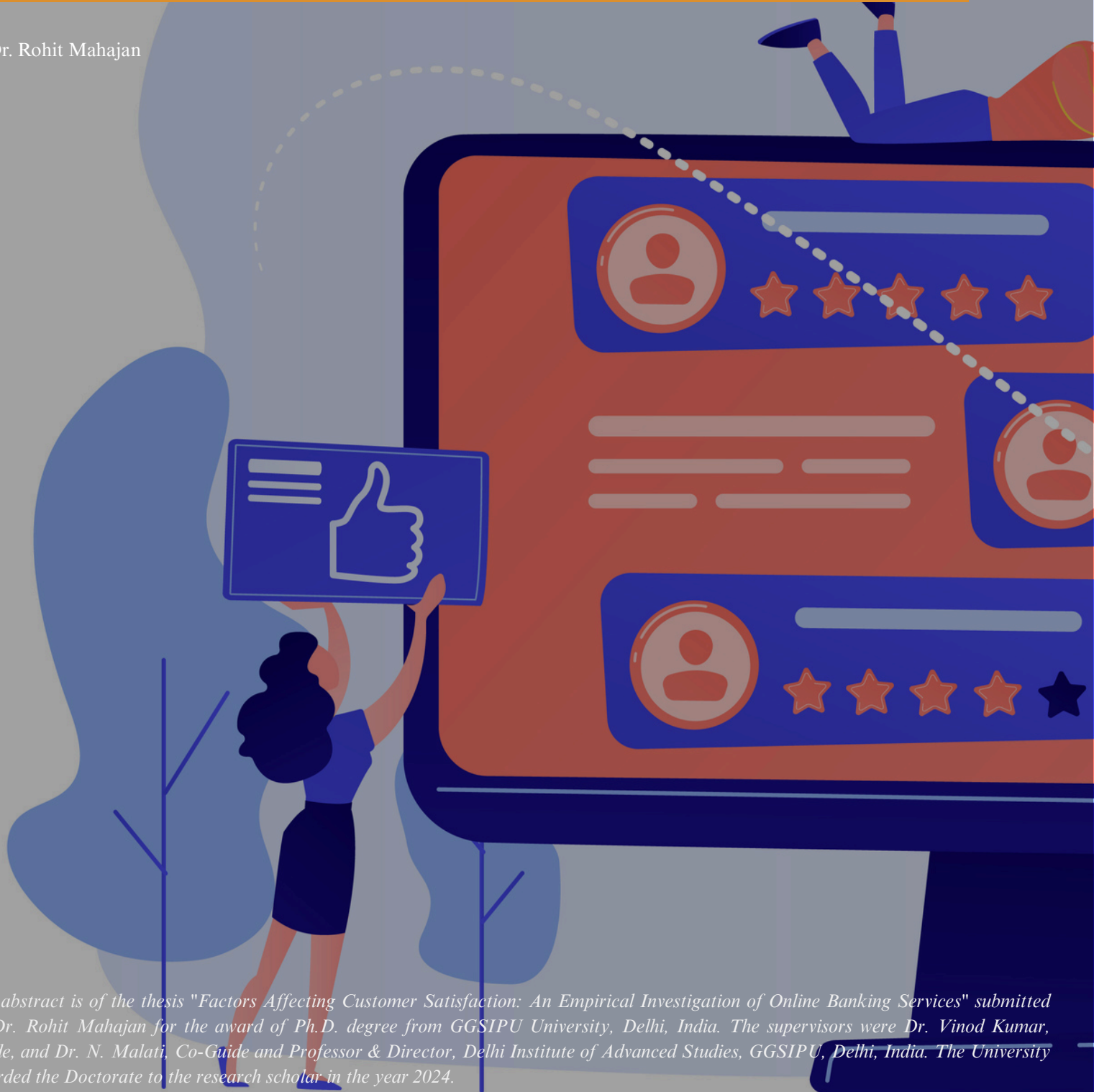


Factors Affecting Customer Satisfaction: An Empirical Investigation on Online Banking Services

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INTRODUCTION

There is no denying, growth & development of electronic technology has resulted in profound change at way of businesses connection to consumers. The adoption of the Internet and technology has been led by banking & non-banking organizations. To define Online banking, one may say that it entails automated distribution of bank assistance to clients directly by electronic means of communication, most notably the Internet. E-banking or PC banking are other names for online banking. Internet banking is described as a "Internet platform, via which users may access various financial services, ranging from making investments to paying bills"(Pikkarainen, Karjaluo, and Pahlila 2004).

This reform has also been well received by the Indian banking and financial industries. In today's intensely competitive market, more and more Indian banks are attempting to set themselves apart. This not only enables companies to better connect their offers with changing client demands and technological advancements, but it also takes over certain conventional banking duties, resulting in considerable savings in branch-related costs.

As more Indian banks seek to creative techniques, in order to improve the banking experience for customers, institutions have used technologies such as Online banking to make everything easy, Useful and productive, it's more important than ever to assess consumer how customers feel about the service they received in general and how satisfied they were with present online bank services. In addition to assisting banks in developing successful plans to employ efficacy in consumer services as a differentiator for very client-focused sector, estimating customer's satisfactory level may be informative for banking organizations regarding how to retain customers.

By enabling clients to perform their daily personal and professional transactions at their location, online banking is introducing the globe to a new spectrum of banking. Regarding "timeliness and accuracy of information flow," which reduces lag in flow of knowledge a demanding decision-making environment, electronic bank service offers a distinct benefit in comparison to traditional bank branches. According to Venkatesh and Davis, 1996, Model for the Acceptance of New Technologies (TAM) is regarded as popular and reliable paradigm in the field of information system research to forecast an individual's uptake of cutting-edge innovation. This research has proposed and tested an integrated model to account for numerous aspects influencing individual acceptance & usage of online bank service at India adopting "TAM" as a theoretical framework. The model now includes the additional concept perceived risk along with the conventional "TAM" variables perceiving utility and perceived easiness. Trust & website design are the precursors of perceived danger.

Increasing management attention on the important task of providing a protected online space where users may freely share and receive information without fear of reprisal & enable clients to fully utilize online banking is the justification for adding perceived risk into TAM. Risk issues with internet banking services are becoming more widespread worldwide.

