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Impact of digital complaint management system on banking customer satisfaction: Evidence from Kathmandu valley, Nepal

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Abstract

This study investigates the impact of Digital Complaint Management Systems (DCMS) on customer satisfaction in the banking sector. The research employed a combination of descriptive and explanatory research approaches. Primary data were gathered from 401 respondents in Kathmandu Valley using purposive sampling. SmartPLS 4.0, along with Microsoft Excel, was used for data analysis. Findings show that an effective complaint management system, customer commitment, customer expectations, and customer trust boost satisfaction in banks. Results also found that employee behavior does not mediate the relationship between these variables and customer satisfaction. The R^2 result of 0.546 suggests that the model accounts for 54.6% of the variation in customer satisfaction. This study also found that data privacy/security is the main obstacle that hinders the adoption of DCMS. For this reason, the study recommends strengthening data protection and security for effective adoption in Nepal.

Keywords
Effective complaint management, customer satisfaction, customer trust, customer commitment, customer expectations

JEL Classification
G20, G21, M31, O33

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1. Introduction

Customer satisfaction is a significant approach that various businesses undertake to sustain growth. This case is more evident in the service sectors, like banking, where service quality plays an important role in retaining customers (Ifedi et. al., 2024). The doctrine of error prevention emphasizes that organizations should address complaints once, but in the right way (Msosa, 2022). However, full compliance with the customer expectation is hardly possible (Msosa, 2022). According to Ifedi et. al. (2024), the two major reasons behind complaints in the service sector include service failures or the feeling of injustice, which depends on the value of the service attribute. In this regard, although not every complaint is resolvable promptly, studies indicate that the successful organization that manages complaints well always leads to enhanced customer satisfaction (Arora and Narula, 2018).

According to Cambra-Fierro et al. (2016), identifying and solving complaints on time is essential to retain customers while also sustaining trust among them. Arora and Narula (2018) further argue that service providers can strengthen the confidence of customers in the service sector by just recognizing complaints on time, providing fair solutions, and updating customers regularly on the complaint status. Yet, Chuang and Lin (2020) claim recovery actions get ignored unless they match what customers expect, showing how difficult it is to satisfy varying perceptions of fairness among customers. This gap in service quality tends to cause negative outcomes, resulting in disappointment plus feedback through complaints (Li et al., 2017). As noted by Komunda and Osarenkhoe (2012) not every customer complaint, but some of them withdraw silently. This creates a situation where banks lose customers without knowing it, thereby harming their stability in the long term.

In contemporary times, the introduction of digital solutions in banking services represents a paradigm shift in how customer complaints are managed (Agnihotri et. al., 2022). Pio et al. (2024) state that a digital complaint management system (DCMS) offers an organized framework that allows quicker reactions to complaints, cutting red tape, while also supporting clear monitoring of complaint progress. The focus of these digital tools is to improve client satisfaction through technology integration in services, thereby matching rising demands for simple, fast, transparent solutions (Banda, 2022). However, evidence on the actual impact of DCMS on customer satisfaction remains limited. This shortage stands out more in developing nations such as Nepal, where banking digitization is gradually progressing (Shrestha & Thapa, 2022).

The 2024 annual report of Nepal Rastra Bank (NRB) reported that there were 59.89 million deposit accounts in the banking and financial institutions (BFIs) of Nepal. The same report also highlighted that there are 24.65 million mobile banking users and 1.919 million internet banking users. This reflects widespread digital adoption in the banking sector of Nepal. Furthermore, NRB reported 2903 public complaints against BFIs in the same year, in which 2046 cases got resolved whereas 857 stayed unresolved, pointing to lingering issues in complaint management. This can be because of inconsistent technological infrastructure, varying levels of digital literacy among customers, and operational inefficiencies which create barriers in effective adoption of DCMS (Paudel et. al., 2025). According to Paudel et al. (2025), although DCMS aim to boost ease and openness, users often struggle to access or use them properly. On top of this, customers now expect BFIs to prevent problems before they arise, not just fix them quickly (Shrestha & Thapa, 2022). This expectation highlights the need to assess how digital tools drive tangible improvements in complaint management that enhance customer satisfaction, rather than serving merely as procedural enhancements (Agnihotri et. al., 2022).

The gap between using digital systems for complaints and actual customer results shows a need for empirical research in the context of the banking sector of Nepal. According to Thakuri et al. (2023), traditional approaches tend to frustrate customers because of slow responses, weak interaction, or unresolved issues. Although the DCMS was launched aiming to fix such problems (Paudel et al., 2023), there is still little proof that it actually improves how customers feel about service. In this regard, this study aims to examine the impact of Digital Complaint Management Systems (DCMS) on customer satisfaction in banking services in Kathmandu Valley of Nepal. To achieve its aim, the study outlines four specific objectives: to assess factors influencing customer satisfaction in Kathmandu Valley's banking services; to examine the impact of DCMS on satisfaction; to identify challenges faced in adopting and using DCMS; and to suggest managerial solutions for addressing these challenges effectively.

2. Review of Literature

Empirical Review

According to Banda (2022), errors are inevitable in service delivery, making effective complaint handling a vital component of customer relationship management. Research have shown significant impact of digital complaint management on the satisfaction of customers in the banking sector. Wasfi and Kostenko (2014) studied 199 bank customers in Sweden and Lebanon using both qualitative and quantitative methods to explore how handling complaints affects client retention. Their model treated Efficient Complaint Handling as the independent variable, Loyalty as the dependent variable, Satisfaction as a mediating variable, while Expectations as the moderating variable. Findings revealed strong positive links between complaint management and satisfaction, and between satisfaction and loyalty. Although complaint management directly influenced loyalty, its effect was stronger when mediated by satisfaction.

