or not the model is appropriate.

3.9.3 Tools for Data Analysis

The descriptive data was analyzed using the, "Partial Least Square Structural Equation Modelling (PLS-SEM)" technique by "SmartPLS software version 3.3.3".

CHAPTER 4

4. Findings and data analysis

4.1 Introduction

This chapter presents an in-depth study of the data that was gathered in the survey that was carried out earlier. This chapter also includes a test of the hypothesis, an analysis of the collinearity between variables, and a measurement of the impact size of independent variables on dependent variables.

4.2 Demographic Profile of the Respondents

DEMOGRAPHIC		
		Percentage
AGE	18-25	66.67 %
	26-35	20.34%
	36-45	9.04%
	46-55	2.82%
	56 or above	1.13%
GENDER	Males	53.11%
	Females	46.89%
EDUCATION	Senior High School and equivalent	7.91%
	Diploma	2.82%
	Bachelors	53.11%
	Masters	32.20%
	PhD	3.95%
OCCUPATION	Student	62.15%
	Civil Officers	6.78%
	Private Employee	20.34%
	Entrepreneur	6.21%
	Housewife	4.52%

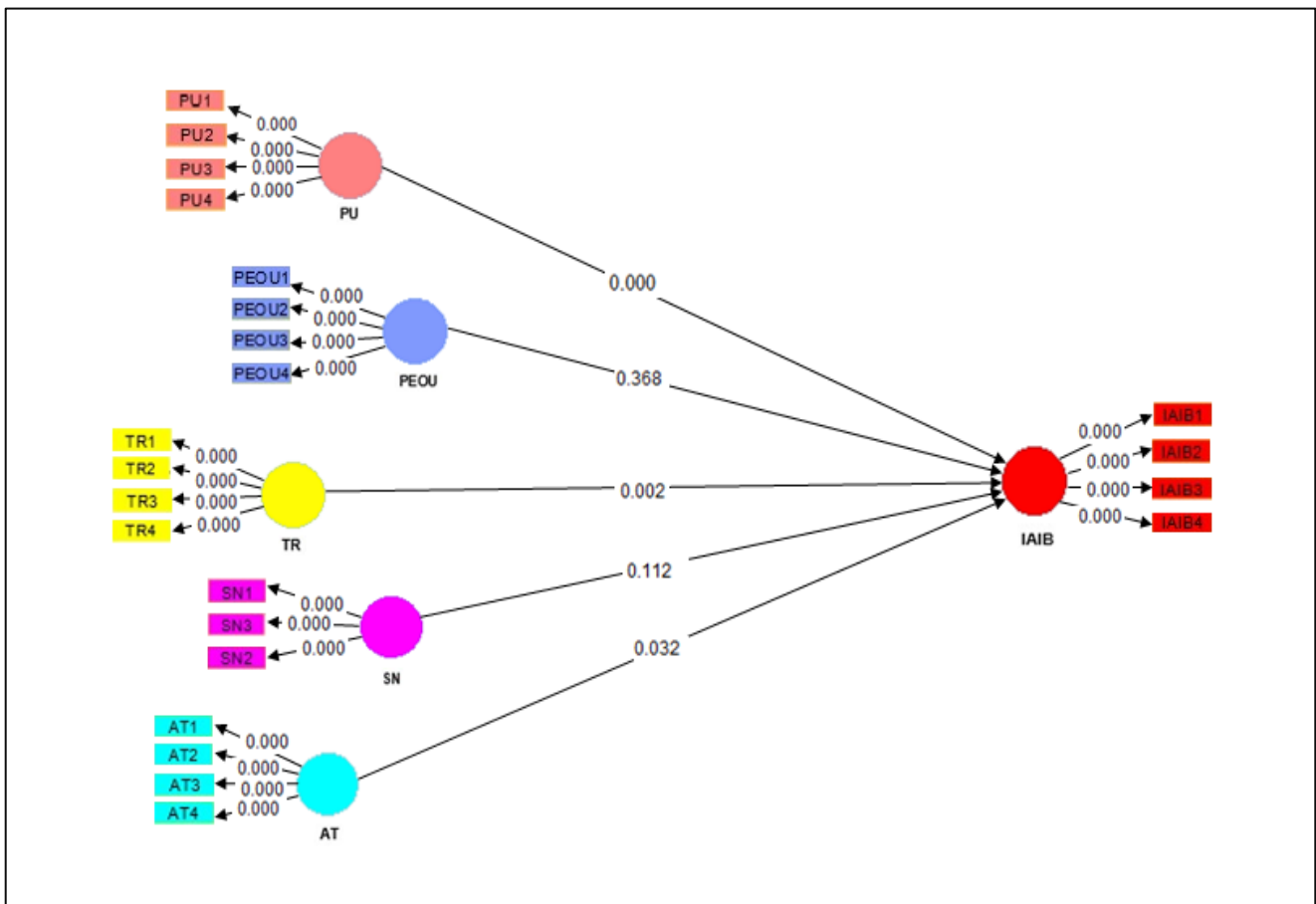
The data is analyzed was based on 177 responses which was collected by convenience sampling from those people who uses IB or starts using IB during Covid-19 pandemic. The first demographic was age which starts from 18 years to 56 or above. Majority of people who have given the responses were between 18-25 years having a percentage of 66.67%. There were 118 individuals who are between 18 -25. This is because nowadays, many young people have started using IB to accomplish their day to day tasks. There were 36 people between the ages of 26-35years having a percentage of 20.34%. People who are between 36-45 are 16 in numbers with 9.04%. Furthermore, 2.82% respondents were belonging to age group of 46-55 while 1.13% respondents belonging between the ages group of 56 or above.

