

**FACTORS IMPACTING CUSTOMER LOYALTY IN ONLINE  
BANKING IN TURKEY**

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BANKING IN TURKEY**

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## **ABSTRACT**

Technology in the recent years has changed how the world conduct banking, online banking has grown a lot in the past years, the number of online users has increased significantly. In a highly competitive environment, ensuring customers loyalty in online banking has become a concern for the bank. The purpose of this thesis is to conclude an understanding how E-service quality, trust and security& privacy impact customer loyalty in an online banking setting in Turkey. To investigate the impact of the independent factors namely E-service quality, Trust and Security& Privacy toward the dependent which is customer's loyalty. A deductive research approach, an explanatory purpose, and a quantitative research method were used by the researcher; A questionnaire method was employed to collect data from participants in this study with the sample size of (385) using random sampling through customer survey after review of literature, After testing the hypotheses using various techniques, it was found that all variables had a significant positive impact on customer loyalty.

**Keywords:** Customer Loyalty, Trust, E-Service Quality, Security And Privacy, Online Banking.

# TÜRKİYE'DE ONLINE BANKACILIKTA MÜŞTERİ BAĞLILIĞINI ETKİLEYEN FAKTÖRLER

## ÖZET

Son yıllarda teknoloji, dünyanın bankacılık işlemlerini yürütme biçimini değiştirdi; çevrimiçi bankacılık son yıllarda çok büyüdü, çevrimiçi kullanıcı sayısı önemli ölçüde arttı. Rekabetin yoğun olduğu bir ortamda, internet bankacılığında müşteri sadakatinin sağlanması bankalar için endişe kaynağı haline geldi. Bu tezin amacı, Türkiye'deki bir çevrimiçi bankacılık ortamında E-hizmet kalitesinin, güveninin, güvenliğinin ve gizliliğinin müşteri sadakatini nasıl etkilediğini anlamaktır. E-hizmet kalitesi, Güven ve Güvenlik&Gizlilik gibi bağımsız faktörlerin, bağımlı olan müşteri sadakatine etkisini araştırmak. Araştırmacı tarafından tımdengelimli bir araştırma yaklaşımı, açıklayıcı bir amaç ve niceliksel bir araştırma yöntemi kullanılmış; Literatür incelendikten sonra müşteri anketi yoluyla rastgele örnekleme kullanılarak (385) örneklem büyüklüğündeki bu çalışmada katılımcılardan veri toplamak için anket yöntemi kullanılmıştır. Hipotezlerin çeşitli teknikler kullanılarak test edilmesi sonucunda tüm değişkenlerin müşteri sadakati üzerinde önemli bir olumlu etki

**Anahtar Kelimeler:** Müşteri Bağlılığını, Güven, E-Hizmet Kalitesi, Güvenlik ve Gizlilik, Çevrimiçi Bankacılık.

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# **CHAPTER 1**

## **1. INTRODUCTION**

### **1.1 Introduction**

Today's increase in competitiveness and fast paced global market an effective strategy is required in order to survive and for companies to be profitable, customers has become the most essential shareholders in organizations and their trust is one of the key elements in retaining the customer, meeting customer expectation is a crucial part in achieving that level of security and privacy with the rise of competition between organization particularly in banking industry customer retention is a big part of surviving.

The concept of customer loyalty has gathered attention from academic research and practitioners in various industries. the ability to build consumer loyalty is a key factor in developing sustainable competitive advantage in market competitiveness, with banking being an industry reliant on customer interaction it's important for the institutes to understands the factors influencing their customer loyalty.

In today's highly competitive and fast-paced global market, organizations face the challenge of developing effective strategies to survive and remain profitable. With customers becoming the most essential stakeholders in organizations, building and retaining their trust has emerged as a key element in achieving success. Meeting customer expectations, particularly in terms of security and privacy, is crucial for establishing a high level of customer trust. In the banking industry, where competition is fierce, customer retention plays a vital role in the long-term survival and profitability of institutions. This introduction will provide an overview of the factors influencing customer loyalty in the banking industry, with a specific focus on trust, security, and

privacy.

Customer loyalty has garnered significant attention from both academic researchers and industry practitioners across various sectors. It is widely acknowledged that the ability to build and maintain consumer loyalty provides organizations with a valuable source of sustainable competitive advantage (Morgan & Hunt, 1994). Loyal customers not only contribute to the financial stability of a company but also serve as brand advocates, referring new customers and expanding the customer base. This translates into increased market share, profitability, and resilience in the face of competition.

In the banking industry, customer loyalty holds even greater importance due to the nature of the services provided. Banking institutions rely heavily on customer interaction, trust, to build long-lasting relationships. These relationships are built on a foundation of E-service quality, trust, security, and privacy. Customers confide in banks with their personal and financial information, expecting them to protect it and ensure the security of their transactions. Failure to meet these expectations can result in a loss of trust, damaging the relationship and leading to customer attrition. To address this challenge, banks need to focus on enhancing trust, security, and privacy in their operations. Trust serves as a fundamental building block in fostering customer loyalty (Doney & Cannon, 1997). Customers need to trust the banking institution with their financial transactions and the security of their personal information. Trust is cultivated through consistent and reliable service delivery, transparent communication, and a steadfast commitment to protecting customer interests.

In addition to trust, ensuring the security and privacy of customer information is crucial. In the digital age, customers are increasingly concerned about the potential risks associated with sharing their personal and financial data online. Banks must invest in advanced security technologies, adhere to industry regulations, and employ stringent data protection measures to instill confidence in their customers. Failure to provide adequate security measures and safeguard customer privacy can lead to a loss of trust, erode customer loyalty, and ultimately harm the organization's reputation.

Understanding the factors influencing customer loyalty in the banking industry is vital for organizations to develop effective strategies and tailor their services to meet customer expectations. By prioritizing trust, security, and privacy, banks can build lasting relationships with customers, foster loyalty, and gain a competitive advantage.

## 1.2 Background of The Study

The expansion and importance of the use of technology especially the internet now a days has increased with the introduction of online banking new challenged emerges for banking organizations to compete and succeed in the global market. With the ability for customers to manage their banking needs by a single click via internet connection being able to conduct banking services any place and anytime without the need to be physically available at the bank. As mentioned by Tam & Oliveira (2017), With the advancement of digital technologies, today's digital systems such as mobile phones evolved over time. Given the advantages of mobile technologies such as speed, convenience, and interactivity, online banking is considered as a prominent system. (Khraim et al., 2011).

The quality of service offered to customers by any service provider will greatly affect their success and progress due to the fact that the customer has the highly important place in any organization and its ability to determines the continuous of product provided by the organization (Ikhsan & Simarmata, 2021). With the development in technology the past years it reshaped the retail banking sector this led to customer using online services and the transformation of physical bank branches into assistant facilities and sales points this changed also leads to changes in bank loyalty with customer in a self-service online use technology as the main interaction between the bank and its customers with the influence of customer loyalty on profitability, it is essential for institutes to understand where and how loyalty is established (Reichheld, 2003).

According to Swedish bankers (2017), technological developments in recent years have brought about a dramatic upheaval in the retail banking business. As a consequence of this change, clients are increasingly using online channels to handle their banking requirements (Swedish bankers, 2017), transforming traditional bank branches into advice offices and sales sites. Since digital self-service technologies have become the dominant method of engagement between banks and consumers, there has been a corresponding shift in the ways in which bank loyalty is formed.

Since client loyalty has a direct effect on a company's bottom line, it's critical that businesses analyze its causes and how to foster it (Reichheld, 2003). In-person encounters at bank branches, for example, used to be a major loyalty driver, but now, digital touchpoints like mobile apps and online chat support have taken their place.

That's why it's crucial for financial institutions to have an understanding of customer loyalty in the modern digital era.

Trust is a critical factor in customer loyalty in online banking. Customers must trust that their personal and financial information will be kept secure and confidential (Tam & Oliveira, 2017). Trust is built through transparent and reliable practices, effective security measures, and clear communication regarding data protection (Khraim et al., 2011). When customers feel confident that their information is safe, they are more likely to remain loyal to the bank (Tam & Oliveira, 2017). Trust can be fostered through the implementation of robust authentication methods, encryption technologies, and proactive measures to prevent fraud and identity theft (Arcand et al., 2017).

Privacy concerns play a significant role in customer loyalty in online banking. Customers value their privacy and expect their banks to protect their personal information (Ikhsan & Simarmata, 2021). Banks need to establish and communicate clear privacy policies that outline how customer data is collected, used, and shared (Swedish bankers, 2017). Respecting customer privacy and complying with relevant privacy regulations build customer loyalty (Swedish bankers, 2017). Banks should also provide customers with control over their privacy preferences and options for managing their data (Reichheld, 2003).

Security is a fundamental aspect of customer loyalty in online banking. Customers need assurance that their financial transactions and sensitive data are protected from unauthorized access (Laukkanen, 2016). Implementing strong security measures, such as multifactor authentication, encryption, and secure network protocols, is essential (Pikkarainen et al., 2004). Banks should also educate customers about best practices for online security (Wessels & Drennan, 2010). Continuous monitoring and prompt response to security incidents are crucial to maintaining customer confidence (Laukkanen, 2016).

E-service quality encompasses various aspects of the online banking experience that influence customer loyalty. It includes website functionality, ease of use, responsiveness, personalization, and reliability of online banking services (Laukkanen, 2016). Banks should strive to provide intuitive and user-friendly interfaces, responsive customer support, and personalized recommendations (Wessels & Drennan, 2010). Consistent availability and fast transaction processing contribute to positive e-service quality (Arcand et al., 2017).

Studies have shown that these factors significantly impact customer loyalty in online banking. For example, research by Arcand et al. (2017) found that commitment, contentment, and trust are major drivers of relationship quality in the context of online banking. They also highlighted the importance of service quality components in shaping overall relationship quality. Similarly, Laukkanen (2016) emphasized the value barrier as a strong predictor of technology adoption in online and mobile banking, which is closely tied to perceived utility. Other studies by Wessels and Drennan (2010), and Pikkarainen et al. (2004) have also explored the factors contributing to the widespread usage of online and mobile banking, highlighting the importance of perceived utility, compatibility, affordability, and security concerns.

Wessels and Drennan (2010), Pikkarainen et al. (2004), and Laukkanen (2016) are just a few of the studies that have looked at the factors that contribute to the widespread usage of online and mobile banking. Customers are more inclined to accept technology if they see it as improving their ability to do banking activities, as was observed by Pikkarainen et al. (2004) in their study of online banking adoption. Supporting this idea further, Laukkanen (2016) emphasized the value barrier as the strongest predictor of technology adoption in online banking. This barrier is directly tied to perceived utility. According to research conducted by Wessels and Drennan (2010), the two factors having the most positive impact on adoption of online banking are perceived utility and compatibility. Affordability and security concerns were also cited as barriers to online banking.

### **1.3 Problem Statement**

Banks have been considered as the backbone of society throughout history, with modern technology and the changes in consumer behaviour has led banks into changing their main assignment, with the decline of cash in circulation year by year according to statistics of world banks, Currency in banking transactions has been replaced by digital information; this is one example of how digitalization has altered the role of banks in society.

Banks have experienced significant changes in their role in society due to modern technology and shifts in consumer behaviour. With the decline of cash in circulation, banks have had to adapt to a digitalized environment where currency in banking transactions is replaced by digital information (World Bank, n.d.). This



transformation presents new challenges for banks in terms of customer interaction and market dynamics. As customers become less interested in traditional banking products, banks need to find ways to retain their customers and minimize customer attrition (Beerli, Martin, & Quintana, 2004).