Online Banking Services

The way that banking is delivered has fundamentally changed since the middle of the 1990s in favour of self-service options like internet banking. Online banking has gained popularity over the last several years, and now, 55% of clients of private banks in Finland have an agreement with their bank for online banking. As per technical uses, Europe continues to lead the world in online banking. Comparatively, just around 20% of US banks provided online banking services towards the end of 2000, and only 20% of US private banking clients who had access to an internet connection did so (Sheshunoff, 2000; Orr, 2001). About 120 of the top US banks had online banking services by the end of 2002 (Pyun et al., 2002).

As a result, both ATMs and internet banking have encouraged competition among banks in the USA. In this research, "online banking" may be described as web gateway which permits users to access various finance related services, such as bill paying and investing.

Online banking is the automated provision of bank's goods and services to clients directly via electronic means of communication, most notably the Internet. E-banking or PC banking are other names for online banking. Internet banking is described as a "Internet platform, via which users may access various financial services, ranging from making investments to paying bills." This reform has also been well received by the Indian banking and financial industries. In today's intensely competitive market, more and more Indian banks are attempting to set themselves apart. This not only enables companies to better connect their offers with changing client demands and technological advancements, but it also takes over certain conventional banking duties, resulting in considerable savings in branch-related costs.

Service Quality

According to research, quality is determined by how well product and service meets the consumers' need. The discrepancy between what consumers anticipate and what they actually get from the service affects how customers perceive the services' qualities (Parasuraman et al. ,1985). Understanding consumer expectations and tailoring service delivery to meet those expectations has become essential for businesses. The competitive advantage of a firm is increased when it provides exceptional service and meets consumer expectations (Ranganathan and Ganapathy, 2002) .

Customer Perception

Outcome quality and process quality are both included in the term “perception.” Other academics have used similar terminology, referring to result quality as what the client really got and process quality as the manner in which the service is provided (Gronroos, 1990). However, since services often have more experience and credibility attributes, it is typically challenging for a consumer to assess result quality for any service (Rushton and Carson, 1989). Customers are prompted by this scenario to consider process quality, meaning that the service is assessed by consumers as it is being delivered (Swartz and Brown, 1989).

Customer Experience

Customer experience has been referenced, debated, and theorised during the last three decades by academics and industry professionals. The word “experience” was first used by pioneering academics, who defined it as fun leisure activities, sensory delights, artistic gratification, and emotional reaction. However, beginning in the late 1990s, marketing experts began to pay attention to customer experience as one of the important streams. Scholars Pine II and Gilmore (1999) and Schmitt were the main ones to start the project (1999). Realizing that actual experiences are different from services is crucial, according to Pine II and Gilmore (1999).

Customer Adoption

Online banking, sometimes known as e-banking, is one e-commerce instrument that the banking sector is embracing. Online banking and other IT technologies have improved services for the banking sector. Currently, in this case, “there are” tens of hundreds of online banks websites available worldwide. (Gurau, 2002). Although many industrialised nations, including the United States, have adopted internet banking, States and individuals in Europe, the use of internet banking by banks in emerging nations is also on the rise. (Gurau, 2002). Vietnam is a developing nation that has seen recent tremendous growth (PhanCuNhan, 2005).

However, people must be open to use the technology for internet banking to be effective in Vietnam (PhanCuNhan, 2005). The success of e-commerce, including online banking, ultimately depends on customer attitudes and their willingness to utilise online banking.

Although there has been research with the acceptance of internet bank assistance in the past, numerous research have concentrated upon American nations. Compared to other developed countries, the adoption of the age of internet banking has just begun. Therefore, the goal for this study is to comprehend consumers’ perceptions of online banking’s acceptability and identify the variables that might predict consumers’ desire to utilise internet banking.

Technological Advancements

Many businesses are compelled to implement the necessary technology in Present-day society is replete with sources of age where consumers are the centre of every company in order to satisfy the customers. Technology also facilitates communication between a business and its clients, vendors, and internal stakeholders. This then improves any further contacts with clients, increasing their satisfaction and committed to the business.

From a technology standpoint, CRM is a group of programmes that cater to the requirements of customer-facing operations, which in turn feed into a shared database that is backed by business analytic tools. The endeavor of an organisation to fully use CRM technology will certainly be hampered by ignorance of and disregard for key applications (Eid, 2007). Therefore, it is essential to comprehend the key technological elements that contribute to CRM success.

Online Trust

Trust is defined as “the conviction that one may rely on another’s word and that, under unanticipated circumstances, the other would behave in good faith and in the trustor’s best interests” (Suh and Han, 2002). By minimising monitoring and legal contracts, trust helps consumers save money and time (Fukuyama 1995) and also offers indicators for the anticipated result (Kumar 1996). Because there are no established assurances that an e-vendor won’t participate in damaging positive aspect because the environment is less controlled, trust is a key factor in e-commerce. Numerous experts concur that compared to brick-and-mortar stores or any other channel, e-commerce places a greater emphasis on trust.

Customer Satisfaction

The available research demonstrates the significance of customer satisfaction for long-term company performance (Zeithami et al., 1996). Businesses must outperform rivals to maintain market share and profit by providing high-quality goods and services that satisfy customers (Tsoukatos & Rand, 2006). Oliver (1980) also points out that in order to fully satisfy customers, goods and services must completely fulfil their expectations. Customers are happy when service performance meets or surpasses their expectations. In such case, they are not content (Munusamy, 2006). Additionally, a number of studies define customer satisfaction and dissatisfaction as the judgements of a consumer about the success or failure of a firm to satisfy expectations (Chidambaram, & Ramachandran, 2012, Kheng et al., 2010). When expectations are satisfied, contentment occurs, and when they are not, discontent arises (Oliver, 1980).

According to Lau and Cheung (2013), when consumers anticipate what they feel should happen, they are more likely

to be satisfied than when they experience what they assume to be the opposite perceived performance. Additionally, customer contentment increases the sense of quality and encourages repeat business. The nature of the interaction between consumers and providers of goods and services, in the banking sector especially, is a key component of customer satisfaction. As a result, both the quality of the product and the quality of the service are often seen as crucial requirements and useful factors for maintaining customer happiness. (Muslim & Isa, 2005). It is true that providing clients with high-quality services gives a firm a chance to stand out in a cutthroat industry (Karatepe et al., 2005).

