Users' Perceptions Towards the E-Payment System in Kathmandu Metropolitan City

Rajaram Adhikari
Freelance Researcher, Kathmandu, Nepal
Email: adhikarirajaram2012@gmail.com
DOI: https://doi.org/10.3126/jdl.v3i1.73872

Abstract

The main objective of this study was to analyze the users' perception towards the use of electronic payment systems in Kathmandu Metropolitan City. The specific objectives were to examine the perception of users related to factors like availabilities, performance benefits, and security and trust association with the use of electronic payment systems. This research is designed descriptively. The sample size in this study was drawn from people residing in Kathmandu metropolitan city 16, Nayabazar, Kathmandu area in which most of the branches of banks were located and convenient for the researcher. Six bank branches with 40 users each were selected altogether 240 and the valid sample size was 220 legitimate responders (91.67%). Convenience and quota sampling are two non-probability sampling techniques that are used to choose samples from the community. Users in the Kathmandu metropolitan area believed that the e-payment system's availability was adequate overall. Users found the locations of the ATMs to be handy. While users in the Kathmandu metropolitan area were dissatisfied with the availability and functionality of e-payment systems, they were pleased with the many advantages these systems offered. Further, service providers should focus on the responsive e-payment system in order to raise positive users' perceptions. In the future, the researcher can gather information from supermarkets, shopping centers, and other locations in Nepal, as well as study the use of e-payment systems and their danger in relation to larger or lower volume transactions.

***Keywords*:** e-payment, user's perception, performance, trust and security, availability, benefit

Introduction

Electronic payment systems are fast becoming a necessary component of business and trade online. The world has witnessed the rise of electronic payment instruments meant to simplify payments. The emergence of e-commerce has created new financial needs that in some cases cannot be effectively fulfilled by traditional payment systems. Electronic payment systems enable e-commerce activity generally. The electronic exchange of products and services through computerized business transactions over the Internet, networks, and other digital technologies is known as e-commerce. Additionally, it facilitates market activities including marketing, promotion, customer service, delivery, and payment. The technological infrastructure for e-commerce includes the Internet, intranet, World Wide Web, various electronic payment instruments, and digital technologies (Adams & Lamtey, 2009, 124). Electronic payment systems are Online Credit Card Transactions, Internet Banking, Digital Wallets, Digital Cash, and Online Stored Value Payment Systems such as PayPal, Smart Cards, and Wireless Payment Systems. Credit cards and other conventional payment methods that are used offline can be made online. However, customers find it difficult to use them since they don't feel secure, dependable, or trustworthy. This causes customers to use electronic payment systems reluctantly, which lowers their acceptability of recently launched payment methods (Troy & Anthony, 2000).

The Nepalese payment system now operates on a cash and check basis. Even in cases of high-value transactions, such as the sale and acquisition of real estate, consumers would rather receive cash in person than any other kind of payment. However, nowadays technologies are gradually being deployed, used, and accepted by Nepalese people, especially people residing in Major cities. Nowadays, Financial Institutions are providing some form of e-banking services. These financial institutions provide e-payment services such as Credit Cards, Debit Cards, Automated teller machines (ATMs), Electronic fund transfers, Internet banking, Mobile banking, etc. As a result, the perception of individuals and businesses in major cities towards such payment systems is gradually changing. The Bank for International Settlement in its consultative report on general guidelines for payment system development released in May 2003 stated that users' perceptions regarding e-payment do not depend on the availability of payment choices but also focus on its information security, advantages, risk, and user's cost. The limitations are the

technical infrastructure, and Internet cost of users are the major factors for the effective e-payment system. Digital banking mainly the e-payment system of Nepalese commercial banks is not as expected by the user and henceforth user's perception regarding online banking in Kathmandu Value is not highly satisfied and only at a satisfactory level (Shrestha,2020).

This research aims to understand the present user's perception towards the electronic payment system in Kathmandu Valley. The study focuses on users' perceptions related to availabilities, performance, benefits, trust, and risks of e-payment systems. The uses of e-payment systems make a significant impact on purchases, transactions, and fund transfers. The uses of such systems have a significant impact on the frequency of transactions. The more people perceive the benefits of an e-payment system the more users use it. Financial institutions, legislators, retailers, shopping centers, supermarkets, and eateries that take electronic payments all have an interest in knowing the elements that affect e-payment system adoption and consumer acceptance. However, there remains a knowledge gap that persists to this day, making it difficult to determine how different electronic payment methods affect end users' perceptions and pleasures at the service and end-user levels.

Research Objectives

The main objective of this study is to analyze the users' perceptions towards the use of electronic payment systems in Kathmandu Metropolitan City. The specific objectives are as: to examine the perception of users related to factors like availabilities, performance benefits, and security and trust association with the use of electronic payment systems and their association with demographic profiles of users.

Research Hypothesis

H_1: There is a significant association between age group and users' perception towards availability, performance, benefits, security, and trust associated with the use of e-payment systems.

H_2: There is a significant association between occupation and users' perception towards availability, performance, benefits, security, and trust associated with the use of e-payment systems.