Building a strong relationship with customers and creating trust can provide banks with a competitive advantage and enhance customer loyalty (Beerli et al., 2004). Numerous studies have shown that customer retention is more profitable than acquiring new customers, emphasizing the importance of maintaining customer loyalty (Beerli et al., 2004). Trust in online banking has been found to be relevant to customer loyalty (Shaikh & Karjaluo, 2015). However, building and maintaining loyalty through online banking is challenging as the interactions with customers occur primarily through digital channels such as websites or mobile apps.

E-service quality, security, and privacy are key factors that influence customer loyalty in online banking (Srinivasan et al., 2002). The quality of online services, including website functionality, ease of use, and responsiveness, plays a crucial role in customer loyalty (Srinivasan et al., 2002). Ensuring robust security measures and protecting customer privacy are essential for maintaining online customers and fostering loyalty (Srinivasan et al., 2002).

With this emerge new challenges are faced by banks to adapt to the new market conditions new way of interacting with customers and the market and how customers will be effected with this transition as customer begins to lose interest in the core product of the bank more is required from the bank to continue customer retentions and minimize customer bank switch as mention by Barnes and Howlett (1998 cited in Beerli, Martin and Quintana, 2004), building a relationship with customers creating trust can help banks have a competitive advantage by keeping their customer loyal, as many research have discovered customer retention is far more profiting than gaining new customers, customer retention is high correlated with customer loyalty.

Literature illustrate that the relevance of trust in online banking and the link between trust in customer loyalty (Shaikh and Karjaluo, 2015), loyalty through online banking is not an easy task due to the fact that the interaction with customers are via online methods such as websites or mobile apps therefor E- service quality, ensuring security and privacy is of the determining factors to maintain online customers thus customer loyalty becomes an important marketing focus in retaining the current bank customers, according to (Srinivasan et al., 2002), E-service quality is

considered a determining factor in online loyalty. As a result, the goal of this study is to investigate the factors that influence customer, how E-service quality, trust, privacy and security impact customer loyalty in online banking.

#### **1.4 Study Significance and Research questions**

The main aim of this research is to fully understand the impact of customer E-service quality, trust, and security & privacy on loyalty with the increase in competition consumers have become the determining factor in all bank activities, this research will provide bank institutes with insight into factors that influence loyalty and how to enhance it in an online banking.

With increasing competition, customers have become the central focus of banking activities. Understanding the factors that impact customer loyalty in online banking is crucial for financial institutions to achieve favorable financial results and sustain long-term profitability. Research has shown that customer loyalty is more profitable than acquiring new customers, highlighting the significance of customer retention (Beerli, Martin, & Quintana, 2004). Therefore, the study aims to provide insights into the factors that drive loyalty and how to enhance it in the context of online banking.

Online trust, security, and privacy, along with E-service quality, serve as predictors of customer loyalty in online banking (Srinivasan, Anderson, & Ponnnavolu, 2002). Marketing managers in financial institutions focus on building long-term customer relationships to achieve favorable financial outcomes. By recognizing the profitability of loyal customers, banks can prioritize retention efforts over acquiring new customers.

The research findings will provide financial institutions with valuable insights and recommendations for improving their online banking services. These improvements can be based on enhancing E-service quality, strengthening trust, and ensuring robust security and privacy measures. By implementing these recommendations, banks can enhance customer loyalty and achieve sustainable profitability. Online E-service quality, trust, security and privacy, E-security are used as a predictor of customer loyalty, to provide customers' demands, marketing managers for financial institutes are focused on establishing long term customers to achieve favorable financial results and sustain long term profit, by recognizing that

loyal customer are more profitable than retaining new ones. The research helps banks to carry out additional improvements based on the research recommendations.

### **1.5 Research Question**

The overall goal of this research is to determine the impact of customer E-service quality, Trust and Security& Privacy on customer loyalty in online banking.

1. Does E-service quality impact customer loyalty in online banking
2. Does Trust impact customer loyalty in online banking
3. Does Security & Privacy impact customer loyalty in online banking

## **CHAPTER 2**

### **2. LITERATURE REVIEW**

#### **2.1 Introduction**

The goal of this study is to identify the factors that contribute to a loyal client base in the banking industry. This chapter also discusses related literature on the subject to help guide the research. This section of the study explains relevant concepts such as E-service quality, trust, privacy and security impact customer loyalty in online banking.

#### **2.2 Overview of Online Banking**

Technology has changed the way we live our lives that includes how we carry out our banking activities. Today, technology plays an important role in banking, making life easier and faster for millions of people all over the world. With that rapid change and fast paced life banks had to improve their services toward customer by providing online services 24 hours a day all week both governments and private banks provide these services to their customer through internet banking features. Online banking is the adoption of online terminals by users it is designed to enables customers to have efficient, fast, safe and reliable electronic services that provide access to their banking account with multiple online banking services all hours of the day from any location with internet connection this saves time and cost for customers as they are able to attend to their banking services from their home or offices without the need.

Technology has significantly transformed various aspects of our lives, including how we conduct banking activities. In today's world, technology plays a crucial role in the banking sector, offering convenience and speed to millions of people worldwide.

To keep up with this rapid change and meet the demands of the fast-paced lifestyle, banks have made significant improvements in their services, particularly through the provision of online banking.

Customers' access to and management of their bank accounts has been transformed by online banking, also known as internet banking. It allows customers to perform various banking transactions and access a range of services through online platforms available 24/7. Both government and private banks have adopted online banking features to provide efficient, fast, secure, and reliable electronic services to their customers (AlHares et al., 2020).

By embracing online banking, customers can access their accounts and perform transactions conveniently from any location with an internet connection. This eliminates the need for physical visits to bank branches and saves customers time and cost. They can carry out banking activities from the comfort of their homes or offices, making it more convenient and accessible than traditional banking methods (Sathye, 1999). The benefits of online banking include the ability to check account balances, transfer funds, pay bills, view transaction history, and even apply for loans or open new accounts (Gerrard & Cunningham, 2003). Online banking platforms are designed to provide a secure environment for conducting these transactions, incorporating measures such as encryption, authentication, and firewalls to protect customer information and prevent unauthorized access (Bosch-Badia et al., 2019).

The adoption of online banking has not only improved customer convenience but also brought cost savings for both banks and customers. With fewer physical branches and personnel required, banks can reduce operational costs and redirect resources towards enhancing online services. This cost efficiency can be passed on to customers through reduced fees or better interest rates (Jiang et al., 2017).

Online banking facilitates the availability of banking services to customer regardless of their location. An example of the most popular internet banking operations are bill payment and balance checking (Fox, 2016). Online banking is a process of engaging with a multiple banking service through the internet using a personal computer or other digital devices by connecting to the bank online channel such a website that are facilitated by the bank's designated servers to use the services Bernstel (2010). Personal computer banking system users, online banking is one prominent example of an application that creates e-service quality in the service industry. The advent of online banking has transformed the banking industry (Yang,

2009). Changes in socioeconomic trends, combined with advances in information technology, have made online banking services widely available. Computers, mobile phones, and tablets have largely replaced banks in recent years (Keskar and Pandey, 2018). Bank customers typically pay a fee for access to e-banking private networks.

The advancements in technology resulted in multiple changes in the banking system, a transformation of on bank physical site transaction into an online electronic service. Banking has evolved as digital services with the introduction of ATMs, phone based banking, and online banking, has changed. With advancements in remote technologies, customers' demands and expectations for bank services have increased. To meet the challenges of a changing environment, financial institutions are developing innovative solutions. Predicting new requirements has become critical for dominating a highly competitive industry.

### **2.2.1. Mobile Banking**

Mobile banking was initially launched in the late 1990s in Germany as a collaborative effort with a local bank by implementing basic functions that can be accessed using a mobile phone (Shaikh & Karafuto, 2015). By the year 2009 The smartphone mobile banking that we are familiar with today was introduced as the most recent technology for online banking customers, the first launch of this technology took place in Nordic countries (Tieto, 2016). The introduction of the iPhone has a big correlation with the development of app based mobile banking by modernizing portable devices and the methods by which people frequently utilize the internet (Christensen et al, 2015).

Mobile banking is regarded as an improved digital alternative to traditional banking channels such as ATMS, physical branches and internet banking. Mobile banking, in this regard, is the next step in financial institutions' initiatives to provide new services to customers while utilizing on technological opportunities in the form of new business models. (Riquelme & Rios, 2010). Mobile banking has contributed in significant improvements in banking convenience, as well as beneficial effects for banks. Its expansion has also necessitated the establishment and utilization of other services such as virtual bank accounts, which customers can gain access to via text messages. Customers can now invest in stocks, access financial information, and transfer funds online while at home or on the go, and such advancements are becoming more advantageous. (Meute, 2010).

### **2.2.2 Web Banking**

Web banking is another facility that enables customer to access financial or nonfinancial services provided by the bank web pages and official websites (Hoehle et al. 2012). The most important aspect of web banking is the ease of use and simple design of the website, a good designed home page allows users to access their targeted needs easy and fast without feeling any complication and therefore attracts more customers, bank website usually contain many options which include a page for accessing information regarding the bank in general or personal information based on the customer's account, pages for customer to interact with the online support or provide feedback regarding services and most importantly being able to conduct any banking needs online.

Web banking, also known as online banking or internet banking, has transformed how customers access financial and non-financial services offered by banks. (Hoehle et al., 2012). The usability and design of web banking platforms are critical factors in attracting and retaining customers. A well-designed homepage with an intuitive interface allows users to navigate the website easily, access their desired information, and perform transactions without encountering complications.

Bank websites typically offer a wide range of features to cater to customers' diverse needs. These features may include access to general information about the bank, personalized account details, secure messaging systems for customer support, and avenues for providing feedback on services. The convenience of web banking lies in its ability to provide customers with the flexibility to conduct various banking activities online, saving time and effort compared to traditional branch visits.

Research studies have explored different aspects of web banking and its impact on customer behavior. For instance, a study by Karjaluoto et al. (2002) examined the factors influencing the adoption of internet banking services and found that perceived usefulness, ease of use, and trust were significant determinants of customer acceptance. Similarly, a study by Cheng et al. (2006) investigated the factors affecting customer satisfaction with web banking services and identified ease of use, security, and information quality as key determinants.

Moreover, the importance of web banking in customer relationship management has also been studied. A research article by Wu and Wang (2005) examined the role of web banking in enhancing customer loyalty and found a positive relationship

between customer satisfaction with web banking services and customer loyalty. This highlights the significance of providing a seamless and satisfying web banking experience to foster customer loyalty.

Customers' interactions with banks have been transformed by web banking, offering convenience, accessibility, and a wide range of services. The usability and design of web banking platforms are crucial for attracting and retaining customers. Factors such as perceived usefulness, ease of use, trust, security, and information quality influence customer acceptance and satisfaction with web banking services. Focusing on these factors can help banks enhance customer loyalty and strengthen their competitive position in the digital banking landscape.

### **2.2.3 ATM**

Automated Teller Machines (ATMs) were designed to help customer complete basic banking transaction without the need of bank representative or entering the bank, they can access these machines from various location in the city regardless of the location of the bank branches.

Two types of ATMs were introduced, a basic one that provide services of deposit, withdraw cash with a receipt of account balance, the second type is far more complex providing extra services of credit cards and payment facilities as well as getting reports of account information. The use of ATMs is safe, fast and convenient, these machines can be accessed anytime of the day.

Automated Teller Machines (ATMs) have significantly transformed the banking industry, offering customers the convenience of conducting basic banking transactions without the need for in-person assistance or visiting physical bank branches. These machines are accessible from various locations, providing customers with 24/7 banking services.

