Mikailalsys Journal of
Advanced Engineering International

e-ISSN : 3046-9694
p-ISSN : 3046-8914

Index : Harvard, Boston, Sydney University, Dimensions, Lens, Scilit, Semantic, Google, etc

https://doi.org/10.58578/MJAEI.v2i1.4526

Participation of Clients in the E-Banking Practices of Nepalese Commercial Banks

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Article Info:

Submitted:	Revised:	Accepted:	Published:
Nov 25, 2024	Nov 14, 2024	Dec 26, 2024	Dec 31, 2024

Abstract

The aim of present research was to analyze the different e-banking services provided by Nepalese commercial bank in terms of customers' participation. Nowadays, almost all commercial banks and financial intermediaries provide internet banking services for their customers in order to reduce cost and time. This study conducted to understand the different technological advancement used by the Nepalese commercial bank in their day-to-day operation. Data for this research came from both primary and secondary sources: responses from a questionnaire and many secondary sources. Present investigation was conducted utilizing a survey technique using a questionnaire as the data collecting tool. To get understanding of consumers' involvement in the Nepalese banking sector, structured sets of questions including Likert scale questions, yes/no questions, multiple choice questions were asked. According to the findings of this study, decision-makers should take into consideration the importance of centering their attention on the alertness, and faith of clients. This can be accomplished by enhancing safety measures, implementing proper e-legislation, and offering electronic bills or assurance for each and every transaction. The ultimate goal is to instill a greater sense of confidence in those who use such services and to encourage a culture of internet banking usage throughout Nepal. The findings of this study indicate that both the environment in which the application for online banking is used and the program itself are in need of further enhancement. The bank should always place a strong emphasis on encouraging consumer participation in the use of online banking services, rather than only focusing on the implementation of latest technological advancements.

Keywords: E-banking; Technological advancement; Clients participation; Customers satisfaction; Commercial banks; Questionnaire

INTRODUCTION

Nowadays, every bank in Nepal uses some kind of online banking in their service activities. It is being done in an effort to improve client satisfaction and relationships in terms of time. Net banking is the terms that are most generally used to refer to virtual banking. A website that provides a variety of services offered by any bank that is capable of functioning electronically, such as payments, transfers, deposits, and more, is known as internet banking. Online banking services offered by commercial banks in Nepal to their clients were the subject of this research, which aimed to investigate and evaluate net-banking services and participation of clients in such services.

According to the data that was supplied by the Nepal Rastra Bank for the fiscal year 2021/022, there were more than 1.6 million customers who were registered for online banking and more than 1.8 million customers who used mobile banking in Nepal. In present context, customers of all of Nepal's most prominent commercial banks are now able to take use of internet banking services. E-banking services include a broad range of banking and other services or facilities that make use of electronic payment. These services include, but are not limited to, online banking, services for debit cards and ATMs, mobile banking, SMS banking, electronic alert, funds transfer services, point of sale banking, and other services. Through the use of electronic channels such as the internet, mobile services, and automated teller machines, customers are able to access their bank accounts and carry out transactions from a distant location. Banking services are made more accessible to those who reside in remote areas or who have mobility issues.

As a component of this study, an investigation on the different Internet banking services that are provided by commercial banks in Nepal was carried out. Nepalese commercial banks offer their customers a variety of electronic banking services, including but not limited to: internet banking, mobile banking, debit card services, credit card services, prepaid card services, cash and check deposit services, automated teller machine services, branchless banking, and other types of electronic banking services. Currently, there are a total of 20 commercial banks that are functioning under the Nepal Rastra Bank. Each of these banks provides Internet banking services to its customers. In the course of this study, a variety of Internet banking services and their criteria were investigated. These included Transaction-Intra and Interbank, Merchant tie-up, wallet support, Utility payment, Transaction cost, Transaction Limit, and IPS connection. In order to carry out the research, these services and their parameters were evaluated. The convenience and versatility that online banking provides are two factors that are contributing to its rising popularity. Customers have the ability to conduct their banking transactions electronically via the use of the internet, using their own personal computer or laptop, at any time that is convenient for them, provided that they are not restricted to the regular branch operating hours. This is what is referred to as banking over the internet. The use of internet banking has been accessible for a substantial period of time; yet, it has not yet achieved general acceptability in Nepal. People continue to rely on traditional banking practices, which is significant. Although major cities such as Kathmandu, Pokhara, and Biratnagar have access to dependable internet connections and the majority of banks provide online banking services in metropolitan regions, internet banking is still in its infancy and is not used by the majority of bank customers. This is despite the fact that internet banking is still in its infancy.

