International Journal of Business and Economic Affairs (IJBEA)
8(3), 165-180 (2023)
DOI: 10.24088/IJBEA-2023-830013
ISSN: 2519-9986

Exploring the Impact of Internet Banking Service Efficiency on Customer Loyalty: The Mediating Role of Customer Satisfaction and the Moderating Effect of Customer Trust

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Abstract: Technological advancements have led to a revolutionary shift worldwide, making the internet widely popular. However, the number of internet users in Pakistan remains relatively low compared to the total population. To explore the potential impact of efficient internet banking services on customer satisfaction and loyalty, this study employed a cross-sectional research design. The main goal was to examine how efficient internet banking services could boost customer satisfaction and foster loyalty. Additionally, the study aimed to determine if trust played a moderating role in influencing customer satisfaction. The study utilized a quantitative methodology and collected data through a structured Likert scale questionnaire administered to bank customers in Karachi, Pakistan. The participants were selected through convenience sampling, based on their computer literacy skills and active engagement in internet banking. A total of 120 questionnaires were collected and analyzed using Smart PLS- version 3.4.

Keywords: Internet Banking ("IB"), Efficiency of Internet Banking Services ("EIBS"), Customer Satisfaction ("CS"), Customer Loyalty ("CL") and Trust ("T")

Received: 01 January 2023 / Accepted: 12 March 2023 / Published: 23 May 2023

INTRODUCTION

In today's dynamic business landscape, banks are experiencing significant transformations due to innovative electronic services (Statista, 2018). Internet banking, a crucial facet of e-commerce, offers quicker, more convenient, and cost-effective transactions for both banks and customers (Raza et al., 2020; Alalwan et al., 2017). The demand for internet banking is steadily increasing as customers prefer online banking over visiting physical banks (Islam et al., 2023). However, establishing trust remains essential for customer loyalty in digital environments (Shankar & Jebarajakirthy, 2019).

As the demand for internet banking rises, competition among banks to provide efficient services and ensure loyalty is growing (Sardana & Singhania, 2018; Makanyeza & Chikazhe, 2017; Kandampully et al., 2015). In Pakistan, internet banking has expanded, but adoption rates remain relatively low. In the second quarter of December 2022, the State Bank of Pakistan recorded a significant 42.80% surge in internet banking users compared to the previous year. Nonetheless, the adoption rate remains relatively low across the entire population, possibly due to concerns related to service quality and customer dissatisfaction (Li-hua, 2012; Zhao et al., 2010). To encourage digital transactions, the State Bank of Pakistan is concentrating on improving infrastructure and regulatory measures to bolster customer confidence (Shadman, 2016). The recent introduction of "Raast," offering instantaneous and reliable payments, aims to promote financial inclusion by emphasizing efficiency and a reliable channel.

While trust is crucial, the efficiency of internet banking services plays a pivotal role in securing customer loyalty in today's fast-paced world. Efficiently meeting customer demands leads to satisfaction and loyalty towards

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the cyber-bank service (Kheng et al., 2010). Consequently, banks must ensure the provision of efficient internet banking services while upholding trust to achieve customer satisfaction and loyalty.

Numerous research studies have investigated the correlation between the quality of internet banking services and customer satisfaction, employing diverse models like ES-Qual and SERVQUAL (Zouari et al., 2021; Ahmed et al., 2020; Aslam et al., 2018; Zia, 2022; Raza et al., 2020). Nevertheless, this study sets itself apart by concentrating exclusively on the efficiency aspect. It acknowledges the importance of prompt and outstanding services in today's digital age, addressing a crucial aspect of fulfilling customer expectations.

Moreover, this study integrates Total Quality Management and the ES-Qual Model to investigate the drivers of customer satisfaction in the Digital Era. It reveals that consistently delivering efficient services to customers significantly influences their satisfaction levels, ultimately resulting in customer loyalty.

Notably, there is a scarcity of research on how the efficiency dimension alone impacts satisfaction in Pakistan, rendering this study a pioneering effort in that context.

In essence, this research study amalgamates TQM principles and the ES-QUAL model, specifically centering on the efficiency dimension of Internet Banking Service Quality. Its aim is to explore how efficiency influences customer satisfaction and loyalty concerning internet banking services, while also considering the moderating role of trust.

