E-Banking in banking system of Nepal

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Abstract
Concept - E-banking is the term used for new age banking system. It is also called online banking. E-banking uses the internet as the delivery channel to conduct banking activities.

Purpose – The main objective of this study is to analyze the perception of customers’ and employees about e-banking and to analyze the threats of e-banking in Nepal.

Methodology Used – Descriptive research designs have been used for the study. Primary data through the questionnaires have been collected using convenience and judgmental sampling from the Nepalese commercial banks. Questionnaires are based on the five point Likert Scale and Cronbach’s alpha test has been conducted to test the reliability of the data.

Findings – Most of the people are not satisfied with traditional banking system and they believe that e-banking plays a vital role on the banking performance. Operational and securities threats are the main challenges of e-banking.

Keywords: E-banking, Fear factor and Challenges of e-banking

Introduction
E-banking is a product designed for the purposes of online banking that enables everyone to have easy and safe access to their bank account. E-banking is a safe, fast, easy and efficient electronic service that enables everybody to access their bank account and to carry out online banking services, 24 hours a day, and 7 days a week.
E-banking is the term used for new age banking system. E-banking uses the internet as the delivery channel to conduct banking activity, for example, transferring funds, paying bills, viewing checking and savings account balances, paying mortgages and purchasing financial instruments and certificates of deposits. It is difficult to infer whether the internet tool has been applied for convenience of bankers or for the customers’ convenience.
Most of the consumers who start banking online do it because they need to pay bills frequently and they would like to do it with minimum effort. Besides that people use Internet banking to keep eye on their money matters, view account balance and check receiving payments from other parties.
E-banking contributes in increasing the efficiency of the banking operation as well as in providing more convenience to customers. Without even interacting with the bankers, customers transact from one corner of the country to another corner (Muraleedharan, 2014) [8].

With this service people save their time by carrying out banking transactions at any place and at any time, from your home or office. E-banking enables the following benefits:

a. Accurate statement of all means available in your bank account
b. Statement of current account, credits, overdrafts and your deposits
c. Execution of national and international transfers in various currencies
d. Execution of all types of utility bill payments (electricity, water supply, telephone bills, etc.)
e. Carrying out customs payments
f. Electronic confirmation for all transactions executed by E-banking
g. Management of your credit cards

Features of E-banking
E-banking has brought drastic changes in speed and flexibility to the services provided to us by the banks. This has been made possible only because of the distinctive features of e-banking, they are:
• Medium of delivery of banking services and as a strategic tool for business development.
• Largely used as a marketing and advertising tool.
• Used for general information on deposits, products, and application form downloading.
• Can be used to fill applications on internet and then receive loans at local branch.
• Detail about account holding and transactions.
• Receipt, review and payment of bill online.

E-banking Threats
The following are the possible threats in e-banking (Sing, 2012):
• Operational threats: The central use of new technology to provide e-banking services has important implications on bank's operational risk. This new technology may require changes in procedures supervisors use to ensure that banks properly manage their e-banking risks in the areas of security, data confidentiality, data system integrity, system availability and outsourcing.
• Reputational threats: If a bank fails to deliver a secure, accurate and timely service on a consistent basis, its reputation is at risk. For banks that rely entirely or predominantly on electronic delivery channels, reputational risk can be higher than for traditional brick-and-mortar banks. Problems that are encountered in one e-bank can potentially affect other e-banking service providers if customers lose confidence in electronic delivery channels as a whole.
• Legal threats: Legal risk can also arise from e-banking. Virtual banks can potentially expand the geographical scope of their services faster than traditional banks.

In some cases, however, the banks might not be fully prepared and lack sufficient resources to become entirely familiar with the local laws and regulations before they can begin to offer services in a new jurisdiction, either as a licensed branch or without license if this is not required. Violations of customer protection laws, including data collection and privacy, and regulations for soliciting could be important issues.
• Other threats: The use of electronic delivery channels for banking activities also has implications for other traditional banking risks such as strategic and business risk, credit risk, liquidity risk, market risk and foreign exchange risk.

Levels of E-banking
E-banking services are offered by the banks as an additional method of delivering banking services through Internet or other electronic delivery channels. According to best practices in e-banking, electronic capabilities can be segregated into three categories by degree of functionality. These levels range from Level I to Level III systems (Ali, 2010).

Level 1: Information-only Systems
Information-only systems are defined as those that allow access to general-purpose marketing and other publicly available information, or the transmission of non-sensitive electronic email.