We discovered that the majority of individuals do not use online banking services for a variety of reasons, including inadequate information about how to use online banking services, a lack of familiarity with the internet, and security concerns pertaining to their passwords. In Nepal's commercial banks, the following are some examples of consumers who have used internet banking in the past:

Table 1: *Clients Used internet banking in the Nepalese Commercial Banks*

Channel	2017/ 2018	2018/ 2019	2019/ 2020	2020/ 2021	2021/ 2022
Online banking	8,16,074	8,88,268	10,01,866	11,15,532	12,79,475
Change in Online banking	.-	8.85%	12.79%	11.35%	14.70%

Statement of the Problem:

An issue that has to be resolved or a situation that needs to be worked upon is sometimes referred to as a problem statement. The following are some of the study questions that pertain to the ways in which commercial banks deliver online banking services:

- Do banking customers of Nepal better heard about internet banking?
- Do banking customers of Nepal using internet banking?
- Do banking customers of Nepal facing problems in using internet banking?
- Do banking customers of Nepal visited their own bank website?
- What operations do banking customers in Nepal using the net banking?
- Do banking customers in Nepal express complaints regarding their internet banking experience?
- Are clients pleased with the digital banking services offered by commercial banking institutions?

Purposes of the Study:

The primary purpose of this research was to investigate the consequences and implications of digital banking practices in Nepalese commercial banks, as well as the participation of consumers in these different types of operations. A number of specific targets of investigation are outlined in the following list:

- To assess the behavior of clients of banks in Nepal regarding the herding phenomenon in internet banking.
- To assess the utilization of online banking among clients in Nepal.
- To identify the challenges encountered by Nepalese banking customers when utilizing internet banking services.
- To understand the frequency with which clients of banks in Nepal access their respective bank websites.

- To understand the activities conducted by banking clients in Nepal through online banking.
- To understand the complaints regarding internet banking from clients of banks in Nepal.
- To assess the clients satisfaction regarding the digital banking services offered by Commercial banks in Nepal.

Significances of the Study:

This study will help analyzing client's participation toward the digital banking services performed by the commercial banks. This study will be valuable for researchers, students, instructors, depositors who can objectively identify the better bank to deal with. The significances of this study are as follows:-

- This study will help the public to have information about the performance of internet banking.
- This study will help analyzing the efficiency of banks with the use of information technology.
- This study will assist future researchers to know how Nepalese commercial bank manage their e-banking practices.
- This study will help public to determine the reliability of internet banking services to the banking clients of Nepal.
- This study will help to identify the challenges faced by the internet banking services of commercial bank and its effect on the customers.

Limitations of the Study:

The major restrictions of the investigation are presented below:

- This study primarily utilized primary data sources to examine the impact of digital banking services on customer participation. The reliability of the study's results is contingent upon the accuracy of the responses supplied by the respondents.
- The number of respondents in the current investigation was limited to clients of Nepalese commercial banks. The analysis did not encompass clients from other financial institutions, including development banks, microfinance entities, cooperatives, and similar organizations.

- The survey was carried out in the city of Janakpurdham. Therefore, the investigation did not include respondents from across all regions of Nepal.
- The distribution of respondents is not uniform when categorized by gender. Constrained accessibility for females results in gender discrimination. The outcome may vary if accessibility were provided free of charge to females.

Review of the Literature:

A study of literature involves assessing educational and professional publications, texts, and internet resources. Each source is described, summarized, and evaluated in the literature review. A literature review analyzes current research and debates in a topic and writes a report on it. A literature review improves specific area of knowledge. Reviews of related material are highlighted as:

E-banking may provide challenges for banks due to price, competition from new entrants, and trust, according to Daniel (1999). Aladwani (2001) found that senior bank executives cited the lack of internet specialists and advances in Internet technology as the main factors affecting online banking growth, while IT managers cited time and budget constraints and underdeveloped Internet technology. The poll indicated that general and IT managers believe technical constraints are the biggest obstacle to e-banking. Kuwaiti customers cited internet security, online banking rules, and client privacy as the most e-banking challenges.