The second demographic was gender in which males were 53.11% and females were 46.89%. It means there were 94 males and 83 females who have filled the questionnaire. In Pakistan many females were not using IB because some of them were not earning so they did not have bank accounts but after Covid-19 pandemic many people's interest shifted to online working including females they also starts working online so they needed a bank account but to keep check on their accounts and to make payments people starts adopting IB because due to Covid-19 there were lockdown in almost every country, people were not allowed to go to banks which also boosted the growth and adoption of IB. The third demographic was education in which majority of respondents were doing their bachelors. They were 94 in numbers with the percentage of 53.11% while 57 respondents were doing their masters and make percentage of 32.20%.

The fourth demographic was occupation. This demographic has selected to check the occupation of IB users. The finding has shown that there were 62.15% students which are 110 in numbers who are using IB. The reason is that during Covid-19 many students have started part time jobs on internet so for that purpose having a bank account was necessary. Apart from that there were 20.34% respondents who were private employees, 6.78% respondents were civil officers, 6.21% respondents were entrepreneur and 4.52% individuals were housewife who has adopted or used IB during Covid-19.

4.3 Measurement Model

The measurement model investigates the features of measurable latent constructs by illustrating how those constructs have been evaluated using observable variables. In this study we used 6 variables; Intention to adopt IB, attitude, perceived ease of use, trust, subjective norm and perceived usefulness, understanding the impact of these variables on the customer's intention to use and adopt IB during covid-19 and these variables were measured through 24 items. We used SmartPLS to figure out if the things were true and if we could trust them.



4.3.1 Internal Consistency and Convergent Validity

Following model construction in SmartPLS, the PLS algorithm was implemented (300 maximum iterations, path weighting scheme). The term "measurement model (outer model) assessment" describes this procedure. When items have an outer loading of > 0.708 , it's a good sign that they reliably measure the construct in question and explain more than half of the variance. When the value is more than 0.60, it is still considered acceptable (Byrne, 2016).