Level 2: Electronic Information Transfer Systems
Electronic information transfer systems are interactive in which they provide the ability to transmit sensitive messages, documents, or files among a group of users, for example, a bank's website that allows a customer to submit online loan or deposit account applications.

Level 3: Fully Transactional Information Transfer Systems
Fully Transactional Information Transfer Systems represent the highest degree of functionality and also involve high levels of potential risks. These systems provide the capabilities for information only applications, electronic information transfer systems, as well as online, transactional banking services. Information Technology improves business efficiency, service quality and attracts new customers. Technological innovations have been identified to contribute to the distribution channels of banks and these electronic delivery channels are collectively referred to as electronic banking.

Significance of the Study
This study is useful for both the banks and the general people. It is helpful for bankers to approach all level income people as new market. For general people, it helps them to understand e-banking and gain knowledge about the opportunities and reliability brought by e-banking services.
Table 1: Age and Gender Wise Respondents

| Age of Respondents | Male (No.) | % | Female (No.) | % | Male (No.) | % | Female (No.) | % | Number | % |
|--------------------|------------|---|--------------|---|------------|---|--------------|---|--------|---|
| Below 30           | 25         | 6.5| 20           | 5.21| 30         | 7.81| 15           | 3.91| 90     | 23.44|
| 30 - 40            | 35         | 9.11| 25           | 6.5| 40         | 10.42| 20           | 5.21| 120    | 31.25|
| 40 - 50            | 40         | 10.42| 17           | 4.43| 50         | 13    | 10           | 2.6 | 120    | 31.25|
| Above 50           | 20         | 5.21| 10           | 2.6| 20         | 5.21| 7            | 1.83| 54     | 14.06|
| Total              | 120        | 31.25| 72           | 18.75| 140        | 36.46| 52           | 13.54| 384    | 100 |

Table 1 depicts the characteristics of the respondents’ age and gender wise. Majority of respondents were males, i.e. from employees 31.25 percentages and from customers 36.46 percentages. Female respondents were also satisfactory in number, i.e. 124 (from employees 72 and from customers 52). The reason behind low number of female respondents is that all banks have high number of male employees and customers. Cronbach’s Alpha test has been done to test the reliability of data. Every variable has been tested and it was found that it was above 87 percentages, which clearly indicates that Cronbach’s Alpha test was accepted. Five Points Likert Scale ranging from the best/most acceptable (rating scale of 5) to the worst/most unacceptable (rating scale of 1) has been used to analyze and interpret the subjective answer of the respondent. The analysis of data has been done through various statistical tools like percentage and average etc.

Analysis and Findings

Respondents responses on Traditional Banking System in Nepal

Banking sector of Nepal is still reluctant of accepting the need of IT in its services. Even most of the banks who offer e-banking services are not focused on e-banking as much as required. The table below specifies the number of respondents who are satisfied or dissatisfied with the traditional banking system.

Table 2: Responses on Traditional Banking System

| Traditional Banking System | Employees | Customers | Total |
|-----------------------------|-----------|-----------|-------|
|                             | No. | %     | No. | %     | No. | %     |
| Satisfied                   | 27  | 7     | 47  | 12.24 | 74  | 19.27 |
| Not satisfied               | 165 | 43    | 145 | 37.76 | 310 | 80.73 |
| Total                       | 192 | 50    | 192 | 50    | 384 | 100   |

Table 2 explains that around 80.73 percentages i.e. 43 percentages employees and 37.76 percentages customers were not satisfied with the traditional banking system. Only 19.27 percentages in total were satisfied with existing system of banking. Respondents who are not satisfied expect that the bank should imply online services to provide better facilities to them.

Customers’ Perspectives

Customers’ expectations from E-banking Service

Most of the customers want all types of E-banking services from the bank.

Table 3: Customers’ expectations from E-Banking Services

| Customers Expectation | Customers | % |
|-----------------------|-----------|---|
| Account Opening       | 20        | 10.41 |
| Fund Transfer         | 55        | 28.65 |
| Loan Processing       | 15        | 7.81 |
| Online Bill Payment   | 22        | 11.46 |
| Online Statement      | 80        | 41.67 |
| Total                 | 192       | 100 |

Most of the respondents want all the online services given by the bank like account opening, fund transfer, loan processing and online bill payment. Table 4.3 clearly focus that 41.67% respondents wanted to get online statement so that they could save their time, while 28.65% fund transfer. Only 7.81% focused on loan processing services.