LITERATURE REVIEW & DVELOPMENT OF HYPOTHESIS

Theoretical Background

The foundation of this research study lies in the integration of Total Quality Management (TQM) principles and the ES-QUAL model, providing the theoretical framework for the study. The process of liberalization and globalization within the banking sector has highlighted the significance of service management and quality performance, resulting in heightened competition (Selvaraj, 2009). To remain effective, banks must prioritize superior customer service, quality, cost-effectiveness, and innovation (Cowling & Newman, 1995).

Modern customers have a multitude of options and choose service providers based on factors such as quality, reliability, profitability, and adherence to international standards. Survival in the service industry depends on delivering quality service, leading to the adoption of Total Quality Management (TQM) (Selvaraj, 2009; Saravanan & Rao, 2006). In the banking sector, exceptional system and information quality contribute to increased customer satisfaction and loyalty (Aghdaie et al., 2015).

Pakistani banks have transitioned from traditional banking methods to modern online services, aiming to provide excellent quality through their online platforms (Ahmed et al., 2017; Malhotra & Singh, 2004). Offering exceptional online services leads to customer satisfaction, retention, and positive word-of-mouth, enhancing the organization's reputation (Parasuraman et al., 1988; Cronin & Taylor, 1992; Caruana, 2002). The significance of service quality in various online services offered through the Internet is well-documented (Santos, 2003; Vinayek & Jindal, 2011; Shankar et al., 2003; Mahajan et al., 2002).

Additionally, the ES-QUAL model comprises four dimensions to gauge customers' perceptions of e-service encounters: Efficiency, Fulfillment, System Availability, and Privacy (Parasuraman et al., 2005). However, for this study, the focus is solely on the impact of the Efficiency dimension on customer satisfaction in the context of internet banking.

Choosing one dimension of service quality from the ES-QUAL model for internet banking service quality is a deliberate decision to concentrate on the aspect that most significantly impacts customer satisfaction and loyalty in the modern world. In today's fast-paced and technology-driven environment, customers expect efficient and seamless online experiences. Thus, the efficiency dimension aligns with customer expectations for speed and convenience in their online banking transactions.

Extensive literature provides robust support for the significance of speed, efficiency, and improvements as pivotal factors that shape customers' perceptions of service quality. This, in turn, aligns positively with their utilization of online services (Gautam & Sah, 2023; Fassnacht & Koese, 2006; Polatoglu & Ekin, 2001; Raza et al., 2020; Lodhi, 2020; Wu and Chang, 2013; Chen and Hitt, 2002; Kheng, 2010), consistently demonstrating that efficiency profoundly impacts e-customer satisfaction.

Moreover, Coulter and Coulter (2002) argue that effective indicators of service quality play an essential role in alleviating uncertainties for buyers. In the realm of financial services, trust emerges as a fundamental factor for establishing and maintaining relationships between clients and banks, particularly considering the inherent risks associated with automated services in the banking industry (Sharma & Patterson, 1999; Herington & Weaven, 2007).

Consequently, both trust and efficient internet banking services hold a critical role in attaining customer satisfaction and fostering customer loyalty. The theoretical model employed in our study is illustrated in Figure 1.