Parasuraman et al. (2005) developed the E-SQUAL model to assess service and retail customer satisfaction. Service quality includes production and delivery. The service delivery process communicates the procedure's end impact to service users, whereas the service outcome is a customer's assessment of the product's outcomes.

Angelakopoulos and Mihiotis (2011) show that banks employ e-banking to be competitive, keep up with technology, and take advantage of lower transaction costs. Insufficient customer response and security and data protection procedures are their biggest issues. Greece's low Internet usage, unfamiliarity with new innovation, and security and privacy concerns are the main barriers to e-banking adoption.

Zavareh et al. (2012) found that online banking customer satisfaction is positively connected with effective and reliable services, fulfillment, security/trust, aesthetic appeal, responsiveness/contact, and user-friendliness.

Khattri, J.R. (2013) examined internet banking and its challenges in Nepal. This study collected data on five commercial banks' online banking services and 60 customers' data. The data was shown as bar charts and visuals. This study identified various challenges to adopting new technology and suggested ways to improve online banking.

Hossain et al. (2013) investigated e-banking systems in Bangladesh and their pros and cons. They presented superior Bangladeshi e-banking system building methods. The e-banking systems of these four commercial banks were compared, along with suggestions and features. Dutch-Bangla Bank provides better service than the other three banks, according to this report.

In her 2015 paper, "E-Banking: A Pioneering Service Approach in Commercial Banks in India," Chaudhary explored the role of e-banking in India. This article discusses the shift from traditional banking to virtual banking, focusing on the pros, cons, and security issues of online banking rather than comparing Indian Bank's e-banking services. Multiple secondary data were provided in bar graphs in this study. Basic tabular analysis and relevant visuals were employed for analysis.

Hoseini and Dangoliani (2015) say effectiveness, fulfillment, system availability, privacy, assurance (confidence), and service quality aesthetics affect customer pleasure. Dsouza et al. (2018) found that value-added service, responsiveness, availability, service assurance, bank charges, and convenience directly affect customer satisfaction.

Durgapal and Bhatta (2016) compared public, foreign venture, and private sector banks in Nepal using six service quality factors: dependability, assurance, tangibility, empathy, access, and responsiveness. This research includes 300 public, foreign, and private respondents. Collected Tukey's HSD and Dunn's test. The study showed that banks' assurance and tangibility service quality did not vary.

Mohamud (2017) found that simplicity, usefulness, and cost significantly affect customer satisfaction and e-banking service quality. The study also found that security, aesthetics, reliability, responsiveness, and effectiveness must be considered to improve consumer satisfaction.

Kumar and Gaire (2018) used a linear regression model to analyze data from 199 customers from 19 commercial banks in Surkhet District to determine customer satisfaction factors. This study calculates regression and correlation coefficients to determine how the independent variable affects the dependent variable. Internet banking consumer satisfaction is heavily influenced by accessibility, convenience, security, privacy, processing speed, and costs. This study predicts the influencing factors without comparing.

Dependability, privacy, and security are the biggest factors in customer happiness and loyalty, according to

Shankar and Jebarajakirthy (2019). Further research showed a statistically significant association between service quality and banking customer satisfaction (Sharma et al., 2020).

At a 5% significance level, effectiveness, responsiveness, simplicity of use, privacy, and commission predict customer satisfaction in e-banking services, according to Beshir and Zelalem (2020). client satisfaction considerably increases client loyalty, according to the research.

Conceptual Framework:

Whether it is written or graphic form, a theoretical framework is a demonstration of the primary concepts, variables, and connections that are investigated in a study. The following is a conceptual structure that presents the many independent variables and dependent variables that are being studied for this research, as well as their relationship:

INDEPENDENT VARIABLES DEPENDENT VARIABLE

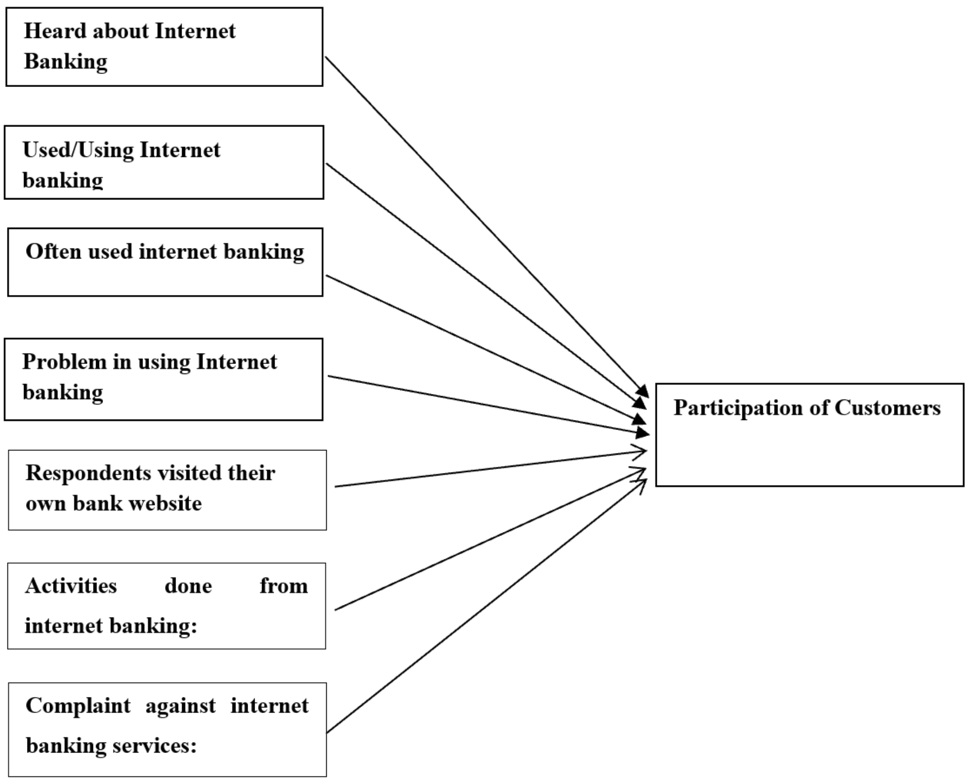

Figure-1: Conceptual framework

METHODS

The purpose of research methods is to provide a systematic approach and perspective to the research process, including data collection, interpretation, and drawing conclusions, which are as follows:

Research Design:

The present investigation employs a descriptive design. Descriptive research seeks to methodically and precisely characterize a population, circumstance, or phenomena. Descriptive analysis offered a concise and understandable overview of the data, facilitating insights and comprehension of patterns, trends, and distributions within the dataset.

Population and sample of the study:

The study's population included the clients of all Nepalese commercial banks. This research utilizes a limited sample of clients who are using the online banking services of their respective banks. The research relied on primary data sources. A questionnaire was administered to a sample of respondents from a Nepalese commercial bank on their perspectives on digital banking. This research used random sampling for the selection of sample respondents.

Sources of Data:

The present research relies on data obtained from both primary and secondary sources. Instrument used to gather primary data. A questionnaire was developed for field data collection, informed by a literature study. A structured questionnaire was developed and sent to the respondents chosen as a sample for this investigation. The questionnaire has both closed-ended and open-ended questions. The questionnaire was created to gather client perspectives on banking services offered via the internet. Diverse publications and papers used for the secondary data.

Data Analysis Tools:

The collected data will be presented through the help of tabular as well as diagrammatic forms. A research has been conducted through Microsoft Excel for developing tables, graphs, and bar diagrams. Further, content analysis and Thematic analysis techniques are used for analyzing primary data collected using questionnaires.

9. Data Presentation and Analysis:

Data collected using questionnaire which administered on 100 respondents of Janakpurdham presented and analyzed to generalize the customers' participation in the e-banking services provided by Banks.

Demographic profiles of the Respondents:

The respondents were required to complete four demographic categories to establish their demographic profile. The variables included gender, age group, educational qualification, and occupation. This research has 100 respondents who are surveyed to get their opinions on the use of online banking services. This research mostly comprises students, since they are well-acquainted with contemporary technology. The attributes of the respondents affect the outcomes. The allocation of obtained samples according to these demographic characteristics is outlined as follows:

Sex:

This survey indicates that the majority of the participants are male, comprising 60 percent, or sixty out of one hundred, while females constitute 40 percent, or forty out of one hundred respondents.

Table 2: *Shows the frequency and percentage of respondents on sex basis*

Sex	**Frequency**	**Percentage**
Male	60	60%
Female	40	40%

Age:

This survey indicates that the bulk of respondents (70 percent) are in the 20-30 age group, while the remaining respondents are distributed throughout the below 20 age group (10 percent), 30-40 age group (15 percent), 40-50 age group (4 percent), and over 50 age group (1 percent).