Raza et al. (2019) surveyed 200 bank customers in Pakistan to explore how staff behavior affects satisfaction levels. Instead of treating all factors equally, they grouped predictors into two sets: personal qualities like attitude and sales ability; versus job-related expertise such as technical knowledge and skill execution, with satisfaction being the outcome measured. Results showed both types mattered statistically. However, interpersonal traits and selling competence had greater influence compared to operational competencies. Therefore, improving soft characteristics should go hand-in-hand with formal training if banks want satisfied customers.

Lovetta (2021) conducted a mixed-method study of 413 respondents across seven banks in Dubai to examine the causes of customer complaints and strategies for enhancing satisfaction. The study treated customer complaints as the independent driver, while viewing customer satisfaction as the outcome. Further, Customer Relationship Management (CRM) acted as mediator, shaping how complaints influenced results, whereas Customer Feedback treated as moderator. Results showed well-functioning CRM tools helped resolve issues faster, which led to more satisfied customers. It suggests financial institutions should focus on reliable CRM setups alongside organized processes for managing grievances if they want lasting client satisfaction.

Banda (2022) analyzed data from 20 Zambian commercial banks using a cross-sectional design, focusing on how complaint handling affects customer satisfaction. Instead of treating all factors equally, the model placed complaint management, trust, and commitment as predictors, while viewing satisfaction as the outcome. Findings revealed that better complaint systems relate closely to higher satisfaction ($r=0.642$). Similarly, trust also correlates positively ($r=0.573$). However, commitment did not show meaningful impact. The study concluded that effective complaint management enhances trust, thereby boosting satisfaction among bank customers.

Al Amosh and Khatib (2022) conducted a cross-sectional study using Stanbic Bank to examine the influence of online banking on customer satisfaction. The study found a positive relationship between customer satisfaction and the use of online banking, with a correlation coefficient of $r=0.34$, significant at $p<0.05$. Similarly, the research by Makau (2013) showed that a majority of Kenyan commercial banks used functional mechanisms to manage client complaints while also gathering input on service performance. This work emphasizes how fast response to issues matters, contributing concrete data about the effect of managing complaints within banking institutions.

The study of Ifedi et al. (2024) examined how complaint handling relates to customer satisfaction in Kenyan commercial banks. Through standardized surveys among 391 participants, results indicated that every element of complaint processing contributes meaningfully to higher satisfaction levels. Efficient handling, monitoring, and resolution of complaints were shown to enhance customer satisfaction substantially. The research suggests banks should focus on strong systems to record, monitor, and handle complaints well. This can be done by emphasizing how organized procedures can boost customer happiness while supporting market position (Akhter et al., 2022).

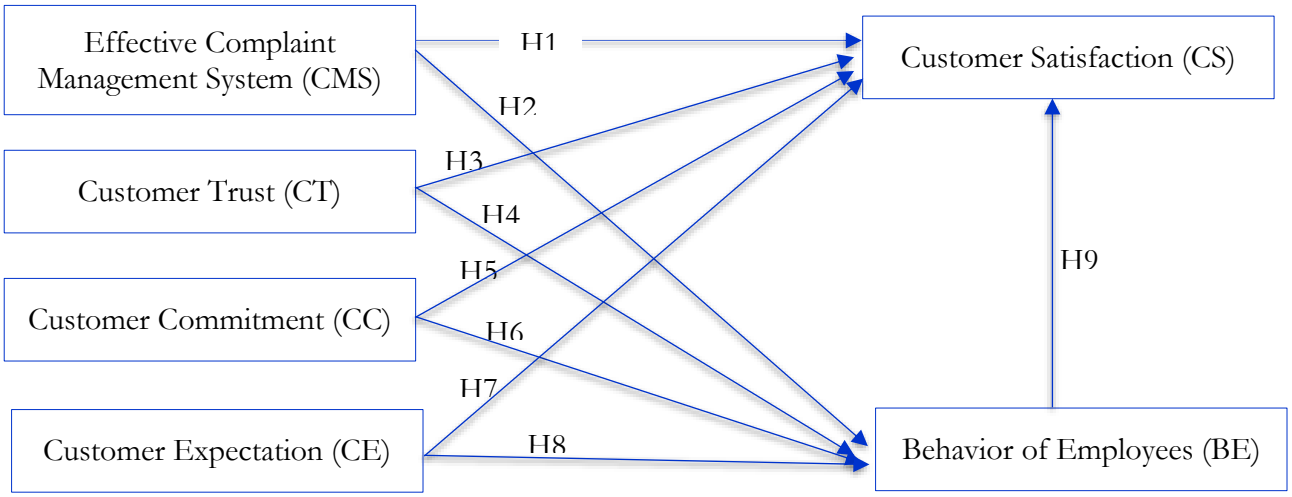
Paudel et al. (2025) reviewed research on how e-banking service quality affects user satisfaction in Nepali commercial banks. Their analysis covered 40 evidence-based papers from 1985 to 2025. Results showed reliability, promptness, and secure systems strongly shaped positive experiences. Similarly, physical features and personal support mattered more for new or rural customers. The findings also

revealed that digital confidence, network access, and tech skills played supporting roles. Therefore, improving these aspects can lead to broader, more user-focused online banking across Nepal.