	Outer loadings
Attitude	
AT1	0.838
AT2	0.826
AT3	0.894
AT4	0.788
Intention to adopt IB	
IAIB1	0.680*
IAIB2	0.831
IAIB3	0.804
IAIB4	0.745
Perceived ease of use	
PEOU1	0.789
PEOU2	0.768
PEOU3	0.741
PEOU4	0.807
Perceived Usefulness	
PU1	0.782
PU2	0.843
PU3	0.808
PU4	0.721
Subjective Norm	
SN1	0.818
SN2	0.765
SN3	0.863
Trust	
TR1	0.775
TR2	0.848
TR3	0.732
TR4	0.777

"Outer Loading"

The result showed that majority of the values were > 0.708 which is acceptable, IAIB1 is also acceptable according to (Byrne, 2016).

To show validity, you can use Cronbach's alpha, rho A, the Composite Reliability (CR), and the Average Variance Extracted (AVE). See the table below for proof that our research is convergently valid.

	Cronbach's alpha	rho_A	Composite reliability	Average variance extracted (AVE)
AT	0.858	0.871	0.903	0.701
IAIB	0.765	0.778	0.851	0.589
PEOU	0.786	0.810	0.858	0.603
PU	0.798	0.805	0.869	0.624
SN	0.750	0.766	0.857	0.666
TR	0.791	0.804	0.864	0.615

“Convergent Validity”

Cronbach's alpha, Composite Reliability, and the rho A are used to determine the degree of internal consistency or reliability between items. Composite Reliability, rho A and Cronbach's alpha values over 0.7 are significantly related to higher levels of internal consistency. The value of all the items in the column of Cronbach's alpha is greater than 0.7 which is reliable and shows the reliability. The value of Composite Reliability and rho A is also greater than 0.7 which shows that all variables are reliable. According to (Fornell & Larcker, 1981) the value of AVE should be greater than 0.50. The AVE of all the variables is greater than 0.50 which is acceptable. If the value of AVE is less than 0.50 it means the items explains more errors than the variance in constructs.

4.3.2 Discriminant Validity

This statistic indicates the degree to which the two variables are distinct from one another. Three separate criteria demonstrate the discriminant validity of SmartPLS.

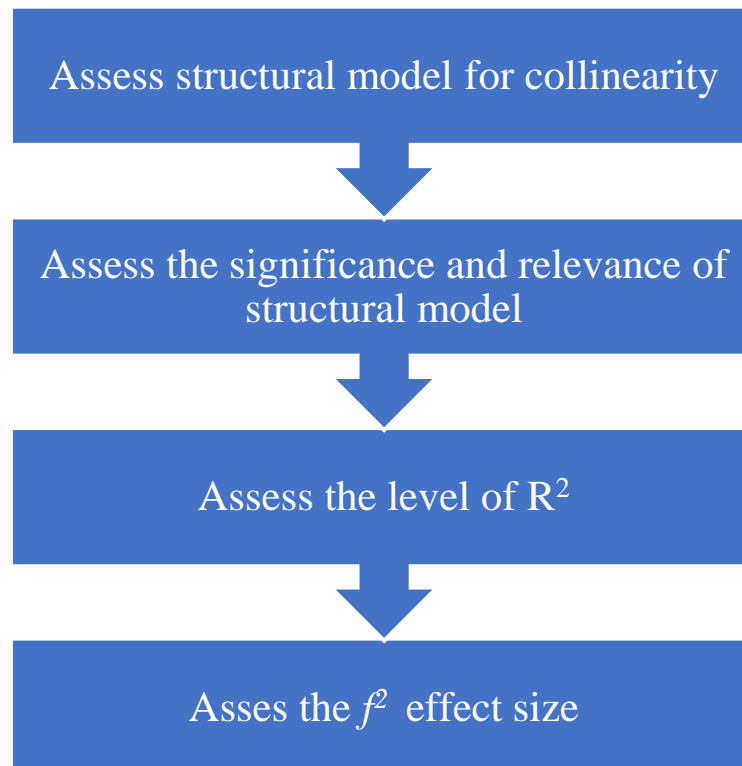
	AT	IAIB	PEOU	PU	SN	TR
AT						
IAIB	0.822					
PEOU	0.596	0.616				
PU	0.749	0.840	0.720			
SN	0.807	0.753	0.527	0.660		
TR	0.905	0.849	0.703	0.718	0.828	