The focus of marketing has been on customer pleasure for more than 30 years (Heitmann et al., 2007). Customer happiness and discontent, according to Patterson et al. (1997), is one of the fundamental marketing ideas that may be linked to any competitive advantage an organisation may have. As a result, every business may gain a competitive advantage over competitors by raising customer satisfaction levels (Mittal and Kamakura, 2001; Patterson et al., 1997). Businesses devote a significant amount of effort to boosting consumer happiness. (Durvasula et al., 2004) because happiness reflects the organization's overall health, its prospects for the future, and offers businesses with several advantages, including increased customer loyalty, reduced customer turnover, lower marketing costs, and improved brand perception (Fornell, 1992). In the current study, the suggested model's dependent variable is chosen to be cumulative satisfaction. Actual experience and anticipation were, however, regarded by Chen et al. (2008) as important determinants of satisfaction. They observed that contentment or discontent is caused by the discrepancy between anticipation and actual experience. Customers who see businesses favourably would rate their satisfaction favourably whereas those who perceive businesses badly would rate their satisfaction negatively. The marketing literature has looked at the connection between client pleasure and experience. According to Zeithaml et al. (2006), experience dominates the assessment process rather than the final result, which is contentment, due to their extensive background knowledge and impeccable reputation, service providers are carefully chosen. Customers are said to be unsatisfied with a service when simply service validity or service dependability are required. Additionally, a service that is very valid but invalid or extremely valid but invalid will result in unhappy clients.

Need for the study

Due to declining customer satisfaction, customer perception, customer adoption and online trust in online banking services, a tool like Service Quality, Customer Experience and Technological Advancements is necessary. Service quality is an antecedent of customer's satisfaction, whether these factors are assessed at the end of a single episode or over the course of several (Oliver, 1993; Spreng & Mackoy, 1996).

Due to its indispensable sequel, customer satisfaction has always been a subject of concern for marketers and practitioners. Although a lot of studies have been conducted over historical context to comprehend the concept of customer satisfaction, the research paradigm is still unable to create a generalized study for the operationalisation of attaining customer satisfaction. A number of different consumer behaviour theories impact how quickly and thoroughly a new service, like online banking, is adopted by the market (M. Sadiq Sohail, B. Shanmugham, 2003). Being mindful of this, the study adopts a relational approach, and characterizes the relationship between service quality, customer experience, technological advancements, customer perception, customer adoption, online trust and customer satisfaction in online banking services.

Research objectives

The present research tries to empirically understand the factors affecting customer satisfaction in the online banking services. For this purpose, the study has established three objectives, which try to encapsulate the essence of the study. The objectives are as follows:

1. To analyze the impact of service quality, customer experience and technological advancements on customer satisfaction in online banking.
2. To analyze the mediating effect of customer perception between service quality and customer satisfaction in online banking.
3. To analyze the mediating effect of customer adoption between customer experience and customer satisfaction in online banking.
4. To analyze the mediating effect of online trust between technological advancements and customer satisfaction in online banking.

REVIEW OF LITERATURE

A literature review examines the published data in a certain field of study during a specific period of time. A review of the literature might consist of a straightforward description of the sources, a recapitulation of the key points, or a reorganization or rearranging of the content. It could provide a fresh interpretation of the outdated information or combine fresh and outdated perspectives to show the subject's intellectual development. The literature review may assess the source and suggest the best course of action to the reader. The review should synthesize, explain, assess, and make the material more understandable. It should be able to specify the kind of research being done and provide a solid theoretical foundation for it.

Customer Satisfaction: Definitions

Customer satisfaction is a person's experience of pleasure or disappointment arising from the comparison of a product's perceived performance (or outcome) in accordance to his or her expectations (Kotler, 2000). Thus, customer satisfaction is a relative notion and is assessed in respect to a standard. At face value, this concept is fairly close to that of perceived quality. Hence, earlier studies have highlighted various conceptual concerns on whether customer happiness and perceived quality are the same or different constructs. Researchers have not always been able to separate these constructs empirically (Dabholkar, 1993; Oliver, 1993).

Dabholkar (1995) observed that the two notions were separate for recent consumers, but they overlapped for long term customers as customer satisfaction assessments become more cognitive with time. Contrarily, other research attempted to distinguish perceived quality and customer pleasure, because the former was defined at the transactional level and the latter at the global level (Eshghi, Haughton, & Topi, 2007). (Eshghi, Haughton, & Topi, 2007).

The level of fulfilment that a company is able to provide for its clients may be measured by customer satisfaction.

The customer's expectations in general and how successfully the organisation has been able to meet those requirements, approach the notion of what a perfect company would be like (Beerli, et. al., 2004).

The level of pleasure a company's consumers feel with their experiences might be interpreted as their plans for the company's future. Service provider, which is determined by the attitude that is developed from the experience of the consumer. When viewed as a whole, there are three distinct types of peripheral segments that may be distinguished:

- i) Satisfied customers are the result of a response, either emotional or cognitive.
- ii) The response is connected to a specific emphasis (such as a consuming experience, certain expectations, a product, etc.); and
- iii) The response takes place at a certain moment (after the decision has been made, after the consumption has taken place, and depending on previous experience, etc). (Kumar, Jumaev and Hanaysha, 2012)

David and Baker (2013) described the concept of customer satisfaction as "an emotional reaction to the gap between what consumers needs and what they receive." Given that internet banking services are readily available.

Customer Perception

Numerous studies have shown that the customer's cognitive evaluation of the firm's offering—which can be thought of

as quality as judged by the client is most crucial factor in determining whether or not the customer is satisfied with the product or service and whether or not the customer will remain loyal to the brand (Fornell et al., 1996).

According to Zeithaml (1988), the term "perceived quality" refers to the consumer's perception about an entity's overall excellence or superiority. 178 *Journal of Management Research* This particular person's experience is characterised by subjectivity, as opposed to the quality that is objective. The study on perceived quality may be traced back to previous studies in services marketing by researchers such as Gronroos (1984); however, until yet, most studies have focused on perceived quality was done in the 1990s (1992, 1994). The SERVQUAL scale, which was established by Parasuraman and colleagues in 1988, is the operationalization for service quality that has received the most widespread recognition.