Conceptual Framework and Hypothesis

The conceptual idea of this study is adapted from three major studies. The first one is the study by Banda (2022), who investigated the relationship between customer satisfaction and an effective complaint management system. This study included complaint management system, customer trust, and customer commitment as independent variables, with customer satisfaction as the dependent variable. Similarly, the second study that serves as the foundation of the conceptual framework is the mixed-method study by Wasfi and Kostenko (2014) to examine the impact of complaint management on customer retention. The study included complaint management system, customer trust, and custom er commitment as independent variables, with customer satisfaction as the dependent variable. This study included Effective Complaint Management as the independent variable, Customer Loyalty as the dependent variable, with Customer Satisfaction as a mediator and Customer Expectations as a moderator. The third study is by Raza et al. (2019) to examine the impact of employees' service behavior on customer satisfaction. According to them, employee behavior has a mediating impact on customer satisfaction. Therefore, the purpose of selecting these studies as the conceptual foundation is that they are from the same sector that this study aims to investigate. Besides, the independent variables of these studies can be easily and quantitatively measured in the context of Nepal.

Figure 1. *Conceptual Framework*



Note. Adopted and modified from Banda, 2022; Wasfi & Kostenko, 2014; and Raza et al. (2019)

The conceptual framework for this study looks at how a digital complaint system affects customer satisfaction in banks, using employee behavior as a mediating factor. The rationale behind treating employee behavior as a mediating variable is that it explains how the effects of the effective complaint management system (CMS), trust, commitment, and expectations translate into customer satisfaction. Customer perceptions are directly influenced by employee behaviour, which represents the calibre of interactions and service provided (Raza et al. 2019). An effective CMS is hypothesized to directly enhance customer satisfaction and indirectly influence it through employees' behavior by enabling prompt and accurate complaint resolution (Banda, 2020). Customer trust is expected to positively affect customer satisfaction and employee behavior, as trust fosters smoother interactions and encourages employees to respond proactively. Customer commitment is proposed to enhance satisfaction directly while also motivating employees to deliver better service through committed client engagement (Banda, 2020; Wasfi & Kostenko, 2014). Customer expectations are anticipated to directly influence satisfaction and shape employee behavior, as understanding expectations guides employee responsiveness (Wasfi & Kostenko, 2014).

The hypotheses of the study are:

H1: Effective complaint management system positively affects employee behavior.

H2: Customer trust positively affects employee behavior.

H3: Customer commitment positively affects employee behavior.

H4: Customer expectation positively affects employee behavior.

H5: Employee behavior positively influences customer satisfaction.

H6: Effective complaint management system positively influences customer satisfaction through employee behavior.

H7: Customer trust positively influences customer satisfaction through employee behavior.

H8: Customer commitment positively influences customer satisfaction through employee behavior.

H9: Customer expectation positively influences customer satisfaction through employee behavior.

3. Data and Methods

Research Design

This study uses both explanatory and descriptive approaches to explore its topic. While explanatory methods aim to uncover causes behind variable interactions, showing how and why specific results emerge, descriptive strategies focus on detailing features within a context without altering conditions (Devkota & Mahapatra, 2025). The research applies a cross-sectional survey model, gathering information once rather than repeatedly. Following collection, it relies on PLS-SEM for analysis, allowing examination of construct links along with hypothesis testing.

Study Area, Population and Sample Size

The research took place in Kathmandu Valley to gain insights into customer satisfaction towards DCMS. The participants were bank customers who regularly use mobile banking platforms, representing a diverse range of respondents within the sampled group. A non-random selection method was applied based on specific criteria. Sample size came from Cochran's equation ($n = Z^2pq/e^2$) (Cochran, 1977). Here, the z-score at 5% threshold stands at 1.96; the estimated proportion (p) used was 0.50, along with $q=(1-0.5)=0.5$, whereas the acceptable error range (e) remained fixed at 5%. Using a calculation, the research set the sample at $n = (1.96^2\times0.5\times0.5)/0.05^2 = 384.16$. In addition, a 5% non-response margin was added: $384.16\times0.05 = 19.21$. Thus, the total participants came to $384.16 + 19.21 = 403.36\sim 404$.

Research Instrument, Data Collection and Analysis

This study used a structured questionnaire to guide answers. It featured fixed-response items with a five-point agreement scale, drawn from earlier work by Banda (2022), Wasfi and Kostenko (2014), and Raza et al. (2019), so people picked choices already given. Before fieldwork, a pilot test was done with 15 individuals, and changes followed based on feedback. The data was gathered from 401 participants using KOBO Toolbox. Furthermore, Partial Least Squares Structural Equation Modelling (PLS-SEM) was utilized for inferential analysis, while KOBO Toolbox and Microsoft Excel were utilized for descriptive analysis of the gathered data.

4. Results

Descriptive Analysis

Socio-Demographic Analysis

Table 1 presents the socio-demographic profile of 401 respondents from Kathmandu Valley.