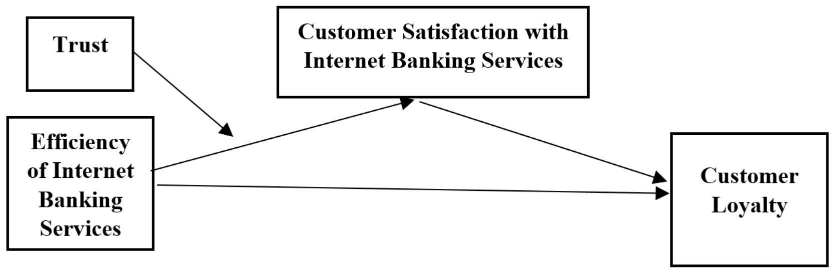

Figure 1: Theoretical Framework

Hypothesis Development

Efficiency of IBS and Customer's loyalty: The literature extensively explores the relationship between electronic banking service quality and customer loyalty (Hussien & Aziz, 2017; Shankar & Jebarajakirthy, 2019). A dependable and high-speed internet connection is a fundamental necessity to ensure customer satisfaction and promote loyalty. Inadequate connectivity and slow speeds can result in frustration, reduced productivity, and ultimately lead to a decline in customer loyalty. The speed and reliability of internet connectivity often exert a significant influence on shaping customer satisfaction and loyalty (Chaudhry et al., 2009). It has been suggested that when customers are provided with high-quality interactive services through an e-banking platform, they are more likely to consistently use the service for their banking needs and recommend it to others (Gera, 2011). Prioritizing e-banking loyalty is of paramount importance for banks to uphold their existing customer relationships and attract potential customers (Amin, 2016). Therefore, it becomes crucial for banks to formulate marketing strategies that deliver exceptional value to customers, fostering loyalty towards e-banking services (Kotler et al., 2014).

Customer loyalty can be explored and understood from both attitudinal and behavioral perspectives (Oliver, 1999; Zeithaml, 2000). From an attitudinal angle, loyalty can be defined as customers' inclination to maintain a relationship with a service provider (Zeithaml, 2000). The swift and error-free execution of banking transactions is often considered crucial in assessing the credibility of e-banking service providers (Blut et al., 2014; Liang & Pei-Ching, 2015; Saccani et al., 2014). The initial hypothesis of this study is stated as:

H1: There is a substantial impact of the Efficiency of Internet Banking Services on Customer's Loyalty.

Efficiency of IBS and Customer's Satisfaction: Customer satisfaction involves assessing how well a user perceives a service's ability to meet or exceed their expectations, thus fulfilling their needs (Batumalai, et al., 2022; Raza et al., 2020). It reflects the sentiment linked to an outcome that matches or exceeds the anticipated level. Therefore, satisfaction relies on the service provider's capacity to meet or surpass customer expectations (Mwiya et al., 2017).

Efficiency pertains to the smooth and rapid accessibility and usability of a website (Parasuraman et al., 2005). This involves companies effectively addressing customer inquiries by facilitating easy searching, retrieving, and integrating of information (Li & Suomi, 2009; Yang et al., 2003). Examples of efficiency include swift responses to customer queries, prompt order acknowledgments, automated delivery and payment updates (Singh, 2002), quick download speeds (Poon, 2008), and well-structured websites (Santos, 2003). The speed of service delivery is crucial for customers as it significantly influences user satisfaction in e-banking services with electronic transactions (Liao & Cheung, 2002; Poon, 2007).

Efficiency and speed are pivotal factors in ensuring customer satisfaction. A fast and seamless experience can greatly enhance customer satisfaction, thereby promoting increased loyalty and repeat business. Notably, efficiency or speed has a positive and significant impact on customer satisfaction (Ahmad & Al-Zu' bi, 2011; Amin, 2016;

Hammoud et al., 2018). Empirical studies conducted in Iran (Sakhaei et al., 2014), Jordan (Alawneh et al., 2013), and Malaysia (Kadir et al., 2011) have affirmed the influence of efficiency on customer satisfaction.

Building upon the above, the ensuing hypothesis is postulated:

H2: The efficiency of Internet Banking Services has a significant impact on customer satisfaction.

Customer's Satisfaction and Customer's Loyalty: Two fundamental factors significantly influence customer loyalty: customer satisfaction and perceived value (Javed, 2017). Extensive research results highlight a strong positive connection between customer satisfaction, perceived value, and organizational performance. This is especially prominent in the context of business-to-consumer (B2C) e-commerce, where customer satisfaction acts as an indicator for consumer loyalty (Eid, 2011).