“Discriminant Validity with Hetrotrait-Monotrait Ratio (HTMT)”

It's evidence that the objects strongly linked with a certain concept are more likely to exhibit variation than unrelated things. Fornell and Lacker" and "Cross Loading" are sometimes cited as the first requirement, however neither one is reliable. For discriminant validity, the third criterion, the "Hetrotrait-Monotrait ratio (HTMT)," is regarded reliable. HTMT is the average correlation between indicators that measure distinct constructs. If the value of this statistic is less than 0.90, it indicates that the two variables are different. All HTMT values obtained by SmartPLS for this investigation were below 0.90 (which indicates that the model is satisfactory), as shown in the table.

4.4 Assessment of Structural Model

The inner path model is evaluated when the outside model is valid. The second stage involves calculating the relevance of the path loadings and path co-efficients connecting the various constructs. Researcher uses the Bootstrap method to determine the links between different variables in order to evaluate structural models. The structural model was judged by four things: the degree to which the variables were related to each other, as shown by the path coefficient (Beta), the R-Square (R²) or regression score, and the effect size (f-square) of the variables. Following figure shows the visual representation:



4.4.1 Assessment of Collinearity

Ordinary Least Square (OLS) regression is used for all independent variables in PLS-SEM analysis. Identifying and eliminating collinearity among variables is crucial for avoiding biased estimations. The Variance Inflation Factor (VIF) is calculated in SmartPLS to identify multicollinearity. Values greater than 3.3 indicate high collinearity. All of the values in our model are much below the threshold, and we find no issue of collinearity between the variables.

Independent Variables	Perception
AT	2.843
PU	1.977
PEOU	1.725
SN	1.979
TR	2.767

“Collinearity Assessments”

4.4.2 Path Coefficient (p) and t –values

To test the research hypotheses, we used the bootstrapping method and looked at the model's path coefficients, t-value, and p-value.

	Hypothesis	mean (M)	S.D	t-value	P values	Decision
AT -> IAIB	H 1	0.185	0.106	1.848	0.032	Supported
PEOU -> IAIB	H 2	0.036	0.072	0.338	0.368	Not Supported
PU -> IAIB	H 3	0.335	0.078	4.327	0.000	Supported
SN -> IAIB	H 4	0.098	0.084	1.217	0.112	Not Supported
TR -> IAIB	H 5	0.264	0.088	2.812	0.002	Supported

The result shows that H1, H3 and H5 are significant because if the P value is 0.05 or less the result will be significant. But if the P value is greater than 0.05 the result will be non-significant and not supported which are H2 and H4.

4.4.3 Explanatory Power of the Model

The value of the R-Square statistic indicates how well a model explains the data. R-squared has values that range from 0 to 1, inclusive. Higher prediction accuracy may be seen in the values that are closer to one, and vice versa. It shows how much percentage change independent variables creating on dependent variable. The table shows that the independent variables (PU, PEOU, SN, AT, TR) creating a change of 59% on dependent variable (intention to adopt Internet Banking).

No	Dependent Variable	R ²
1	Intention to adopt internet banking	0.594

“Dependent Variable and Related R-Square”

4.4.4 Effect Size f²

A small effect is shown by the f² value of 0.02, a medium effect is shown by the f² value of 0.15, and a large effect is indicated by the f² value of 0.35. The results showed that Perceived usefulness and trust has a large effect on dependent variable while perceived ease of use, attitude and subjective norm has a small and medium effect on intention to adopt IB.