ATMs come in different types, ranging from basic cash withdrawal and deposit machines to advanced ones that offer additional features such as cardless transactions, check deposits, and interactive touchscreens. The use of ATMs offers numerous benefits, including safety, speed, and convenience, making them a preferred choice for many customers (Yaseen & Al-Naemi, 2021).

Research indicates that the introduction of ATMs has had a significant impact on cost reduction for banks. By automating routine transactions, ATMs eliminate the need for additional personnel and reduce operational expenses. This cost-saving aspect



has allowed banks to allocate their resources more efficiently and invest in other areas of customer service and technological advancements (Blažić et al., 2019). Furthermore, ATMs have proven to be a strategic tool for expanding customer access to banking services. By strategically placing ATMs in various locations, such as shopping centers, airports, and remote areas, banks can reach a wider customer base and improve accessibility to financial services. This expanded reach enables banks to cater to diverse customer needs and enhances customer satisfaction and loyalty (Krishnan, 2018).

### **2.3 Overview of online Banking in Türkiye**

As a result of technological advancements, the Turkish banking industry has grown not only in size but also in the range of services it provides to its domestic and international customers. Until 1987, banking activities in Türkiye were carried out mainly through bank branches. Türkiye İş Bankası was the first private bank, introduced ATMs in 1987, laying the groundwork for electronic banking. Türkiye İş Bankası, on the other hand, pioneered internet banking in Türkiye in 1997, and Garanti Bankası followed suit the following year, Akbank, Yapı Kredi Bankası, and other banks rapidly followed suit, offering their customers online banking. (Polatolu & Ekin, 2001).

Banking in Türkiye has a long and distinguished history dating back to the nineteenth century. Over the last two or three decades, this created a highly competitive banking sector, which eventually took advantage of the opportunity provided by mobile technologies to attract new customers. In Türkiye, mobile banking began in 2003 and accelerated with the implementation of 3G technologies in 2009.

The banking industry in Turkey has made significant progress toward financial liberalization of the Turkish economy, playing a crucial role in Turkey's financial system. According to recent research, mobile banking is one of the most popular kinds of mobile apps among Turkish consumers, according to survey results. (Farid,2020) As a result, the number of online banking users grows and online banking services improve year after year in Turkey, and banking customers' financial behavior shifts. (Nazli. 2014:24).

Turkey has a great potential for the growing banking technology. according to the Türkiye Banks Association (TBB) the number of active digital banking users in

Turkiye increased from 70.8 million to 85.1 million between June 2021 and June 2022, Commercial customers increased from 3.1 million to 3.8 million, while retail customers increased from 67.7 million to 81.3 million. According to the data, the number of online banking users has increased from 58.9 million to 73.9 million.

<b>Number of Active Digital Banking Customers, thousand person</b>			
	<b>March 2021</b>	<b>Dec. 2021</b>	<b>March 2022</b>
Number of active retail customers	65,487	74,521	77,361
Number of active commercial customers	2,989	3,411	3,566
<b>Number of Active Digital Banking</b>	<b>68,475</b>	<b>77,932</b>	<b>80,927</b>

**Figure 2.1** Active digital banking customers. Source: The banks association of Turkey (digital, internet and mobile banking statistic 2021) tbb.org.tr

## 2.4 Customer Loyalty

Customer loyalty is defined as a psychological and emotional attachment to the people, products, or services of a company. (Hallowell, 1996). A loyal customer displays the desire to continue to purchase a product or service., Loyalty defining features usually involve preferences for a product or brand, repurchase intention, and engaging in a favorable behavior of positive word of mouth. (Lam & Burton, 2006; Lee & Feick, 2001). Bank loyalty is the deliberate choice to stick with the same financial institution throughout time, as defined by Bloemer et al. (1998). In this context, "loyalty" to a bank means that clients have a positive opinion of that bank and are willing to recommend it to others.

The correlation between loyal customers and financial success and expansion has been the subject of several studies. Several authors, including Hallowell (1996), Reichheld (1993), Reichheld and Teal (1996), Matzler (2006), Edvardsson et al. (2000), and others, have investigated the correlation between customer loyalty and business success. When it comes to service businesses, customer loyalty tends to boost performance, but when it comes to product businesses, it might have the opposite impact (Edvardsson et al., 2000).

It's been noted that banks that provide new goods and services are more likely to

retain clients (Meidan, 1996). It has been argued, however, that in order to foster client loyalty, banks should place equal emphasis on less nebulous, more intangible elements like service quality and customer satisfaction (Yavas and Shemwell, 1996; Worcester, 1997).

Lack of competition and substantial costs associated with switching providers are other factors in maintaining loyal customers (Andreassen and Lindestad, 1998). According to research conducted by Tesfom and Birch (2011), consumers of varying ages face distinct difficulties when attempting to move banks. Older consumers, notwithstanding possible unhappiness, are less likely to move banks. The authors suggest that financial institutions increase the value of their incentives for younger clients.

We investigated the concept of loyalty and its relevance to organizational success, the literature has documented many times the importance of loyal customer for institutes and financial institutes is no exception (Griffin, 2002; Edvardsson et al., 2000; Heskett et al., 1994). One definition of loyalty is " a strong desire to continue purchasing a product or service in the future, despite other influences and marketing initiatives to persuade customers into engaging with a different business." Oliver (1997), Increased loyalty results in decreased fees, lesser marketing expenses, and also more business from existing customers. This idea was expanded upon in Alber O.Hirschman's theory Exit, Voice or Loyalty, The theory explores the significance of loyalty in organizational survival and observes customer loyalty in various aspects..

With the rise of technology in financial institutes, loyalty has a distinctive role and has received attention in literature, (Reyes-Menendez et al., 2018) mentioned that loyalty is a customer desire to continue to purchase the same product and pay for the continues use of the same brand.

Dedicated or loyal customer bring great advantages to organization, loyal customer has the upper hand in financial institutes, loyal customer in long term enables companies to reduce marketing cost, throughout marketing research, it has been demonstrated that the price of recruiting new customers is costlier than the expense of retention existing customers.

In other words, for a financial institution, loyalty can lead to increased income and financial stabilization. Sayani (2015) stated that organizations should motivate customer loyalty and assign resources accordingly. Customers who remain loyal are less cost-effective to maintain, price insensitive, participate in positive word of mouth,

always provide suggestions, and are interested in trying new products. Given the intense competition in the market, businesses have incorporated customer retention strategies. Customer loyalty is an indication of a customer's psychological connection to a product as well as advocating toward the organization; increasing loyalty leads to increased customer retention, which leads to increased profit. By examining the customer transaction history, the level of loyalty, as well as the degree of stability, can be assessed. (Oluwadamil, 2021; Yi & Jeon, 2003)

Customer loyalty is the dedication to continue purchasing a particular service or product despite the existence of alternative options marketed to the consumer in the hope of a switching behavior of the consumer. (Chiguvi, 2016). Customer loyalty is achieved through consistent customer retention especially in combination with an emotional attachment to the organization. (Mellroy and Barnett (2000) describe loyalty as a consumer's commitment to engage with a given organization, to purchase its services or products on a continuous basis, and to suggest them to others. Several studies have been made in regard of customer loyalty in banking. (Beerli et al.'s (2004) According to Methlie and Nysveen (1999), the most significant factors are customer brand reputation. (Srinivasan et al in 2002), defined loyalty as a preference and dedication to continue to use a website repeatedly to purchase a product or service, to brows information regarding the services provided by organization through the website with a high level of trust and loyalty, (Shanker et al 2003) stated that loyalty should not to be limited with the concept of repeated purchase behavior and explained that repeated purchase behavior is part of a decision making process not including the emotional aspects of loyalty within a customer. A loyal consumer poses a sense of commitment to an organization and belonging rather than merely choosing the product or service based on attraction.

To build loyalty many bank institutes focused on creating new and innovative product and services, this innovation followed by extra cost on the institutes with the hope of retaining customers, it has been argued that the bank should focus on less tangibles part of loyalty and concern with service quality, building trust ensure loyal customers (Yavas and Shemwell, 1996; Worcester, 1997).

#### **2.4.1 Factors Impacting Loyalty**

The literature on banking customer loyalty discusses multiple factors that can impact loyalty. Based on various research multiple factors has been found determinant

in bank customer loyalty, all the factors impact each other in multiple ways and cannot be separated, one of the most researched factors are E-service quality and switching cost, the importance of customer loyalty while conducting online business with empathizes on the importance of trust in online business due to the inability to interact with customers personally and its harder to keep online customers loyal ( Ribbink, et al. (2004) ), (Methlie and Nysveen (1999) deeply debate this concept and express the significance of customer trust as difficult as it is for competitors to steer satisfied customer away in comparison with an unsatisfied customer.

There is a certain level of difficulty in acquiring loyal customers, customers happiness regarding a product or service is not the only deterrent of loyalty taking into consideration the emotional attitude of a customer toward the product and services, a show of positive attitude toward an organization is a key aspect in customer loyalty, Dissatisfied customers are observed to never express their loyalty; instead, they simply leave the company. Research also indicates that it costs an organization far more to recruit new clients rather than to maintain existing ones., happy customers with an online business have been known to engage in a re-purchase behavior that is far more profitable to an organization and increase trust in the system.

#### **2.4.1.1 E-Service Quality ( E-SQ)**

Electronic service quality has been defined many ways by literature According to Zeithaml (2002)The quality of service in an online commerce or electronic service can be defined as the ability to conduct efficient online purchasing and delivery of product or service using an application, Meanwhile, Santos (2003) defines the quality of electronic services as an evaluation and perception of excellence level of electronic services in an online setting, many studies have shown the importance of service quality and its correlation with customer service this also applies in the concept of electronic service quality in online banking services it's a crucial factor in competitiveness and customer sustainability in businesses.

Electronic service quality offers many advantages to businesses that conducting their services online that include enhanced accessibility, reduced costs and time efficiency that are important factors in banking services, it's an important feature in measuring customer loyalty many research have been conducted regarding customer buying decision influenced by service quality in terms of websites and e-commerce channels (Kuo, 2003), (Devaraj et al., 2002), therefore, service quality in the online

environment includes the delivery of product , maintenance services, fast, safe and convenient transactions through websites or other channels,

Numerous studies and research have discovered that service quality is an important factor in determining customer loyalty, high perceived service quality (SERVQUAL) is set to differentiate business from their competitors with a competitive advantage, businesses with financial services that are able to score high in a SERVQUAL model achieve a long-term growth, business that offer high quality services are perceived to be more reliable and satisfactory to customers.

The most commonly used metric for evaluating customer loyalty is the model SERVQUAL it assess and measures the performance of an organization without the online elements (Parasuraman, Zeithaml, (1988) ) , with the advancement in technology and business using online channels the E-SERVQUAL model is then developed by Zeithaml, Parasuraman, (2002) to measure service quality in an online environment including online banking services with the high competitiveness in banking industry providing high quality services is a detriment in being able to survive in this industry, earlier studies identified several dimensions to measure service quality that includes communicating and understanding of the customer, respect , security and credibility to list a few, later studies designed five important factors that is used to assess the quality of banking services (Aladwan & Alsinglawi, 2016; Parasuraman et al., 2002).

#### **2.4.1.2 Trust**

In electronic commerce trust is viewed as the confidence in credibility and reliability of services and product provided by an online business (Gabarino & Johnson, 1999). Trust can be explained as degree of risk that is involved with online business, it's an important factor in the business relationship with the absence of human interaction in online transactions and consumers inability to view the product directly (Reichheld & Schefter, 2000; Gefen et al., 2003), risk is a major factor in creating trust, with the absence of risk customers are not able to conclude a business as trust worthy (Felix and Paul, 2004).