Numerous studies have explored the relationship between customer satisfaction and loyalty, investigating various factors and their impacts. The success of banks heavily relies on customer satisfaction, which directly influences customer loyalty. From a theoretical perspective, understanding the determinants of customer satisfaction is crucial as they form the foundation for e-customer loyalty and commitment (Al-Msallam, 2015; Ganguli & Roy, 2011). Anderson and Srinivasan (2003) uncovered a significant direct impact of e-customer satisfaction on e-customer loyalty, extending to employee job satisfaction (Gautam, 2016; Haq et al., 2010). Amin (2016) observed that contented users of Internet banking services tend to exhibit higher loyalty to their banks, emphasizing the role of e-customer satisfaction in shaping e-customer loyalty. Raza et al. (2020) explored the relationship between online banking service quality dimensions, electronic customer satisfaction, and loyalty, highlighting the growing importance of online banking as more people rely on the Internet for banking interactions. The core of customer loyalty hinges on retaining online customers by addressing concerns, resolving online banking issues, and ensuring overall satisfaction. Customer satisfaction and loyalty open pathways for service improvement and competitive advantage (Siddiqi, 2011), with technology emerging as a significant and beneficial factor influencing customer loyalty. Positive evaluations of service providers are based on customers' assessments of service quality experiences (Banu et al., 2019; Ganguli & Roy, 2011).

Drawing from the aforementioned discussions, the ensuing hypothesis is postulated:

H3: Customer satisfaction has a significant impact on customer loyalty.

Mediating Role of Customer Satisfaction between Efficiency of IBS and Customer's Loyalty: Extensive scholarly research has extensively documented that increased customer satisfaction indirectly contributes to customer retention (Walsh et al., 2009). This phenomenon arises from the fact that sustained customer satisfaction reduces the necessity for customers to explore alternative service providers, thereby reducing their transaction costs. As a result, customer satisfaction not only decreases perceived risks but also fosters elevated customer loyalty, acting as a potent barrier against new market entrants. This alignment with existing empirical evidence is reaffirmed by studies conducted in Pakistan (Raza et al., 2020), Zambia (Mwiya et al., 2017), and Malaysia (Amin, 2016), highlighting the positive correlation between customer satisfaction and loyalty.

Businesses consistently aim to achieve higher customer satisfaction as a foundational element, with the primary objective of nurturing customer loyalty. This trend is evident in various sectors, such as tourism, where satisfied tourists tend to develop into loyal customers (Mahadin et al., 2020). E-satisfaction also translates into attitudinal loyalty, consequently influencing behavioral tendencies positively. Undoubtedly, the degree of customer satisfaction is frequently regarded as a crucial factor that impacts both customer loyalty and the intention to make repeat purchases (Deng et al., 2010; Liao, Palvia & Chen, 2009).

Within the banking sector, e-satisfaction serves as a pivotal factor in promoting increased engagement with banking services, subsequently enhancing the prospects of e-loyalty (Giao et al., 2020; Suariedewi and Suprapti, 2020). Building upon this understanding, the following hypothesis is posited:

H4: Customer Satisfaction plays a significant mediating role between the Efficiency of Internet Banking Services and Customer Loyalty.

The relationship between the efficiency of internet banking services and customer satisfaction is moderated by customer trust: The significance of the relationship among the efficiency of Internet Banking Services (IBS), trust, and customer satisfaction is paramount. Trust plays a pivotal role in influencing customers' inclination to adopt technology, acting as a safeguard for privacy and user information during electronic transactions (Boateng, Adam, Okoe, & Anning-Dorson, 2016). Establishing trust holds key importance for merchants in fostering enduring positive client relationships and encouraging technology adoption (Partel et al., 2019; Reichheld & Schefter, 2000). The foundation of trust rests upon customers' confidence in the fulfillment of promises by IB services (Bashir & Madhavaiah, 2014), and it is a vital element for addressing customer needs (Usman, 2015). Several studies emphasize the role of trust in enhancing customer relationships and ensuring system security (Liébana-Cabanillas et al., 2018).

Sharma and Sharma (2019) contend that trust is a pivotal determinant of users' intentions, especially in situations necessitating confidential information for online transactions. Recent research also highlights the critical role of online trust in the adoption of e-banking (Chiu et al., 2019).

