CUSTOMER SATISFACTION AND DIGITAL BANKING SERVICES IN NEPALESE COMMERCIAL BANKS

A Dissertation submitted to the Office of the Dean, Faculty of Management in partial fulfillment of the requirements for the Master's Degree

by:

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CERTIFICATION OF AUTHORSHIP

I hereby corroborate that I have researched and submitted the final draft of dissertation entitled "Customer Satisfaction and Digital Banking Services in Nepalese Commercial Banks". The work of this dissertation has not been submitted previously for the purpose of conferral of any degrees nor it has been proposed and presented as part of requirements for any other academic purposes.

The assistance and cooperation that I have received during this research work has been acknowledged. In addition, I declare that all information sources and literature used are cited in the reference section of the dissertation.

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REPORT OF RESEARCH COMMITTEE

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We, the undersigned, have examined the thesis entitled "Customer Satisfaction and Digital Banking Services in Nepalese Commercial Banks" presented by Mina Khanal, a candidate for the degree of Master of Business Studies (MBS Semester) and conducted the Viva voce examination of the candidate. We hereby certify that the thesis is worthy of acceptance.

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This study entitled "Customer Satisfaction and Digital Banking Services in

Nepalese Commercial Banks" has been prepared in partial fulfillment for the Degree

of Master of Business Studies (MBS) under the Faculty of Management, Tribhuvan

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Date:

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ABBREVIATIONS

% : Percentage

& : And

AS : Assurance

ATM : Automated Teller Machine

CS : Customer Satisfaction

e.g. : Example EM : Empathy i.e. : That is

IBM : International Business Machine Corporation

MS. DO : Microsoft Disk Operating System

No. : Number

Res : Respondents
RL : Reliability

RS : Responsiveness

SEM : Structural Equation Modeling

SPSS : Statistical Package for Social Sciences

T.U. : Tribhuvan University

TN : Tangibility

WHO : World Health Organization

www : World Wide Web

ABSTRACT

This study examines the customer satisfaction and digital banking services in Nepalese commercial banks. The study has followed descriptive and casual research design. This study used descriptive statistic, correlation analysis and regression analysis to analyze the data. This study found that majority of the respondents agreed that empathy, assurance and reliability of e-banking services quality factor highly affects the banking customers satisfaction and they believe that their satisfaction was also high. The correlation analysis reveals that reliability of e-banking services has positive and significant relationship with customer satisfaction and also correlation between responsiveness and customer satisfaction is significant positive. At the same time, there is significant positive association between assurance of e-banking services and the customer satisfaction. Likewise, tangibles and empathy have positive and significant relationship with customer satisfaction. The regression result concluded that reliability of e-banking services, responsiveness of e-banking services, assurance of e-banking services, tangibles of e-banking services and empathy of e-banking services have significant positive impact on customers satisfaction in Nepalese commercial banks. Therefore, this study concluded that the impact of e-banking service quality on customer satisfaction is significant.

Keywords: Customer satisfaction, reliability, responsiveness, assurance and tangibility

CHAPTER - I

INTRODUCTION

1.1 Background of the Study

Banks play a significant and active part in a country's financial and economic growth. An efficient banking system has a significant impact on a country's growth in numerous areas of the economy. Banking professionals encounter a plethora of complicated issues in the global marketplace. To compete more successfully with global enterprises, banks must better comprehend changing client expectations and use cutting-edge information technology systems (Malhotra & Mukherjee, 2004). In recent years, it has been critical for banks to have a strong and loyal client base in order to withstand harder economics and more severe competition. To survive the current fierce rivalry in the banking market, most banks are attempting to develop convenient banking operations for their consumers. ATMs, money transfers, mobile banking, and other similar activities fall within this category. Despite the fact that numerous banks provide similar services, the focus currently is on the quality of service delivered. Excellent service quality linked with consumer items is a potent generator for catering to and engaging with clients. Given that many banks offer homogeneous goods in a competitive environment, banks are focusing more on Service quality to obtain a competitive advantage. Banks that excel at service quality might acquire a competitive advantage in terms of increased revenue, client loyalty, and retention (Kumar et al., 2010).

Customer happiness is considered as a crucial differentiator in a competitive marketplace where firms fight for consumers and has increasingly become a fundamental aspect of corporate strategy (Gitman & Carl, 2005). To comprehend the economic difficulties and options confronting banks, it is helpful to think of them as companies and apply general microeconomic concepts that influence the surroundings of all enterprises. Banks, on the other hand, are specialized enterprises not just in terms of the services they provide, but also in terms of how and by who those services are supplied (John, 2003). Customers nowadays encounter several issues with the services and overall customer satisfaction supplied by banks. According to research, many foreign internet users exhibit comparable habits and preferences across countries (Masukujjaman & Akter, 2010). Other scholars have investigated the

internet in the context of traditional civilizations while being constrained by national borders. Some have researched e-banking client preferences. Some have studied the growth of e-banking and the success criteria in various e-delivery channels in the banking situation (Sohail & Shanmugham, 2003).

Customers are critical to the growth and existence of any organization, and this is true for the banking industry as well. Since a result, there is a need not only to delight clients, but also to keep them, since this may lead to improved profitability and increased efficiency of banks. In this day and age, technology affects everyone's lives, and online banking is one of the technologies that is rapidly expanding in banking practice. Furthermore, people are increasingly transitioning from conventional banking to online banking due to a variety of advantages such as cost and time efficiency. In this day and age, technology has an impact on everyone's life, both qualitatively and quantitatively. The rapid advancement of information technology has permeated the lives of millions of individuals and caused significant changes in the global economic and corporate environment (Belbase & Paudel, 2023).

Banking technological advancements have accelerated client communication and transactions. It is described as a bank providing information or services to its clients via the internet. It is seen as an additional channel that is used along with existing channels to provide convenient banking from home or at work whenever needed, without having to pay for the expenses associated with visiting a branch, such traveling there or standing in line. Online banking removes physical and geographic limits as well as temporal constraints from financial services (Simon & Thomas, 2016).

Customers today are looking for a variety of benefits from a bank, such as higher service quality, lower transaction fees, complaint handling, a sign of prestige, and access to new products through various channels, and this scheme forces banks to look for new ways to satisfy customers before any other bank or financial service provider does (Winer, 2001). As a result, in order to be more profitable in the market and improve an organization's performance, particularly a service provider company, it focuses on many variables that effect customer happiness. Effective management of

such components enables organizations to fulfill their goals by delighting their consumers, resulting in customer loyalty and retention (Claude, 2022).

Maintaining a high level of service quality is critical to increasing customer satisfaction and winning the competition (Duncan & Elliot, 2002). This suggests that a service provider's success is dependent on providing constant quality service and sustaining relationships with clients (Panda, 2003; Belbase, & Paudel, 2023).

This is intended to influence client happiness and loyalty for a service provider. Service quality influences organizational outcomes such as performance superiority (Poretla & Thanassoulis, 2005), increasing sales profit (Levesque & Mc. Dougal, 1996; Duncan & Elliot, 2002), and market share (Fisher, 2001), improving customer relations, enhancing corporate image, and promoting customer loyalty (Newman, 2001; Ehigie, 2006). Furthermore, repurchase intentions were found to be connected to service quality and customer satisfaction (Levesque & Mc. Dougall, 1996; Newman, 2001; Claude, 2022).

Customer satisfaction is essential for success and survival in today's competitive banking environment. Most academics propose that a high level of service quality be supplied by the service provider to attain a high level of customer happiness, as service quality is typically regarded an antecedent of customer satisfaction (Anderson 1994; Cronin & Taylor, 1992; Joshi, 2021). In this respect, the purpose of this study is to look at the impact of service quality aspects (tangibility, responsiveness, dependability, and assurance) on customer satisfaction in Nepalese commercial banks.

1.2 Problem Statement

It is critical that service organizations assess and monitor service quality and satisfaction in order to influence their customers' behavioral intentions (Saha & Theingi, 2009). In today's competitive market, consumers are becoming more aware of their options for services and service providers. As a result, expectations grow, and consumers become more critical of service quality.

In today's extremely competitive and international economy, customer contentment is a highly sought after phenomena. Customers today demand more than just low prices; they want helpful, trustworthy, and dependable technology. Many banks have embraced the use of information and communication technology in their service delivery at a rapid pace. Huge sums of money have been invested in the implementation of self-service and virtual banking services with the goal of enhancing customer service quality. However, the quality, availability, and expense of accessing telecommunication infrastructures, a lack of competent staff, poor internet penetration, a lack of bank accounts, and a lack of timely delivery of physical items have all hampered e-commerce adoption (Jalal et al., 2011).

Banks now operate in a rapidly changing environment, fueled by increased competition, rapid developments in financial instruments, goods, and services, shifting customer needs, and explosive expansion in information technology. Banks that perform well across all trend lines will survive the financial technology revolution that has produced an era of informational standardization of banking services (Gazi et al., 2021).

Technology offers clients with a streamlined path to acquiring banking products that were previously unavailable due to the large capital investments necessary to solve internal obstacles. The main issue is that banks must give clients not just what they want, but also when and how they want it. However, in such conditions, particularly in Nepal, the perceived quality of services supplied by banks falls short of client expectations (Joshi, 2021). This is true for all metrics of service quality in general, as illustrated by the problem of a lack of well-trained and professionally competent banking staff.

Offensive and bad attitude and behavior on the part of bank employees in their interactions with present and potential clients, insufficient facilities and equipment to perform contemporary banking services, Excessively extensive processes for responding to consumer demands Both public and private banks have been judged to be deficient in terms of infrastructure and branch placement (Tigineh et al., 2012). Updating knowledge about customer satisfaction levels in terms of service quality across banks in general, and Abyssinia bank in particular, is thus critical for understanding the elements that impact customer contentment (Janahi & Mubarak (2017).

Tien et al. (2021) discovered that the elements of dependability, system, guarantee, interest rate and cost, tangible factors (facilities and forms), and tangible factors (facilities and forms) had a favorable impact on customer satisfaction at Vietcombank in Ho Chi Minh City. Toor et al. (2016) discovered a significant association between service quality characteristics and customer satisfaction in Pakistani E-banking, with higher weightage given to dependability, responsiveness, and assurance among the five factors. We may infer from this study that service quality in E-banking leads to pleased clients.

Joshi (2021) showed a statistically significant positive influence on customer satisfaction. It indicates that better service quality contributes to greater customer satisfaction. Claude (2022) found that there was a strong link between technology, electronic mobile devices, electronic banking transactions, and financial regulations and their effects on consumer satisfaction. Belbase and Paudel (2023) found a favorable association between four factors reliability, responsiveness, assurance, tangibles and consumer satisfaction. In this competitive environment, Nepalese banks strive to build and maintain relationships with their clients by using customer relationship management. The goal of this study is to look at the influence of customer relationship management on customer satisfaction in Nepal's banking business. The tries to answer the following questions:

- What are the digital banking service quality major factors in term of reliability, responsiveness, assurance, tangibility and empathy in Nepalese commercial banks?
- Is there any relationship between reliability, responsiveness, assurance, tangibility and empathy and customer satisfaction in Nepalese commercial banks?
- Do the impact of reliability, responsiveness, assurance, tangibility and empathy have an impact on customer satisfaction in Nepalese commercial banks?