Table 3: *Shows the frequency and percentage of respondents on gender basis*

Age	**Frequency**	**Percentage**
10 to 20	10	10%
20 to 30	70	70%
30 to 40	15	15%
40 to 50	4	4%
50 above	1	1%

Educational Qualifications:

The research indicates that the majority of respondents possess a bachelor's degree (either in progress or finished) at 60 percent, followed by an intermediate degree (in progress or completed) at 25 percent, a master's degree (in progress or completed) at 10 percent, and an M.Phil/PhD (in progress or completed) at 3 percent, with additional qualifications accounting for 2 percent.

Table 4: *Shows the frequency and percentage of respondents on academic qualification basis*

Educational qualification	**Frequency**	**Percentage**
Intermediate	25	25%
Bachelor's degree	60	60%
Master's degree	10	10%
M.PHIL/Ph.D	3	3%
Others	2	2%

Occupation:

The survey indicates that a predominant portion of the respondents are students, comprising 75 percent. Likewise, 5 percent of the respondents are educators, 10 percent are entrepreneurs, 3 percent are bankers, 2 percent are retirees, and the other 5 percent belong to other categories. Students are well-acquainted with current technologies; hence, they are mostly picked.

Table 5: *Showing frequency and percentage of respondents occupation basis*

Occupation	**Frequency**	**Percentage**
Student	75	**75**%
Teacher	5	5%
Businessman	10	10%
Banker	3	3%
Retired	2	2%
Others	5	5%

RESULTS

Data presentation about participation of customers in the E-banking practices:

Various aspects which reflected by the data collected using questionnaire and their effect on customers' participation in the e-banking practices of commercial banks of Nepal are highlighted as:

Heard about Internet Banking:

The findings of a study, which gathered answers from 100 individuals, indicate that the majority of respondents are familiar with the term online banking. Ninety percent of respondents are familiar with online banking, whereas seven percent are not, and three percent have no knowledge of it.

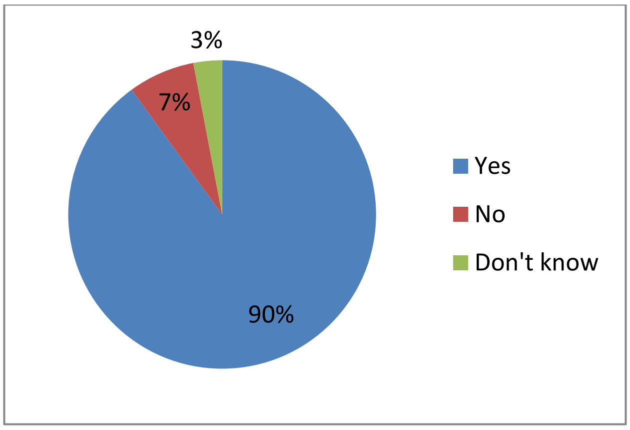

Figure 2: *Graphical presentation shows respondents heard about internet banking*

Used/Using Internet banking:

The questionnaire results, based on responses from 100 individuals, indicate that the majority, 80 percent, have utilized or are currently utilizing internet banking. Conversely, 15 percent have not engaged with internet banking, 3 percent are unaware of it, and 2 percent are unable to comment on it.

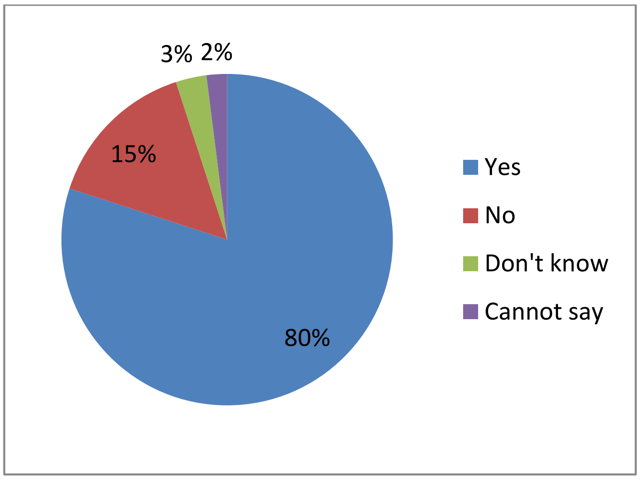

Figure 3: *Graphical presentation of the respondents used/ using internet banking*

Often used internet banking:

The questionnaire results, derived from 100 respondents, indicate that the majority utilize internet banking facilities monthly i.e.35 percent, while 30 percent use them weekly, 20 percent daily, and 15 percent employ them in other manners.