Many obstacles affect customers trust in online business particularly online banking such as the use of technology that comes with the uncertainty of online transactions, the lack of personal nature of human interactions, online environments has a degree of uncertainty in comparison to a traditional environment thus trust is

very important in an electronic commerce, research explains that trust is an important factor when the transaction is accompanied with uncertainty and risk (Mayer et al. (1995) as cited in Sonja and Ewald (2003), with the use of technology for online commerce contains several risks with the aspects of technology breach and information sharing.

Ribbink et al. (2004) research explained customers engage in different kind of trust; Dispositional trust is the most important for online business as its empathies customer ability to trust in general. Trust has an important effect on customer retention and the ability to acquire more customers (Gefen, 2000) Customers, according to (Grabner,Kräuter and Faullant (2008), must have confidence in the online system in order to use it on a regular basis. trust have a strong effect on loyalty and therefore loyalty Several research studies have been conducted that demonstrate trust can predict of loyalty. (Gul, 2014; Bibb; Hsu, 2008;). A model was proposed connecting the link between trust and loyalty (Sirdeshmukh, Singh, and Sabol (2002) The model was supported by Chaudhuri and Holbrook (2001) in their model explaining brand loyalty.

#### **2.4.1.3 Security & Privacy**

Security is highly significant issue in banking management with vast connection to banking activities, ensuring security is an important measure determined by multiple factors, in this context banks focused on electronic banking security to meet customers' requirements (Bilan, 2013), online banking is highly connected to customers need of security (Grabner-Krauter and Faullant, 2008). Many studies defined security and privacy as a measure of a customer trust in online banking (Broom, and Forcht, 2002; Flavián and Guinalú, 2006).

A model for internet banking and customer loyalty was developed by (Chen, Hsiap and Hwang (2012)) that explained customer loyalty is a composition of six elements which includes security among other elements , the focus of the model was the customer perception of the importance of online security, Security is a critical aspect of the banking system; there is a strong correlation between bank activities and fraud prevention and third-party attacks, client relationship quality, and loyalty. (Hoffmann and Birnbrich (2012)).

Privacy and security is a significant task of the banking system, banks are highly concerned with customer safety and establishing a secure level for money transactions, there is an important correlation between security and privacy regulations provided by

the banks and sustaining customer loyalty (H.F. Lin 2007 ), with the development of technology new ways have been developed in securing online business however security remains a factor of risk especially in online banking, with the rise of need for security in online banking new approaches are taken to ensure the security and safety of transactions with key encryptions , website security and two factor authentications. Privacy and personal information pose a great concern for online business and online banking customers need to feel their privacy is protected in order to engage in an online transaction.

According to Ojasalo (2010), the security dimension, financial security, and confidentiality are all important considerations. It is concerned with the technical aspects of a website's security, reliability, and online transactions. With the consideration of the business reputation, trust, and overall protection of privacy demonstrated by employees to customers in the transaction process

Privacy addresses the technical aspects of a website's security, payment transaction confidentiality, and overall trust according to Malhotra, Parasuraman, and Zeithalm (2005). Customer trust, E-service quality, security and privacy impact on loyalty can also be increased as a result of continuous usability (Konalingam et al., 2017)

## **2.5 Selected Theories**

### **2.5.1 Equity Theory**

The argument behind equity theory is that "one's rewards in exchange with others should be proportional to his or her investments" (Swan & Oliver, 1989). As this theory proposes, customer loyalty results from a fair exchange ratio, equity is commonly defined as perceived "fairness" (Swan & Oliver, 1989), This theory focus on the transactions between the customer and the business, the theory proposed that following the transaction of product or service the customer will start developing an evaluation in regard to the experience, this evaluation will generate the customer loyalty in regard to the interaction (Oliver & Desarbo, 1988).

Messick and Cook (1983) explained in their research that in regard to equity theory the enhancement of customer relationship with the business will lead to an increase in the loyalty exhibited by the customer. based on previous research equity theory can be utilized to explain the factors that impact customer loyalty.



## **2.6 Review of Previous Studies**

### **2.6.1 The Relationship of E-Service Quality and Loyalty**

Multiple studies have researched quality of service and concluded a major connection exists between both service quality and customer loyalty (Zeithaml, et al, 1988 Parasuraman et al, 1985; 1988) customer who perceive the service by a business as high quality had an increase in their loyalty level (Jain and Gupta, 2004). The better service quality resulted in customer engaging in a loyal behavior and an increase in customer retention (Nadiri, et al 2009). Many authors in the field of marketing (Edvardsson et al., 2000; Tsai et al., 2010) agree that customer connections are crucial to the success of service organizations. Keeping customers for longer periods of time has been shown to boost a company's profits (Reichheld, 1993; Reichheld and Sasser, 1990; Andreassen, 1995), and even a little increase in retention rates may have a large influence on future revenues.

As stated by Hennig-Thurau, et al. (2002), marketing theory has been looking to determine what factors influence relational outcomes. The results of healthy relationships will leads to customer loyalty and word-of-mouth marketing. Positive word-of-mouth is know for its ability to aquire new clients while boosting the loyalty of current ones (Hennig-Thurau et al., 2002; Reichheld, 1993; Trusov et al., 2009).

E-Service quality model is an major factor in the success rate of online business and as a measure of customer experience in an online setting, the concept of E-service quality has been discussed in a number of studies (Rahi and Ghani, 2018; Raza, Jawaid, Hassan, & Burton, 2015; George & Kumar, 2014; Clemes, Gan, &Zhang, 2014), A research done by Dabholkar (1995) concluded that service quality levels can predict customer loyalty and customer behavioral intentions that leads to loyalty , Khan et al. (2019) and Nasution et al. (2019) also mentioned in their study business that improved their service quality had an increase in their customer loyalty.

### **2.6.2 The Relationship Between Trust and Loyalty**

Trust can be defined as the confidence between a customer a business due to the honestly, reliability of the business (Gul, 2014; Hsu, 2008; Liang & Wang, 2007). A positive relationship is observed between customer trust and loyalty (ARA 2013), customers with disregard a negative experience if they demonstrate trustful attitude toward the business and view this experience an outlier, whereas customers who lack

trust in a business will regard the negative experience as evidence of a lack of trust. (Hennig-Thurau, 2002).

(Reichheld et al., 2000; Pavlou, 2003; van Esterik-Plasmeijer, 2017) Trust has been shown to be a crucial element driving customer loyalty. Businesses can't succeed without strong customer connections, and such relationships can't succeed without trust (Geyskens et al., 1996; Rousseau et al., 1998; Singh and Sirdeshmukh, 2000). In e-commerce environments, where the customer interacts with the company's technology rather than its employees, trust is especially important (Urban et al., 2000; Papadopoulou et al., 2001).

Trust is an intricate notion that has been examined extensively, leading to a wide range of meanings (Lewicki et al., 1998). Both Morgan and Hunt (1994) and De Wulf et al. (2001) define trust as "consumer confidence in a retailer's reliability and integrity." Competence, kindness, and integrity are all proposed as components of trustworthiness by several academics, including Flavian, Guinaliu, and Gurrera (2006); Mayer et al. (1995); and McKnight et al. (2002). Competence and honesty are valued highly in banking (van Esterik-Plasmeijer, 2017; Arcand et al., 2017). Both the five-dimensional trust construct presented by Sekhon et al. (2004) and the five-dimensional definition of trustworthiness in financial services proposed by Ennew and Sekhon (2007) may be found in the literature. However, Bhattacharjee (2002) and Bart et al. (2005) advocate for a unidimensional approach since it is difficult to experimentally isolate the several components often used to describe trust.

According to Garbarino and Johnson (1999), trust not only affects customer loyalty but also reduces perceived risk. Trusting customers don't give the hazards of doing business with a firm as much weight. Customers' responses to unfavorable events are also influenced by their level of faith in the organization; those with high trust are more inclined to perceive such encounters as outliers, while those with low trust may take them as confirmation of their lack of trust (Hennig-Thurau, 2002). Furthermore, commitment is also positively correlated with trust (Mukherjee and Nath, 2003; Arcand et al., 2017), hence trust indirectly contributes to higher loyalty via this pathway.

A study by (Morgan and Hunt, 1994) further explained that the strong connection trust establishes between a customer and a business it's one of the determine of customer loyalty, based on conducted study by (Ranaweera and Prabhu (2003)) consumers exhibiting trustful emotions toward a business has a high level of loyalty

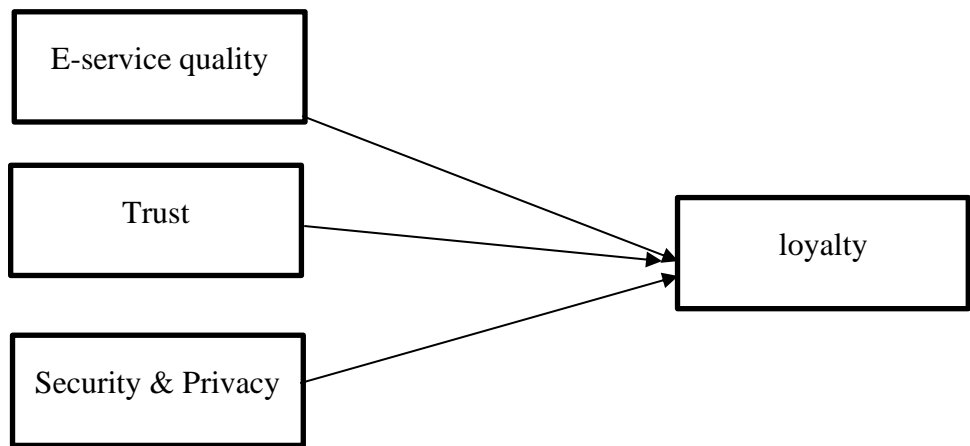
compared to the ones exhibiting loyalty. A number of studies concluded that a positive connection between trust and loyalty (Mukherjee and Nath, 2003; Arcand 2017), When a customer is loyal to a service or product, he is putting his trust in it. (Gul, 2014).

### **2.6.3 The Relationship Between Security-Privacy and Loyalty**

A large number of research studies have identified an important link between security and customer loyalty in a variety of settings, which include online. ( P.A. Deyalage, &D. Kulathunga 2019; M.D.D. Dharmesti, & S.S. Nugroho 2012 C; Thilakarathne, & N. Abeysekara 2016; Trong, N.T.V. Khanh and G. Gim 2014) in the banking business security is a key factor in ensuring customer safety in plenty of areas including personal information, accounts access and transactions, security concerned has increased with the use of technology and online banking this concerned when managed by online business has been found to influence customer loyalty the research study by Murugiah and Akgam (2015) supported the connection between security and loyalty, high level of security provided to customers is an important factor in their continuous use of online transactions which lead to loyalty, satisfied customer often engage in a repurchase behavior, these type of behavior are high correlated with loyalty, Therefore, when customers perceive security in online banking transactions, they may develop trust and loyalty towards the online business .