Construct	Intention to adopt internet banking
Perceived Usefulness	0.142 (larger effect)
Perceived ease of use	0.001 (small effect)
Trust	0.055 (larger effect)
Subjective Norm	0.013 (small effect)
Attitude	0.033 (medium effect)

CHAPTER 5

5. Discussion and Implications

5.1 Discussion

The findings of the research are discussed in this chapter, which follows up on the discussion of those findings that was presented in the chapter before this one. These discussions are being undertaken with the study objectives that were outlined in the first chapter. The primary objective of this research is to investigate the factors that play a role in the uptake and application of IB in Pakistan throughout the Covid 19 pandemic. In addition, the purpose of this study was to investigate the influence of (PU), (PEOU), (TR), (SN), and (AT) on customers' intentions to embrace IB during the Covid 19 outbreak in Pakistan. In this research, TAM and TRA are both utilised as theoretical frameworks.

We have hypothesized that customers' intentions to embrace IB are significantly impacted by the perceived usefulness of the product or service. To test this hypothesis the data has been collected through an online questionnaire after collecting it we have analyzed the data and test the hypothesis whether it is significant or not. The result has shown that perceived usefulness has a significant influence on the customer's intention to adopt IB. The hypothesis is being supported by P value which is 0.000, because if the P value is 0.05 or less than 0.05 it will consider significant. So the hypothesis is significant and it is accepted. The perceived usefulness of a service has an effect on a customer's intention to accept and utilise an online banking service in Pakistan, hence we can claim that this variable has an influence. In Pakistan, the banking business is expanding on a daily basis, but a large number of individuals have not adopted the technology available in the form of IB. However, since many were unable to leave their homes during the Covid-19 outbreak, they began to rely more and more on internet banking rather of traditional banking. IB's usage and acceptance have been influenced as a result of the perception that it is beneficial. When consumers use this service, they discover that it is simple and easy, which is what first piqued their interest in it. There are a lot of people who would rather do activities that aren't too difficult or dangerous. Customers have developed a positive impression in their minds about the usage of IB due to the fact that they believe it to be beneficial. Statistics demonstrated that there was a spike in the usage of IB during the pandemic, and the results of our study indicated that PU was a significant and important variable in the expansion of IB in Pakistan during the Covid-19 outbreak.

According to the second hypothesis, the customer's intention to use IB was strongly affected by the perceived ease of use. In order to put this idea to the test, we have gathered data from the individual who makes use of the IB service. The degree to which a person believes that utilizing a certain piece of technology will be easy is referred to as the "perceived ease of use". During Covid-19 in Pakistan, the findings indicated that the customer's desire to use an IB service was unaffected by the customer's perception of how easy the service was to use. This indicates that individuals began using IB as a response to the pandemic scenario, rather than because of the apparent ease of usage of the technology. IB has gained popularity simply because to the fact that people need it. They were unconcerned with the simplicity or complexity of the process involved in using this technology. Because the P value for PEOU is 0.368, which is more than 0.05, it may be concluded that the hypothesis is either not supported or is not accepted. The results are being supported by the research (Sudarsono, Nugrohowati, & Tumewang, 2020) which states that the adoption and usage of IB services both before and during the pandemic are not significantly impacted positively by the perceived ease of use.

According to the third hypothesis, a customer's degree of trust may have an important influence on the customer's desire to use IB as a solution to their business problems. It has been shown that this hypothesis is significant, and it has been accepted. The level of significance is 0.002, which is lower than the threshold of 0.05. This showed that trust plays an essential role in the customer's inclination to adopt IB when Pakistan is experiencing a Covid-19 pandemic. Many individuals choose not to utilise new technology because they are concerned about the financial safety, and when the situation involves money, people are much less likely to trust a technology easily. IB service has not received a significant amount of attention in Pakistan before Covid-19. When individuals switched to IB during the pandemic and started using it, they discovered that it was easy to use and secure, which earned the confidence of customers and resulted in the banking sector receiving all of the advantages. Banks are working on inventing innovative technology and formulating innovative strategies in order to expand the number of consumers they serve and gain the trust of those customers. Trust is an essential component of any successful business, but particularly one conducted online. It has the potential to create a positive impression of a service in the minds of customers. Pakistan witnessed the beginning of an increase in the usage of online banking during Covid-19. Customers have reached a point where they place a significant amount of trust in the internet banking services offered by their bank, and as a

result, they are increasingly turning to these services in order to carry out a variety of financial transactions, including the payment of bills, the transfer of money, and other types of payments. According to the results of our research, trust is shown to have a significant impact on the likelihood that a consumer will embrace IB.