Customer satisfaction is notably influenced by the strong presence of consumer trust. This trust signifies the degree of confidence customers hold in an organization's capacity to meet their needs and expectations. Recognizing the moderating impact of customer trust holds vital importance for businesses aiming to optimize customer satisfaction. In cases where trust in a business is lacking, customer satisfaction and subsequent loyalty are jeopardized (Ahmed et al., 2020; Doghan & Albarq, 2022). Consequently, businesses should prioritize the establishment of customer trust to maximize customer loyalty (Ranaweera & Prabhu, 2003). This formulation of the following hypothesis is based on existing literature:

H5: The relationship between the efficiency of Internet Banking Services and customer satisfaction is moderated by Customer Trust.

RESEARCH METHODOLOGY

The data for this study were collected from bank customers residing in Karachi, Pakistan, who hold active bank accounts in both public and private banks. However, participant selection was limited to individuals who possess computer literacy skills and utilize internet banking services. Given the absence of an exact population size, a guideline presented in Mark Saunders' 2009 book was relied upon. A combination of methods was employed to gather primary data, including the distribution of questionnaires via email and sharing questionnaire links through WhatsApp. Ultimately, a total of 120 completed questionnaires were analyzed. The research utilized a cross-sectional design and a convenience sampling technique, with data collection facilitated through a survey questionnaire.

The survey consists of two sections. The initial segment covers demographic characteristics, while the latter focuses on four variables: Efficiency of Internet banking, Customer satisfaction, Customer loyalty, and Customer Trust. Eight items related to Efficiency of internet banking, four items about Customer satisfaction, and three items concerning Customer loyalty were adapted from Parasuraman et al. (1991) and Asubonteng et al. (1996). Additionally, five items regarding Customer Trust were sourced from Morgan and Hunt (1994), Sharma and Patterson (1999), and Caceres and Paparoidamis (2007). Details regarding the item count and their corresponding sources are available in Table 1. Participants were requested to express their level of agreement or disagreement using a five-point Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree). Data analysis for this study was conducted using the Smart PLS software.

Table 1: Questionnaires Details

Factor	Items	Source
Efficiency of Internet banking	8 Items	Parasuraman et al. (1991) and Asubonteng et al. (1996)
Customer Satisfaction	4 Items	
Customer Loyalty	3 Items	
Customer Trust	5 Items	Morgan and Hunt (1994) Sharma and Patterson (1999) Caceres and Paparoidamis (2007)

RESULTS

Marcoulides and Saunders (2006) highlighted the widespread utilization of partial least square path modeling in social science research. Before delving into the primary analysis, this study ensures the satisfaction of assumptions like linearity, normality, and multicollinearity, aligning with Hair et al. (2010) and Tabachnick and Fidell (2007). Partial least squares (PLS) serves as a versatile approach, particularly suitable for exploring variable relationships, as underscored by Hair et al. (2011) and Kura (2016). The assessment of the measurement model centers on internal consistency, convergent validity, and discriminant validity. In parallel, the assessment of the structural model is applied to examine variable relationships and the overall quality of the model.

Measurement Model Assessment

The measurement model evaluates the reliability of individual items, internal consistency, and both discriminant and convergent validity. For assessing individual item reliability, the outer loading of each construct is considered, following the discussions by Hair et al. (2016). Reliable items are indicated by outer loadings surpassing 0.7, as emphasized by Henseler (2017). Internal consistency is measured using composite reliability (CR), where values above 0.7 denote established consistency. In this study, all CR values exceed 0.7, confirming achieved internal consistency. Convergent validity is determined through the average variance extracted (AVE), with values above 0.5 indicating validity. The AVE values in this study surpass 0.5, fulfilling the requirement for convergent validity. Please refer to Table 2 for specific loading, CR, and AVE values.

Table 2: Convergent Validity & Reliability

Construct	Items	Factor Loading	CB Alpha	CR	AVE
Customer Loyalty	CL1	0.911	0.920	0.949	0.862
	CL2	0.929			
	CL3	0.945			
Customer Satisfaction	CS1	0.913	0.950	0.964	0.869
	CS2	0.961			
	CS3	0.960			
	CS4	0.894			
Efficiency of Internet Banking Services	EEF1	0.854	0.937	0.948	0.695
	EEF2	0.809			
	EEF3	0.754			
	EEF4	0.856			
	EEF5	0.821			
	EEF6	0.816			
	EEF7	0.868			
	EEF8	0.884			
Trust	T1	0.909	0.948	0.96	0.829
	T2	0.912			
	T3	0.915			
	T4	0.89			
	T5	0.926			