The term "perceived service quality" refers to an overarching opinion or attitude towards the excellence of the service, whereas "satisfaction" refers to a feeling associated with a particular transaction (Parasuraman et al., 1988).

Service Quality

The quality of the service is comprised of both functional and technical aspects (Gronroos, 1990).

The functional component considers the manner in which the service workers do their jobs, the rate at which the service is provided, and the level of expertise possessed by the workforce. The technical elements are those that are concerned with the final product or service. The SERVQUAL methodology includes consideration of the following five perceived aspects of service quality: tangibles, dependability, responsiveness, assurance, and empathy (Parasuraman et al., 1988). It places an emphasis on the delivery method but does not take the behavioural factors into consideration (Baker and Lamb, 1993; Richard and Allaway, 1993).

According to the findings of research, there are numerous aspects to comprehending service quality. It considers aspects such as the service's physical, interactive, and corporate quality, customer-employee interactions (Rust and Oliver, 1994), and "how" the service was provided (Swartz and Brown, 1989).

Customers will consider a service to be subpar if it does not measure up to the standards, they have set for it (Oliver, 1980).

It has been shown that an improvement in the quality of the service leads to an increase in customer satisfaction, which in turn influences how customers feel about the service provided.

Bahia and Nantel (2000) developed the banking service quality scale as a result of their study on the quality of bank customer service. When it comes to banking, perceived service quality is the outcome of a difference between the customer's expectation and the actual service that is provided. The initial SERVQUAL scale included the majority of the components that make up the marketing mix; however, the "promotion" and "pricing" components were not included (Bahia and Nantel, 2000). The BSQ scale that they established has a total of 31 points, which are broken out as follows: effectiveness and assurance; access; pricing; tangibles; service portfolio; and dependability. According to them, providing exceptional service in banking involves accurately predicting and meeting the requirements and requirements of clients on a constant basis. Therefore, the quality of the service is defined by the views of the consumers, and it should include meeting the requirements of these expectations (Lewis, 1989; Howcroft, 1991; Kathawala and Elmuti, 1991; Blanced and Galloway, 1994; Chen, 2009). Lassar et al. (2000) looked at two factors and found that knowing both was critical for comprehending the quality of bank service. Despite the fact that SERVQUAL played an essential role in quality evaluation, the organisation also considered the functional and technological components of bank services.

Customer Experience

According to the research, the process of creating a positive customer experience is an all-encompassing notion that considers a variety of different transactions, beginning from the moment a client requests a service and ending with his assessment of the quality of that service. Different academics have arrived at distinct definitions for the idea. For example, Sirapricha and Tocquer (2012) proposed that the customer experience is the result of the contact between the customer and the company, which includes the engagement with the employees, self-service technology, service environment, service businesses, and the client themselves. "experience" is described as "a takeaway impression established by consumers experiences with goods, services, and businesses- a perception produced when individuals accumulate sensory information," according to Carbone and Haeckel (1994). (p.9). In the succeeding study, Haeckel et al. (2003) have defined experience to be the sensations that a consumer takes away from an engagement with a firm's products, services, and atmospheric stimuli. This definition may be found in Haeckel et al (2003).s definition of experience. They put out the idea that contact at different phases of the service delivery process produces hints in the form of emotional and cognitive impressions, which eventually result into experience.

Customer experience dimensions

There is a paucity of empirical backing in the customer experience literature; hence, standardised aspects of custom-

er experience have not yet been defined. In a similar vein, Nigam (2012) came to the conclusion that experiential marketing, also known as sensing, feeling, thinking, acting, and relating on the part of the customer, is significant since it influences the consumer's desire to make a purchase. He proposed that if a consumer had an experience that sticks with them, it would increase their likelihood of making a purchase. On the other side, his desire to buy will drop if he does not have a positive encounter with the product. According to Pine and Gilmore (1998), when an event involves more of a person's senses, it has the potential to be more powerful and memorable.

They were of the opinion that the most important thing for a consumer is to have a positive and memorable experience as a whole. Haeckel et al. (2003) examined the phenomenon from a different angle and identified three distinct sorts of signals that contribute to the customer experience: functional, humanics, and mechanical. They spoke about three different classifications of experience clues: functional, mechanical, and humanic. Functional clues refer to the actual functioning of the product or service; mechanical clues stimulate the emotional circuitry of the brain; and humanic clues are those that evoke affective responses. These three aspects of the client experience may be thought of as separate dimensions. Researchers at Berry et al. (2006) established a connection between functional cues and technical excellence.

The humanic cues include aspects of workers' and service providers' actions and appearances, such as tone of voice, body language, attractiveness, degree of excitement, and so on. The contacts between customers and service providers are very important, and when they contribute to high levels of performance, they may produce an emotional engagement and add to the overall service experience. Last but not least, tangible representations of services are referred to as mechanic hints. According to Berry and Seltman (2007), mechanic cues have the potential to impact consumers before humanic clues and functional clues, and as a result, they contribute to the formation of first-hand expression. Each of these three hints contributes in its own unique way to the overall creation of the client experience.

Backstrom and Johansson (2006) concluded that pleasant experiences are produced when staff are required to go above and above the required service level. This requires the employees to put in more effort. Schmitt's notion that is based on five dimensions is taken into consideration in the research for two reasons since it is in between the two classifications. To begin, these facets constitute the fundamental components that make up the client experience. Second, as was previously said, the customer experience is connected to the whole and accumulated customer experience that is formed throughout the process of learning about, purchasing, and using a product or service (Carbone and Haeckel 1994).

Customer Adoption

A great deal of prior research and studies have been carried out, and a variety of conceptual frameworks have been proposed, in order to ascertain the adoption scenario of IT applications in the market, such as internet banking. The purpose of these studies and frameworks is to identify the factors or determinants that influence the acceptance of technology in the context of the consumer. Since online banking is a kind of technical innovation (Lin and Lee, 2005), research that have already been conducted on the adoption of innovations might be used to the investigation of online banking. The Technology Acceptance Model (TAM) is one of the models that is used by researchers rather often in the investigation of the ways in which individuals accept new forms of technology (Davis, 1989). TAM claimed that the attitude toward adopting new technology can be predicted by using both the perceived utility and the perceived ease of use of the technology. This, in turn, impacts the behavioural intention to use the real system directly. [Citation needed] (Davis, 1989; Venkatesh et al., 2003). visiting to the bank and an improvement in the effectiveness of the system (Rao et al., 2003).