1.3 Objectives of the Study

The main objective of the study is to analyze factors influencing on customer in commercial banks of Nepal. The other specific objectives are;

- To explore the state of digital banking service quality in term of reliability, responsiveness, assurance, tangibility and empathy in Nepalese commercial banks.
- To assess the relationship between reliability, responsiveness, assurance, tangibility and empathy and customer satisfaction in Nepalese commercial banks.
- To analyze the impact of reliability, responsiveness, assurance, tangibility and empathy on customer satisfaction in Nepalese commercial banks.

1.4 Research Hypothesis

Based on the objectives of the study and the previous empirical evidences the following hypothesis are developed.

- 1. H₁: There is significant impact of reliability on customer satisfaction in commercial banks of Nepal.
- 2. H₂: There is significant impact of responsiveness on customer satisfaction in commercial banks of Nepal.
- 3. H₃: There is significant impact of assurance on customer satisfaction in commercial banks of Nepal.
- 4. H₄: There is significant impact of tangibility on customer satisfaction in commercial banks of Nepal.
- 5. H₅: There is significant impact of empathy on customer satisfaction in commercial banks of Nepal.

1.5 Rationale of the Study

Since Nepalese commercial banks currently provide excellent domestic, international, and special banking services to their esteemed and valuable customers, this type of research can be carried out to serve various purposes of the bank by containing the most useful information to service quality improvement decisions.

It also assists the bank in taking remedial activities based on the given recommendations, and the study serves as a springboard for other researchers to do indepth research on the relevant variables of customer satisfaction in Nepalese commercial banks.

The distribution of knowledge by delighted customers accelerates the growth of business and commerce. As a result, it is critical to please customers. When customers are unsatisfied, marketers and bankers must ask them why they are dissatisfied and strive to remedy the situation as thoroughly as possible.

Customers who come to the bank to complain must be encouraged. They must attentively consider each and every client complaint and even take action to make them happy. In this context, it is also critical for both customers and bankers.

1.6 Limitations of the Study

The major limitations of the study are as follows;

- The study focuses on the customer satisfaction with digital banking service in commercial banks in Nepal and thus does not embrace the other marketing aspects.
- This study is limited inside Kathmandu Metropolitan City and requires areas where targeted responses would be available, so it might not represent the overall consumer's view of Nepal.
- The data analysis section has relied on primary data to greater extent, and the accuracy of the data depends upon the reliability of the opinions of the respondents.
- The sample size is not more than 200. So, the generalization will be very difficult.
- The sampling method used in this study is non-probabilistic sampling technique. Thus, it may have some errors resulting from the sampling method.

CHAPTER - II

LITERATURE REVIEW

This chapter attempts to assess the relevant body of knowledge in order to grasp the concept of customer satisfaction with the quality of online banking service from an academic viewpoint. First and foremost, the literature that relates the research questions and objectives. There is a review of several books on the subject under discussion. This chapter includes a theoretical review, an empirical review, and a research gap.

2.1 Theoretical Review

2.1.2 Theories of Customer Satisfaction

This section's review of general ideas of customer satisfaction helps provide a clearer picture of how consumers are happy in banks, despite differences in particular procedures among banks. Some customer satisfaction ideas are as follows:

2.1.1.1 The Dissonance Theory

A person who receives a low-value product instead of a high-value one would notice the discrepancy and experience cognitive dissonance, according to Cardozo (1965). In other words, psychological discomfort or cognitive dissonance result from unfulfilled expectations (Yi, 1990). According to this hypothesis, the presence of dissonance creates demands to reduce it, which might be accomplished by altering the apparent discrepancy. According to this idea, post-exposure evaluations are mostly a function of anticipation level since detecting disconfirmation is thought to be psychologically painful. As a result, customers are said to perceptually distort expectation-discrepant performance in order to match their past expectation level (Oliver, 1977).

Customers may feel psychologically stressed out and try to de-stress by changing their perception of the goods, for instance, if there is a discrepancy between their expectations and the performance of the product (Yi, 1990). Customers may rate a product highly if it comes at a considerable cost to them personally. Consider the following scenario: a customer walks into a restaurant they expect to be amazing and is greeted with an unattractive meal. In an attempt to mitigate dissonance, the patron who had made the long journey and paid a substantial amount for the dinner may

argue that the cuisine was not as bad as it appeared or that she like overly prepared dishes, etc.

Though it can help explain how expectations are not constant and might change during a consuming experience, the Dissonance Theory does not offer a complete account of consumer enjoyment. For instance, throughout the holiday, the importance given to pre-holiday expectations may change, and holiday activities may lead to the establishment of new expectations. This indicates that depending on how well the previous contact performed, customers' expectations regarding the room may shift as they go from one experience to the next, such as from the hotel's reception to the room or the restaurant (Danaher & Arweiler, 1996).

2.1.1.2 The Contrast Theory

The contrary view of the dissonance theory is implied by the contrast theory. This hypothesis states that consumers tend to exaggerate discrepancies between expectations and results when the actual product's performance does not meet consumer expectations (Yi, 1990). A customer who receives a lower-value product than anticipated will, in accordance with the Contrast theory, exaggerate the variance between the expected and actual products (Cardozzo, 1965). This theory states that a product's performance that doesn't live up to expectations will be given a lower evaluation than it deserves (Oliver & DeSarbo, 1988). Stated differently, the Contrast Theory postulates that when expectations are not met, the subject will either react favorably or unfavorably to the disconfirmation experience, where a positive disconfirmation will lead to a high product appraisal and a negative disconfirmation to a low evaluation (Oliver, 1977). Regarding the previously described restaurant, the patron may assert that it was among the worst experiences of their life, that the food was unfit for human eating, and so forth.

2.1.1.3 The Comparison Level Theory

Several scholars have attacked the Expectancy-Disconfirmation paradigm, arguing that it assumes that the fundamental predictor of consumer happiness is the expectations produced by producers, business reports, or other sources (Yi, 1990). La Tour and Peat (1979) stated that the EDP bypasses the other sources of expectations, such as the consumer's prior experience and the experience of other consumers with

comparable structures. Thibaut and Kelley (1959) offered a refinement to the Comparison Level Theory. Unlike the Expectancy-Disconfirmation paradigm, which uses predictive or situationally-produced expectations as the comparison standard, the Comparison Level Theory contends that there are multiple basic determinants of a product's comparison level: (1) consumers' previous interactions with similar products, (2) contextually generated desires (those created through marketing and promotional efforts), and (3) the experience of other consumers who serve as referent persons.

LaTour and Peat (1979) discovered that experience-based standards or norms serve as a foundation for comparisons in consumer satisfaction evaluations by applying the Comparison Level Theory to the confirmation/ disconfirmation process. They discovered that situationally generated expectations had minimal influence on consumer satisfaction, but expectations based on earlier experiences were the most influential predictor of customer pleasure. This research implies that when customers have personal experience and relevant knowledge about other consumer experiences, they may assign less weight to manufacturer-provided information (Yi, 1990).

2.1.1.4 The Value Percept Theory

According to Westbrook and Reilly (1983) the Expectancy-Disconfirmation paradigm the best model for explaining consumer satisfaction was not since satisfaction/dissatisfaction is more likely to be driven by comparison criteria rather than expectations. As an alternative to the Expectation Disconfirmation paradigm, they offered a Value-Percept Disparity hypothesis, initially developed by La Tour and Peat (1979). Westbrook and Reilly suggest that what is expected from a product may or may not correlate to what is wanted or valued in a product, criticizing the predictive expectations utilized as a comparison standard in the classic Disconfirmation paradigm. In contrast, what is valued may or may not match to what is expected. Thus, values, rather than expectations, have been advocated as a superior comparable measure for explaining consumer satisfaction/dissatisfaction. According to Westbrook and Reilly (1983) satisfaction is an emotional reaction generated by a cognitive evaluative procedure in which perceptions of offers are compared with one's values, requirements, wants, or desires. A rising gap among one's desires and one's values (value-perception) implies the increasing level of unhappiness, similar to the Expectancy/ Disagreement paradigm.

2.1.2 Methods to Assess Customer Satisfaction

According to the findings, client affective states had a direct influence on CS/D metrics. There is a link between the purchase and emotive responses, which determine the customer's contentment or dissatisfaction. Thus, in addition to the cognitive knowledge that expectations were not met, the emotions surrounding the post-acquisition process appear to impact product satisfaction (Gazi et al., 2021). A handful of the strategies listed below can be used to assess client satisfaction.

Complaint and Suggestion System

To assess consumer happiness, the company may use the complaint and suggestion system. Forms are accessible at restaurants and motels for guests to sign out their preferences, dislikes, and ideas. Many firms set up toll-free customer service hotlines where customers may make recommendations, complaints, or queries. Customer satisfaction is important to companies such as P&G, General Electric, and Whirlpool. They set established hotlines with numbers that do not require the use of any gear. Businesses also utilize email and websites for immediate, two-way contact. They help firms develop unique concepts for enhanced goods and services (Mowen, 1990).

Customer Satisfaction Surveys

Companies may gain direct evaluations of consumer satisfaction by conducting surveys on a regular basis. Companies can call clients or send them surveys to understand what they think about the company's goods, services, and performance. According to research, even if one out of every four transactions is not satisfying to the buyer, less than 5% of them will register a complaint. Most customers will lower their purchasing or switch suppliers. Period surveys are used by respondent firms to get firsthand data on client happiness. When obtaining data on customer satisfaction, it is beneficial to inquire more about repurchase intention and the possibility or desire to refer the firm and brand to others (Tien et al., 2021).

Ghost Shopping

It may also be used to assess customer satisfaction. Under this scenario, the company may hire a few people to pose as prospective consumers in order to get feedback on the benefits and drawbacks of purchasing both its own and its competitors' goods. This type of shopper can even evaluate how the company's sales personnel behave to certain situations. Managers should sometimes leave their workstations, enter unexpected sales settings for their firms and rivals, and see how they are treated. Managers might take a different approach and phone their own company with questions and complaints to see how the calls are handled (Lamichhane, 2018).

Lost Customer Analysis

Reaching out to customers who have switched to a competitor or stopped purchasing is another effective way to gauge consumer satisfaction. Businesses may recoup a considerable portion of lost revenue by reaching out to customers, listening to their concerns, and really seeking to resolve the problem (Siddiqi et al., 2018).

2.1.3 Relation between Customer Satisfaction and Service Quality

In today's banking business, both private and state banks are involved in market rivalry regarding the quality of their services in all aspects of their competitive strategies. This is because customers are becoming more aware of the need to select the bank that provides higher-quality services relative to the level of satisfaction they expect, and as a result, various banks have developed winning strategies that provide the best service quality in order to outperform their competitors in the competitive market. Numerous research have been conducted to investigate the relationship between customer expectations, perceived service quality, and customer pleasure (Zeithaml et al., 1996). Customer satisfaction and service quality have a significant association (Parasuraman et al., 1985; 1988). Increased bank service quality can satisfy and promote attitudinal loyalty, resulting in the retention of valued clients (Nadiri et al., 2009).