Table 3: Fornell-Larcker criterion / Discriminant Validity

	Customer Loyalty	Customer Satisfaction	Efficiency of Internet Banking Services	Trust
Customer Loyalty	0.928			
Customer Satisfaction	0.838	0.932		
Efficiency of Internet Banking Services	0.734	0.875	0.834	
Trust	0.820	0.856	0.608	0.911

In line with the guidance of Hair et al. (2014), the prerequisite for discriminant validity is that the square root of AVE must surpass the correlations with other constructs. The data presented in Table 3 demonstrates the fulfillment of this condition, as all diagonal values exceed the corresponding non-diagonal values. This unequivocally confirms the presence of discriminant validity within the dataset.

Table 4: Cross Loading / Discriminant Validity

	Customer Loyalty	Customer Satisfaction	Efficiency of Internet Banking Services	Trust	Trust * Efficiency of Internet Banking Services
CL1	0.911	0.775	0.653	0.720	-0.503
CL2	0.929	0.742	0.673	0.738	-0.501
CL3	0.945	0.813	0.718	0.822	-0.549
CS1	0.740	0.913	0.774	0.752	-0.591
CS2	0.787	0.961	0.841	0.807	-0.548
CS3	0.796	0.960	0.871	0.816	-0.611
CS4	0.800	0.894	0.774	0.814	-0.572
EEF1	0.609	0.772	0.854	0.669	-0.533
EEF2	0.545	0.685	0.809	0.673	-0.527
EEF3	0.563	0.681	0.754	0.599	-0.498
EEF4	0.689	0.776	0.856	0.718	-0.524
EEF5	0.639	0.694	0.821	0.683	-0.444
EEF6	0.520	0.627	0.816	0.572	-0.441
EEF7	0.598	0.714	0.868	0.669	-0.492
EEF8	0.701	0.851	0.884	0.729	-0.527
T1	0.743	0.792	0.727	0.909	-0.608
T2	0.824	0.812	0.724	0.912	-0.560
T3	0.716	0.791	0.766	0.915	-0.515
T4	0.696	0.699	0.682	0.890	-0.489
T5	0.747	0.794	0.739	0.926	-0.614
T * EFF	-0.558	-0.623	-0.599	-0.613	1.000

The values representing the comparisons of each variable with itself are higher than those with all other variables, thereby confirming the presence of discriminant validity.

Structural Model Assessment

The evaluation of the measurement model verified the satisfaction of all prerequisites, paving the way for the subsequent evaluation of theorized relationships through structural model assessment, as recommended by Hair et al. (2014). To analyze these proposed relationships, a bootstrapping procedure was utilized for the structural model assessment. The results of this evaluation are detailed in Table 5

Table 5: Direct Effects

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	*T* statistics (|O/STDEV|)	*P* values	Decision
EFF -> CL	0.005	0.007	0.091	0.054	0.957	Not Supported
EFF -> CS	0.509	0.510	0.088	5.805	0.000	Supported
CS -> CL	0.834	0.829	0.100	8.350	0.000	Supported

The aforementioned results indicate statistically significant relationships between CS and CL, as well as between EFF and CS. However, the relationship between EFF and CL is not statistically significant.

Table 6: Mediating & Moderating Effects

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	*T* statistics (|O/STDEV|)	*P* values	Decision
EFF -> CS -> CL	0.424	0.423	0.089	4.773	0.000	Supported
T * EEF -> CS -> CL	-0.023	-0.022	0.017	1.346	0.178	Not Supported

The aforementioned results indicate that the indirect effect of T * EFF -> CS -> CL is not statistically significant, suggesting that trust does not significantly moderate between EFF and CS. However, Customer Satisfaction mediates between EFF and CL.

Quality of Model

Several studies elucidate the varying ranges of acceptable *R*-square values (Hair et al., 2013). However, this is contingent upon factors such as the number of variables, the nature, and type of research. An *R*-square value exceeding 0.10 aligns with the recommendation by Falk and Miller (1992). In this study, the *R*-square value stands at 0.695, surpassing the acceptable threshold.