The Technology Acceptance Model (TAM) defines perceived ease of use as “the degree to which the prospective adopter anticipates the new technology chosen to be a free effort regarding its transfer and use” (Davis, 1989). Therefore, the likelihood of consumers making use of the system will increase if they have the impression that using online banking is uncomplicated and does not involve any hassle. TAM was found to be one of the most widely used technology adoption models after Jeyaraj et al. (2006) carried out an exhaustive review of the predictors of technology adoptions by organisations and individuals that were published between 1992 and 2003. This review was based on studies that were conducted between 1992 and 2003.

According to the findings of Jeyaraj et al., TAM is currently used in a significant manner despite the fact that it was originally made available in 1989. (2006). However, a large number of studies claim that TAM by itself is unable to adequately explain users’ decisions to adopt new technologies. As a result, the researchers who conducted these studies used TAM as a foundation for their own models and then extended those models by including additional variables that were relevant to the technologies they researched. For instance, Kamarulzaman (2007) used TAM in his research on the adoption of online purchasing. He also added personal and cognitive effect in his analysis. In addition, Amin (2007) made some adjustments to the conventional TAM by integrating perceived legitimacy and the availability of information on mobile credit cards in his investigation of consumers’ intentions on the use of mobile credit cards. In addition, the TAM was extended in a number of different ways throughout the course of the research on online banking that was carried out by Pikkarainen et al.

According to Kiong (2004), environmental factors such as the characteristics of a market, which include customers’ preferences and demographic factors, could either encourage or inhibit the adoption of e-commerce by businesses. Perceived ease of use refers to the extent to which a person believes that using a system will be free of effort (Davis et al, 1989). “Even if prospective users feel that a specific programme is beneficial, they may at the same time consider that the systems are too difficult to use and that the performance advantages of utilisation are overshadowed by the effort of utilising the application,” says the quote (Davis, 1989). There is a great amount of research suggesting that the perception of ease of use has a major influence on attitude, either directly or indirectly via the effect that it has on perceived usefulness (e.g. Davis et al., 1989; Venkatesh and Davis, 1996; Venkatesh, 1999, 2000; Agarwal and Prasad, 1999; Venkatesh and Morris, 2000). TAM demonstrates that PEOU came before PU, and although the former is more of a state, the latter is more of a process. TAM also demonstrates that PEOU is the antecedent of PU (Eriksson, et al., 2005). PEOU conducts the majority of its business via PU since PU can consider both the benefits and the costs of an action. PEOU could be considered a component of the cost (Davis, 1993). Applications that are simple to use are seen as less intimidating by their users (Moon and Kim, 2001), and they are also considered to be of more value to the user. When two information systems have the same functions, the one that is seen as being simpler to use will be regarded as being more helpful. On the other side, if people believe that the system serves no use, then user friendliness won’t be enough to drive adoption.

Online Trust

The transactions that take place in online banking involve highly confidential information about clients (Gefen, 2000; Morgan and Hunt, 1994). Because of security flaws and a general lack of confidence in online service providers, people are understandably wary of disclosing sensitive information such as their bank information over the internet (Suh and Han 2002). When it comes to the provision of financial services, the building of trust and confidence is an extremely important factor (Palmer and Bejou, 1994). The formation of trust (such as cognitive-based trust and disposition-based trust) prior to experience ought to have a substantial influence on the customer’s intention toward the adoption of online banking. In the context of online banking, the issue of trust is far more significant than it is in the context of traditional banking (Ratnasingham 1998). When it comes to the first phases of a relationship, trust as a belief that we have is highly significant since it provides credit to people before experience. Reichheld and Schefter (2000) stated that this disposition is very crucial when dealing with clients who have little to no experience shopping online.

In the field of marketing, trust has been studied primarily in the context of relational exchanges (also known as relation-

ship marketing). These exchanges can take place between a buyer and a seller (Doney and Cannon, 1997; Ganesan, 1994; Ganesan and Hess, 1997) or between a customer and a provider (Garbarino and Johnson, 1999; Singh and Sirdeshmukh, 2000; Sirdeshmukh et al., 2002). Other researchers have Along with opportunism and happiness, the function of trust in relationships has been conceptualised by a number of researchers as a component of relationship quality (Moorman et al., 1992). (Crosby et al., 1990). It has also been conceptualised as a powerful aspect of relationships (Anderson et al., 1987), a determinant of conflict between parties (Anderson and Narus, 1990), a source of believability and honesty (Zeithaml et al., 1996), and a tool of communication between parties (Anderson and Narus, 1990). [Citations needed] [Citation needed] [Citation needed] [Citation needed] [Citation needed (Mohr and Nevin, 1990). All of these things, in the end, contribute to a solid connection with consumers, which eventually results in increased customer satisfaction and loyalty (Reichheld and Schefer, 2000). Many academics, such as Zaheer et al. (1998), believed that trust was an essential component of a healthy, long-term connection with clients. In a similar vein, Wilson (1995) referred to it as the basic relationship model's core building piece. Finally, Singh and Sirdeshmukh (2000) referred to trust as the "glue" that maintains connections together and makes a beneficial contribution toward CRM and, eventually, the success of organisations.

Technological Advancements

In the prior body of literature, there is a scarcity of studies concerning technological CSFs. Although a wide variety of elements that might impact customer satisfaction (the success of CRM) have been stated in the research, relatively few studies that have been undertaken in the context of CRM give robust statistical evidence. For instance, Turban et al. (2006) emphasised the significance of information systems in order to have a successful CRM deployment. [Citation needed] Umashankar (2001) included the selection of right software as one of the unavoidable aspects for successful CRM implementation.

On the other hand, Lee et al. (2001) noted that the majority of the CRM software that has been built does not even match the most fundamental requirements of customers. This problem also highlights how important it is for a given business to choose the appropriate software for its needs.