Table 1. *Socio-Demographic Characteristics*

Title	Category	Number	Percentages
Gender	Male	228	56.86
	Female	172	42.89
	Others	1	0.25
Age	18-30	174	43.39
	30-40	152	37.91
	40-50	61	15.21
	50 above	15	3.74

Title	Category	Number	Percentages
Marital Status	Married	261	65.09
	Unmarried	140	34.91
Education Qualification	Bachelor's degree	238	59.35
	Master's degree	108	26.93
	Higher level	51	12.72
	SLC or SEE	10	2.49
	Ph.D.	3	0.75
Current Employment Status	Student	102	25.44
	Self employed	100	24.94
	Industrial sectors	86	21.45
	Government	59	14.41
	Services sectors	53	13.22
	Others	2	0.50
Average Monthly salary	20000-40000	137	34.16
	40000-60000	128	31.92
	60000-80000	105	26.18
	80000 above	31	7.73

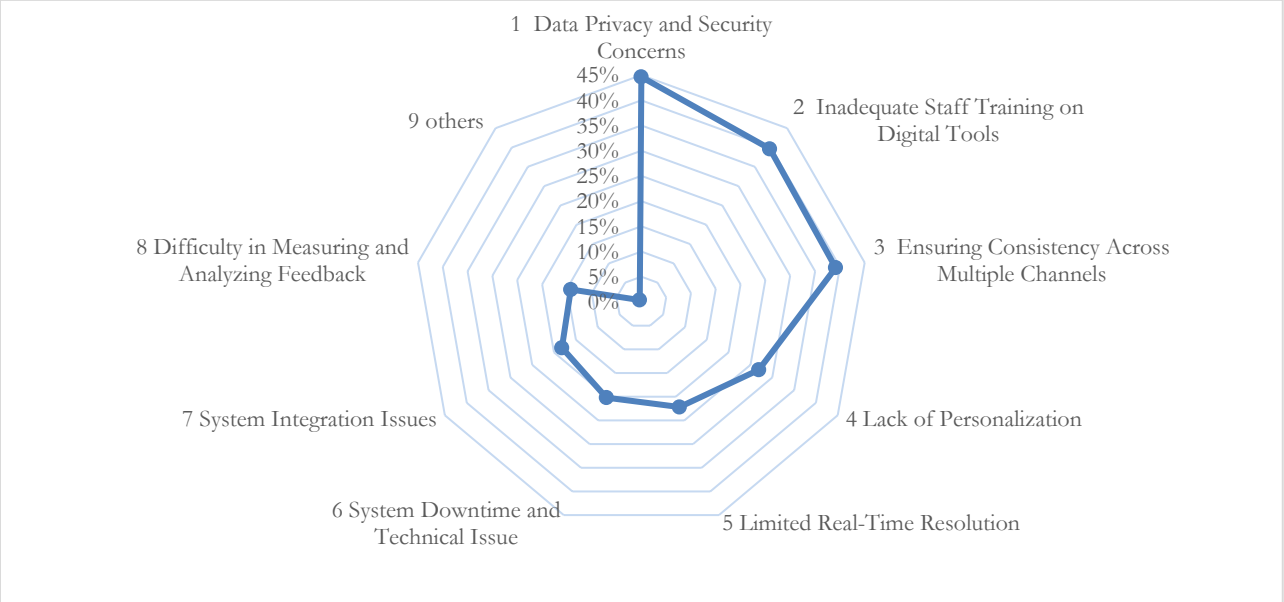
Note. Author's calculation.

In Table 1, the gender distribution includes 56.86% male, 42.89% female, and 0.25% identifying as other. Age-wise, most respondents are 18–30 years (43.39%), followed by 30–40 years (37.91%), 40–50 years (15.21%), and 50 years and above (3.74%). Regarding marital status, 65.09% are married, while 34.91% are unmarried. Educationally, 59.35% hold a bachelor's degree, 26.93% a master's, 12.72% higher-level qualifications, 2.49% SLC/SEE, and 0.75% a Ph.D. Employment distribution shows 25.44% students, 24.94% self-employed, 21.45% in industrial sectors, 14.41% in government, 13.22% in services, and 0.50% other. Monthly income is mostly NPR 20,000–40,000 (34.16%), followed by 40,000–60,000 (31.92%), 60,000–80,000 (26.18%), and above 80,000 (7.73%), reflecting a diverse and representative sample.

Challenges Faced by Respondents

Figure shows the challenges faced by respondents from Kathmandu valley.

Figure 2. *Challenges Faced by Respondents*



Note. Author's Calculation.