According to the fourth hypothesis, the customer's subjective norm may have an important influence on the customer's desire to adopt IB. This was one of the hypotheses that was tested. In order to put this hypothesis to the test, a questionnaire was developed and distributed, which included items on subjective norms. Because the significance threshold is 0.112, which is more than 0.05, the study that was conducted after the collection of data came to the conclusion that the hypothesis is not significant and should not be accepted. The hypothesis has not been accepted as a result. It indicates that the customer's subjective norm does not have any link with their desire to accept new technologies. The literature also provided support for the idea; however, after gathering the data and putting it to the test, it was discovered that subjective norm did not have any effect whatsoever on the intention of those who use the IB. Researchers have shown that customers' subjective norms can influence whether or not they'll adopt a new technology, and this conclusion is confirmed by the literature. It indicates that individuals have chosen to utilise IB for reasons that have nothing to do with the viewpoints held by other individuals and that this decision has led to the adoption of IB. SN can be defined as the influence that a person considers to have been exerted on them by other organisations or people who are relevant to them or who are close to them. Subjective norms can also be used to refer to the influence that an individual believes to have been exerted on them by others (such as neighbours, friends etc). SN is the results of the pressure of society on the behaviour of individual members of society. People act or behave in a way that is consistent with the perspective or point of view of society. The findings of our study do not provide support for the hypothesis; we may conclude that the hypothesis is not acceptable. The acceptance of IB during a pandemic is unaffected by the subjective norm.

The fifth hypothesis states that a consumer's attitude has a major role in influencing whether or not they will adopt IB. The findings provide conclusive evidence in support of the idea. The research and conclusions showed that attitude had a major role in determining how well IB was accepted during the Covid-19 outbreak in Pakistan. The level of significance was found to be 0.032, which is satisfactory and provides support for both our data and hypothesis. It was hypothesised that customers' perceptions of how simple Internet banking

was to use, how beneficial it was, and how trustworthy it was had a role in shaping their attitudes about utilizing the service. The (TRA) theory is used in research that investigates the connection that exists between an individual's mindset and their actions towards the adoption of a new technology. A positive attitude can influence the customer's intention to use new technologies. A positive attitude may have an effect on a customer's inclination to make advantage of emerging technology. People who are not comfortable with the usage of new and advanced technologies might have their perspective changed if they have a positive attitude toward technology. They may be persuaded to try new and novel things if they see that you have a positive attitude. According to the findings of our study, a customer's attitude has an effect on their intentions.

5.2 Implication of the Study

When customers use IB, it makes it simpler for banks to satisfy both customers' and customers' demands. Because of the dynamic nature of young people, bank management are required to adopt efficient marketing techniques in order to grow the number of customers who utilise online banking. Because the vast majority of young people are still in school, they have access to computers and the internet, which makes it simple for them to take advantage of the online banking services provided by banking industry. The customer not only benefits from the IB facilities in terms of their commercial transactions, but also in terms of their ability to save time and energy.

The banking industry in Pakistan might reach more people who could become clients if social media apps were used to advertise and encourage the use of IB. The bank's administration should facilitate both the usage and the adoption and utilization of internet banking by its clients. It is essential for banks to upgrade their facilities in order to make the most efficient use of IB. Therefore, it is important for banks to not only provide online banking services, but also to make them easier to use, provide several menu options to cater to different customers' needs, and include more engaging features.