Automation of sales forces is yet another important aspect connected to technological advancements (SFA). Since this factor plays such an important part in boosting customer satisfaction, a great number of researchers (Avlonitis and Panagopoulos, 2005; Honeycutt et al., 2005; Morgan and Inks, 2001; Pullig et al., 2002; Rivers and Dart, 1999; Robinson et al., 2005; Speier and Venkatesh, 2002) have shown a keen interest in studying it. Some examples of these studies include Avlon According to Sandoe et al. (2001), businesses

should make an investment in the development of their database technologies such as data warehousing and data mining to ensure that customer relationship management (CRM) systems perform correctly, are successful, and achieve their goals. Other researchers have included the internet (Barnes, 2001) and call centres as significant components of the technology-related issues (Wallace and Hulme, 2001). According to findings from Forrester Research, seventy percent of businesses asked feel that contact centre tactics are essential to the success of CRM; nonetheless, many businesses struggle with providing the appropriate information to their consumers.

According to Kirby (2001), these businesses have to realise that CRM cannot operate inside the framework of uncoordinated activities in order for it to be successful.

To improve customer satisfaction and ensure the effective adoption of CRM, businesses need to ensure that all of their tasks are coordinated, and they should also acknowledge the role that technology plays as a facilitator in this process (Hart et al., 2004).

RESEARCH METHODOLOGY

The present research attempts to throw light on the factors which affect the overall satisfaction of the customer towards the banks with special focus on the online banking services. On the basis of an extensive review of literature, this study has identified a few factors that lead to customer satisfaction. Out of those identified a few factors; service quality, customer experience and technological advancements are being treated as the independent variables. The other three factors identified are customer perception, customer adoption and online trust, which act as mediating variables. The last identified variable is customer satisfaction, which acts as a dependent variable. This study tries to establish an inter-relationship between service quality, customer perception, customer experience, customer adoption, technological advancements, online trust and customer satisfaction with different dimensions of Service Quality, Customer Experience & perception and Customer Satisfaction. The current study tries to explore the path from service quality, customer experience and technological advancements to customer satisfaction. For this purpose, a serial mediation path is established starting from service quality leading to customer perception and customer perception leading to customer satisfaction. Further, we also analyse the relationship between customer experience and customer satisfaction which is mediated by customer adoption, and the serial relationship between technological advancements and customer satisfaction which is mediated by online trust.

Rationale of the study

The rationale of this study can be bifurcated into two parts. The first and the basic rationale behind conducting this re-

search is to check the relationship amongst different factors affecting customer satisfaction viz; service quality, customer perception, customer experience, customer adoption, technological advancements, online trust and customer satisfaction in online banking services. An in-depth analysis would help in giving a clear picture as to what ultimately makes the customer satisfaction in online banking services. A question remains whether service quality, customer experience and technological advancements directly relate to customer satisfaction, or if there are other factors that can mediate this relationship. Research done in the past has tried to establish a direct relationship between service quality and customer satisfaction (R. Ragu Prasad, 2018; Rizwan Rheem Ahmed et al., 2017; Debarshi Ghosh et al., 2017), customer experience and customer satisfaction (Mohsen Mazaheri Asad et al., 2016 ; Meenakshi Sharma et al., 2014;

Conceptual Framework

A conceptual framework, depicted in Figure 1, has been designed for the study based on the rationale and objectives. This framework provides a diagrammatic presentation of the actual research work. As shown in Figure 1, service quality, customer experience and technological advancements are independent variables, customer perception, customer adoption and online trust are mediating variables and customer satisfaction is dependent variable.

However, the above-mentioned relationship would be given a more concrete structure only if the inter-linkage is established among them. So, this framework will check the serial mediation among the constructs in this study. This will help in getting a more robust outcome for the study.

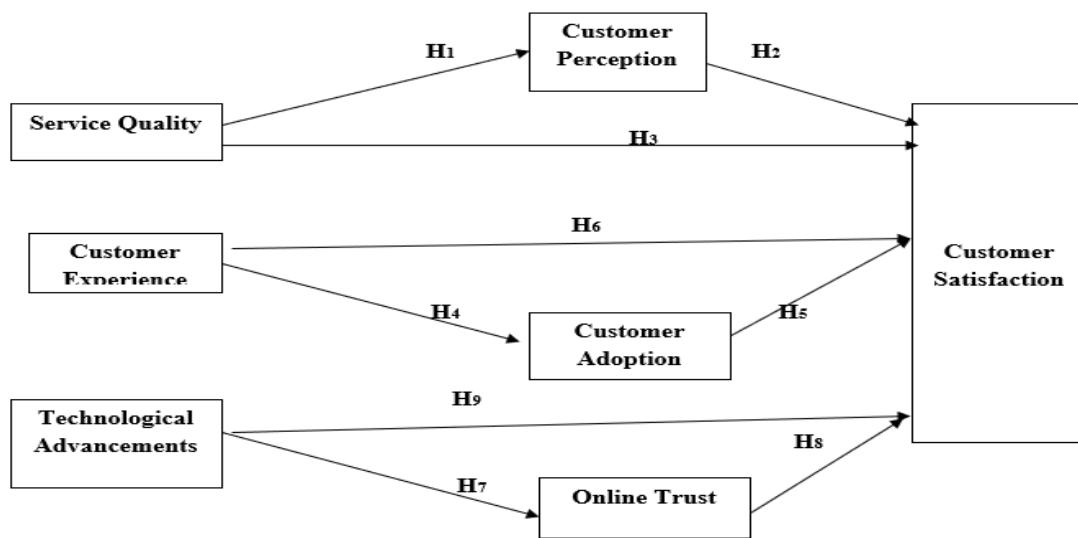


Figure 1 : Conceptual Framework

Hypothesis Formulation

On the basis of the framework discussed, the following hypotheses have been established.

- H1:** There exists a relationship between service quality and customer perception.
- H2:** There exists a relationship between customer perception and customer satisfaction.
- H3:** There exists a relationship between service quality and customer satisfaction.
- H4:** There exists a relationship between customer experience and customer adoption.
- H5:** There exists a relationship between customer adoption and customer satisfaction.

- H6:** There exists a relationship between customer experience and customer satisfaction.
- H7:** There exists a relationship between technological advancements and online trust.
- H8:** There exists a relationship between online trust and customer satisfaction.
- H9:** There exists a relationship between technological advancements and customer satisfaction.