Increased customer satisfaction stems from a better degree of perceived service quality. Customers would be disappointed if perceived service quality is lower than intended service quality (Jain & Gupta, 2004). According to Cronin and Taylor (1992), contentment is subordinate to quality since quality is one of the service factors

considered when determining customer satisfaction. According to Parasuramanet et al., (1985) and Zeithaml et al., (1996) providing quality services to consumers is a critical strategy for the success and survival of any commercial organization. Customer satisfaction and attitudinal loyalty are determined by the quality of services provided (Ravichandran et al., 2010).

According to studies, service quality is increasingly recognized as a critical component of any company's success (Parasuraman et al., 1988), and the banking industry is no exception. Client satisfaction in retail banking was highly impacted by the service provider's performance on the relational and core components of services, according to Parasuraman et al. (1988).

Service quality has become a popular metric for assessing the performance of financial services (Cowling & Newman, 1995). Customers are loyal if banks provide more quality services than competitors (Dawes & Swailes, 1999). Banks can only increase profits if they put themselves in better position than competitors within a specific market (Davies et al., 1995). Customer happiness and quality of service have a positive linear connection. As a result, banks must prioritize quality of service and customer happiness as a key strategy in the competitive market (Chaoprasert & Elsey, 2004).

2.1.4 Service Quality Dimensions (Service Quality Model)

According to Johnston (1995) identifying the drivers of service quality is required in order to specify, measure, regulate, and enhance customer perceived level of service. SERVQUAL (Parasuram et al., 1988) and SERVPERF (Cronin and Taylor 1992) are the most often used measures in measuring perceived service quality. Both are the product of research from the US School of Quality; consequently, among the models for evaluating service quality, the SERVQUAL (service quality) model created by (Parasuraman et al., 1985) is the most recognized and implemented model in a variety of sectors.

Parasuraman et al. (1988) established the SERVQUAL model to assess service quality, which presented a five-dimensional construct encompassing perceived service quality tangibles, dependability, responsiveness, assurance, and empathy

(Parasuramanetel al., 1988; Zeithaml et al., 1990). As a result, the SERVQUAL model is used in this study to assess customer satisfaction with electronic banking services provided by a select group of banks.

Reliability

It comprises two concepts: reliability and consistency in performance. Reliability also entails keeping promises in areas such as invoicing accuracy, good record maintenance, and delivering services within an acceptable time frame. It also refers to the proper technical operation of a self-services technology and the precision with which services are delivered. Many writers have discovered that dependability plays an important role in determining service quality (Davis et al., 1989; Parasuraman et al., 1988). And dependability is one of the most important aspects for clients when evaluating service quality. Customers, according to Zeithaml et al. (1996), should be especially impacted by the dependability of new technology since it may be connected with hazards such as the equipment failing.

Service dependability, according to Paul et al. (2016), is a critical component of service quality. It has also been shown that dependability is the most essential aspect in assessing the quality of a service. Performance, or dependability, is a critical attribute that is impacted by computer and associated technological research (Davis et al., 1989). Finally, Dabholkar (1996) discovered that accuracy and dependability are appropriate indicators for evaluating technology-related services.

Responsiveness

The extent of participation and care for consumers in need of assistance is determined by responsiveness. Understanding the needs and desires of clients is also part of being responsive. It also includes flexible operation hours, personalized attention from personnel to clients, responsiveness to customer concerns, and consumer safety in their transactions (Kumar et al., 2009; Othman & Owen, 2001).

Assurance

Parasuraman et al. (1985) defined assurance as staff members' expertise, courtesy, and ability to establish confidence and trust. According to Leelavathi and Saravanan

(2020), confidence in British banks includes the following elements: polite and friendly people; financial coaching; interior comfort; ease of access to account records; and a management team with experience and competence. This includes assurances that account security and financial activity records will not be exposed. 2004 (Yang and Fang). Another important factor in consumers' decision to utilize internet banking is security. Individuals are often concerned about security, which is why they are hesitant to utilize online banking (Madu & Madu, 2002).

Empathy

As defined by Parasuraman et al. (1985) empathy is the caring and individualized service that a company provides to its customers. It requires giving each consumer personalized attention, having staff members who understand their requirements, and keeping convenient business hours. Khamis and Rashid (2018) characterized empathy in their research of private sector banks as recognizing the specific requirements of the client, delivering individualized attention, keeping the customer's best interests at heart, and offering flexible operating hours.

Tangibility

Parasuraman et al. (1985) defined tangibility as the physical appearance of written materials, staff, equipment, and facilities. Janahi and Mubarak (2017) defined tangibility in their study of private sector banks as having modern-looking equipment, a physical facility, well-groomed individuals, and visually appealing items.

2.1.5 Customer Satisfaction in Banking Sector

Customer happiness, according to Tsoukatos and Rand (2006) was critical to long-term corporate success. To maintain or increase market share, firms must outperform rivals by providing high-quality products or services that satisfy customers. According to Magesh (2010) satisfaction was a feeling of joy because one possesses something or has accomplished something. It was the act of meeting a need, want, demand, or anticipation. Customers contrast their expectations of a certain product or service with its actual advantages. According to Kotler and Armstrong (2010) satisfaction is defined as a person's sentiments of joy or disappointment as a result of comparing a product's perceived performance to expectations. Customers' sentiments and beliefs can have an impact on their degree of satisfaction.

According to Claude (2022) the capacity of a product or service to meet a customer's needs or expectations was assessed or evaluated by their degree of satisfaction or discontent. According to Razak et al. (2007) a customer's total pleasure was influenced by how well they score a set of experiences associated with a certain service provider. It has been observed that a company's emphasis on matching customer expectations increases satisfaction. When customers are satisfied with a company's services, they become loyal customers, and the company keeps them. It was beneficial to the company since it may lead to more income, a larger market share, and a larger clientele (Belbase & Paudel, 2023). Customer satisfaction has become increasingly significant as a factor in determining a bank's competitiveness as a result of rising competition (Berry et al., 2002).

Continuous and systematic assessment of satisfaction level is required (Chakravarty et al., 1996). Because a delighted client is a true asset for any firm, ensuring long-term prosperity even in times of intense competition. Cronin et al. (2000) said in their study that pleased consumers repeat their purchase of the items and also create new customers by spreading the word about it to others. Dissatisfied customers, on the other hand, may migrate to other products/services and spread a bad word to others. Customer satisfaction is defined as a collection of feelings or outcomes associated with a customer's experience with a product or service (Solomon, 1998). As a result, firms must assure client pleasure with their goods/services.

2.2 Empirical Review

Kumbhar (2011) explored customer satisfaction elements in e-banking: some data from Indian banks. This study examined the primary elements influencing customer satisfaction in e-banking service settings (service quality, brand perception, and perceived value). This study also looked at how service quality affects brand perception, perceived value, and satisfaction in e-banking. Customers' surveys were used to acquire the necessary data. Following a review of the literature and talks with bank management as well as specialists in customer service and marketing, a likert scale-based questionnaire was designed for conducting customer surveys. SPSS 19.0 was used to analyze the collected data using principle component analysis (PCA). Perceived value, brand perception, cost effectiveness, ease of use, convenience, problem handling, security/assurance, and responsiveness are critical elements in

customer satisfaction in e-banking, according to the results, which explain 48.30% of the variation. Contact Facilities, System Availability, Fulfillment, Efficiency, and Compensation are considerably less important, explaining 21.70 percent of the variance in customer satisfaction. Fulfillment, Efficiency, Security/Assurance, Convenience, Cost Effectiveness, Problem Handling, Responsiveness, Compensation are predictors of perceived value in e-banking, while Security/Assurance, Responsiveness, Easy to Use, Cost Effectiveness, Problem Handling, and Compensation are predictors of brand perception in e-banking.

Mistry (2013) studied evaluating customer happiness in the banking sector, with a focus on Surat City banks. The goal of this study was to determine the elements influencing customer happiness in banks and examine their influence on customer satisfaction levels. The questionnaire was administered to 120 people, and their replies were statistically evaluated in SPSS, and the mean of their scores was obtained. According to the findings of this survey, customers place the greatest value on the dependability component. Within that reliability dimension, they place more emphasis on how banks keep their promises and demonstrate a desire in doing work. According to the findings of the analysis, the responsiveness of bank workers is ranked second. It covers factors like as promptness in providing service, readiness to assist consumers, and so on. Customers place third priority on the assurance element, which includes factors such as transaction security, consistency in service, and so on.

Sabir et al. (2014) investigated factors influencing customer satisfaction in Pakistan's banking industry. The study's goal was to investigate the elements influencing customer satisfaction in Pakistan's banking sector and to discover the link between Service Quality, Customer Satisfaction, and Customer Loyalty. The study's research design is quantitative, and the survey research method was employed. Data was gathered in four cities: Sahiwal, Arifwala, Okara, and Pakpatan. Data was acquired from 72 respondents using a pre-tested structured questionnaire. According to the findings of this study, there is a substantial association between service quality features and customer happiness. It was also shown that there is a positive association between customer satisfaction and customer loyalty. This study shows that service excellence leads to pleased customers, and customer pleasure leads to customer

loyalty. Banks may get a competitive advantage in today's competitive market by delivering greater services to their consumers.

Simon and Thomas (2016) investigated the effect of electronic banking on customer satisfaction in a sample of Kenyan commercial banks. The study's overarching goal was to examine the impact of electronic banking on customer satisfaction among Nairobi's first-tier banks. A sample size of 225 respondents was chosen using the stratified sampling procedure. Structured questionnaires were used to obtain primary data from individuals. The researcher used descriptive statistical methods to conduct preliminary data analysis. In order to ascertain the relationship between the research variables, a regression analysis was also carried out. The study concluded, based on the data, that customer satisfaction is significantly impacted by the flexibility of online banking. Moreover, a large number of customers use online banking due to its ease of use, and customized internet banking greatly increases customer satisfaction. The poll also showed that customer satisfaction was only little impacted by the ease of use and friendliness of online banking. The poll also revealed that customer satisfaction is significantly impacted by how simple mobile banking is. In addition, the poll found that customer satisfaction was significantly impacted by ATM privacy, accessibility, and user-friendliness. Moreover, the use of ATM cards at supermarkets and the reasonableness of ATM rates have little effect on customer happiness. Customer satisfaction is significantly impacted by the point of sale system's performance, according to the study. Ultimately, it was evident that internet banking had the least influence on consumer satisfaction, while mobile banking had the biggest, followed by automated teller machines and point-of-sale systems. Banking institutions should enhance their online banking to make it easier to use, faster, and more versatile. To increase customer happiness, financial institution management should enhance the mobile banking application.

Worku et al. (2016) investigated the effect of electronic banking on customer satisfaction in the Ethiopian banking market. This study set out the objectives to find out how electronic banking affected customer satisfaction in comparison to traditional brick and mortar banking services; how it related to age, occupation, and education; how it affected branch visits; how well-informed customers were about e-banking; and what opportunities and drawbacks it presented. The study made use of tables,

percentages, regression analysis tests to explain the factors that determine customers' satisfaction with e-banking, independence t-tests to determine whether or not customer visits to offices before and after e-banking are significant, and chi-square independence tests to determine the relationship between demographic factors and e-banking. It was found that the majority of e-banking users are young, educated, salaried, and students, according to the study's findings. Business men and women do not actively use e-banking, there is a correlation between e-banking and demographic characteristics, e-banking is currently only available to current account holders and savers, and e-banking has improved customer satisfaction, decreased the frequency of bank halls for banking services, and shortened customer wait times. In a similar vein, some customers had no idea that using e-banking would cost them money; bank customers reported feeling happier after using e-banking; users could monitor the activities of their accounts; and there is a good probability that e-banking services will expand in the city.