According to Cohen's (1988) classification, F-square values of 0.35, 0.15, and 0.02 correspond to large, medium, and small effect sizes, respectively.

In the context of this analysis, the F-square value associated with Customer Satisfaction (CS) concerning both Customer Loyalty (CL) (f2 = 0.543) and the Efficiency of Internet Banking Services (EFF) (f2 = 0.539) indicates a substantial effect size. Additionally, the impact of CS on Trust demonstrates a moderate effect size (f2 = 0.334), while the correlation between CS and the interaction of Trust and EFF shows a minor effect size (f2 = 0.017). It's worth noting that EFF does not have a direct effect size (f2 = 0.000) in this analysis.

DISCUSSION

The central aim of this study is to elevate e-banking loyalty by introducing more streamlined internet banking services within the e-banking environment. Moreover, the research explored the mediating function of customer satisfaction and the moderating influence of customer trust in this progression. Among the five hypotheses examined, three received support, while two were not upheld.

The study results revealed that the relationship between Efficiency of Internet Banking Services (EIBS) and Customer Loyalty (CL), as stated in H1 ($p > 0.05$), exhibited a negative and statistically insignificant association. This implies that the efficiency of internet banking services might not directly impact customer loyalty, or other influencing factors could be at play. Notably, these outcomes are in harmony with earlier investigations conducted by Amin (2016) and Khan et al. (2023), indicating that while the efficiency of internet banking services might not have a direct impact on loyalty, it does indeed have an effect on customer satisfaction, subsequently influencing customer loyalty within the realm of e-banking.

The positive and significant correlation between Efficiency of Internet Banking Services (EIBS) and Customer Satisfaction (CS), as indicated by H2 ($p < 0.05$), supports the hypothesis. This finding is consistent with Herington and Weavon's (2009) research, emphasizing the significance of website efficiency in evaluating internet banking service quality, particularly in terms of download speed and transaction completion. Likewise, validation for these results is found in studies by Raza et al. (2020), Hammoud et al. (2018), Ahmad et al. (2011), and Kadir et al. (2011), highlighting the pivotal role of website efficiency as a determinant of internet banking service quality.

Hypothesis H3 ($p < 0.01$) establishes a significant and positive connection between Customer Satisfaction (CS) and Customer Loyalty (CL), confirming the hypothesis. These findings are consistent with previous research conducted by Aslam et al. (2018), Raza et al. (2020), Giao et al. (2020), and Amin (2016). When customers develop a strong affinity for internet banking services, they transition into regular and dedicated users. As a result, individuals who find satisfaction in internet banking are more likely to become loyal patrons. Additionally, Hypothesis H4 ($p < 0.05$) affirms the mediating role of Customer Satisfaction between the Efficiency of Internet Banking Services (EIBS) and Customer Loyalty (CL), aligning with prior studies by Mwiya et al. (2017) and Ul Haq et al. (2020).

The study outlines a systematic method for attaining customer loyalty via effective internet banking services. Initially, customers evaluate these services based on their expected standards, and satisfaction is achieved when these expectations are fulfilled. Following this, the degree of satisfaction profoundly impacts customers' attitudes, ultimately cultivating a sense of customer loyalty.

Nevertheless, the study failed to uncover substantial evidence to confirm the role of Customer Trust as a moderator in the analyzed connections. Consequently, H5 ($p > 0.05$) could not be verified. However, during hypothesis testing, a positive and significant correlation was observed between Trust (T) and Customer Satisfaction. This emphasizes the significance of exploring the role of Trust as an independent variable alongside the Efficiency dimension of Internet Service Quality.

It is noteworthy that other research studies, such as those conducted by Ahmed et al. (2020) and Vats & Maheshwari (2019), provide support for the role of trust as an independent or mediating variable in the context of internet banking.

Theoretical Implications

The study integrates innovative principles from Total Quality Management (TQM) with the ES-QUAL model, presenting a fresh approach to exploring customer satisfaction in the Digital Era. This methodology yields valuable insights into the way efficient services shape customer satisfaction and, in turn, customer loyalty. With a specific emphasis on the efficiency facet of Internet Banking Service Quality, the research illuminates a pivotal aspect of addressing customer expectations in today's fast-evolving digital landscape.