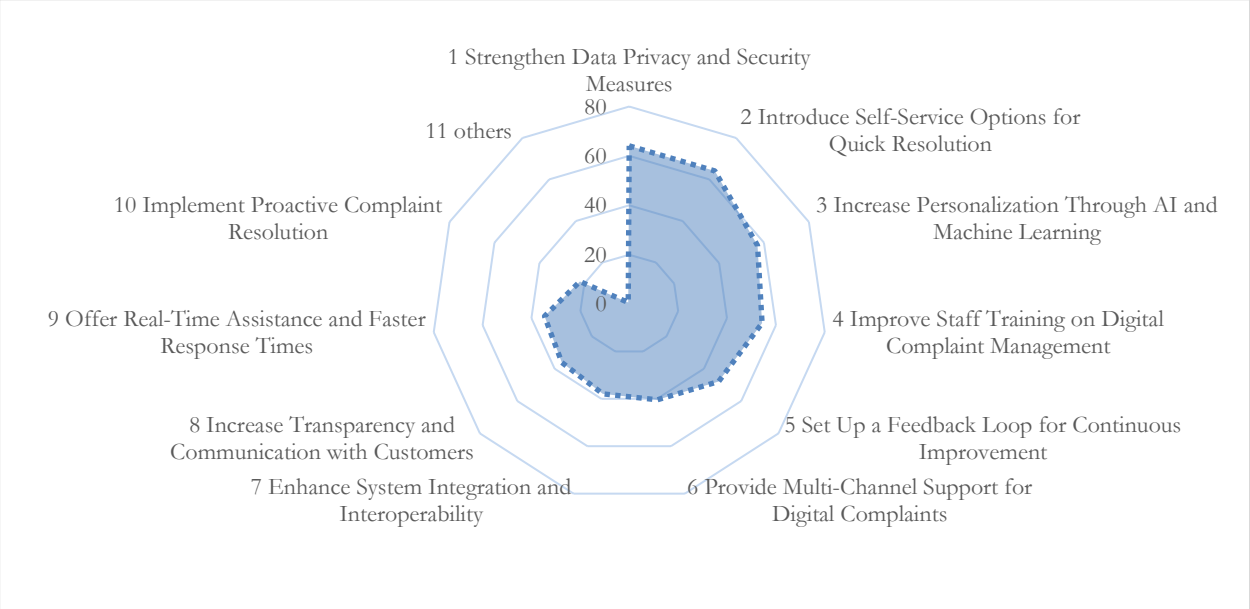
The study found that more than half of the respondents (233 out of 401, 58.1%) face challenges in adopting DCMS in the banking sector, while 168 (41.89%) never faced any challenges. As shown in Figure 2, 44.64% (179) of the respondents face "Data Privacy and Security" as the most significant

challenge. Following this, 39.65% (159) reported "Inadequate Staff Training on Digital Tools," 39.15% (157) reported "Inconsistency Across Multiple Channels," 26.93% (108) reported "Lack of Personalization," 22.19% (89) reported "Limited Real-Time Resolution," 20.20% (81) reported "System Downtime and Technical Issues," 18.20% (73) reported "System Integration Issues," while 14.21% (57) reported "Difficulty in Measuring and Analyzing Feedback." Besides, the very least respondents (2, 0.50%) reported other concerns.

Managerial Solutions to Address Challenges

Along with the possible challenges, the study also included some of the managerial solutions to improve the adoption of DCMS, as shown in Figure 3.

Figure 3. *Managerial Solutions*



Along with the possible challenges, the study also included some of the managerial solutions to improve the adoption of DCMS, as shown in Figure 3. The two most commonly suggested actions were 'Strengthen Data Privacy and Security Measures' and "Introduce Self-Service Options for Quick Resolution," each supported by 64.09% of participants. Following this, 57.11% recommended "Increase Personalization Through AI and Machine Learning," 54.36% recommended 'Enhance Staff Training on Digital Complaint Management," 47.88% recommended "Feedback Loop for Continuous Improvement," 40.4% recommended "Multi-Channel Support for Digital Complaints," 37.91% recommended "System Integration," 36.16% recommended "Increased Transparency with Customers," and 34.66% recommended "Real-Time Assistance." Only 0.75% of respondents proposed other ideas.

Inferential Analysis

Measurement Model Assessment

Measurement models illustrate the relationship between observed variables and latent constructs. The three most widely used tests for this purpose are Cronbach's Alpha (CA), Composite Reliability (CR), and Average Variance Extracted (AVE), as presented in Table 2.

Table 2. *Reliability and Convergent Validity Analysis*

Constructs	Indicators	Outer loading	CA	CR	AVE
Behavior of employees (BE)	be1	0.788	0.628	0.799	0.571
	be3	0.718			
	be5	0.793			
Customer Commitment (CC)	cc1	0.752	0.684	0.806	0.57
	cc2	0.637			
	cc4	0.706			
	cc5	0.759			

Constructs	Indicators	Outer loading	CA	CR	AVE
Customer Expectation (CE)	ce1	0.842	0.719	0.841	0.511
	ce3	0.697			
	ce5	0.851			
Effective Complaint Management System (CMS)	cms1	0.758	0.625	0.799	0.639
	cms3	0.726			
	cms5	0.781			
Customer Satisfaction (CS)	cs1	0.864	0.8	0.87	0.628
	cs2	0.702			
	cs3	0.74			
	cs4	0.852			
Customer Trust (CT)	ct1	0.809	0.692	0.829	0.619
	ct3	0.699			
	ct5	0.846			

Note. Author's Calculation; Items with loadings below 0.4—be2, be4 from BE; cc3 from CC; ce2, ce4 from CE; cms2, cms4 from CMS; cs5 from CS; and ct2, ct4 from CT—were removed during validity testing. Despite the removal of some items, each construct still has three items, which is usually regarded as adequate for PLS-SEM analysis and maintains the constructs' theoretical coverage. The removal preserved the conceptual integrity of each construct while being supported by empirical data from the loadings.

Cronbach's Alpha (CA) suggests internal consistency is good when 0.7 or higher. However, 0.6–0.7 can still be used in early-stage studies (Amatya et. al., 2023). In Table 2, CMS (0.625) and BE (0.628) fall slightly below ideal levels, suggesting limited coherence, whereas CC, CE, CS, and CT reach or surpass 0.7, pointing to better stability. Likewise, Composite Reliability (CR), measuring how well items reflect a common underlying factor, varies from 0.799 to 0.87 across all variables, supporting strong dependability (Hair et. al., 2014). Moreover, Convergent validity, evaluated through Average Variance Extracted (AVE), looks at how closely indicators relate within a single concept. An AVE at or beyond 0.5 is considered sufficient; factor loadings should preferably surpass 0.7, yet those over 0.5 are still acceptable (Hair et. al., 2014). Here, every construct meets the minimum AVE criterion, while the majority of loadings go past 0.7. This indicates solid convergent validity and justifies using these constructs in later model testing.