Considering the significant impact it has on the achievement of long-term customer relationships, privacy has received special attention in online banking services. (Morgan & Hunt, 1994). In the age of the internet, maintaining privacy has become increasingly important. (Tayler & Stanley, 2007). Privacy received special attention in online banking service as a result of the important effect it has on the establishment of long-term customer relationships (Morgan & Hunt, 1994). Persistent studies have shown that providing ample privacy measures to online customers has a significant impact on long-term customer loyalty. (Ataya & Ali, 2019). Customer loyalty can also be enhanced as a result of ongoing improvements in the privacy and security concerns of online banking applications. (Konalingam et al., 2017)

## 2.7 Theoretical framework



## **CHAPTER 3**

### **3. METHODOLOGY & HYPOTHESIS**

#### **3.1 Methodology**

##### **Research design**

A research framework is used to answer questions and achieve the study's objective. It illustrates the process of data collection and information that assist in solving the research questions. It can be described as a process of data collection, evaluation and reporting in an investigative search Asenahabi, (2019). The study aim is to investigate e-service quality, trust and security-privacy impact on customer loyalty in online banking and to provide an answer to the research question. “Does customer e-service quality, trust and security privacy impact loyalty “for this research a quantitative research design is adopted, quantitative research is the most suitable method for this study as numerical data will be collected that will later be analyzed and tested, quantitative research assist in defining the impact between independent and dependent variables,

Quantitative research can be analyzed using statistical methods that leads to accurate elements and hypothesis in order to support the information connection (Creswell, 2017). To help achieve the objective of the study researcher choose the best approach. For this study, the descriptive analysis and survey method is used to assess the customer trust, E-service quality, security and privacy attributes effect on customer loyalty in online banking. Descriptive research is the method of gathering data through survey questionnaires that determine the characteristics and factors, organize the describe the data collection (Glass & Hopkins, 1984), specific research questions are developed based on the variables, data will be collected by using questionnaire.

### **3.2 Hypothesis**

**Hypotheses 1** E- Service quality has a positive impact on customer loyalty.

**Hypotheses 2** Trust has a positive impact on customer loyalty.

**Hypotheses 3** Security and privacy has a positive impact on customer loyalty.

### **3.3 Data Collection**

Data can be retrieved from both primary and secondary sources. The term "primary source" alludes to data that has been obtained directly from participants or respondents. This type of data may be obtained through a variety of techniques, including questionnaires and interviews. For this study primary data is used , with the use of questionnaire data was aquired for the analysis, active users of online banking customer were participants with a brief explanation to customers on requirement for filling the questionnaire, the respondents was informed no personal contact information was collected and the survey is completely anonymous to be used for academic research purposes only, the questionnaire was distributed using a random sampling method, a time consuming method however the survey questionnaire was successfully distributed. The questionnaire was developed based on previous similar research, the survey contained multiple sections, the first is a demographic characteristic of the participants (gender, age, occupation etc.) in the second section are the variables to measure the hypothesis, quantitative research is a process of understanding the finding of the investigative study and confirming the finding.

### **3.4 Research instrument**

Data instrument tool is a tool used to gather information for the analysis aspect of the research, for this research questionnaire was adopted as the data instrument tool, Five Likert scales were used to restrict the options for the questions, the variables are measured using questions adapted from previous research in the field, the reason behind the choice is efficiency and improve the comparability with earlier research (Saunders et al., 2012, p.431).

### **3.4.1 Customer loyalty**

In this research, the definition of loyalty is explained by a set of dimensions. that help illustrate the term, to avoid limitation by using a single approach in this research we measure with these 6 items (Caceres & Paparoidamis, 2007; Ehigie, 2006; Zeithaml 1996).

**LOC1:** Are you satisfied with the online banking service provided by your bank

**LOC2:** The online services meet your requirement

**LOC3:** I will continue to use my online banking services

**LOC4:** I would recommend my bank to friends and relatives

**LOC5:** I would like to remain as a customer to my online banking services

**LOC6:** I conduct all my banking affairs with my bank

### **3.4.2 E-Service quality**

Items concerning service quality has been researched in many studies., Sivakumar (2015) study explain that one the most important aspect in evaluating a bank is their service quality, the question below are adopted from previous studies of the banking field to fit in the research.

**ES 1:** The bank offers fast and sufficient service online.

**ES 2:** The speed of login into the account is fast.

**ES 3:** Finding information on the bank website is easy.

**ES 4:** Fast delivery of online services

**ES 5:** I can use my online bank anywhere with internet connection.

### **3.4.3 Trust**

Items relating to trust were adopted from previous studies, the items reflect the user ability to trust the online transaction with the bank Bhattacharjee (2002), as described in literature trust as the confidence felt by the end user, this is an indication of interpersonal trust (Ribbink, et al., 2004), the questions bellow were adopted to reflect trust.

**TR 1:** My bank is trustworthy.

**TR 2:** I have confidence in my bank.

**TR 3:** The bank is consistent in providing quality service.

**TR 4:** I am satisfied with the bank response to service failure recovery.

**TR 5:** I can communicate with the bank support 24 hours a day.

### **3.4.4 Security and Privacy**

The security and privacy dimension were created by combining items from previous studies that were relevant to this research., the items are designed to examine how customers perceive the safety of online banking (Featherman and Pavlou (2003) and Pikkarainen (2004). The questions bellow was adopted to measure privacy and security.

**SP 1:** My bank offers high security authentication online.

**SP 2:** My privacy is protected using online banking.

**SP 3:** The transaction carried out in online banking feels secure to me.

**SP 4:** The bank is concerned with the security of my transaction.

**SP 5:** Matter of security are important to me.

## **3.5 Sample Design**

### **3.5.1 Targeted Population**

Population is an essential aspect in any study or research It refers to a group of individuals, organizations, or other entities. where a sample can be investigated for the study Turner (2020) defines a population as "a specific group of individuals or objects that possess the same characteristics.", The target population for this thesis are customers who are active users of online banking in Turkey. However, due to the large size of the population acquiring information is not easy, a sample size that represent the overall population is a method used for testing.

### **3.5.2 Size of Sampling**

According to research, the sample size must be sufficiently large to allow for a reasonable assessment of the characteristics of the total population and to achieve reliable results. (Bougie & Sekaran, 2019), for this research random sampling is used, random sampling can be explained by the the concept that each individual in the population has an equal opportunity to be selected., random samples represent the population as a whole including errors and compromised components.

The number of research participants is known as sample size, and it has an effect



on statistical aspects. which including calculation accuracy and drawing a conclusion (Andrade, 2020). According to previous research sample size is the most effective method to achieve reliable results (Henry (1990), The three most important factors to consider when calculating sample size are degree of confidence, accuracy, and degree of variability. (Cochran, 1963).

### **3.5.3 Technique of Sampling**

The questionnaire distribution approach is used in this sampling technique. It's an effective tool for information collecting from respondents, random sampling was used throughout this research. to select reasonable number of subjects that represent the population and where every subject reserve an equal chance of being selected, therefore simple random method is sued consciously select customer who meet the research criteria of using online banking , respondent were initially contacted via social networking sites and email., ethical consideration was taken to ensure the Reponses are kept private and voluntary.

### **3.6 Data Analysis**

Data analysis is a technique used to evaluate, reshape, and model data. in order to discover relevant information and support decision making, In this study, processing of data is used to ensure that the dates are accurate and exact for the analysis., multiple steps is used to process the data prior to analysis that include data inspection for errors and missing information, data editing and coding.

For this research the date obtained through the questionnaire is coded into SPSS version to analyze the data providing the research with the necessary information to reach the desired objectives. SPSS software contains the suitable element for analysis that fit the criteria such reliability testing, correlation analysis etc. The biographic data is analysis by the use of descriptive analysis, the prediction of the independent variables and depended multiple regression was sued, testing hypothesis was with the use of Pearson correlation technique.

#### **3.6.1 Reliability Analysis**

The first stage in the validation test procedure is reliability analysis. (Wells & Wollack, 2003). The use of reliability is to test the items measurement in term of their

internal consistency, reliability is computed by Cronbach's alpha it's one of the most used methods of testing,

Cronbach's alpha is a measure of the internal questionnaire's reliability in terms of its questions (Cronbach, 1951). The questions' uniformity in measuring the same thing is referred to as their internal reliability. It is imperative that the questions correspond to the same topic if the goal is to combine them to get a single overall rating considering failing to do so will result in low internal reliability. According to (Sekaran, 2003) reliability is when there is a consistency in result that has been collected and the measurements are free of errors.

### **3.6.2 Descriptive Statistics**

Descriptive analysis identifies the respondents' attributes and highlights the sample's overall basic characteristics According to Zikmund (2003), this analysis provides general pattern of responses and summaries from the sample, data will be analyzed and organized in a simple patter for easier understanding, Descriptive analysis assist the analysis to determine the aspects of mean, median and standard deviation for continuous variables, for categorical variables proportion and frequency distribution,

In this research Likert scale was used to evaluate the results variables mean score interpretation will be broken down to 3 level, high, moderate and low scores, scores 5.00 to 7.00 considered high, 3.00 to 4.99 are moderate and 1.00 to 2.99 is low (Oliveira et al., 2012).

### **3.6.3 Correlation Analysis**

The correlation is obtained by comparing the variant in one variable to another. (sekeran et al., 2001). As a result, the applicable statistical method is to determine the presence of any connection between two variables. (Bewick et al., 2003). The R-Value of the correlation coefficient determine three purposes, The first is an assessment of the degree of association between variables, second to determine the connection between variable and third to assess if significant of the correlation coefficient (Hair et al (2007))

## CHAPTER 4

### 4. RESULT AND ANALYSIS

#### 4.1 Demographic

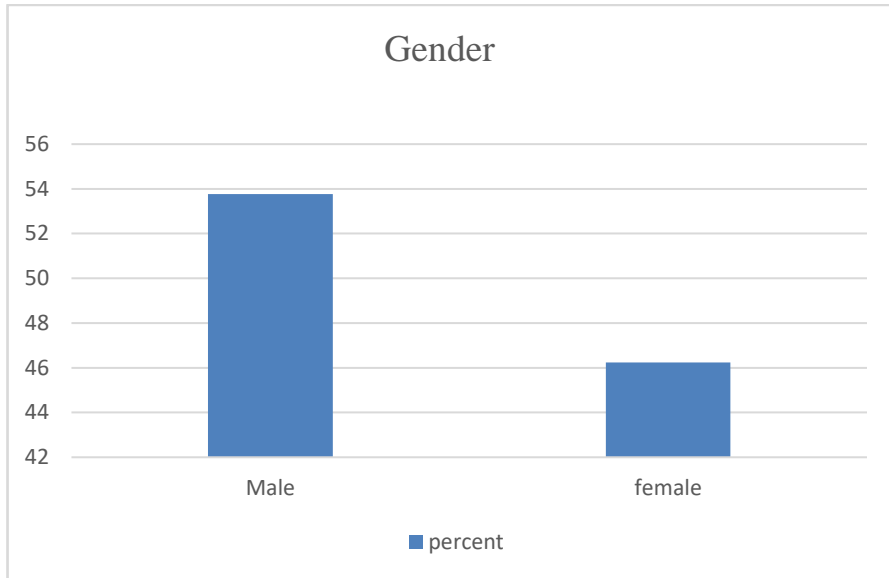
The term demographic analysis can refer to entire societies or groups defined by criteria such as gender, age, occupation, education, income, and bank selections (demographicpartions.com 2015)

**Table 4.1:** Demographics

	Category	Frequency	Precent
<b>Gender</b>	Male	207	53.766
	Female	178	46.244
	Total	385	100
<b>Age</b>	less than 20	5	1.298
	20-30	143	37.142
	31-40	135	35.064
	41-50	75	19.480
	More than 50	27	7.0129
	Total	385	100
<b>Education</b>	Bachelors	186	48.312
	Master	147	38.182
	PhD	25	6.494
	Diploma	14	3.636
	High school	13	3.377
	Total	385	100
<b>Occupation</b>	Private officer	130	33.766
	Student	99	25.714