Table 4: Would you feel e-banking secure?

| Is E-banking Secure? | Customers |
|----------------------|-----------|
| Yes                  | 120       | 62.5 |
| No                   | 52        | 27.08 |
| No Idea              | 20        | 10.42 |
| Total                | 192       | 100  |

Table 4 explains that 62.5% i.e. 120 customers are strongest supporter of e-banking that they think e-banking is more secure than the traditional banking system. Only 27.08% customers said that e-banking has security problems and threats for them. About 10% customers have no idea about e-banking.

Reasons for Insecure of E-banking Perception

Table 5: Reasons for Insecure of e-banking perception

| Insecure e-banking perception reasons | Customers |
|--------------------------------------|-----------|
| Never tried before                   | 10        | 19.23 |
| People say so                        | 20        | 38.46 |
| Fear of unknown                      | 10        | 19.23 |
| Security problem experience          | 12        | 23.08 |
| Total                                | 52        | 100  |
Respondent who are against e-banking due to security reason were asked about the reasons behind thinking e-banking as insecure. Table 5 shows that about 23% customers thought e-banking has certain degree of insecurity problem. Similarly, 19.23% think it that way simply because of being new to them. Customers about 38% were influenced by negativity what was told to them and 19.23% think it as insecure because they have never tried before.

E-banking fear factors

Table 6: Fear Factors

| Fear Factors       | Customers |
|--------------------|-----------|
|                    | No. | %   |
| Card duplication   | 50  | 26.04 |
| Key Loggers        | 60  | 31.25 |
| Phishing emails    | 32  | 16.67 |
| Fear of Unknown    | 50  | 26.04 |
| Total              | 192 | 100   |

All the respondents who are for, against and no ideas about e-banking due to security reason were asked about the fear factors of e-banking. Table 6 depicts that about 26% each have been said that they have fear because e-banking practice is simply new to them and card duplication. Out of total 31.25% thought key loggers could be their fear factor. Similarly, about 17% respondents thought ‘Phishing emails’ is fear factor for them.

Employees’ Perspectives

Reasons to start E-banking Services by Banks

Table 7: Reasons of starting E-Banking Services

| Reasons          | Employees |
|------------------|-----------|
|                  | No. | %   |
| Costs            | 22  | 11.46 |
| Reliability      | 50  | 26.04 |
| Easy Accessibility| 40  | 20.83 |
| Time             | 80  | 41.67 |
| Total            | 192 | 100   |

Table 7 explains the reasons of banks being interested in introducing e-banking services. About 42% employees agree that the time saving is the main for the bank to start e-banking services followed by reliability 26.04%, easy accessibility 20.83% and costs by 11.46%.

Challenges of E-banking

Table 8: E-banking Threats

| E-banking threats         | Employees |
|---------------------------|-----------|
|                           | No. | %   |
| Operational threats       | 62  | 32.3 |
| Security threats          | 54  | 28.12 |
| Reputational threats      | 32  | 16.67 |
| Legal threats             | 20  | 10.41 |
| Money laundering threats  | 24  | 12.5 |
| Total                     | 192 | 100   |

Table 8 focuses on e-banking threats to the banks. About 32% employees agree that e-banking threats affect highly in operational activities followed by security 28.12% and reputation 16.67%. Very little affect has been seen on money laundering 12.5% and legal matters 10.41%.

Major Findings

The following are the major findings of the study:

- Almost 80% employees and customers are not satisfied with the traditional banking system.
- About 60% customers believe that e-banking plays a vital role on the performance of the banking systems. But, about 28% customers felt insecure about e-banking whereas about 10% customers have no idea about it.
- Bank’s employees said that operational and security threats are main challenges of e-banking.

Conclusion

People are happy with e-banking system than traditional banking system which depicts that the number of people using e-banking is increasing day by day. The main aim of introducing e-banking is to make the transactions smooth and easier. Despite tremendous possibilities through e-banking products, some people are not fully confident with e-banking due to fear of unknown and negative rumor. Most of the customers are not satisfied with the existing system banking. Banks should provide the most contemporary e-banking services and address issues of dissatisfied customers to penetrate and retain all customers. Similarly, banks should make people aware that e-banking is more secure than traditional banking system and should initiate into eliminating fear or resistance factors associated with e-banking.

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