5.3 Limitations

The research was only done in three of Pakistan's cities since there were insufficient resources and not enough time to do it anywhere else. Analysis of the data for this study was conducted using a quantitative method. The use of quantitative techniques may restrict the capacity of existing research to investigate more deeply by clarifying additional issues linked to the intentions and perception of customers who make use of IB. As a direct result of this, it

is strongly suggested that more research be carried out making use of methods that are both quantitative and qualitative in nature. This is so that a more comprehensive explanation of the findings of this study may be provided. This study focuses on consumers who are the users of IB. Other sorts of customers that procrastinate, resist, and reject IB are not included in this study. However, researching these kinds of customers might be helpful in gaining a deep understanding of the primary barriers that prevent the widespread adoption of IB. In addition, this study focuses exclusively on the viewpoint of the client, with no consideration given to the standpoint of the bank. So, this could be seen as a limitation of this research, since it doesn't give a full picture that explains the main problems with how IB is implemented and accepted by both consumers and financial institutions.

5.4 Conclusion

The invention of the internet has fundamentally altered society. Every industry's prospects for success depend on the state of its information technology department; if that department is well-developed and kept current, the company has a better chance of achieving its goals. The banking business, like every other industry, has embraced new technology and now provides its services over the internet. Users are able to complete transactions online with the assistance of Internet Banking. It gives its customers almost every function that a bank would provide, such as the ability to make deposits and payments online, print statements, transfer money, and so on. These days, almost all banks provide their clients with access to online banking services, which not only lowers the fees associated with transactions but also saves customers valuable time. Because of Internet banking, most basic banking tasks can now be done online, so customers no longer have to go to a bank branch.

The majority of banks in Pakistan have already adopted online banking and are working to improve their level of competitiveness by bringing their technology and services up to date. There are now 27 banks in Pakistan that provide financial services through mobile devices and the internet. In Pakistan, a significant number of individuals, particularly those who live in rural regions, did not have a good understanding of how internet banking might benefit them. The fact that some individuals in urban areas chose not to use IB due to a lack of faith in banks or online services which was not beneficial to the expansion of Pakistan's banking sector. In Pakistan people don't have trust in utilizing IB due to the fact that the country's information technology sector has not evolved nearly as much as it could have. However, with the situations of the Covid-19, everything is quite different. People began making their

payments, clearing their debts, and other financial tasks using IB. They are keeping track of their financial situation with the use of IB. A lot of individuals started working online, and they received money via IB from people in other countries. During Covid-19, people's use of online banking has grown and become an essential part of their life.

Before Covid 19, it was discovered that a number of persons lacked knowledge and trust in IB. In addition to this, it was discovered that these individuals had privacy concerns, and the majority of them did not know how to utilize online banking. Since this is the case, the goal of this research is to find out what factors affect the use and adoption of IB in Pakistan during the Covid 19 pandemic. The other goal of this study was to find out how (PU), (PEOU), (TR), (SN), and (AT) affected customers' perceptions to use IB in Pakistan during the Covid 19 pandemic.

For the purpose of conducting research, a questionnaire was circulated to a total of 200 Internet Banking customers in Islamabad, Lahore, and Karachi; 177 replies were obtained from those individuals. The primary data was collected by answering questions given in an online questionnaire that had been developed using Google Forms. This was done because it is a simple process to create a questionnaire and distribute it to other people. The vast majority of the secondary data used in this investigation originated from journal articles and other types of research publications. This kind of research employs a methodology known as cross-sectional analysis. To analyze the descriptive data, "Partial Least Square Structural Equation Modelling (PLS-SEM)" technique by "SmartPLS software version 3.3.3" was used.

It has been hypothesized that customers' intentions to adopt IB are significantly impacted by the perceived usefulness of the service or product. According to the findings, the customer's level of satisfaction with the PU of the IB has an important impact on their decision to implement the IB. The p value provides evidence in support of the hypothesis. According to the statistics, there was an increase in the use of IB during the pandemic. According to the results of our study, IB spread rapidly in Pakistan during the Covid-19 pandemic because people saw it as having practical applications. The second hypothesis is that the customer's perception of how simple it is to use IB has a major impact on the customer's decision to actually use IB. The P value for PEOU is 0.368, which is more than 0.05, it may be concluded that the hypothesis is either not supported or is not accepted. According to the third hypothesis, a customer's degree of trust may have an important influence on the customer's desire to use IB. It has been shown that this hypothesis is relevant, and hence, it