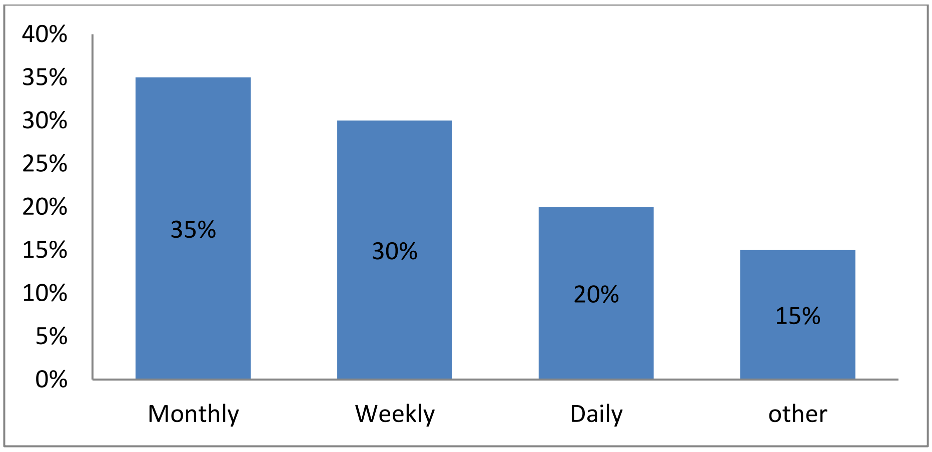

Figure 4: *Graphical presentation of respondents often using internet banking wise classification*

Problem in using Internet Banking:

According to the findings of this survey, the majority of respondents i.e.85 percent had difficulties while using online banking. On the other hand, ten percent of respondents did not have any difficulties when using internet banking, and five percent of respondents were completely unaware of internet banking.

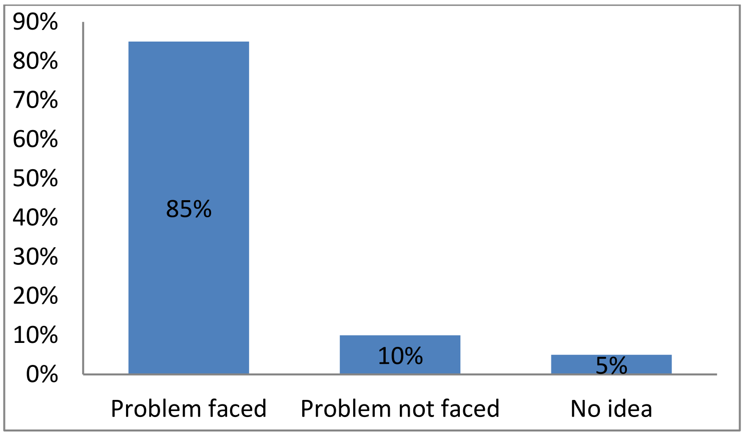

Figure 5: *Graphical presentation of respondents facing internet banking problem*

Respondents visited their own bank website:

The questionnaire results, derived from 100 participants, indicate that 75 percent of respondents accessed their bank's website for internet banking purposes, while 20 percent did not. Additionally, 2 percent were uncertain, and 3 percent were unable to confirm their website visitation status.

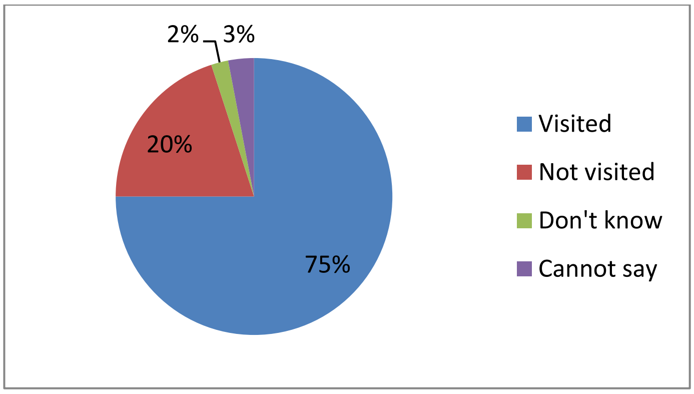

Figure 6: *Graphical presentation of respondents visited their own bank website*

Complaint against internet banking services:

The questionnaire findings, derived from 100 participants, indicate that the bulk of respondent i.e.80 percent expressed complaints about online banking services, while 15 percent do not voice any complaints, and 5 percent are uncertain.