The influence of quality of service on customer satisfaction in private and public sector banks was investigated by Paul et al. (2016). The goal of this study was to compare private and public sector banks in India and investigate the influence of several service quality characteristics on overall customer satisfaction. The authors demonstrate how a number of variables influence customer satisfaction both negatively and favorably using forward stepwise regression. The authors gathered information from 500 Indian respondents, 250 of whom were users of private sector banks and 250 of whom were customers of public sector banks. The writers received a 65 percent response rate. According to the findings of this study, in the case of private sector banks, understanding of products, reaction to need, query resolution, rapid service, quick connection to the proper person, and attempts to decrease queue time are the aspects that were positively related with overall satisfaction. Customer assistance, appearance, and follow-up are all adversely related with customer satisfaction. In the case of public sector banks, however, understanding of the product and quick service are favorably related, whereas appearance is the sole aspect that is adversely associated. The service quality components that were positively related were not the same in public and private sector banks.

Toor et al. (2016) investigated the influence of E-Banking on customer satisfaction: Evidence from Pakistan's banking sector. The purpose of this study was to look at the influence of E-banking factors on customer satisfaction in Pakistan. The study's research design is quantitative. Data was collected using an already tested questionnaire from 264 E-banking customers from various cities in Pakistan. According to the study's findings, there was a significant association between service quality characteristics and customer satisfaction in Pakistani E-banking, with higher importance given to dependability, responsiveness, and assurance among the five aspects. We can infer from this study that service quality in E-banking leads to pleased clients, and banks may gain a competitive edge by providing higher-quality services to their customers in today's emulous environment.

Janahi and Mubarak (2017) investigated the relationship between customer service quality and customer happiness in Islamic banking. The aim of this study was to make a contribution to the literature on Islamic banking by examining the impact of several quality of service metrics on customer satisfaction. The results demonstrated that all hypotheses were supported and statistically significant, suggesting that customer satisfaction with Islamic banks was positively impacted by the caliber of customer service provided. In the context of Islamic banking transactions, all implemented elements in this study—Compliance, Assurance, Reliability, Tangibility, Empathy, and Responsiveness—showed how important it is to incorporate service quality components in order to attain a high degree of customer satisfaction.

Siddiqi et al. (2018) used a structural equation modeling technique to investigate CRM aspects influencing customer satisfaction in the Bangladeshi banking market. As a result, Structural Equation Modeling was used on a sample size of 210 to identify those elements, investigate their interaction, and estimate their combined influence on customer satisfaction. Three latent factors were established in this respect, namely orientation to customers, experience of customers, and service process. The outcome indicates that, of the three factors considered, orientation to customers and experience of customers have a substantial influence on each other and on customer satisfaction when combined, whilst the other element, service procedure, has been shown to be insignificant. The study also evidenced the hypothesis that CRM aspects help organizations improve customer satisfaction.

Lamichhane (2018) evaluated the impact of customer satisfaction on service quality in Nepalese commercial banks. This study examined bank customers' perceptions of service quality elements that explain customer satisfaction. This study used a descriptive and regression research design with the SERVQUAL technique to examine service quality parameters that influence customer satisfaction. In 2017, a study was done in Kathmandu valley to obtain data from bank clients using a structured questionnaire. In all, 250 surveys were issued to bank clients, with only 175 returned in acceptable condition, representing a 70% response rate. According to the study's findings, bank service quality parameters influence customer satisfaction. Finally, this study indicated that the reliability, assurance, palpable, empathy, and responsiveness of bank service quality aspects impact the level of customer satisfaction. In Nepalese commercial banks, tangible, assurance, and empathy are strong and have greater explanatory power of client happiness.

Wilson and Christella (2019) investigated the elements that influence consumer satisfaction in the Indonesian e-commerce market. The goal of this research was to examine the impact of website design, dependability, time saved, product diversity, and delivery performance on consumer satisfaction in the Indonesian e-commerce business. The questionnaire is used as the data collection instrument. The number of samples acquired in this study was 200, of which 15 should be excluded since the questionnaires were not completely filled out, resulting in a total of 185 samples being declared useable and utilized for this investigation. The PLS-SEM Method was used to evaluate the data. According to the findings of this study, dependability, time saved, product variety, and delivery performance all have a positive and substantial influence on customer satisfaction, with product variety having the greatest effect among the other categories. This study, however, discovered that there was no substantial relationship between website design and consumer happiness. This study also advises that companies specialized in the e-commerce business should always improve their products and services to their clients, which will increase their likelihood of repeating their purchase experience with the firm in the future.

Leelavathi and Saravanan (2020) investigated the influence of e-banking services on consumer attitudes and satisfaction in the Chennai area. The purpose of this study was to give an examination of client attitudes and satisfaction with three financial service

technologies: automated teller machines (ATMs), mobile banking, and internet (online) banking. The study began with a correlation and regression analysis of valid replies from a convenience sample of bank clients. The purpose of this study was to look into the influence of E-banking factors on consumer attitude and satisfaction in the Chennai District. Data was collected via questionnaire from 200 E-banking customers from various regions in the Chennai district. The study's findings demonstrated a significant association between service quality parameters and customer satisfaction in E-banking in the Chennai District. This study showed that service quality in E-banking leads to fulfilled customer demands and wants, and that banks may acquire a competitive edge in today's world by providing better-quality services to their consumers. The findings indicated that the online banking service quality parameters had a substantial influence on internet banking customer satisfaction. Each of the dimensions, namely efficiency, system availability, fulfillment, privacy, contact, responsiveness, and contact, contributes 70% to overall consumer satisfaction in internet banking. The study presents empirical data to demonstrate that the online banking service quality characteristics are an essential aspect in satisfying consumers since they are all positively associated to customer satisfaction.

Tien et al. (2021) investigated the elements that influence customer satisfaction at Vietcombank in Vietnam. The purpose of this study was to identify the elements influencing customer satisfaction and service quality for Vietcombank in Ho Chi Minh City. The quantitative research approach was used, with the study objective being clients who directly involve at the bank. There are 347 valid surveys that have been analyzed using exploratory factor analysis (EFA) and linear regression to assess the study hypotheses. The findings revealed that the elements of dependability, system, warranty, rate of interest and cost, and tangible factors (facilities and forms) had a favorable impact on satisfaction of customers. In which the relevance of two aspects, interest rate, service charge, and system, in boosting customer satisfaction with the service, hence increasing loyalty to the bank, is emphasized. CRM is a smart business approach for identifying the bank's most lucrative clients and new customers. As a result, customer relationship management in the bank is one of the requirements for the bank to fulfill its objectives.

Gazi et al. (2021) conducted an empirical investigation of the factors of banking client satisfaction. The purpose of this study was to identify the elements that influence customer satisfaction in Bangladesh's banking industry, because a country's economic progress and stability are dependent on the effectiveness of its banking sector. The study attempts to explore and measure the impact of quality of service on customer satisfaction in the banking industry. Data were obtained as a sample from 382 respondents who were clients of 32 chosen commercial banks in Bangladesh. To obtain the necessary data and information, a pre-structured questionnaire was employed. Data was analyzed using the OLS regression model and descriptive statistical methods. The findings of this study showed that service quality (e.g., tangibility, dependability, and empathy) has a statistically significant influence on customer satisfaction. The findings also demonstrate a favorable relationship between customer satisfaction and service quality parameters in Bangladesh's banking industry. The current study discovered that the service quality aspects (tangibility, dependability, and empathy) had a considerable beneficial influence on customer satisfaction in the domestic banking market. The current study's findings recommend that the Bank Supervisory Authority, the Central Bank of Bangladesh, and bank management should place special attention on ensuring maximum customer satisfaction.

Joshi (2021) conducted research on perceived service quality and customer satisfaction in the Nepalese banking business. The main aim of this study was to investigate the link between banking service quality parameters and customer satisfaction in the Nepalese banking market. Data was gathered through an online and in-person survey of consumers at linked banks, commercial groups, and government and non-government entities in Kailali. The data was analyzed using SPSS version 20, Pearson's correlation, and multiple regression analysis. The study's findings demonstrated a favorable association between service quality and customer satisfaction. Except for tangibility, all service quality parameters showed a statistically significant positive influence on customer satisfaction. It indicates that better service quality contributes to greater customer satisfaction. The findings of this study will assist bank managers in focusing on customer satisfaction in order to compete competitively in the banking industry. Future academics might focus their research on the role of customer satisfaction in service quality and customer loyalty.

Claude (2022) researched the influence of electronic banking on customer satisfaction in Rwanda: the instance of the Kigali Headquarter of the Bank of Rwanda. The current study's major goal was to look at the impact of electronic banking on customer satisfaction in Rwanda, specifically at the Bank of Kigali. In this study, validity and reliability were used since it was easier to maintain high reliability if the experiment could be performed numerous times and the results were consistent. To allow data analysis, collected quantitative data were examined using the computer program Statistical Package for Social Sciences (SPSS) version 23.0. The coefficient of correlation and descriptive statistics were utilized to determine the impact of electronic banking on customer satisfaction. Regression analysis was performed to assess the linear connection between predictor variables and outcome variables. While descriptive statistics were very beneficial in summarizing the data in this study. The study revealed that the there was a higher degree of relationship between the study's dependent and independent variables. Similarly, the R square demonstrated the relationship between the total variance of all dependent variables and customer satisfaction. It was concluded that there was a strong link between technology, electronic mobile devices, electronic banking transactions, and financial regulations and their effects on consumer satisfaction.

Belbase and Paudel (2023) investigated impact of e-banking on customer satisfaction. The study's main goal was to investigate the influence of e-banking on customer satisfaction at a Nepalese commercial bank. The study obtained primary data from 200 respondents who use banking services using structured questionnaire methodologies. The research design is descriptive and cause and effect. The data in this study was analyzed using correlation and regression analysis. This study discovered a favorable association between four factors and consumer satisfaction. According to the data, security was the most influential variable on consumer satisfaction with e-banking.