Scale/ Instrument Development/ Questionnaire Design

The current study uses a questionnaire to evaluate the relationship between various customer satisfaction in online banking services related constructs (service quality, customer perception, customer experience, customer adoption, technological advancements, online trust and customer sat-

isfaction). The said questionnaire was divided in two parts, the first section is related to demographic profile of the respondents whereas, the second section of the questionnaire contains measurement statements of various constructs adopted from the previous literature.

Sample Size

The sample size is an essential part of empirical research. The goal is always to draw inference from the population set for the sample. As mentioned previously, the population is viewed to be the sum total of elements that are investigated in terms of time, place, education and unit of sampling. Sample size taken for this study is 728. This number is based on the findings of Orme (1998). According to him, a total sample from 150 to 1,200 respondents was found to be acceptable for joint studies. The total sample of 728 respondents was decided on the basis of the following factors: The present study is a combination of exploratory, descriptive, and causal research.

95% Confidence level required.

Pre-Testing of the Instrument

The purpose of the pilot study was to evaluate the reliability of the measurement items used in the questionnaire. Pilot testing was conducted on a sample of 80 respondents. The said sample size has been decided based on the recommendations of Connelly (2008), where it was suggested to take 10 per cent of the sample projected for the larger parent study. The pilot study also proposed the adjustments to be made in the final questionnaire.

3.8 Reliability Measurement

Reliability is performed to test whether the tools used to measure the variables get a consistent response. Reliability of the scale has been evaluated with the aid of Cronbach's Alpha. A value of 0.7 or more is considered acceptable (Cronbach, 1951; Nunnally, 1978). The overall value of Cronbach's Alpha was computed at .867 thereby, indicating the internal consistency of the items.

Data Collection Procedure

The data, which is primary in nature, has been gathered with the distribution of a structured non-disguised questionnaire. The questions were listed in a pre-arranged order and the respondents were told about the purpose of collecting the information. The research aims to understand the factors affecting customer satisfaction in online banking services. The questionnaire has been circulated in the National Capital Region including Delhi, Ghaziabad, Faridabad, Noida and Gurugram. The questionnaire was circulated through online channels. For the online platform, the questionnaire has been circulated as a Google form on apps such as WhatsApp, Facebook as well as Gmail. Data was collected

from July 2021-December 2021. Data has been collected from the respondents who used online banking services. In total, 1000 questionnaires were distributed initially. After removing the un-filled or redundant responses, 728 forms were found fit for statistical analysis: thereby, achieving a 73 percent response rate.

Result and Interpretation

Data Analysis

This section of the thesis offers a precise and detailed report of the analysis as well as the interpretation of the data obtained during the research process. The analysis and interpretation of data is a procedure that attributes value to the information obtained and draws inferences from the gathered information (Spiggle, 1994). It is also known as 'empirical investigation of the organized material', which promotes the discovery of critical knowledge. This chapter concerns the presentation of the findings of the data gathered after the empirical review.

Design for Analysis

The objective behind conducting this research is to study the factors affecting customer satisfaction in online banking services. For this purpose, six variables have been identified, viz. service quality, customer perception, customer experience, customer adoption, technological advancements and online trust. Their independent and inter-relationships will be tested with dimensions customer satisfaction viz; E-SERVQUAL and TAM. The technique of Structural Equation Modeling (SEM) has been used to accomplish the above-mentioned objective. The collected data has been examined with the help of validated tools and techniques. The first step in this procedure was to check for any biasness in the data collected. It has been done with the help of Harman's Single Factor test (Harman, 1967). With no biasness reported in the data, Exploratory Factor Analysis (EFA) has been performed in the SPSS software 24.00. Once the factors were identified using EFA, Confirmatory Factor Analysis (CFA) and Path analysis were used to confirm those extracted factors. The current study will be focusing upon three simple mediating relationships.

Harman's single-factor test for Common Method Biasness (CMB)

As per Podsakoff et al. (2003), common method bias appears to arise when a highly associated measurement scale or maybe related methodology is used in data collection. Harman Single Factor Test has been recommended to test for any biases in the data set (Podsakoff, MacKenzie & Podsakoff, 2012). As per this technique all variables are subject to Exploratory Factor Analysis and if single factor accounts for more than 50 per cent of the variance explained, CMB is presumed to exist (Harman, 1976). 43.731 per cent of vari-

ance is explained by a single factor, which is lower than the threshold of 50 per cent (Harman, 1976). Thus, we can infer that the data is free from any biasness.

Craighead et al. (2011) suggested carrying out the CFA, since it offers resilience to the findings of the EFA. Different model fit indices were used for both, a one-factor and a multi-factor model. In the case of a one-factor model, the value of Chi-square, as well as other fit indices, came out to be insignificant, while all values are statistically significant in the multi-factor model. Hence, the multi-factor model is indeed a good fit model, and the single-factor model is not. The difference amongst the model fit indices of both the two models is also significant and exceeds the threshold of 0.001 (Byrne, 2013). It can, therefore, be deduced that the data are not subject to any bias and can be used for further analysis.

Reliability of Measurement Scale

Cronbach (1951) described reliability as “the internal consistency of the measurement scale, which highlights the consistency of the output given by the tool.” According to Nunnally (1978), the permissible limit for the measurement scale would be that the Cronbach Alpha value must be higher than the 0.7 cut-off limit. In this study, the value of Cronbach Alpha (α) came out to be 0.933, which comes well within the prescribed limit.

Exploratory Factor Analysis

Using factor analysis, this study extracted 7 factors out of 30 variables. The current study reflects 7 factors representing 30 variables. 84.183 per cent of the variance is explained by the 7 factors and data is being significantly represented (Pett, Lackey & Sullivan, 2003). The eigenvalue of all 7 factors has been determined to be more than 1. The component F1 explains the maximum variance, among 7 factors, with eigenvalue of 9.183 and 43.731 per cent of the variance explained. It is followed by component F2, with eigenvalue of 4.163 and 19.825 per cent of the variance explained. Accordingly, F3; F4; F5, F6, F7 comes next, with eigenvalue of 1.719, 1.415, 1.197, 1.176, 1.857 respectively and 8.185, 6.740, 5.702, 4.876, 4.471 per cent of the variance explained, respectively.