Discriminant Validity

Discriminant validity gets checked through cross-loadings, the Fornell-Larcker method, or the HTMT ratio. Each indicator should load more strongly on its own construct than others, and this is confirmed by examining cross-loadings (Ab Hamid et al., 2017). Instead of comparing inter-construct correlations, the Fornell-Larcker approach uses the square root of AVE values for distinction (Henseler et al., 2015). In contrast, the study applied the Heterotrait-Monotrait (HTMT) ratio when working with structural equation models to test separation between constructs quantitatively (Ab Hamid et al., 2017).

Table 3. *Heteroirait-monotrait (HTMT) Analysis*

	cms	be	cc	ce	cs	ct
cms						
be	0.765					
cc	0.832	0.892				
ce	0.742	0.895	0.892			
cs	0.712	0.891	0.788	0.828		
ct	0.899	0.891	0.892	0.767	0.718	

Note. Author's Calculation.

HTMT scores less than 0.9 usually suggest good discriminant validity (Franke & Sarstedt, 2019). According to Table 3, every construct has HTMT figures beneath that level, which means discrimination between concepts is adequate.

Table 4. *Fornell-Larcker Criteria Analysis*

	cms	be	cc	ce	cs	ct
cms	0.755					
be	0.484	0.755				
cc	0.552	0.635	0.715			
ce	0.508	0.651	0.645	0.8		
cs	0.515	0.653	0.595	0.651	0.792	
ct	0.592	0.594	0.661	0.556	0.545	0.787

Note. Author's Calculation.

The Fornell-Larcker criterion requires that the square root of each construct's AVE exceed its correlations with other constructs to establish discriminant validity (Hair et al, 2019). Table 4 shows that all diagonal AVE values are higher than their off-diagonal correlations, confirming strong discriminant validity.

Goodness of Fit

A properly fitted model needs a Standardized Root-Mean-Square Residual (SRMR) under 0.1 (Henseler et al., 2015). Here, the result shows 0.078 which suggests acceptable fit. Although thresholds matter, observed values fall within expected range. Therefore, conclusions about structure appear justified because criteria are met.

Structural Model Assessment

The structural model assesses the relationships between latent variables through hypothesis testing, examining the significance and relevance of path coefficients and confidence interval criteria (Hair et. al., 2014).

Table 5. *Coefficient of Determination (R^2) and VIF*

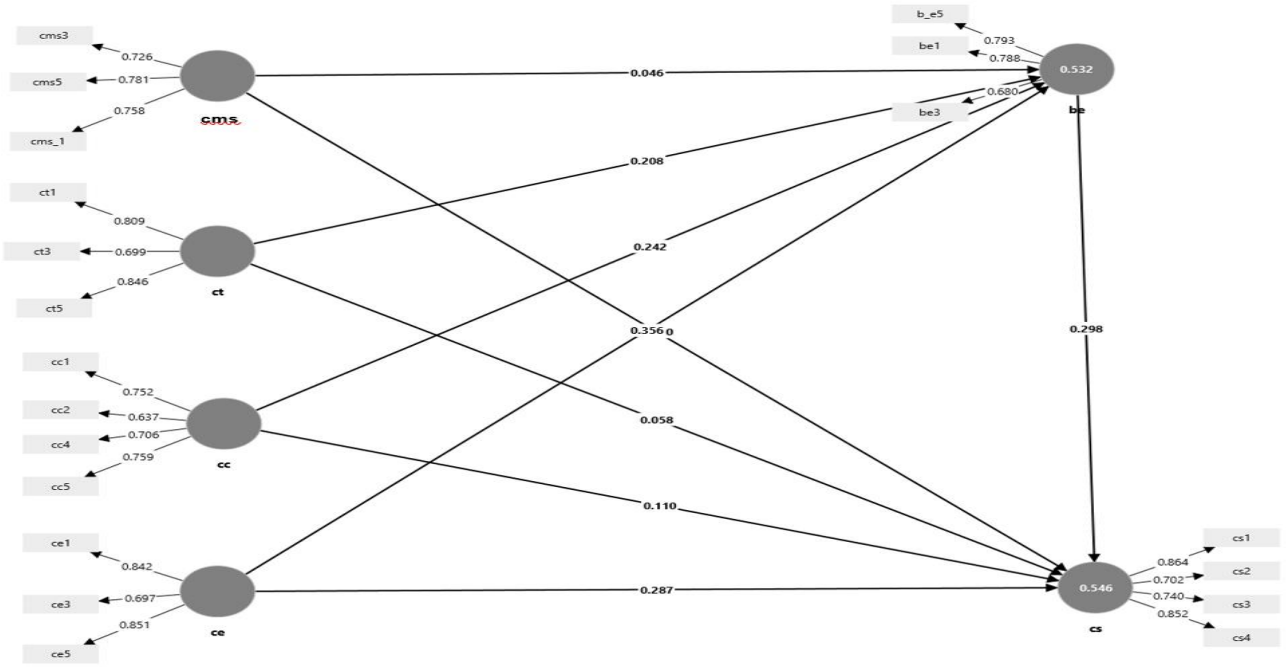
Exogenous Latent Factors	R^2	VIF
cms		1.706
cc		2.282
ct		2.096
ce		1.861
be	0.532	2.135
cs	0.546	1.872

Note. Author's Calculation.