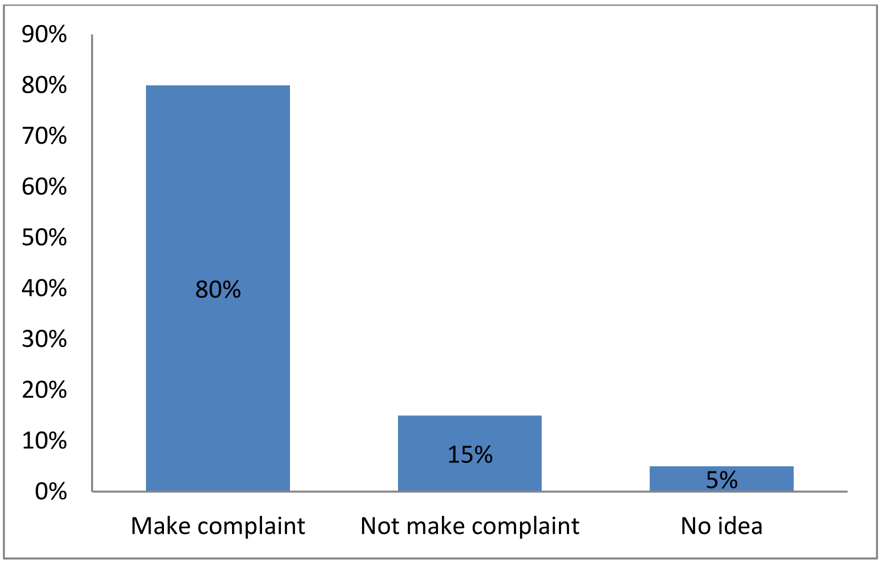

Figure 7: *Graphical presentation of respondents who complain while taking internet banking services*

Activities done from internet banking:

The results of a questionnaire, which gathered responses from 100 individuals, indicate that the majority of respondents utilize internet banking for utility purposes, accounting for 40 percent. In contrast, 30 percent use internet banking services for fund transfers, 15 percent for account services, 10 percent for personal updates, and 5 percent for other purposes.

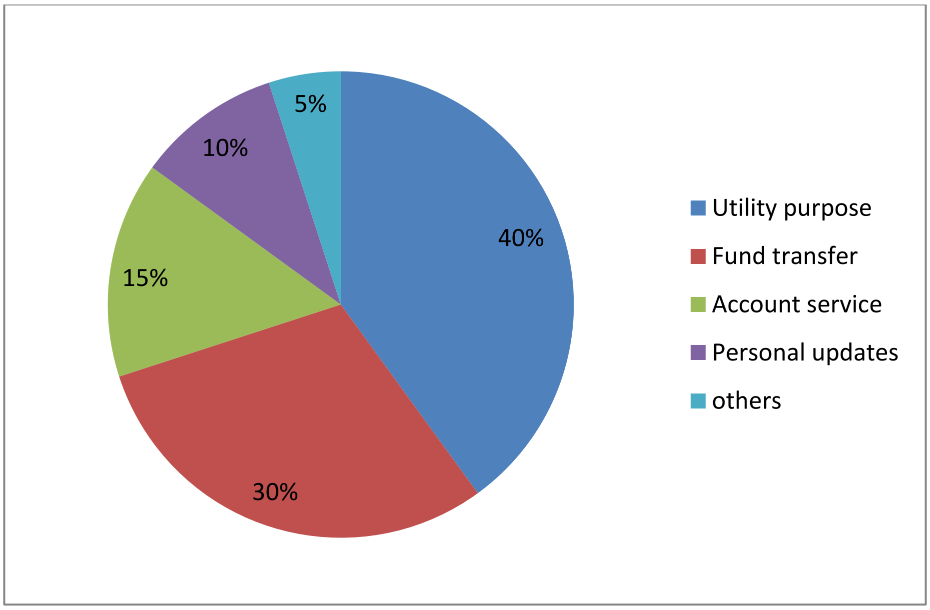

Figure 8: *Graphical presentation of respondents using internet banking for different purposes*