Table 1
Summary of Empirical Review

S.N.	Authors	Title	Objective	Methodology	Findings
1	Kumbhar,	Electronic	This study	This study	This study discovered that all
	(2011).	banking	evaluated service	used	factors were significant and
		service and	quality, brand	correlation	were strong predictors of total

		customer satisfaction: Some evidence from Indian banks.	perception and perceived value as major factors affecting on customers' satisfaction in e- banking service settings.	and multiple regression analysis to analyze the data.	e-banking satisfaction. However, a principal component analysis shows that perceived value, brand perception, cost efficiency, ease of use, convenience, issue management, security/assurance, and responsiveness are critical aspects in e-banking consumer satisfaction.
2	Mistry, (2013).	Measuring customer satisfaction in banking sector: With special reference to banks of Surat City.	The purpose of this study was to identify the factors affecting customer satisfaction in banks and analyze their effects on the level of customer satisfaction.	The questionnaire was tested on 120 respondents and their responses were statistically tested in SPSS and mean was computed for their ratings	It was discovered that customers place the greatest importance on the dependability component. Within that reliability dimension, they place more emphasis on how banks keep their promises and demonstrate a desire in doing work. According to the findings of the analysis, the responsiveness of bank workers is ranked second.
3	Sabir et al., (2014).	Factors affecting customer satisfaction in banking sector of Pakistan.	The purpose of the study was to analyze the factors affecting Customer Satisfaction in Pakastani Banking Sector.	This study used correlation and multiple regression analysis to analyze the data.	According to the findings of this study, there is a substantial association between service quality features and customer happiness. It was also shown that there is a positive association between customer satisfaction and customer loyalty. This study shows that service excellence leads to pleased customers, and customer pleasure leads to customer loyalty.
4	Simon, & Thomas, (2016).	Effect of electronic banking on customer satisfaction in selected commercial banks, Kenya.	The general aim of the study was to determine the effect of electronic banking and customer satisfaction among first tier bank in Nairobi Town.	The study also conducted a regression analysis to establish the relationship between the study variables.	Based on the data, the study found that the flexibility of online banking has a significant impact on consumer happiness. Furthermore, many consumers utilize online banking because it was simple to use, and tailored internet banking has a significant impact on customer happiness. Furthermore, the survey revealed that user-friendly ATMs, convenience of access to ATMs, and ATM privacy all had a significant impact on

					1 .
5	Worku, et al. (2016).	The Impact of electronic banking on customers' satisfaction in Ethiopian banking industry: The case of customers of Dashen and Wogagen Banks in Gondar City.	This study aimed to examine what impact electronic banking has on customer satisfaction.	The study used tables, percentages, chi-square independency test and multiple regression analysis.	consumer happiness. According to the study's findings, the majority of e-banking users are young, educated, salaried, and students; business men and women are not actively using the service of e-banking; there is also a relationship between e-banking and demographic characteristics; e-banking is currently available only to holders of saving and current accounts; and e-banking has improved customer satisfaction.
6	Paul, et al., (2016).	Impact of service quality on customer satisfaction in private and public sector banks.	The study examined the impact of various service quality on the customers satisfaction.	This study used multiple regression analysis to analyze the data.	According to the findings of this study, in the case of private sector banks, understanding of products, reaction to need, query resolution, rapid service, quick connection to the proper person, and attempts to decrease queue time are the aspects that are positively related with overall satisfaction. Customer assistance, appearance, and follow-up are all adversely related with customer satisfaction.
7	Toor, et al., (2016).	The impact of e-banking on customer satisfaction: Evidence from banking sector of Pakistan.	This research work intends to investigate the effect of E-banking variables on customer satisfaction in Pakistan.	Data collected were analyzed and hypotheses were tested using multiple regression.	According to the study's findings, there is a significant association between service quality characteristics and customer satisfaction in Pakistani E-banking, with higher importance given to dependability, responsiveness, and assurance among the five aspects. According to the findings of this study, service quality in E-banking leads to happy clients.
8	Janahi & Mubarak, (2017).	The impact of customer service quality on customer satisfaction in Islamic banking.	The purpose to examine the impact of different factors of customer service quality on customer satisfaction.	Data collected were analyzed and hypotheses were tested using multiple regression.	The findings showed that all hypotheses were accepted and statistically significant, indicating that customer service quality had a favorable influence on customer satisfaction when interacting with Islamic banks. All operationalized

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					factors in this study (Compliance, Assurance, Reliability, Tangibility, Empathy, and Responsiveness) demonstrated the need of implementing service quality elements in order to achieve a high level of customer satisfaction.
9	Siddiqi, et al., (2018).	CRM dimensions affecting customer satisfaction in Bangladeshi banking industry: A structural equation modeling approach.	The main objective of this study was to find out the impact of CRM on the satisfaction of the customers of Bangladeshi banks.	This study used multiple regression analysis to analyze the data.	The outcome indicated that, of the three factors considered, customer orientation and customer experience have been shown to have a substantial influence on each other and on customer satisfaction when combined, whilst the other element, service procedure, has been shown to be statistically insignificant.
10	Lamichha ne, (2018).	Service quality on customer satisfaction in Nepalese commercial banks.	This study analyzed bank customers' perception in relation to the service quality factors explaining customer satisfaction.	In this study descriptive and regression research design were used and SERVQUAL approach was used to analyze service quality factors affecting customer satisfaction.	According to the study's findings, bank service quality parameters influence customer satisfaction. Finally, this study revealed that the dependability, assurance, palpable, empathy, and responsiveness of bank service quality aspects impact the level of customer satisfaction. In Nepalese commercial banks, tangible, assurance, and empathy were strong and had higher explaining power of client happiness.
11	Wilson, & Christella, (2019).	Effect of social media on Nepal consumer purchase decision.	The purpose of this study was to analyze the effect of website design, reliability, time saved, product variety, and delivery performance towards customer satisfaction	The data were analyzed using PLS-SEM Method.	According to the findings of this study, dependability, time saved, product variety, and delivery performance all have a positive and substantial influence on customer satisfaction, with product variety having the greatest effect among the other categories. This study, however, discovered that there was no substantial relationship between website design and consumer happiness.
12	Leelavath,	A study on	This research	This study	The study's findings

	& Saravanan , (2020).	customer's attitude and satisfaction towards online banking services in Vellore City.	work intended to investigate the impact of E-banking variables on customer attitude and customer satisfaction in Chennai District.	used multiple regression analysis to analyze the data.	demonstrated a significant association between service quality parameters and customer satisfaction in E-banking in the Chennai District. This study showed that service quality in E-banking leads to fulfilled customer demands and wants, and that banks may acquire a competitive edge in today's world by providing better-quality services to their
13	Tien, et al., (2021).	Factors impacting customer satisfaction at Vietcombank in Vietnam.	This study tried to discover the factors affecting service quality and customer satisfaction for Vietcombank in Ho Chi Minh City.	The exploratory factor analysis (EFA) and testing the research hypotheses by linear regression	consumers. The findings revealed that the elements of dependability, system, warranty, rate of interest and cost, tangible factors (facilities and forms), and tangible factors (facilities and forms) had a favorable impact on customer satisfaction at Vietcombank in Ho Chi Minh City. In which the relevance of two aspects, interest rate, service charge, and system, in boosting customer satisfaction with the service, hence increasing loyalty to the bank, is emphasized.
14	Gazi, et al., (2021).	An empirical study of determinants of customer satisfaction of banking.	The aim of this study was to determine the factors that affect customer satisfaction in the banking sector of Bangladesh.	OLS regression model and descriptive statistical tools were used to analyze data.	The findings of this study show that service quality (e.g., tangibility, dependability, and empathy) has a statistically significant influence on customer satisfaction. The findings also demonstrate a favorable relationship between customer satisfaction and service quality parameters in Bangladesh's banking industry.
15	Joshi, (2021).	Perceived service quality and customer satisfaction in Nepalese banking industry.	The main purpose of this study was to examine the relationship between banking service quality dimensions and customer satisfaction in Nepalese banking industry.	SPSS version 20, Pearson's correlation and multiple regression analysis have been used to analyze the data.	The study's findings demonstrated a favorable association between service quality and customer satisfaction. Except for tangibility, all service quality parameters showed a statistically significant positive influence on customer satisfaction. It indicates that better service

					quality contributes to greater
16	Claude, (2022).	Effect of electronic banking on customer satisfaction in Rwanda: Case of bank of Kigali Headquarter.	The main objective of the current study was to investigate the effect of electronic banking on customer satisfaction in Rwanda	To test the linear relationship between predictor variables and outcome variables regression analysis was used.	quality contributes to greater customer satisfaction. As a consequence, the study indicated that the regression model was statistically significant and accurately predicted the outcomes of the study variables. This indicated a higher degree of correlation between the study's dependent and independent variables. In short, there was a strong link between information technology, electronic mobile devices, electronic banking transactions, and financial
17	Belbase, & Paudel, (2023).	Impact of e- banking on customer satisfaction.	The main objective of the study was to examine the impact of e-banking on customer satisfaction in Nepalese commercial bank.	This study used correlation and regression analysis to analyze the data.	regulations and their effects on consumer satisfaction. This study discovered a favorable association between four factors and consumer satisfaction. According to the data, security was the most influential variable on consumer satisfaction with e-banking.

2.3 Research Gap

According to the literature research, the many definitions were depending on the context, circumstance, and environment in which the notion existed. The common concept that runs across all of the definitions, however, was highlighted by key terms such as the flow of information via ICT tools to build strong customer relations. In other words, electronic banking was defined as a technique used by banks to provide excellent services to their customers.

The literature review also looked at several types of electronic banking. The chapter also covered the benefits and obstacles of using electronic banking. Finally, empirical research were examined. Several published and unpublished articles are used to make the research more successful and to cover gaps in prior investigations. This study aids in conceptualizing the theoretical framework under which this investigation was carried out.

There is a gap between the current study and earlier studies in terms of some aims, instruments utilized for analysis, data collecting time, and so on. The topic is also regarded to represent the distinction between prior and current research. The major goal here is to get a genuine conclusion on customer satisfaction with e-banking based on past research. Previous research cannot be overlooked in this context since they serve as the foundation for the current investigation. To finish this research task, numerous books, journals, papers, and other published and unpublished dissertations are used as a guideline to make the research effective and smooth.

CHAPTER - III

RESEARCH METHODOLOGY

The goal of this chapter is to outline the research methods used to achieve the study's stated objectives. It looks on customer satisfaction and digital banking in Nepalese banks. This study comprises research design, population and sample design, data nature and sources, data collecting tools, method of analysis, research framework, and variable definition.

3.1 Research Design

The research design used for this study is casual and descriptive. The different elements of digital banking services are described using a descriptive study design. In the same way, the link between the independent variable (digital banking services) and the dependent variable (consumer happiness) may be ascertained by casual design. The influence of digital banking services being provided on customer satisfaction in Nepal's banking sector is investigated using a casual research design in this study.

3.2 Population and Sample, and Sampling Design

At the present, there are all together 20 commercial banks in Nepal and who are the customers of these banks are the total population of this study. However, a total of 250 questionnaires were distributed to the banking customer, out of them only 200 i.e.80 percent valid responses are takes as the sample size in this study. These clients were chosen using a straightforward sampling method. Convenience sampling, also known as non-probabilistic sampling, was the method used for the study. Hands-on distribution of survey questions was done around the Kathmandu Valley to elicit answers from a range of responder groups. The participants in this study consented to participate in answering the questionnaire after being solicited when they entered the banking hall for business.

3.3 Nature and Sources of Data and Instrument of Data Collection

In terms of data sources, both primary and secondary sources were employed to provide important and relevant data. The major source of data was also employed on purpose in the study's analysis stage. Surveys and interviews intended for branch managers, commercial bank customers, and supervisors of banking customer care were used to gather this data. Secondary data were gathered from relevant online reading materials, books in journals, articles, magazines, commercial bank annual reports, and newspapers, all of which had a connection to variables affecting customer satisfaction.

3.4 Method of Analysis

We utilized frequency tables that provide the proportion of each category and frequency in an easy-to-understand and interpretable format. To validate the hypothesis, correlation and regression analyses were performed in addition to the descriptive analysis.