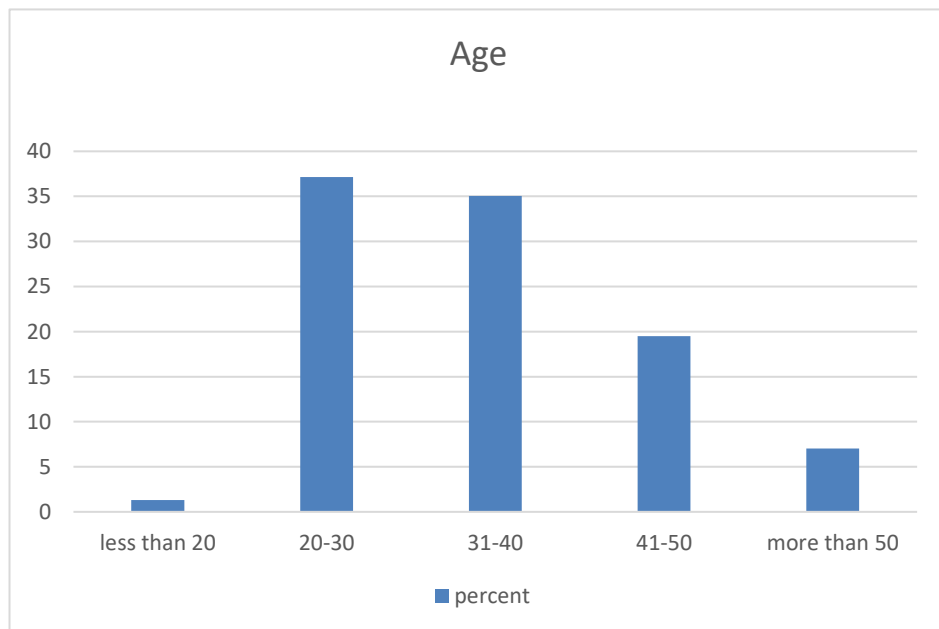
	Business owner	49	12.727
	Government officer	42	10.909
	Other	36	9.351
	Teacher	21	5.455
	Retired	7	1.818
	<b>Total</b>	<b>385</b>	<b>100</b>
<b>Monthly Income</b>	Less than 6000	36	9.351
	6000 - 10000	91	23.636
	10000 - 20000	150	38.961
	More than 20000	108	28.052
	<b>Total</b>	<b>385</b>	<b>100</b>
<b>Frequent use of online banking in a month</b>	1 to 5 times	38	9.870
	6 to 10 times	126	32.727
	More than 10	221	57.403
	<b>Total</b>	<b>385</b>	<b>100</b>
<b>List of Banks</b>	Akbank	63	16.364
	Deniz bank	10	2.597
	Enpara	5	1.299
	Garanti	88	22.857
	HSBC	10	2.597
	Isbank	71	18.442
	Kuveyt Truk	14	3.636
	QNB	8	2.078
	Sekerbank	1	0.260
	TEB	2	0.519
	Vakif Bank	10	2.597
	Yapi Kredi	43	11.169
	Ziraat	60	15.584
	<b>Total</b>	<b>385</b>	<b>100</b>

Starting with gender, the table indicate that in Turkish banks, the majority of the research participants are male with (53.7%), while the remaining (46.2%) being female. According to Figure



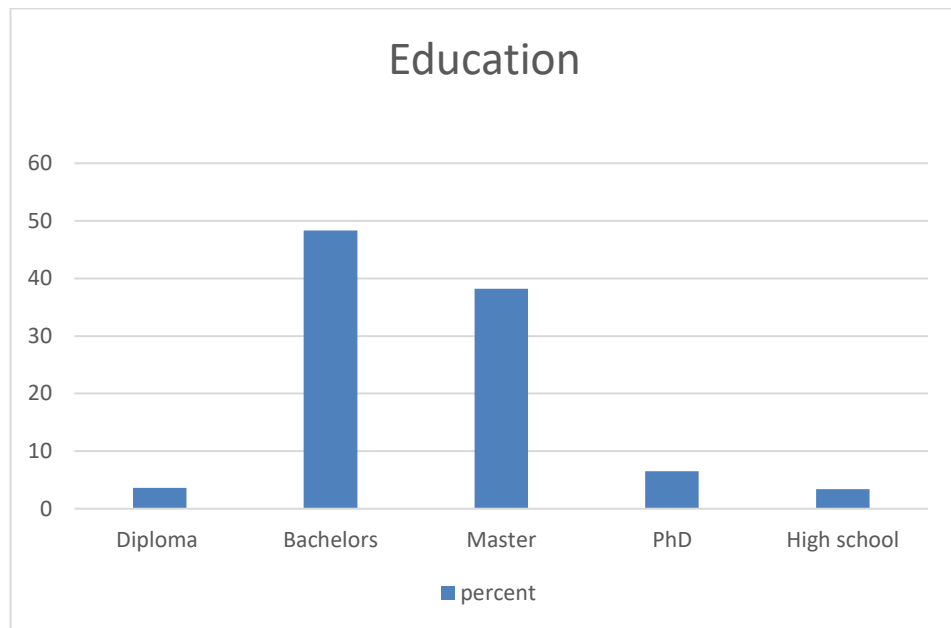
**Figure 4.1:** A comparative analysis of the participants' gender

The statistic show the research participants age levels, ranging from < 20 years 1.2%, between 21-30 years it show 37.1%, from 31-40 years at 35.0%, from 41-50 years 19.4% and more than 50 years are 7.0%



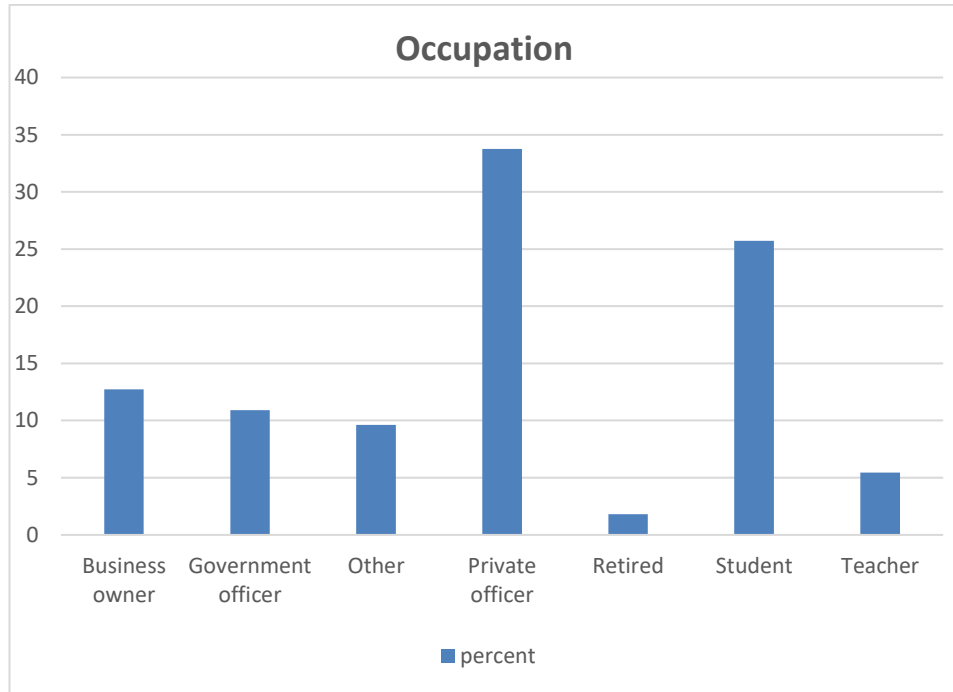
**Figure 4.2:** A comparative analysis of the participants' ages

In terms of the bank's educational level, respondents were mostly (48.3%) received a Bachelor, while Master degree holders (38,1%) and PHD (6.4%)



**Figure 4.3:** A comparative analysis of the participants' education level

According to the results, the study sample included the greatest percentage of employees in the private sector, representing 33.7% of the research sample, and the smallest percentage of customer with the bank indicated by retired customers with only 7 individuals, representing 1.8 % of the reserch sample.



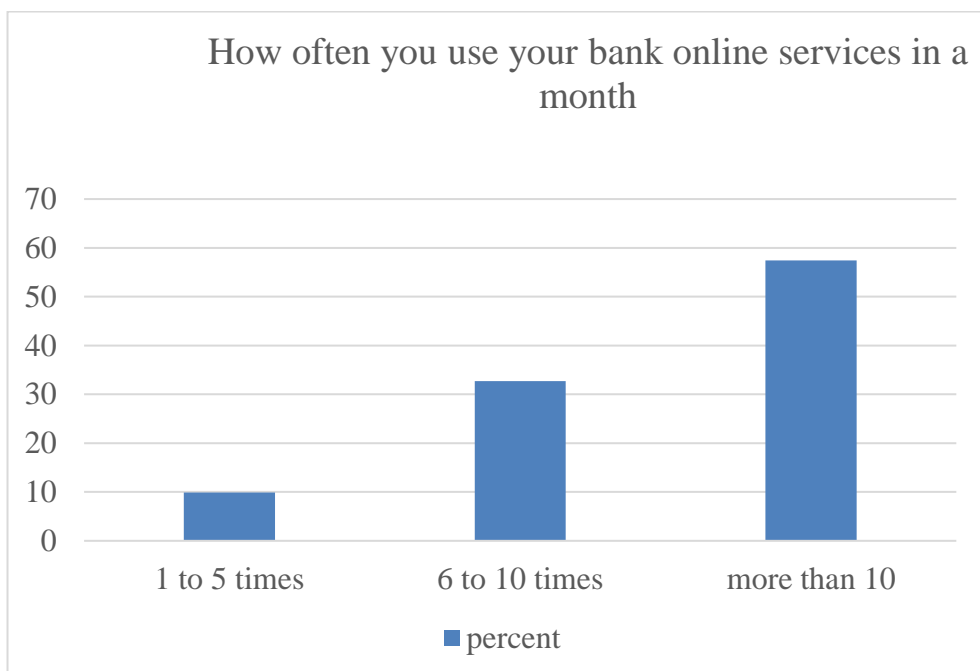
**Figure 4.4:** A comparative analysis of the participants' occupation

According to the results, the research sample had the largest percentage of monthly income of more than 20000 thousand Turkish Lira, reflected by 108 individuals, representing 28. % of the research sample, and the smallest percentage of monthly income between less than 6000 thousand TL for 9.3%. 6000-10000 thousand TL, represented by 91 individuals with 23.6% of and 10000-20000 thousand TL with a total of 150 people 38.9% of the study sample, respectively.



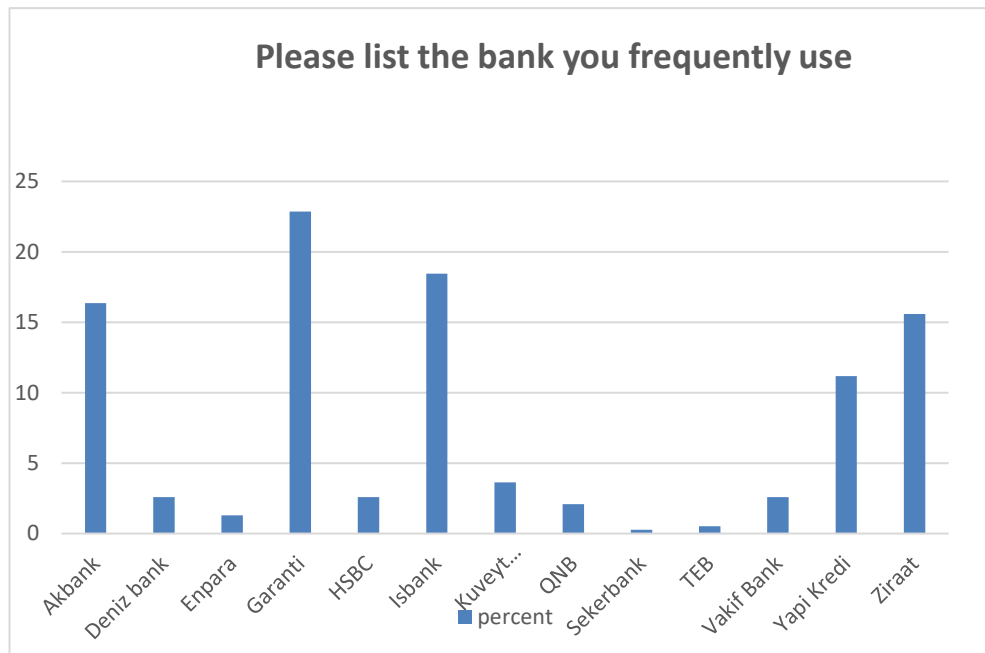
**Figure 4.5:** A comparative analysis of the participants’ monthly income.