has been approved for use. The customer's subjective norm may play a significant role in the customer's propensity to adopt IB, as suggested by the fourth hypothesis. This was one of the hypotheses that were tested. The results of our investigation do not provide support to the hypothesis; hence, we may come to the conclusion that the hypothesis is not acceptable. According to the fifth hypothesis, the attitude of a customer is an essential component in establishing whether or not they plan to use IB. The results give a lot of proof that the hypothesis is true. The results and conclusions showed that attitude had a big effect on how many people in Pakistan used IB during the Covid-19 pandemic.

It is concluded that perceived usefulness, attitude, and trust have a big influence on customers' decisions to use IB in Pakistan during Covid-19. However, customer intent to use IB is unaffected by variables such as perceived ease of use and subjective norm. The users of IB have increased during Covid-19 which is being influenced by PU, AT and TR.

5.5 Recommendations

Banking sector is the backbone of an economy. With the advancement of new technologies banking industry has also introduces internet banking service. The technology is not new but still many people don't have trust on IB they don't want to take risk which is not good for the growth of IB. The study has concluded that perceived usefulness, trust and attitude has a significance influence of customer's perception to use and adopt IB. So, it is recommended that to increase the usage of IB banks should focus on perceived usefulness by introducing new features and options in their website and applications. Introducing new features will capture the interest of consumers and if they find it useful they will definitely use it. Their positive attitude will also influence others to adopt IB.

Banks can attract customers by providing them safe and secure services. Trust is the main issue in online banking due to which people hesitate to adopt and use IB. Banks should make their IB service more secure so that it can attract more customers.

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QUESTIONNAIRE

Section 1:

Age	18-25	26-35	36-45	46-55	56 or above
Gender	Male	Female			
Education	Senior High School and equivalent			Diploma	Bachelors
	Masters	PhD			
Occupation	Student	Civil Officers	Private Employee		Entrepreneur
	Housewife				

Section 2:

A. Intention to adopt Internet banking		Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)
1	I intend to enhance the use of my Internet Banking service in the future.					
2	I hope my transaction through Internet Banking will be enhanced in the future.					
3	I will encourage my friends and family to use Internet Banking service.					
4	I would highly recommend others to use Internet Banking.					
B. Perceived Usefulness						
1	The use of Internet Banking improves the functions of my banking activity.					
2	Internet Banking enables me to manage my banking activity more efficiently.					
3	Internet Banking enables me to do my banking activity comfortably.					
4	Internet Banking enables me to do my banking activity quickly.					
C. Perceived ease of use						
1	It is very easy to use Internet Banking.					
2	Learning to use Internet Banking is					

	easy.					
3	Instruction provided on the Internet Banking website is clear and understandable.					
4	I feel that it is easy to remember how to use Internet Banking.					
D. Trust						
1	I believe that it is always safe to transfer money using Internet Banking.					
2	I believe I can count on transferring money using Internet Banking.					
3	My bank immediately notifies me if there are problems with my transaction.					
4	I believe that my transaction through Internet Banking will always be transparent.					
E. Subjective Norm						
1	Most of the people who are important to me would think that I should use Internet Banking.					
2	People who influenced me would think that I should use Internet Banking.					
3	People whose opinions I value would think I should use Internet Banking.					
F. Attitude						
1	Using Internet Banking service is a good decision.					
2	Using Internet Banking service is a wise decision.					
3	Using Internet Banking service is a positive move. I like to use Internet Banking Service.					
4	Using Internet Banking service is a good decision.					

Fariha Ramal Plagiarism Report

ORIGINALITY REPORT

6%	4%	3%	3%
SIMILARITY INDEX	INTERNET SOURCES	PUBLICATIONS	STUDENT PAPERS

PRIMARY SOURCES

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