3.4.1 Descriptive Analysis

Descriptive statistics were utilized to describe the respondents' demographic features, as well as e-banking services and customer satisfaction. To explain the variables, frequencies, percentages, mean, and standard deviation were determined.

3.4.2 Correlation Analysis

The correlation coefficient was used to depict the relationship between e-banking services and customer satisfaction.

3.4.3 Regression Analysis

To examine the effect of e-banking services on customer satisfaction, following regression model was used. The model is specified as

Y= β_0 + β_1 Reliability + β_2 Responsiveness + β_3 Assurance + β_4 Tangibility + β_5 Empathy + e_{it} (1)

Y = Customer Satisfaction

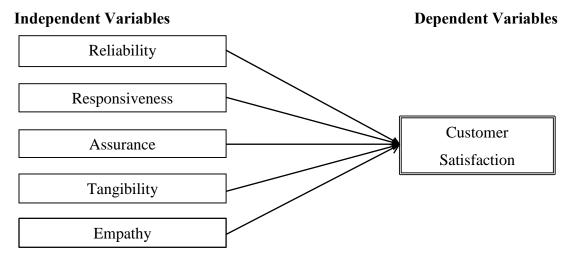
 β_0 = The intercept (constant)

 β_1 , β_2 , β_3 , β_4 , β_5 , = The slope which represents the degree with which banking services quality and customer satisfaction changes as the independent variable changes by one unit variable.

e = error component

3.5 Research Framework and Definition of the Variables

The research is based upon the analysis and interpretation of dependent (customer satisfaction) and independent variables (Reliability, Responsiveness, Assurance, Tangibility and Empathy).



Source: Toor et al. (2016); Lamichhane (2018); Gazi et al. (2021)

Independent Variables

The independent variables in terms of customer satisfaction determinants are those components that have an influence on customer satisfaction. The suggested research of service quality's independent factors include dependability, responsiveness, assurance, and tangibility.

Reliability

According to Joshi (2021) dependability is a bank's and its employees' sincerity and interest in addressing client difficulties and providing accurate services the first time. According to Gazi et al. (2021) dependability is defined as providing services on time, maintaining an error-free record, keeping one's word, and providing clients with correct and complete information.

Responsiveness

The extent of participation and care for consumers in need of assistance is determined by responsiveness. Understanding the needs and desires of clients is also part of being responsive. It also includes flexible operation hours, personalized attention from personnel to clients, responsiveness to customer concerns, and consumer safety in their transactions (Kumar et al., 2009; Othman & Owen, 2001).

Assurance

Assurance is essential in order to provide excellent service in banks. Customers may be comforted by employees that act with friendliness, respect, appreciation, and a nice look. Furthermore, it entails providing financial advice to clients, establishing a welcoming environment in banks, and providing clients with readily understandable and accessible information (Joshi (2021; Gazi et al. (2021).

Tangibility

The physical characteristics of the goods and services provided to customers are referred to as tangible. For example, the way bank employees respond, the tools they use, and the materials connected to services that catch the attention of customers (Guo & Hair, 2008). Service tangibility has physiological, emotional, and cognitive consequences on both clients and workers (Aslam et al., 2011).

Empathy

Empathy is described as the firm's caring, personalized attention to its clients. The core of empathy is demonstrating to clients that they are unique and special, and that their requirements are understood, through personalized or tailored service. Customers want to feel understood and important by companies who offer them with services. Toor et al. (2016) discovered that empathy has a favorable but negligible affect on bank customer satisfaction.

Dependent Variable

Customer Satisfaction

In this study, customer satisfaction is defined as an emotional reaction to an experience linked with banking services in relation to the client's expectations (Simon & Thomas, 2016). Customer satisfaction may be measured in terms of satisfaction with the bank's services, favorable impression, continued transactions, and referral.

CHAPTER - IV

RESULTS AND DISCUSSION

The primary goal of this study, as described by the researcher in earlier chapters, is to analyze the satisfaction of customers and digital banking services in Nepalese commercial banks. As a result, this chapter is divided into three sections that deal with the discussion's outcomes and analysis. The first portion gave the demographic profile, descriptive and correlation analysis on study variables; the second section presented the fulfillment of the linear regression model assumptions; and the third section presented the regression findings. For further statistical analysis, the data analysis methodologies utilized for ratio scale measurement, as well as the ratio of the given dependent and independent variables, were determined. The data gathered was analyzed using the statistical program SPSS version 26.

4.1 Results

4.1.1 Respondents Demographic Profile

This section is concerned with the summarization and presentation of demographic profiles of respondents in the survey. In this part, the gender and age profiles of the respondents were examined. The Kathmandu Valley was home to all of the responders.

Table 2

Gender Specification

Options	No. of Respondents	Response (percent)
Male	128	64
Female	72	36
Total	200	100

Source: Opinion Survey, 2023

Table 2 depicts the age wise composition of the respondents in this study. Responses of 200 respondents were collected and analyzed in this study. Out of total respondents 64.00 percent of responses are achieved from male and it indicates that banks' majority of the respondents are male. Their out of 200 respondents most of response are received from male in comparisons to female. However, 36.00 percent female provided their response about digital banking and its impact on customer satisfaction

in Nepalese commercial banks. From these result male respondents are likely to have more users with digital banking than females. In this context, Nepalese commercial banks can identify both male and females respondents as the main participants for the survey.

Table 3

Age Description of Respondents

Options	No. of Respondents	Response (percent)
20-29	70	35
30-39	94	47
40 and above	36	18
Total	200	100

Source: Opinion Survey, 2023

Table 3 shows that age description of respondents and found that the 47.00 percent respondent's age most of the respondents belong to age between 30-39-age groups. The lowest percentage age group is 40 and above age group who are customers of commercial banks. However, respondents are majority are young. In additions to this 35.00 percent responded provided their response that belongs to 20-39 age groups and 18.00 percent representing the ages of 40 and above. This implies that 82.00 percent of the total customers of the Nepalese commercial banks were within the active age, energetic and they can use digital banking etc.

Table 4

Annual Income Description of Respondents

Options	No. of Respondents	Response (percent)	
Up to Rs. 300,000	66	33	
Rs. 301,000 to Rs. 500,000	80	40	
More than Rs. 501,000	54	27	
Total	200	100	

Source: Opinion Survey, 2023

Table 4 presents the income level wise profile of respondents and found that the 40.00 percent respondent's income most of the respondents belong to income from Rs.301,000-Rs.500,000 groups. The lowest percentage income group is Rs.501,000 and above group who are customers of commercial banks. However, respondents are majority are medium level. In additions to this 33.00 percent responded provided their

response that belongs to income group up to Rs.300000 and 27.00 percent representing the income of Rs.501,000 and above.

Table 5

Years of Using e banking Services

Options	No. of Respondents	Response (percent)
Less than 1 year	14	7
1-2 years	24	12
2-3 years	40	20
3-5 years	64	32
More than 5 years	58	29
Total	200	100

Source: Opinion Survey, 2023

Table 5 shows the length of using e-banking services by the respondents. Out of 200 customers, 64 representing 32.00 percent have been using the e-banking for about 3-5 years whereas a total of 58 representing 29.00 percent are using the services for about more than 5 years. It was also revealed that, 40 customers representing 20.00 percent are using the e-banking services for 2-3 years, 24 customers representing 12.00 percent are using the e-banking service services for about 1-2 years and remaining 14 representing 7.00 percent are using the services for less than 1 year.

4.1.2 Descriptive Statistics Analysis

The data in this study are analyzed using the mean and standard deviation methods. A higher mean value indicates that a greater number of respondents concur that the variable may have a significant effect on customer satisfaction.

Reliability of E-banking Services

Through descriptive research, this part investigates the influence of e banking service dependability on customer satisfaction in Nepalese commercial banks. Three statements are included in this study's definition of dependability. The variable is quantified on a 5-point likert scale, with 1 being strongly disagree and 5 being highly agree. The mean and standard deviation of respondents' opinions are computed. The information shown below depicts the effect of dependability on customer satisfaction in Nepalese commercial banks.

Table 6

Descriptive Statistics of Reliability of E-banking Services

Scale Items of Reliability of E-banking Services	Mean	Std. Dev.
RL1 The use of e- banking is reliable	3.7400	1.19983
RL2 The bank's website provides all details of products	3.8700	1.09961
and services		
RL3 When I have a problem the bank shows a sincere	3.8250	1.04875
interest in solving it		
RL4 The bank has employees who give customer personal	3.8550	1.05334
attention		

Source: Appendix-I

Table 6 shows descriptive statistics of three different scale items of reliability of e banking services. Among all scale items, RL2 "The bank's website provides all details of products and services" had high score mean 3.8700. Scale item RL1 "The use of e- banking is reliable" had the lowest mean 3.7400. It can be concluded from the above table the bank's website provides all details of products and services. Respondents also feel when they have a problem the bank shows a sincere interest in solving it.

Responsiveness of E-banking Services

Through descriptive analysis, this section demonstrates the responsiveness of banks' e banking services. It has three distinct assertions. This concept was assessed using a 5-point likert scale ranging from 1-strongly disagree to 5-strongly agree. The mean and standard deviation of the respondents' opinions were computed.

Table 7

Descriptive Statistics of Responsiveness of E-banking Services

Scale Items of Responsiveness of E-banking Services	Mean	Std. Dev.
RS1 Bank staffs tell you exactly when the service will be	3.8050	1.03067
performed		
RS2 Fast processing at reasonable cost	3.8250	1.03912
RS3 Response of service through e banking is very arouse	3.7850	1.14689
and quick		
RS4 Employees in bank can understand customers' needs	3.8000	1.07507

Source: Appendix-I

Table 7 shows descriptive statistics of three different scale items of responsiveness of e-banking services of banks. Among all scale items, RS2 "Fast processing at

reasonable cost" had high score mean 3.8250. It means most of the customers agreed banks provide fast processing services at reasonable cost. At the same time, the lowest mean score is 3.7850 for the statement RS3 "Response of service through e banking is very arouse and quick" which shows that most of the customers agreed less compared to other statements.

Assurance of E-banking Services

Through descriptive research, this part investigates the state of assurance of banks' e-banking services. Three statements are included in this investigation. The variable is assessed using a 5-point likert scale: From 1 (strongly disagree) to 5 (strongly agree). The mean and standard deviation of respondents' opinions are computed. The mean value represents the average state of the respondents' feelings, while the standard deviation represents the difference from the average mean of the respondents. The figures shown below depict the influence of e-banking service assurance on customer satisfaction in Nepalese commercial banks.

Table 8

Descriptive Statistics of Assurance of E-banking Services

Scale Items of Assurance of E-banking Services	Mean	Std. Dev.
AS1 Bank staffs have the knowledge to answer my questions	3.9100	0.89212
about e banking service		
AS2 Employees in banks provide sufficient trust to	3.8800	1.03000
customers placing confidence in heart		
AS3 I feel secured and safe in my transactions with the bank	3.8050	1.02579
AS4 The bank can honor their commitments	3.8600	0.96699

Source: Appendix-I

Table 8 shows descriptive statistics of five different scale items of assurance of e-banking services of banks. Among all scale items, AS1 "Bank staffs have the knowledge to answer my questions about e banking service" had high score mean 3.9100. Scale item AS3 "I feel secured and safe in my transactions with the bank" had the lowest mean 3.8050. It can be concluded that customers believed that bank staffs have the knowledge to answer my questions about e banking service. Moreover, employees in banks provide sufficient trust to customers as much as possible.