Moreover, this study makes a substantial contribution to the existing body of literature. It offers empirical evidence of how the Efficiency of Internet Banking Services impacts both Customer Satisfaction and Customer Loyalty. The findings underscore the concept that contented customers are more likely to display loyalty to the bank. Furthermore, the study's identification of Customer Satisfaction acting as a mediator between the Efficiency of Internet Banking Services and Customer Loyalty enriches our theoretical understanding of the elements that influence customer loyalty within the realm of internet banking.

Managerial Implications

The outcomes of the study carry noteworthy ramifications for practitioners within Pakistan's internet banking services industry, encompassing bank executives. Elevating the emphasis on enhancing Efficiency in Internet Banking Services emerges as a pivotal strategic objective. By channeling investments into technology, streamlining processes, and ensuring seamless service provision, banks can notably elevate customer satisfaction and cultivate heightened customer loyalty.

Bank managers and industry practitioners should strongly emphasize enhancing the Efficiency of Internet Banking Services due to its pivotal role in elevating customer satisfaction. This, in turn, leads to amplified customer loyalty and a competitive advantage in the Pakistani market. Recognizing customer satisfaction as a vital mediator, banks should continuously strive to provide exceptional services to their clients. Contented customers are more inclined to uphold their loyalty to the bank and are prone to recommend its services to others.

Limitations and Future Research Directions:

One limitation of this research is the restricted sample size, comprising only participants from Karachi. This limits the generalizability of the study's findings. Incorporating samples from various cities across Pakistan would yield a more comprehensive representation of the population and enhance the external validity of the outcomes. Future studies should aim to encompass a broader geographic scope to attain a more diverse range of perspectives.

Another constraint is the sole focus on internet banking services, neglecting other digital banking products like ATMs, Point of Sale systems, etc. These additional digital channels play a substantial role in influencing customer experience and loyalty. Exploring the broader influence of diverse digital products offered by banks could provide valuable insights into how various channels contribute to customer loyalty and satisfaction. Future research should encompass a wider range of digital banking products to capture the comprehensive scope of digital banking services.

By addressing these limitations, the study's findings would be strengthened, further advancing knowledge in the field of digital banking and customer loyalty in Pakistan.

Moreover, as the study did not find support for the moderating role of Customer Trust, it remains a pivotal concept for further exploration. Subsequent research could delve deeper into the role of trust in the relationship between Efficiency of Internet Banking Services and Customer Satisfaction, considering additional factors that might influence this relationship.

CONCLUSION

Over the past several years, extensive research has flourished in the fields of service quality and customer satisfaction. However, amid the ongoing digital transformation, it's imperative for bank managers not only to comprehend but also to grasp the factors customers use to evaluate the services they provide. In this context, the present paper aims to illuminate the paramount significance of the efficiency dimension of service quality and its profound impact on customer satisfaction and loyalty within the specific context of Pakistan.

The research findings unequivocally underscore that efficiency plays an indispensable role in addressing the needs and demands of today's digitally-oriented customers. It firmly emphasizes that, despite the undeniable convenience digital banking offers, the aspect of efficiency must not be disregarded or underestimated. On the contrary, it should be considered a pivotal factor in ensuring customer satisfaction and fostering lasting loyalty. Recognizing and attending to the demands for efficient service delivery are crucial steps in driving customer engagement and nurturing unwavering loyalty. Furthermore, the study expounds on the multifaceted nature of achieving customer loyalty, indicating that it involves a gradual and incremental process that requires ongoing efforts and strategic approaches.

By leveraging the insights and knowledge gained from this research, banks can boost their capacity to cultivate customer loyalty, efficiently retain their customer base, and ultimately achieve a durable competitive edge within the ever-changing and dynamic banking sector. In essence, acknowledging the critical significance of efficiency in driving customer satisfaction and loyalty, and subsequently incorporating this insight into their operations, can enable banks to fortify their stance in the fiercely competitive digital realm.

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