As per Hair et al. (2019), an R^2 starting at 0.2 counts as acceptable. Here, "Employee Behavior" showed an R^2 of 0.532; meanwhile, "Customer Satisfaction" reached 0.546, so more than half the variation in these outcomes is captured by the model. This implies that, although other unmeasured factors might also be important, the model's components, such as CMS, CT, CC, and CE, have a significant impact on customer satisfaction in a service setting, particularly in banking. VIF scores stayed under 5 across the board, which implies no serious overlap among predictors.

Finally, bootstrapping in SmartPLS 4.0 was performed to compute path coefficients and corresponding t-values for both direct and mediated relationships, as illustrated in Figure 4, which confirms the significance and strength of the relationships among the model's constructs.

Figure 4. *Path Analysis*



Note. Author's Calculation.

Hypothesis Testing

Table 6. *Hypothesis Testing*

Hypothesis		β	SD	t-values	P values	Confidence Interval		Decision
						LL= 0.025	UL= 0.975	
H1	cms -> be	0.049	0.023	2.067	0.038	0.000	0.098	Supported
H2	ct -> be	0.208	0.055	3.784	0.000	0.099	0.313	Supported
H3	cc -> be	0.243	0.067	3.641	0.000	0.112	0.37	Supported
H4	ce -> be	0.356	0.057	6.228	0.000	0.242	0.464	Supported
H5	be -> cs	0.653	0.04	16.448	0.000	0.576	0.731	Supported

Note. Author's Calculation.

Table 6 shows that five hypotheses (H1, H2, H3, H4, H5) are statistically significant since p-values are under 0.05. Meanwhile, β estimates lie inside the confidence interval, which suggests meaningful relations between predictors and dependent variables.

Table 7. *Mediating Analysis*

Hypothesis		β	SD	t-values	P value	Confidence Interval		Decision
						LL= 0.025	UL= 0.975	
H6	cms -> be - cs	0.237	0.236	0.068	0.953	0.001	0.362	Not Supported
H7	ct -> be - cs	0.028	0.016	1.816	0.069	0.004	0.068	Not Supported
H8	cc -> be - cs	0.010	0.008	1.302	0.193	0.000	0.033	Not Supported
H9	ce -> be - cs	0.028	0.015	1.802	0.071	0.005	0.064	Not Supported

Note. Author's Calculation.

The mediation analysis in Table 7 does not support H6, H7, H8, and H9, indicating that effective complaint management, customer trust, customer commitment, and customer expectation do not impact customer satisfaction through the behavior of employees.

5. Discussion

This study looked at how consumer satisfaction with banking services in the Kathmandu Valley, Nepal, was affected by Digital Complaint Management Systems (DCMS). To achieve the aim of the study, five direct hypotheses (H1, H2, H3, H4, H5) and four mediating hypotheses (H6, H7, H8, H9) were examined, offering crucial insights into how employee behavior and digital complaint processing shape customer satisfaction in the banking sector.

According to the findings, four of the five direct hypotheses were validated. H1, which suggested that employee behavior (BE) is positively impacted by an efficient complaint management system (CMS), was validated. This result is consistent with Msosa's (2022) claim that organized complaint management systems improve employee behavior by providing accountability and clarity in service procedures. H2, which claimed employee behavior is positively impacted by customer trust (CT), was also validated. This aligns with the findings of Ifedi et al. (2024), who proposed that increased consumer trust leads to better employee responsiveness. H3, which suggested that customer commitment (CC) has a favorable impact on employee behavior, was validated, supporting the claim that devoted and devoted clients motivate staff to participate more successfully in service interactions (Banda, 2022). In a similar vein, H4, which proposed that staff behavior is positively impacted by customer expectation (CE), was validated. This is consistent with Cambra-Fierro et al. (2016), who emphasized that staff are motivated to provide better complaint resolution when they have higher expectations. Lastly, H5, which claims that customer satisfaction (CS) is positively impacted by employee behavior, was also confirmed. This is consistent with earlier research (Wasfi & Kostenko, 2014) showing that, even on digital platforms, frontline employee behavior is a major factor in determining customer satisfaction.

However, there was no evidence to support any of the mediating ideas. The link between CMS, CT, CC, CE, and CS is mediated by BE, according to H6, H7, H8, and H9. The findings, however, showed no discernible mediation effects. This contrasts with previous research, such that of Raza et al. (2019), which proposed that employee behavior might serve as a link between consumer outcomes and complaint management methods. The failure of the mediating impact of employee behavior may be because customers in Nepalese banking are increasingly connecting directly with mobile platforms. This reduces the need for frontline staff in digital banking and DCMS. Consequently, the position of BE as a mediator becomes insignificant in this study because customer satisfaction is more influenced by system convenience and efficiency than by employee behavior.

6. Conclusion

This research provides significant insights into ways to enhance the use of digital complaint management systems in the banking industry of Nepal. As per the findings, despite growing demand, many customers face obstacles, including poor internet access, a lack of tech skills, and uneven income levels that limit platform usage. In this context, BFIs should invest in better networks, expand education around digital tools, and reinforce safety features in feedback mechanisms. These steps matter most in cities such as Kathmandu Valley, where the majority of the customers now depend on phone-based or web transactions. Therefore, Nepalese banks can encourage increased consumer satisfaction, credibility, and responsiveness by removing these obstacles. This will further improve service quality and maintain a competitive edge for Nepalese banks in the rapidly changing digital landscape.