Tangibles of E-banking Services

Through descriptive research, this section demonstrates the influence of tangibles of e-banking services on customer satisfaction in Nepalese commercial banks. It has three distinct assertions. This concept was assessed using a 5-point likert scale ranging from 1-strongly disagree to 5-strongly agree. The mean and standard deviation of the respondents' opinions were computed. The mean value represents the average state of the respondents' feelings, while the standard deviation represents the difference from the average mean of the respondents.

Table 9

Descriptive Statistics of Tangibles of E-banking Services

Scale Items of Tangibles of E-banking Services	Mean	Std. Deviation
TN1 The banks physical features are visually nice	3.7750	1.12280
TN2 The e-banking physical facilities of bank are	3.8150	1.08474
modern		
TN3 The bank has modern looking equipment and	3.8300	1.11233
tools		
TN4 The bank facilities and designs make customers	3.8250	1.02940
feel comfortable		

Source: Appendix-I

Table 9 shows descriptive statistics of three different scale items of tangibles of e-banking services in Nepalese commercial banks. Among all scale items, TN3 "The bank has modern looking equipment and tools" had high score mean 3.8300. Scale item TN1 "The banks physical features are visually nice" had the lowest mean 3.7750. It can be concluded that customers agreed on tangibles of e-banking services is very secured and reliable. In addition, the e-banking physical facilities of bank are modern.

Empathy of E-banking Services

Through descriptive research, this section demonstrates the influence of empathy in e-banking services on customer satisfaction in Nepalese commercial banks. It has three distinct assertions. This concept was assessed using a 5-point likert scale ranging from 1-strongly disagree to 5-strongly agree. The mean and standard deviation of the respondents' opinions were computed. The mean value represents the average state of

the respondents' feelings, while the standard deviation represents the difference from the average mean of the respondents.

Table 10

Descriptive Statistics of Empathy of E-banking Services

Scale Items of Empathy of E-banking Services	Mean	Std. Deviation
EM1 The employees of banks can understand customer	3.8150	1.04221
specific needs		
EM2 Banks gives customer individual attention	3.9500	1.00626
EM3 Banks has working hours suitable for all	3.8400	0.99970
customers		
EM4 When customers have problems, employees in an	3.8350	1.04558
the bank will be supported and encouraging		

Source: Appendix-I

Table 10 shows descriptive statistics of three different scale items of empathy of e-banking services in Nepalese commercial banks. Among all scale items, EM2 "Banks gives customer individual attention" had high score mean 3.9500. Scale item EM1 "The employees of banks can understand customer specific needs" had the lowest mean 3.8150. It can be concluded that customers agreed on banks always gives pay attention to the customers. Besides that, customers think banks' working hours is suitable.

Customer Satisfaction

Through descriptive analysis, this component depicts the state of client happiness. It has three distinct assertions. This concept was assessed using a 5-point likert scale ranging from 1-strongly disagree to 5-strongly agree. The mean and standard deviation of the respondents' opinions were computed. The mean value represents the average state of the respondents' feelings, while the standard deviation represents the difference from the average mean of the respondents.

Table 11

Descriptive Statistics of Customer Satisfaction

Scale Items of Customer Satisfaction	Mean	Std. Deviation
CS1 I am satisfied with the services provided by bank	3.6650	1.14426
CS2 Overall service of online banking is better than my	3.8100	1.01442
expectation		
CS3 I think I made the correct decision to use the E-	3.8350	1.01138
Banking services		
CS4 The e-banking service conditions of this bank are	3.7900	1.12795
excellent		

Source: Appendix-I

Table 11 showed individual scale items of customers' satisfaction. Among three scale items CS3 "I think I made the correct decision to use the E-Banking services" scored the highest mean value 3.8350 with standard deviation 1.01138. Then, scale items CS1 "I am satisfied with the services provided by bank" scored the lowest mean value 3.6650 and 1.14426 standard deviation. It is concluded from the study that the customers think they take the correct decision to use the E-Banking services. Moreover, consumers are highly satisfied overall service of online banking and meet their expectation.

4.1.3 Summary of Descriptive Analysis

To identify digital marketing and its impact on customer satisfaction in Nepalese commercial banks, the mean and standard deviation of each variables were analyzed. Using reliable sources that Creswel (2012) gave, the decision rule (cut-off point) for the mean values was determined and interpreted. Creswel (2012) states that a mean value of < 1.5 indicates very low, 3.5-4.5 indicates high, 2.51-3.5 indicates moderate, and ≥ 4.5 indicates very high. The researcher reported the participants' mean score for each category of variable descriptions based on this mean score assessment.

Table 12
Summary of Descriptive Analysis

Study Variables	Mean	Std. Deviation	Evaluation of Mean Score
Reliability (RL)	3.8225	.83448	High
Responsiveness (RS)	3.8037	.78294	High
Assurance (AS)	3.8638	.75555	High
Tangibles (TN)	3.8113	.80024	High
Empathy (EM)	3.8600	.75382	High
Customer Satisfaction (CS)	3.7750	.79965	High

Source: Appendix-I

Table 12 shows the result of the study shows that mean score for the customer satisfaction is recorded 3.7750 which show the level is high. It shows that all elements of commercial banks in Nepal are at high level which all falls in the range from 3.8037 to 3.8638. The mean score value of assurance is 3.8638 which is the highest mean score value compared to the other elements, reliability, responsiveness, tangibles and empathy. This indicates that assurance of e-banking services is the dominant element in this study when it can be evidenced by the overall value of the highest mean score of 3.8638. In other word, it is obvious that majority of the customers agreed that assurance is the highly affecting factor of customer satisfaction and they accepted that satisfaction level is also high when the assurance level is high. Meanwhile, reliability (RL), responsiveness (RS), assurance (AS), tangibles (TN), empathy (EM) and customer satisfaction (CS) element got an overall mean score of 3.8225, 3.8037, 3.8638, 3.8113, 3.8600 and 3.7750 respectively.

4.1.4 Correlations Analysis

Correlation analysis was used to determine the marketing of e-banking services and its influence on customer satisfaction in Nepalese commercial banks. The tables below show the relationship between the dependent and independent variables, namely bank customer satisfaction and factors. Correlation analysis was used in this study to determine the link between variables. Using the SPSS software, the researcher discovered the value of the correlation co-efficient in this investigation. The correlation research concentrated on the overall link between e-banking services and customer satisfaction at banks.

Table 13

Pearson Correlation Coefficients of Study Variables

	RL	RS	AS	TN	EM	CS
Reliability (RL)	1					
Responsiveness (RS)	.675**	1				
	(0.000)					
Assurance (AS)	.512**	.518**	1			
	(0.000)	(0.000)				
Tangibles (TN)	$.572^{**}$.582**	.490**	1		
	(0.000)	(0.000)	(0.000)			
Empathy (EM)	.528**	$.472^{**}$.533**	$.492^{**}$	1	
	(0.000)	(0.000)	(0.000)	(0.000)		
Customer	$.692^{**}$.695**	.699**	.693**	.601**	1
Satisfaction (CS)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	

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

(Source: Appendix-II)

Table 13 reveals the relationship analysis results between both dependent and independent variables using correlation coefficient. The correlation value between reliability of e-banking services (RL) and customer satisfaction (CS) is as 0.692 which has significant value 0.000 meaning that there is significant positive association between reliability of e-banking services and customer satisfaction (P<0.05), also correlation value between responsiveness of e-banking services (RS) and customer satisfaction (CS) is as 0.695 which has significant value 0.000 showing that there is significant positive association between responsiveness of e-banking services and the customer satisfaction (P< 0.05). Similarly, correlation value between assurance of e-banking services (AS) and the customer satisfaction is as 0.699 which has significant value 0.000 which indicates that there is significant positive association between assurance of e-banking services and the customer satisfaction (P< 0.05).

At the meantime, the correlation between tangibles of e-banking services (TN) and the customer satisfaction is as 0.693 which has significant value 0.000 meaning that there is significant positive association between tangibles of e-banking services and the customer satisfaction (P< 0.05). Finally, correlation value between empathy of e-banking services (EM) and the customer satisfaction (CS) is as 0.601 which has significant value 0.000 so it can be clearly stated that there is significant positive

association between empathy of e-banking services and customer satisfaction (P< 0.05).

4.1.5 Regression Analysis

When examining the association between a dependent variable as customer satisfaction and separate variables such as reliability, responsiveness, assurance, tangibles, and empathy of e-banking services in Nepalese commercial banks, the regression analysis technique is used in this study. And the results are presented below;

Table 14

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the
				Estimate
1	.858 ^a	.736	.729	.41637

a. Predictors: (Constant), Empathy, Tangibles, Responsiveness, Reliability, Assurance

(Source: Appendix-III)

The specification of the five variables such as reliability, responsiveness, assurance, tangibles and empathy of e-banking services variables in the model revealed, predict to customer satisfaction. R² value is 0.736 which are in the models shows that 73.60 percent of variation in customer satisfaction are explained by the changes in the independent variables. Remaining 26.40 percent of the change in customer satisfaction is not explained in this regression model.

Table 15

Analysis of Variance (ANOVA)

df	Mean Square	Г	Sig.
5	18.723	107.999	.000 ^b
	.173		
	5 194) 199	5 18.723 194 .173	5 18.723 107.999 194 .173

a. Dependent Variable: Customer Satisfaction

(Source: Appendix-III)

b. Predictors: (Constant), Empathy, Tangibles, Responsiveness, Reliability, Assurance

An examination with ANOVA (F-value) indicates that explains the most possible combination of predictor variables that could contribute to the impact of dependent variables. Results show significant impact of customer satisfaction indicator. On the F- values of 107.999 (p = 0.000 < 0.05) for Empathy, Tangibles, Responsiveness, Reliability, Assurance as customer satisfaction proxy, it clearly shows that there is a significant effect of independent variables on the dependent variable.

Table 16

Regression Coefficient of Independent Variables on Customer Satisfaction

Variables	Coefficients	t-	p-value	Collinearity Statistics	
		statistics		Tolerance	VIF
(Constant)	422	-2.258	.025		
Reliability	.180	3.437	.001	.457	2.187
Responsiveness	.208	3.766	.000	.467	2.141
Assurance	.327	6.464	.000	.596	1.676
Tangibles	.260	5.267	.000	.559	1.790
Empathy	.121	2.394	.018	.603	1.657

a. Dependent Variable: CS

(Source: Appendix-III)

Table 16 presents the regression coefficient of independent variables reliability, responsiveness, assurance, tangibles and empathy of e-banking services and the intercept value of dependent variable customer satisfaction. It shows that tolerance values were not above 0.1 and VIF below 10. That's why, there is multicollinearity in the model.

The coefficient of regression β is 0.180 for reliability of e-banking services. It indicates that changes in one unit of reliability of e-banking services leads to increase 0.180 units in customer satisfaction and the p value of reliability of e-banking services is 0.001 discloses that it is statistically significant at 5 percent level of significance. Hence, this is significant positive effect of reliability of e-banking services on customer satisfaction. The coefficient of regression β is 0.208 for responsiveness of e-banking services increased by one then customer satisfaction increased by 0.208 units and the p value of responsiveness of e-banking services is 0.000 reveals that it is statistically

significant at 5 percent level of significance. Hence, this is significant positive effect of responsiveness of e-banking services on customer satisfaction.