Assessment of Measurement Model Fit

The fitness of the measurement model is evaluated with the aid of AMOS 21 after assessing the validity of the model. This step validates the support of the measurement model for the theoretical structure. Various model fit indices are used in this analysis, and this facilitates the confirmation of the model fit. The values are $CMIN(\chi^2) = 401.736$, $(df) = 179$, $CMIN/df (\chi^2 /df) = 2.244$ which is lower than the threshold of 4, $GFI = 0.938$, $AGFI = 0.920$, $CFI = 0.983$, $IFI = 0.983$, $NFI = 0.969$, and $ECVI = 0.833$. The evaluation of the model fit in this study is carried out as indicated by Booms-

ma (2000). The required limit has been achieved by AGFI, IFI, NFI and CFI. The RMR is 0.063, that is lower than 0.1; the RMSEA has also been shown to be 0.045, which is lower than 0.06. All model fit measures indicate that the model is, indeed, a good fit.

Path Analysis

The direct relationship between independent and dependent variables has been tested before beginning with the mediation analysis. The present research tries to study service quality, customer experience and technological advancements as independent variables (IDV). Customer Satisfaction is Dependent Variable (DV). Two distinct criteria have been utilized to verify the relationship. Firstly, the Critical Ratio (CR) has been compared to the Z-value at the 95% confidence level ($C.R > 1.96$). Secondly, the regression coefficient has been verified at a 5 % significance level ($p < 0.05$). Only once the relationship is proved to be significant, then we can proceed with the testing of hypothesis.

All relationships except customer perception and customer satisfaction, customer adoption and customer satisfaction & online trust and customer satisfaction relationships came out to be significant. The relationship depicting impact of customer perception on customer satisfaction (H2) has been found to be insignificant, as the p-value came out to be more than 0.05, i.e. 0.339. Likewise, the statistical results do not support the relationship as ($b = 0.035$, $p = ***$); $CR (0.955)$, which is less than the required 1.96 value.

The study also examines the mediating role of customer perception, customer adoption and online trust. This helps in a better understanding of the inter-relationships of factors affecting customer satisfaction.

Mediation Analysis

The mediation analysis aims to clarify the relationship between the predictor, as well as the criterion variable. The predictor variable, indeed, the IDV, while the criterion variable is the DV.

The first indirect effect of service quality on customer satisfaction through customer perception is -0.1910 . The said effect is negative due to the reason that the bootstrap confidence interval excluded is below zero (-0.2021 to -0.0987). Service Quality leads to higher Customer Perception (0.5745), however, this enhanced Customer Perception was not supported with higher customer satisfaction. The second indirect effect of customer experience on customer satisfaction through customer adoption is 0.0712. The effect came out to be positive owing to the reason that the confidence interval is above zero ($.0084$ to $.1378$). Customer Experience leads to higher customer adoption (0.4956), and a higher customer adoption leads to higher customer satisfaction (0.1438). The third indirect effect of technological advancements on

customer satisfaction through online trust is 0.0852. As discussed previously, the positive effect is due the confidence interval being above zero (.0421 to .1366). Technological advancements lead to online trust (0.2452), and a higher online trust leads to higher customer satisfactions (.3476). Hence, based on statistical evidence, it is deduced that the above-mentioned three indirect relationships are significant.

CONCLUSION

Customer Satisfaction is the ultimate objective of every organization. Every organization opts innovative ways for delivering goods or services to its customer to increase their level of satisfaction. Banks are also adopting the latest technology to make the services more secure and convenient for their customers to make them more satisfied.

The study focuses on three broad objectives. First objective was to analyse the effect of service quality, customer perception, customer experience, customer adoption, technological advancements and online trust on customer satisfaction. The said objective has been accomplished for three variables, viz. service quality, customer experience and technological advancements. Service quality significantly impacts customer satisfaction in online banking services. Similarly, customer experience and technological advancements influence the satisfaction level of the customer in online banking services. The relationship between service quality and customer satisfaction is mediated by customer perception, the relationship between customer experience and customer satisfaction is mediated by customer adoption and the relationship between technological advancements and customer satisfaction is mediated by online trust.

The basic premise of the research is based on the analysis of inter-relationship of factors affecting customer satisfaction in online banking services. The current study examines the impact of service quality, customer perception, customer experience, customer adoption, technological advancements, and online trust on customer satisfaction.

Findings of the study revealed that service quality shares a significant relationship with customer perception and customer satisfaction, customer experience shares a significant relationship with customer adoption and customer satisfaction and technological advancements share a significant relationship with online trust and customer satisfaction. Service

Quality directly impacts customer satisfaction and indirectly through customer perception (mediating variable), customer experience directly impacts customer satisfaction and indirectly through customer adoption (mediating variable) and technological advancements directly impact customer satisfaction and indirectly through online trust (mediating variable). The results obtained suggest that the customer perception, customer adoption and online trust are central for development of customer satisfaction. Marketers always thrive to satisfy their customers to a large extent. They try to convince customers to use the services offered so that their satisfaction level can be measured accurately.

From the managers' viewpoint, the findings of the study support that service quality exerts a stronger influence on customer perception and customer satisfaction; customer experience exerts a stronger influence on customer adoption and customer satisfaction (Wai-Ching Poon, 2008) & technological advancements exert a stronger influence on online trust and customer satisfaction (M Sadiq Sohail et al., 2003). This implies that if the manager wants to increase the level of satisfaction of customers in online banking services, he should develop strategies to increase the level of perception of customers, the adoption of online banking services and build up the online trust.

The level of satisfaction that Indian clients have had with the service provided by domestic financial institutions is a major factor in determining their views of global banks. There is a significant discrepancy in the service quality in terms of both service delivery and result, and these are critical elements that influence their impressions of international banks provide superior levels of service.

Limitations and Future Scope:

The sample selection of the study is restricted to New Delhi and related areas. Nevertheless, to boost the generalizability of the findings, data from different regions of India could also be collected. In the future, a much larger and more representative response group will allow the researcher to conduct a much more comprehensive analysis, maintaining the efficacy and reliability of the techniques used. In addition, it is possible to perform a comparative analysis between two banking sectors to see which banking sector is more dominant.

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