According to the findings, the research sample consisted of the largest percentage of customers who interacted with the bank online between 1 to 5, with 38 individuals representing 9.8% of the research sample, and the largest percentage numbering 221 people, or 57.4 % of the study sample that interact with the bank more than 10 times a month.





**Figure 4.6:** A comparative analysis of the participant' interacted with the bank.



**Figure 4.7:** List of banks being used by customers

#### 4.2 Reliability Analysis

The Cronbach Alpha coefficient is a common test to measure internal consistency. Ideally, Cronbach's alpha was used in a reliability test to evaluate the study instrument's stability and internal consistency (questionnaire). indicates that the Cronbach's Alpha test for each questionnaire item was at the recommended minimum level (Alpha 0.60). (2013) (Sekaran).

Table (2) shows the results of the Cronbach Alpha test of independent and dependent study variables in their different dimensions. The Cronbach value of variable E-Service quality, Trust, Security & privacy and loyalty is 0.88, 0.827, 0.883, 0.864, 0.952. consecutively.

**Table 4.2:** The Cronbach value

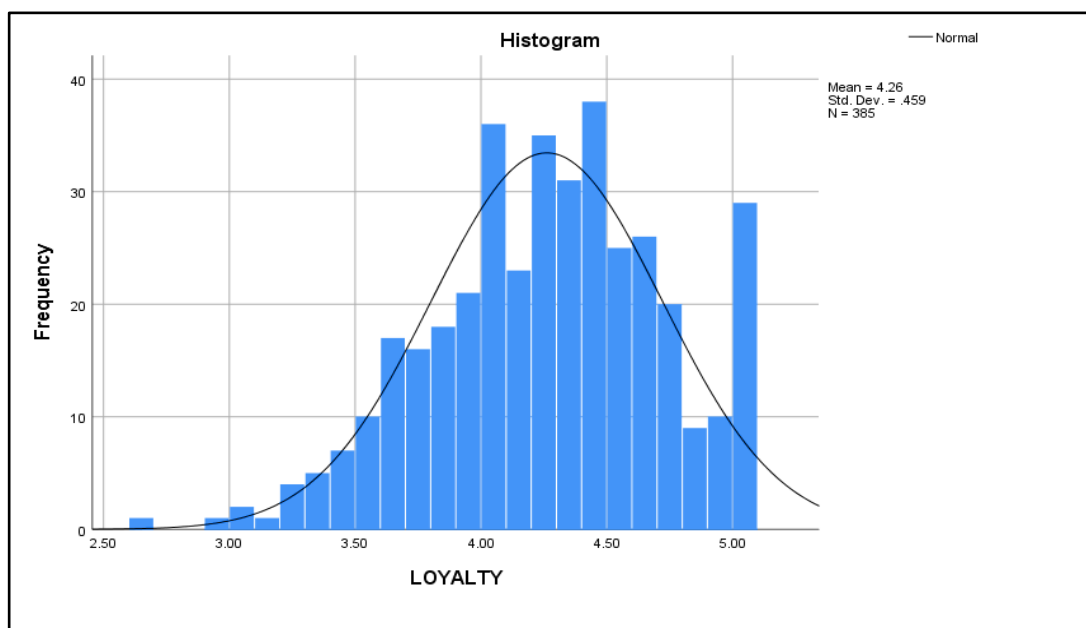
Study Variable	Item number	Reliability coefficients
E-Service quality	6	0.888
Trust	5	0.883
Security & Privacy	5	0.827
Loyalty	5	0.864
Total	21	0.952

The table data indicate the reliability values for the questioners aspect range from 0.827- 0.888) while the overall tool reliability value was (0.952) this value appropriate for this type of research.

### 4.3 Test of Normality

For this study normality is tested, this indicates whether or not data is normally distributed.

The following figure below depict the variables' regular distribution in this research.



#### 4.4 Factor Analysis

The set of statistical methods known as factor analysis examines the interactions between variables by developing a common dimension known as a factor. To limit the number of independent variable dimensions and to pinpoint definite, The table that follows: measures to evaluate sample adequacy and perform a "Bartlett" test for the data.

**Table 4.3:** Factor Analysis

<b>KMO and Bartlett's Test</b>		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.925
Bartlett's Test of Sphericity	Approx. Chi-Square	7642.056
	Sig.	0.000

#### 4.5 Descriptive Finding

**Table 4.4:** Results for Customer Loyalty

<b>NO</b>	<b>Code</b>	<b>Statements</b>	<b>Minimum</b>	<b>Maximum</b>	<b>Mean</b>	<b>Standard deviation</b>
<b>1</b>	<b>LOC1</b>	Are you satisfied with the online banking service provided by your bank	1.00	5.00	4.1403	0.60040
<b>2</b>	<b>LOC2</b>	The online services meet your requirement	1.00	5.00	4.1636	0.69352
<b>3</b>	<b>LOC3</b>	I will continue to use my online banking	1.00	5.00	4.3455	0.59742

		services				
<b>4</b>	<b>LOC4</b>	I would recommend my bank to friends and relatives	1.00	5.00	4.0909	0.77362
<b>5</b>	<b>LOC5</b>	I would like to remain as a customer to my online banking services	1.00	5.00	4.2442	0.65560
<b>6</b>	<b>LOC6</b>	I conduct all my banking affairs with my bank	1.00	5.00	4.1013	0.79230
<b>General average</b>					4.1810	0.55252

From Table present customer loyalty in online banking ranging from 4.0909 to 4.3455, with the greatest level “LOC3” (4.3455± 0.59742), and the smallest level “LOC4” (4.0909± 0.77362)

**Table 4.5:** Results for E-Service Quality

<b>NO</b>	<b>Code</b>	<b>Statements</b>	<b>Minimum</b>	<b>Maximum</b>	<b>Mean</b>	<b>Standard deviation</b>
<b>1</b>	<b>ES 1</b>	The bank offers fast and sufficient service online	1.00	5.00	4.1766	0.73949
<b>2</b>	<b>ES 2</b>	The speed of login into the account is fast	1.00	5.00	4.3117	0.68198
<b>3</b>	<b>ES 3</b>	Finding information on the bank website is easy	1.00	5.00	3.9247	0.90257
<b>4</b>	<b>ES 4</b>	Fast delivery of online	1.00	5.00	4.2234	0.67467

		services				
<b>5</b>	<b>ES 5</b>	I can use my online bank anywhere with internet connection	1.00	5.00	4.3455	0.63133
<b>General average</b>					4.1964	0.56300

From Table present the average of E-service quality in online banking ranging from 4.3455 to 3.9247, with the greatest level “ES5” ( $4.3455 \pm 0.63133$ ), and the smallest level “ES3” ( $3.9247 \pm 0.90257$ )

**Table 4.6:** Result for Trust

<b>NO</b>	<b>Code</b>	<b>Statements</b>	<b>Minimum</b>	<b>Maximum</b>	<b>Mean</b>	<b>Standard deviation</b>
<b>1</b>	<b>TR 1</b>	My bank is trustworthy	1.00	5.00	4.2260	.65618
<b>2</b>	<b>TR 2</b>	I have confidence in my bank	1.00	5.00	4.1740	.70219
<b>3</b>	<b>TR 3</b>	The bank is consistent in providing quality service	1.00	5.00	4.1792	.74063
<b>4</b>	<b>TR 4</b>	I am satisfied with the bank response to service failure recovery	1.00	5.00	3.9922	.80198
<b>5</b>	<b>TR 5</b>	I can communicate with the bank support 24 hours a day	1.00	5.00	3.9506	.90724
<b>General average</b>					4.1044	0.63263

From Table present the values of Trust in online banking ranging from 4.2260 to 3.9506, with the greatest level “TR1” ( $4.2260 \pm 0.65618$ ), and the smallest level “TR5” ( $3.9506 \pm 0.90724$ )

**Table 4.7:** Results for Security & Privacy

NO	Code	Statements	Minimum	Maximum	Mean	Standard deviation
1	SP 1	My bank offers high security authentication online	1.00	5.00	4.1636	0.67833
2	SP 2	My privacy is protected using online banking	1.00	5.00	4.1714	0.64284
3	SP 3	The transaction carried out in online banking feels secure to me	1.00	5.00	4.2182	0.59001
4	SP 4	The bank is concerned with the security of my transaction	1.00	5.00	4.2130	0.64254
5	SP 5	Matter of security are important to me	1.00	5.00	4.4935	0.61287
<b>General average</b>					4.2619	0.51052

From Table present the values of Trust in online banking ranging from 4.4935 to 4.1636, with the greatest level “SP5” ( $4.4935 \pm 0.61287$ ), and the smallest level “SP1” ( $4.1636 \pm 0.67833$ )

#### 4.6 Pearson Correlation Analysis

In this study the connection was measured by using the Pearson correlation analysis between independent variables (E-Service quality, Trust, Security & Privacy) and the dependent variable (loyalty ) in the table below the results are illustrated . Correlation analysis was performed to assess the connection strength between independent and dependent variables. The first step in regression analysis is correlation. Correlation calculates and confirms connections based on multi-item concepts.

**Table 4.8:** Correlation Analysis

Variables	E-Service quality	Trust	Security & Privacy	Loyalty
E-Service quality	1			
Trust	0.607**	1		
Security & Privacy	0.568**	0.661**	1	
Loyalty	0.575**	0.551**	0.511**	1
<b>** . Correlation is significant at the 0.01 level (2-tailed).</b>				

E-service quality, Trust, security & privacy (independent variables) indicated positive and significant links with loyalty (dependent variable). According to the findings, the independent variables are all positively correlated at the level of 0.01, Trust and loyalty has the highest correlation between ( $r=0.575$ ,  $p<0.01$ )

With regards to the relationships between the independent variables and the dependent variable, the results showed the following, the Pearson correlation between E-service quality and loyalty is ( $r=0.575$ ,  $P<0.01$ ) therefor a high degree of correlation exists, the lowest value of correlation between security&privacy and loyalty ( $r=0.511$ ,  $p<0.01$ )

With the values of correlation between variables being closer to 1 therefore the variable has a significant connection with each other.

#### 4.7 Test of Hypothesis

The hypotheses were tested using the measurement of, the value of Correlation Coefficients (R), the Coefficient (R<sup>2</sup>), and the Multiple Regression establish a conclusion for the previous chapter's hypotheses and research questions.

The range of correlation between +1 to -1, r values are considered weak in between 0 to 0.2, considered moderate between 0.3 to 0.6 and the highest at 0.7 to 1 (Brace et al., 2000)

Multiple regressions examine the degree to which each group of explanatory variables (independent variables) influences the response variable (dependent variable). depending on the research needs for this study we used linear regressions.

According to the results presented in table (9), there is a distinct statistically significant effect between (E-Service quality, Trust, Security & Privacy) on (loyalty). The results demonstrate that the correlation coefficient (R) is (0.560), the value (Rsquare) is (0.314), and the value (F) is (56.254). As a result of this, we have the ability to prove that the hypothesis is accurate. Thus, the hypotheses imposed by the researcher are accepted.