The coefficient of regression β is 0.327 for assurance of e-banking services. It indicates that if every assurance of e-banking services increased by one then customer satisfaction increased by 0.327 units and the p value of assurance of e-banking services is 0.000 reveals that it is statistically significant at 5 percent level of significance. Hence, assurance of e-banking services has significant positive impact on customer satisfaction. The coefficient of regression β is 0.260 for tangibles of ebanking services. It indicates that if every tangibles of e-banking services increased by one then customer satisfaction increased by 0.260 units and the p value of tangibles of e-banking services is 0.000 reveals that it is statistically significant at 5 percent level of significance. Hence, this is significant positive effect of tangibles of e-banking services on customer satisfaction. Finally, the coefficient of regression β is 0.121 for empathy of e-banking services. It indicates that if every empathy of ebanking services increased by one then customer satisfaction increased by 0.121 units and the p value of empathy of e-banking services is 0.018 reveals that it is statistically significant at 5 percent level of significance. Hence, this is significant positive effect of empathy of e-banking services on customer satisfaction.

Hypothesis Testing

H₁: There is positive impact reliability of e-baking services and customer satisfaction in Nepalese commercial banks.

P-value of reliability is 0.001 which is significant 5 percent level of significance. So, hypothesis 1 is accepted.

H₂: There is positive effect between responsiveness of e-baking services and customer satisfaction in Nepalese commercial banks.

P-value of responsiveness is 0.000 which is significant 5 percent level of significance. So, hypothesis 1 is accepted.

H₃: There is positive impact between assurance of e-baking services and customer satisfaction in Nepalese commercial banks.

P-value of assurance is 0.003 which is significant 5 percent level of significance. So, hypothesis 1 is accepted.

H₄: There is positive impact between tangibles of e-baking services and customer satisfaction in Nepalese commercial banks.

P-value of tangibles is 0.000 which is significant 5 percent level of significance. So, hypothesis 1 is accepted.

H₅: There is positive impact between empathy of e-baking services and customer satisfaction in Nepalese commercial banks.

P-value of empathy is 0.018 which is significant 5 percent level of significance. So, hypothesis 1 is accepted.

Table 17
Summary of Hypothesis Testing

Hypothesis	Standard Coefficient	t- Value	p- Value	Result
H ₁ Impact of reliability of e-	.180	3.437	.001	Supported
banking services on customer				11
satisfaction.				
H ₂ Impact of responsiveness of	.208	3.766	.000	Supported
e-banking services on customer				
satisfaction.				
H ₃ Impact of assurance of e-	.327	6.464	.000	Supported
banking services on customer				
satisfaction.				
H ₄ Impact of tangibles on	.260	5.267	.000	Supported
customer satisfaction.				
H ₅ Impact of empathy on	.121	2.394	.018	Supported
customer satisfaction.				

According to table 17, p-value of reliability, responsiveness, assurance, tangibles and empathy are 0.001, 0.000, 0.000, 000 and 0.018 respectively which are significant at 5 percent level so hypothesis 1 and hypothesis are accepted.

4.2 Discussion

The main objective of the study is to evaluate customer satisfaction and e-banking services in Nepalese commercial banks. This research also highlights the association

between e-banking service quality and customer satisfaction. Research and previous literature supports the relationship between reliability of e-banking services, responsiveness of e-banking services, assurance of e-banking services, tangibility of e-banking services, empathy of e-banking services and customer satisfaction. The research literature validates that e-banking services directly influence customer satisfaction. Results obtained from the data analysis e-banking services have positive and statistically significant relationship with customer satisfaction and also significant positive impact on customer satisfaction. If consumers think the use of e-banking is reliable, banks show to solve a sincere interest of customer problems and banks provides details of products and services through website and they will be more satisfaction towards e-banking services. The result is consistent with Toor et al. (2016); Gazi et al. (2021) which observed positive and significant effect of reliability on customer satisfaction. The results are also consistent with Janahi and Mubarak (2017). The results of this study also support the Joshi (2021) which states that reliability of e-banking services greatly effect on the customer satisfaction.

A responsiveness e-banking service is found to have positive and significant relationship with customers' satisfaction. The impact is also found to be positive and significant. Janahi and Mubarak (2017); Joshi (2021) concluded a positive association between responsiveness of e-banking service and customer satisfaction. If consumers believed that response of service through e banking is very arouse and quick and there is fast processing at reasonable cost, they are highly satisfied. This result is similar with the prior study of Toor et al. (2016); Lamichhane (2018); Gazi et al. (2021) mentioned that internet banking services has significant positive effect on customer satisfaction.

There is positive and significant relationship of assurance of e-banking services and customer satisfaction among consumers. The result shows that the impact is also positive and significant on consumers' satisfaction. The result is line with the findings of Toor et al. (2016); Janahi and Mubarak (2017) concluded that an assurance of e-banking services has positive and significant relationship with customer satisfaction. When customer perceived bank staffs have the knowledge to answer any questions about e banking service and employees in banks provide sufficient trust to customers in every possible way that will be more satisfied for customers. This is also consistent

with Gazi et al. (2021); Joshi (2021) mentioned that assurance of e-banking services have significant positive influence on customers' satisfaction.

There is positive and significant relationship of tangibility of e-banking services and customer satisfaction among consumers in Kathmandu Valley. The result shows that the impact is also positive and significant on consumers' satisfaction. The result is line with the findings of Janahi and Mubarak (2017); Gazi et al. (2021) concluded that tangibility of e-banking services has positive and significant relationship with customer satisfaction. When customer feels the bank has modern looking equipment and tools and physical features are visually nice of the banks, they are more satisfied with it. This is also consistent with Lamichhane (2018); Joshi (2021) mentioned that tangibles e-banking services have significant positive influence on customers' satisfaction.

Finally, empathy of e-banking services is found to have positive and significant relationship with customers' satisfaction. The impact is also found to be positive and significant. Toor et al. (2016); Gazi et al. (2021) observed that a positive association between empathy of e-banking service and customers' satisfaction. If the consumer feels banks always gives customer individual attention and working hours of banks is suitable for all customers, they will more interested to use e-banking service. This result is similar with the prior study of Janahi and Mubarak (2017) and Joshi (2021) concluded that empathy of e-banking services has significant positive effect on customers' satisfaction. The result is also similar with the researcher expectation.

CHAPTER V

SUMMARY AND CONCLUSION

5.1 Summary

Banking operations have altered dramatically since the emergence of the Internet. Banks offer a wide range of services to banking customers online. E-banking is the use of information and communication technologies by banks to better manage client relationships and provide services. Given the critical role that electronic banking has played in the growth of banks, information technology has been shown to increase corporate efficiency and service quality, which in turn attracts and retains customers. Online banking features include reliability, responsiveness, assurance, tangibles, and empathy. Then, as a result of internet banking, the processes for transferring money, viewing and analyzing savings account balances, paying mortgages, paying bills, and purchasing financial instruments and certificates of deposit have all substantially improved.

The primary goal of the research is to examine the elements that influence customer behavior in Nepalese commercial banks. Other specific objectives include examining the digital banking service quality (reliability responsiveness, assurance, tangibility, and empathy) in Nepalese commercial banks, measuring the relationship between service quality factors (reliability responsiveness, assurance, tangibility, and empathy) and customer satisfaction in Nepalese commercial banks, and investigating the impact of reliability responsiveness, assurance, tangibility, and empathy on customer satisfaction in Nepalese commercial banks. The research is descriptive and explanatory in nature. The descriptive research design is used to describe the components of e-banking services. Explanatory study design, on the other hand, aids in determining the link between the dependent variable (customer happiness) and the independent variable (e-banking services). A more informal study approach is employed to investigate the influence of e-banking service quality on customer satisfaction in Nepal's banking industry. The major source of data was also employed on purpose in the study's analysis stage. This information was acquired via questionnaires and interviews designed for commercial bank clients, branch managers, and banking customer service supervisors, respectively. The study's sample

size is 200 people. To validate the hypothesis, descriptive analysis, correlation, and regression analysis were performed.

According to the findings of this survey, the majority of respondents agreed that the quality component of empathy, assurance, and dependability of e-banking services has a significant impact on banking customers' pleasure, and they feel that their satisfaction is also high. According to the correlation research, the dependability of e-banking services has a positive and substantial association with customer satisfaction, as does the correlation between responsiveness and customer happiness. Simultaneously, there is a considerable positive relationship between the guarantee of e-banking services and consumer happiness. Similarly, tangibles and empathy have a large and positive association with client pleasure. The regression results revealed that e-banking service dependability, responsiveness, assurance, tangibles, and empathy have a substantial beneficial influence on customer satisfaction in Nepalese commercial banks. As a result, this study indicated that the quality of e-banking services has a considerable influence on consumer satisfaction.

5.2 Conclusion

The research looked on customer satisfaction with e-banking services in the banking industry. According to the findings of the descriptive analysis research, the majority of male customers are more likely than females to utilize e-banking. The majority of overall clients of Nepalese commercial banks are of active age, energetic, and can use e-banking services, among other things. According to income level, the majority of respondents are in the middle, and the majority of customers have been using digital banking for 3 to 5 years. According to the findings of this survey, the majority of respondents agreed that guarantee of e-banking services and empathy of e-banking service aspect have a significant impact on banking customers' pleasure, and they feel that their satisfaction is also high.

According to the correlation study, reliability of e-banking services (RL) has a positive and substantial link with customer satisfaction (CS), and the correlation between responsiveness (RS) and customer satisfaction (CS) is also significant. Simultaneously, there is a considerable positive relationship between assurance of e-banking services (AS) and customer satisfaction (CS). Similarly, tangible (TN) and

empathy (EM) have a strong and favorable link with customer satisfaction. According to the regression results, dependability of e-banking services, responsiveness of e-banking services, assurance of e-banking services, tangibles of e-banking services, and empathy of e-banking services all have a substantial beneficial influence on customer satisfaction of commercial banks in Nepal. As a result, this study showed that the quality of e-banking services has a substantial influence on customer satisfaction in Nepalese banks.

5.3 Implications

Based on the summary and conclusion of the study the researcher forwards the following implications to the concerned bodies.

- According to the findings of this study, the dependability, responsiveness, assurance, tangibles, and empathy of e-banking service quality have a statistically significant influence on customer satisfaction. As a result, the study's conclusions benefit IT policymakers, bankers, and customers.
- Given the importance of electronic banking in the development of banks, information technology has been shown to boost company efficiency and service quality, attracting and retaining clients.
- The study is extremely beneficial to students and academics who seek to conduct more research on the issue as a source.
- The sorts of services provided by e-banking should be expanded, for example, to take deposits, and banks should capitalize on the prospects for growing ebanking by minimizing the hurdles. Finally, banks should place a greater emphasis on the factors that have the greatest influence on consumer satisfaction in e-banking.
- This study has laid the groundwork for future researchers to perform research
 using client demographic data. This survey only looks at customer satisfaction
 in banks and financial organizations. In addition, research may be undertaken
 in other industries such as healthcare, insurance, commerce, manufacturing,
 and technology.