DISCUSSION

Based on the analysis of data the major findings of the study are summarized as follows:

- Among 100 respondents, 90 percent are familiar with Internet banking, while 7 percent are not, and 3 percent are unaware of Internet banking services.
- Of the 100 respondents, 60 percent express dissatisfaction with their bank's internet banking services, 35 percent are satisfied, and 5 percent are uncertain about these services.
- Of the 100 respondents, 85 percent reported issues with internet banking services, while only 10 percent experienced minimal or no problems, and 5 percent were uncertain about using internet banking services. This research identifies the challenges encountered by online banking users, including issues related to electricity, internet connectivity, speed, and dependability, among others.
- Of the 100 respondents, the majority, 40 percent, utilize internet banking for utility payments. Subsequently, 15 percent employ internet banking for account services, while 10 percent use it for personal updates, and 5 percent for other purposes.
- Of the 100 respondents, 75 percent accessed their bank's website for internet banking, 20 percent did not visit the website, 2 percent were unaware of the website's use, and 3 percent were uncertain about their website visitation.
- Of the 100 respondents, 35 percent strongly agree that there are internet issues during internet banking, 50 percent strongly disagree, and 15 percent neither agree nor disagree regarding internet problems encountered during internet banking.
- Of the 100 respondents, 30 percent strongly agree that security is an issue in internet banking, 45 percent strongly disagree, and 25 percent neither agree nor disagree regarding security concerns in internet banking.
- Of the 100 respondents, 40 percent experienced electricity issues while using internet banking, 40 percent did not encounter such problems, and 20 percent neither agreed nor disagreed regarding electricity issues during internet banking.
- Of the 100 respondents, the majority, comprising 55 percent, express concerns regarding the speed and security of internet banking services. Conversely, 35 percent do not share these concerns, while 10 percent remain neutral on the issues of speed and reliability in internet banking services.

CONCLUSION

Nepalese commercial banks now have new distribution channels because of Information technology and telecom advancement. Mobile banking, Internet banking, ATMs, and others are the most popular new delivery methods. Today, Nepalese commercial banks use online banking to maintain and recruit clients. Internet banking adapters employ cash deposits and withdrawals, balance inquiries, and scheduled payments. Few clients utilize inter-account cash transfer, internet shopping, etc. Customer security and confidentiality concerns about online banking capabilities are the main reason, internet banking in Nepal faces problems. |Banks must create infrastructure and human capabilities before adopting online banking. Nepal's online banking system is young and insecure. Internet banking may be difficult due to a lack of internet technological knowledge.

The current study found that legal, security, and managerial difficulties are hurdles for online banking in Nepal. Most consumers' understanding of the internet and its applications, awareness, security, infrastructure, and resource issues are barriers to the development and broad use of online banking technology. Customers are aware of online banking, but they are not interested in using it for daily transactions. Banks fail to explain online banking's advantages and features. Security restrictions, lack of technological knowledge, etc. are important issues in online banking's low client participation. Even if online banking users are pleased and positive, a remarkable portion of the population is not covered. Thus, Nepalese commercial banks' E-banking services lack client participation. Banks should promote online banking services to the customers or clients of commercial banks of Nepal.

The research recommended that decision-makers prioritize client alertness and faith by enhancing security features, implementing appropriate e-legislation, and offering electronic confirmations or guarantees for each transaction to foster greater trust among service users and advance digital banking in Nepal. Ultimately, research concluded that online banking applications and their environments need enhancement. Banks must not only implement new technology but also promote client participation in the online banking, since current satisfaction levels are inadequate.

Conflict of interest:

The current study aims to improve understanding of the issue while also pursuing personal ambitions. It was not performed out for a single corporation with the objective of accomplishing their administrative goals. To the best of our knowledge, none of the parties involved in the inquiry for this research have any conflicting interests.

Data Availability:

The various data included in the research are my own efforts, which I gathered while constructing a survey questionnaire. So, the investigation is based on the real data obtained from participants via the questionnaire.

Acknowledgement

Without the assistance of a huge number of supporters, professional counselors, and recognized educators, the research article has not been accomplished. I would want to offer my heartfelt appreciation to everyone who has helped with this scientific effort and provided their own knowledge.

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