H_3: There is a significant association between income level and users' perception towards availability, performance, benefits, security, and trust associated with the use of e-payment systems in Kathmandu Metropolitan City.

Limitation of the Study

The research would have been more efficient if it had included people living in all major cities of Nepal. However, this research is only focused on Kathmandu Metropolitan City (KMC) - 16. Therefore, the sample includes only the users living inside the KMC.

Literature Review

User Perception

User perception is the way that users usually view or feel about certain products or services. It can also be related to user satisfaction which is the expectation of the user towards the products or services. Users' the process through which a person chooses, arranges, and interprets stimuli to create a meaningful and cohesive image of the outside world is known as perception. Since perception is a cognitive and intellectual activity, it will always be subjective. In essence, it is our perspective of the environment. When we talk about "electronic payment," we usually mean a method of making a payment that doesn't require actual cash or money. Stated otherwise, any cashless technique, such as utilizing credit and debit cards, automated teller machines (ATMs) for bill payment, online payments, and so on (Barnes, 2002).

There are several commonly used electronic payment methods in Nepal, such as debit and credit cards, smart cards, and automated teller machines (ATMs). Businesses and consumers alike can profit from electronic payments in a number of ways. From the perspective of the customer, electronic payments offer ease and time efficiency. However, a quicker payment process might be advantageous to retailers or service providers. The e-payment facilities available in Nepal are credit card, debit card, ATM service, mobile banking, internet banking, *e-Sewa*, *Khalti,* and connect IPS.

Abrazhevich (2001) found that self-perception by customers relates to values and motivations that drive buying behavior which is also an important aspect of consumer perception theory. The major characteristics related to electronic payment systems are efficiency, applicability, ease of use, security, reliability, and trust. The research concluded that small payments are not necessary for shopping on the Internet. Ease of use is rated high. Thapa (2003) identified the issue and inquired about potential solutions to improve card payments using descriptive analysis. According to research, the idea of a

credit card has not advanced as much in our country as it has in other countries. Researchers also discovered that the primary issues facing the card industry are the enormous operating costs and the general lack of understanding of the framework among those who create economic scenarios. Salam, Rao, and Pegels (2003) claimed that when institutional trust rises, consumer-perceived risk decreases. The researcher also came to the conclusion that when financial incentives rise, so does consumer perception of danger. This implies that by providing goods or services at a price lower than that of competitors, consumers' perceived risk may be decreased.

Maharjan (2009) pointed out that the number of users of Internet banking is very poor which is why the researcher recommended some marketing policies to implement by banks to increase the number of Internet banking users. So if the banks use biometric devices as security measures then internet banking will be more secure. Adhikari (2010) discovered that the majority of commercial banks, development banks, and other financial organizations are providing their account users with debit cards and setting up as many ATMs as possible. The average growth rate of debit card issues in NIBL alone is over 110%. The bank wants to provide debit cards to every account holder. The researcher also showed that people are becoming more drawn to cards than checks and cash since they are more convenient to use for ATM withdrawals and card purchases. According to Adhikari (2011), there is still work to be done for proper implementation even though the IT policy is in the right place at the right time.

Shah (2012) found that among the varied e-banking services, only ATM is the most popular and is most cost-effective. 'Quality in work" and 'satisfaction of the customers' are the two keywords that must be given the sternest attention to promote a product. The study concludes that all whether it is the public sector, private sector or foreign banks are providing e-banking services. Shrestha (2020) depicted that e-payment facilities available in Nepal are ATM service, debit card, credit card, mobile banking, internet banking, and *e-Sewa*. The following are the forms of e-payment in Nepal. Credit Cards (introduced by Nabil Bank in 1990), Debit Cards (all commercial banks), Automated teller machines (introduced by Himalayan Bank Ltd. in 1995), Electronic fund transfer at points of sale (EFTPOS), Internet banking (introduced by Kumari Bank Ltd. in 2002) and Mobile banking; (introduced by Laxmi Bank Ltd. in 2004). In Nepal, Smart Choice Technology (SCT) provides the switching and settlement facilities for transactions performed on ATMs. Against a population of 25 million in Nepal, the

issuance of bank cards is approximately 250,000 for debit cards (1% of the population) and 125,000 for credit cards (0.5% of the population). Internet banking users are significantly less. The effect of the usage of non-cash payments on monetary policy management is purely negligible. Gautam and Sah (2023) depicted that the efficiency of the website and e-customer service were highly influential dimensions of online banking service practices, followed by user-friendliness, security and privacy, and the organization's site**.** Likewise, e-customer satisfaction significantly influences e-customer loyalty, and e-satisfaction mediates the association between online banking services and e-customer loyalty, which is a prime concern to bankers, users, and policymakers for continuous development.