**Table 4.2:** Results of Coefficient and Regression

Variable	B	t	Sig.	R	R Square	F	Sig
<b>E-Service quality</b>	0.473	7.865	0.000	0.560	0.314	56.254	0.000
<b>Trust</b>	0.355	6.469	0.000				
<b>Security &amp; Privacy</b>	0.323	5.872	0.000				



#### 4.8 Summery of Finding

All the hypothesis mentioned above (H1, H2, H3) had a positive and of statistical significance correlation with the variable of interest, In addition, all of the research hypotheses have been validated, proving the feasibility of the model proposed in the study.

**Table 4.0:** Hypothesis results

	<b>Hypotheses</b>	<b>The Results</b>
H1	E- Service quality has a positive impact on customer loyalty	Supported
H2	Trust has a positive impact on customer loyalty	Supported
H3	Security and privacy have a positive impact on customer loyalty	Supported

## **CHAPTER 5**

### **5. DISCUSSION AND CONCLUSION**

#### **5.1. Discussion**

Online banking has become more popular over the past year with the advancements in technology and the growth of the number of internet users, e-commerce has pushed business into adopting online technologies while conducting their services (Wang & Emurian, 2005), Electronic loyalty that is formed when a customer is conducting a transaction online regarding a purchase of product or services has a high rate of customer retention and cost reduction by maintaining existing customers instead of attracting new ones, which leads to long term profitability for online business (Reichheld et al., 2000). Customer loyalty has a great value on business the purpose of this study was to investigate and explain the impact of customer loyalty factors and their importance on customer loyalty within the concept of online banking , the study help illustrate the value of customer trust on online banking, e-service quality, privacy and security impact on loyalty which is an important part for strategic management, and it will help banking business realize the importance of customer loyalty , online banking has great benefits to consumers by offering convenient , time saving and accessibility to information.

The presented hypotheses developed in previous chapter are tested through Pearson Correlation Analysis and Multiple linear Regression Analysis. Internal Reliability testing is performed to ensure the authenticity of instruments. The findings of all analyses show that all of the independent variables are present. (E-Service quality, Trust and Security & Privacy) are positively related with dependent variable (loyalty), and showed a positive relationship, The findings are also consistent with previous research (Bei & Chiao, 2001).

In the research equity theory was adopted to explain the variables (service quality, security& privacy) among other things as shown in the analysis security and privacy has a positive impact on customer loyalty this result consisted with the concept of equity theory , customer always prioritize the protection of their information in an online transaction. According to (Aytes and Connolly (2004)), the Internet user's behavior is influenced by how the user perceives the benefits of information security and the consequences of not using it. E-Service quality was the highest deterrent of customer loyalty. This concept stated that in order to remain competitive in the banking industry, a bank should provide higher-quality online banking services in compared to other banks (Eriksson & Schuster, 2009).

The concept trust tested against the dependent variables has a high level of significance, indicating that the tests show that trust has an impact on bank customer loyalty online that can be proved statistically, Trust has been identified as an important factor of e-commerce. If trust is essential, then building trust is even more crucial. This study offers some preliminary insights into the role trustworthiness on customers loyalty, although a positive expectation of the quality of online banking services may lead to customer loyalty, interaction between the customer and the bank is also essential for the development of customer relationships. This occurs because e-service quality and trust with online banking services is insufficient; instead, a deeper sense of commitment and trust are required for the customer to develop a sense of loyalty and engage in loyal behavior (Eriksson & Schuster, 2009). This has been proven in this study with the test of hypothesis reveals how customer valued trust in an online banking setting.

Over the past year, online banking has gained popularity due to technological advancements and the increasing number of internet users (Wang & Emurian, 2005). The adoption of online technologies in conducting business, driven by e-commerce, has encouraged businesses to offer online banking services. This shift has highlighted the significance of customer loyalty in the success of online businesses. Maintaining existing customers through electronic loyalty, formed during online transactions, leads to higher customer retention and cost reduction, resulting in long-term profitability (Reichheld et al., 2000).

The impact of customer loyalty factors on customer loyalty within the context of online banking has been investigated in various studies. These studies emphasize the importance of customer trust, e-service quality, privacy, and security in influencing

loyalty, which is crucial for strategic management in the banking sector (Bei & Chiao, 2001). Online banking provides consumers with benefits such as convenience, time-saving, and easy accessibility to information.

The study also emphasizes the importance of trust in online banking. Trust is a critical component of e-commerce, and building trust is essential. The interaction between customers and banks plays a vital role in developing customer relationships. Merely expecting high-quality online banking services is not sufficient for customer loyalty. Instead, a deeper sense of commitment and trust is required for customers to develop loyalty and engage in loyal behavior (Eriksson & Schuster, 2009).

As a result, the findings of this study are consistent with previous research, indicating that a higher level of E-service quality, trust, privacy, and security of online banking has a significant impact on customer loyalty. This research is beneficial in the field of service marketing and understanding customer trust, e-service quality, security and privacy impact on customer loyalty in online banking context, it also provides bank managers a clear understanding of their customers' wants and requirements in changing environments. Among findings the highest impact was service quality So, in order to remain viable, banks must enhance their service quality and reconsider their business strategy.

Surprisingly, banks struggle to determine what constitutes a customer as loyal and recognize its value to the business. Additionally, Banks must recognize that not every loyal customers is benefiting to them in the future and allocate resources accordingly.

## **5.2. Conclusion**

The study aimed to investigate and explain the impact of influential factors on customer loyalty within the concept of online banking. It focused on customer trust, e-service quality, privacy, and security as key variables and their influence on customer loyalty. The findings of the study contribute to the understanding of the importance of these factors in the online banking context and provide valuable insights for strategic management in the banking sector.

The research findings consistently support previous studies, highlighting the significant impact of customer trust on online banking customer loyalty. Trust has been identified as a critical component of e-commerce, and building trust is crucial for

fostering long-term customer relationships. The study emphasizes that a positive expectation of the quality of online banking services alone may not be sufficient for customer loyalty. Instead, deeper commitment and trust are required from customers to develop a sense of loyalty and engage in loyal behavior.

E-service quality emerged as the most significant determinant of customer loyalty in the online banking context. Banks need to provide higher-quality online banking services compared to their competitors to remain competitive in the industry. The study reinforces the notion that customers value the convenience, time-saving benefits, and accessibility to information provided by online banking. Enhancing service quality and reevaluating business strategies are essential for banks to maintain viability in the evolving online banking landscape.

Furthermore, the study highlights the importance of privacy and security in influencing customer loyalty. Customers prioritize the protection of their information in online transactions, and their perception of the benefits of information security significantly impacts their behavior. Banks must prioritize privacy and security measures to build customer loyalty. Recognizing the significance of these factors in the online banking context, the study underscores the need for banks to invest in robust security infrastructure and effective privacy policies.

The findings of the study also shed light on the challenges faced by banks in defining and understanding loyal customers and their value to the organization. It is important for banks to allocate resources effectively, recognizing that not all loyal customers may be beneficial over time. A deeper understanding of customer loyalty and its dynamics is crucial for banks to develop targeted strategies for customer retention and satisfaction.

In conclusion, this study contributes to the field of service marketing by providing valuable insights into the impact of customer loyalty factors on customer loyalty in the online banking context. The findings highlight the significance of customer trust, e-service quality, privacy, and security in influencing customer loyalty. The study emphasizes that banks must prioritize these factors to build and maintain strong customer relationships. Enhancing service quality, establishing trust, and ensuring robust privacy and security measures are vital for banks to thrive in the competitive online banking industry. The research provides bank managers with a clear understanding of their customers' needs and requirements in the ever-evolving digital landscape and offers strategic guidance for effective customer relationship.

### **5.3. Limitation**

The strength of a conducted research is only as great as its ability to acknowledge its own limitations. The previous section mentioned the contributions of this thesis to marketing literature. The results of this thesis, similar to those of other studies, have flaws that must be acknowledged when interpreting the findings. The main criticism leveled at this study is that it is impossible to distinguish between a bank and an Internet bank when both are present.

The research was conducted with a sample size of 385 customers. Only those customers were targeted who conduct their banking through online channels. There are plenty of other factors that affect loyalty but for this study only few has been chosen another limitation was generalization in future, the research should focus on a specific type of banks. There are imperfections, circumstances, and influences in this study that are uncontrollable. These limitations and shortcomings limit the research methodology, conclusion, and findings. A sample size of only 385 may make it challenging to establish a genuine relationship between the data.

### **5.4 Future Research**

Given the limitations identified above, additional empirical research must be conducted to broaden the scope of the study. in order to compensate for the study's shortcomings, The previously carried out research framework could be expanded and broadened. The study mainly surveyed 385 online banking customers However, future research can be conducted with a large number of customers,while the results of this study are satisfactory and have received a very positive response, It is limited to the respondents' imaginations, and there is no practical basis for proving that their opinions are correct..

The links between e-service quality, trust, security, privacy, and customer loyalty need to be explored, along with the mediating and moderating impacts of factors including customer loyalty, perceived value, and switching costs. This may help provide light on the ways in which these elements affect customer loyalty. Examine the impact of cultural norms on the evaluation of e-services in terms of quality, trust, security, privacy, and customer loyalty. Examine the cultural variances in these associations by comparing and contrasting examples from other cultures.

Research the implications of e-service quality, trust, security, and privacy on customer loyalty over the long term. Keep tabs on customer activity and loyalty for a while to get a feel for how these connections evolve over time.

Find out how various groups of customers are affected by the service quality, trust, security, and privacy of online services. Consider the demographic characteristics' effects on the associations between loyalty and things like age, gender, and digital literacy. Examine how new innovations like AI, block chain, and biometrics are changing the landscape of e-services in terms of quality, trust, security, privacy, and customer loyalty. Examine how customers' perspectives and online habits have changed as a result of technological developments.

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## **CURRICULUM VITAE**

## APPENDIX

### SURVEY QUESTIONNAIRE

Dear respondent,

I am conducting a survey in fulfillment of completing my Master of Business Administration from Isik University, as part of my research thesis (The Impact of customer Trust, e service quality and security privacy on Customer loyalty in online banking), the survey is to seek public opinion and views regarding online banking in Turkey, I appreciate your participation and feedback, your identity will remain private this research is used for only academic purposes.

The survey consists of few sections which are all required, kindly fill in as genuine as possible to the best of your ability, thank you for taking the time.

Age:

Gender:

Education:

Occupation:

Monthly income:

How often you use banking services:

1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree

	Question	1	2	3	4	5
	<b>LOYALTY</b>					
1	Are you satisfied with the online banking service provided by your bank					
2	The online services meet your requirement					

3	I will continue to use my online banking services					
4	I would recommend my bank to friends and relatives					
5	I would like to remain as a customer to my online banking services					
6	I conduct all my banking affairs with my bank					
	<b>E-SERVICE QUALITY</b>					
1	The bank offers fast and sufficient service online					
2	The speed of login into the account is fast					
3	Finding information on the bank website is easy					
4	Fast delivery of online services					
5	I can use my online bank anywhere with internet connection					
	<b>TRUST</b>					
1	My bank is trust worthy					
2	I have confidence in my bank					
3	The bank is consistent in providing quality service					
4	I am satisfied with the bank response to service failure recovery					
5	I can communicate with the bank support 24 hours a day					
	<b>SECURITY AND PRIVACY</b>					
1	My bank offers high security authentication online					

2	My privacy is protected using online banking					
3	The transaction carried out in online banking feels secure to me					
4	The bank is concerned with the security of my transaction					
5	Matter of security are important to me					