This study has certain limits worth noting. First, the cross-sectional design limits the capacity to establish causal linkages by capturing data at a single point in time. Therefore, a longitudinal strategy might be used in future studies to look at how consumer satisfaction develops over time. Second, the study's limitations to the Kathmandu Valley restrict the findings' applicability to other parts of Nepal. Therefore, to capture more comprehensive behavioral patterns, future research could involve individuals from various regions. Third, selection bias can be introduced when purposive sampling is used. To improve generalizability, probability-based sampling techniques should be used in subsequent research. Fourth, the study only examines four variables, which might not adequately represent the complexity of variables affecting the satisfaction of customers. Future studies, therefore, take into account other factors like digital literacy, technological trust, or aspects of service quality. Lastly, the study ignores modern

technologies that are becoming more and more important in contemporary banking, like AI-driven complaint resolution and human-robot collaborations. Future research might therefore look at how these technologies affect customer satisfaction in the banking sector.

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Appendices: Questionnaire

Section A: Socio- demographic

Name(optional)	
Gender	1. Male 2. Female 3. Other
Email (optional)	
Age	1. 18-30 2. 30-40 3. 40-50 4. 50 above
Marital status	1. Married 2. Unmarried

	3. Others
Educational qualification	1. SLC or SEE 2. High school 3. Bachelor's degree 4. Master's degree 5. Ph.D. 6. Other (please specify): ……
Current employment status	1. Service sector 2. Industrial sector 3. Government 4. Student 5. Self-employed 6. Unemployed 7. Others: …….
Average monthly income (in NRs)	1. Less than 20000 2. 20000-40000 3. 40000-60000 4. 60000-80000 5. 80000 above

Section B: Research Variables

Please tick the appropriate number indicating your level of agreement:

1=Strongly Disagree, 2= Disagree, 3= Neutral, 4= Agree, 5= Strongly Agree

S. N	Constructs	1	2	3	4	5
A. Effective complaint management system (CMS)	I believe the bank's complaint management system is efficient in resolving issues in a timely manner					
	I believe that the digital complaint management system provides a seamless and user-friendly experience when addressing my concerns					
	I believe an effective complaint management system positively influences my overall satisfaction with the bank's services					
	I believe the bank's digital complaint management system ensures transparency and clarity in the resolution process					
	I believe a well-implemented complaint management system enhances my trust and loyalty toward the bank					
B. Customer trust	I believe that the bank's digital complaint management system is secure and protects my personal information					
	I believe that the bank is transparent and honest in its handling of complaints, which builds my trust					
	I believe that the bank is efficient handling of complaints					
	I believe that there are prompt responses to my complaints					
	I can trust its digital complaint resolution system					
C. Customer commitment	I believe that my long-term commitment to this bank strengthens the quality of services I receive					
	I believe that my bank makes effort to understand my needs					
	I believe that the loyalty programs offered by my bank reflect their commitment to me					
	I believe that my commitment to this bank stems from its ability to deliver reliable and trustworthy services					
	I believe my loyalty to this bank encourages them to prioritize my needs					
D. Customer expectation	I believe the bank's digital complaint management system should respond to my issues in a timely manner					
	I believe that the banks will resolve my digital complaint quickly					
	I believe the bank's digital complaint management system is easy to use and navigate.					
	I believe the digital complaint management system meets my expectations for clarity and ease of use					
	I believe that the bank meeting my expectations through its digital complaint management system					
E. Behaviors of employees	I believe the professional behavior of bank employees positively influences me					
	I believe employees at the bank are courteous and attentive to my needs					

	I believe employees at this bank are knowledgeable and provide accurate information.					
	I believe that employees promptly address my concerns, enhancing my overall satisfaction with the bank					
	I believe that employees who understand my concerns and show empathy to me					
F. Customer Satisfaction	I am satisfied with the service provided by the banks.					
	The product and services provided by the bank is convenient and trustworthy					
	The performance of the bank more than my expectations					
	Overall, I have a good and positive impression towards this bank					

Section C: Challenges and Obstacles

Did you face any challenges while digital complaint in banking services?	1. Yes 2. No
If yes, what are the major challenges you face?	1. Data Privacy and Security Concerns 2. System Integration Issues 3. Lack of Personalization 4. Limited Real-Time Resolution 5. System Downtime and Technical Issues 6. Inadequate Staff Training on Digital Tools 7. Difficulty in Measuring and Analyzing Feedback 8. Ensuring Consistency Across Multiple Channels 9. Others
How often do you face such challenges?	1. Always 2. Often 3. Sometimes 4. Rarely 5. Never
What is the improvement do you think banks should implement to address digital complaints?	1. Strengthen Data Privacy and Security Measures 2. Enhance System Integration and Interoperability 3. Increase Personalization Through AI and Machine Learning 4. Offer Real-Time Assistance and Faster Response Times 5. Provide Multi-Channel Support for Digital Complaints 6. Improve Staff Training on Digital Complaint Management 7. Implement Proactive Complaint Resolution 8. Increase Transparency and Communication with Customers 9. Set Up a Feedback Loop for Continuous Improvement 10. Introduce Self-Service Options for Quick Resolution 11. Others