Literature Summary Matrix

Variables focused	**Findings**	**Sources**
User Perception	User satisfaction is the expectation of the user through credit and debit cards, automated teller machines (ATMs) for bill payment, online payments, and so on towards services.	Barnes (2002)
E-payment system	Issues facing the card industry are the enormous operating costs and the general lack of understanding of the framework among users.	Thapa (2003)
Perceived risk	When institutional trust rises, the consumer-perceived risk decreases.	Salam, Rao, and Pegels (2003)
Trust and security	The number of users of Internet banking is very poor that's why some	Maharjan (2009)

Variables focused	Findings	Sources
	marketing policy needs to be implemented by banks to increase the number of Internet banking users. Similarly, banks need to use biometric devices for secure Internet banking services.	
Performance	There is still work to be done for the proper implementation of e-banking.	Adhikari (2011)
Availability	All banks -- whether it is public sector, private sector, or foreign banks -- are providing e-banking services.	Shah (2012), Shrestha (2020)
Benefit	Web efficiency and e-customer service were highly influential dimensions of online banking service practices, followed by user-friendliness, security, and privacy, and the bank 'site and benefited towards customer satisfaction and loyalty.	Gautam and Sah (2023)

Note: As cited in various Research journals cum dissertation

Conceptual Framework

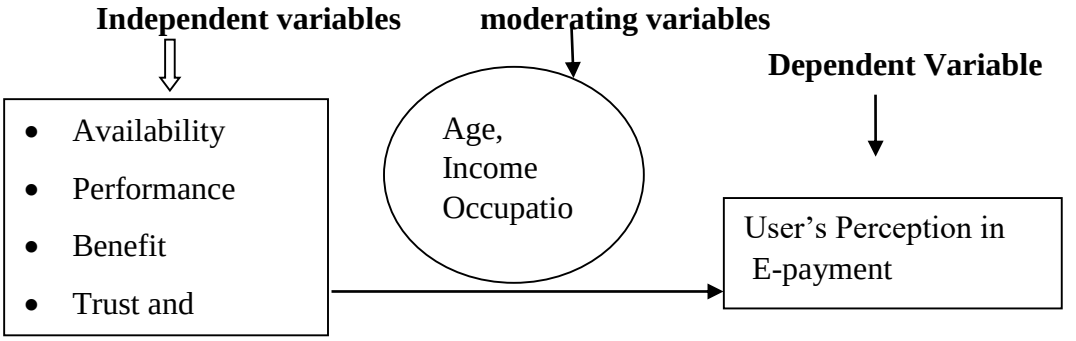
Electronic payment systems have not escaped from these scenarios. Mostly perceived benefits from the technology owners may turn into nightmares when users do not attach the same value as the owners of the technology.

Model for Users' Perceptions Towards the Use of E-Payment Systems

The perception of users towards e-payment systems is based on their perceptions towards availability, performance, benefits, security, trust, and risks in the use of e-payment systems. The perceptual factors like availability, performance, benefits, security, trust, and risks are the factors of their perception.

Figure 1

Model for Users' Perceptions Towards the Use of E-Payment Systems, Researches Drawn From the Reviewing Matrix



Availability, performance, benefits, security and trust, and risks of e-payment system after they use e-payment service are taken as independent variables. The state of users' perception varies across demographic profiles of these users such as age, income, and occupation of the users are considered as moderating variables, and user's perception of e-payment is taken as a dependent variable under this study. Users' perception towards availability, performance, benefits, security, trust, and risks is determined by using descriptive, inferential analysis. For each factor, a five-point Likert scale ranging from (strongly agree, agree, neutral, disagree, and strongly disagree) is used. Mean scores for each factor are calculated. If the mean score is less than 3, then the users tend toward disagree, if it is greater than 3, then the users tend toward agree and if it is equal to 3, then the users are neutral. The moderating variables are also used to link the dependent and independent variables and henceforth it fulfills the gap in the research.

Research Methodology

This research is designed in a descriptive manner. The sample size in this study is drawn from people residing in Kathmandu metropolitan city 16, Nayabazar, Kathmandu.

The reason for selecting as stated area is most of the branches of banks are located and convenient for the researcher. Citizen Bank International Ltd., Sanima Bank, Prime Commercial Bank, Kumari Bank, Nepal Bank, and Machhapuchre Bank were selected as sample banks. The researcher spent more than two weeks for collecting the data and 40 users each respectively and altogether 240 from January 20, 2024 to February 7, 2024. The formula suggested by Taro Yamane in his book "Statistics; an Introductory Analysis" published in 1967 was employed for data calculation. The formula is n = N / (1+Ne2) n - Sample size to be calculated N - Total Population e - Level of Precision. The values for the calculation were taken as Total Sample (N) > 100000; Level of Precision/significance (e) = 7%. The sample size, in this case, was calculated as 204. Convenience and quota sampling are two non-probability sampling techniques that were used to choose samples from the community. There are 220 legitimate responders (91.67%) in the response rate. Those who use electronic payment systems are the ones chosen as responders. Before the respondents filled out the questionnaire, a filter question about their use of electronic payment methods was asked to ensure that the respondents were using electronic payment systems or not. Using inclusive of all sample items only once would be the sampling strategy. Primary data were gathered employing questionnaire dissemination. There are semi-structured questions in the questionnaire. The responders are asked a question using a Likert scale. In a similar manner, published articles, books, news bulletins, journals, and publications are the sources of secondary data. Following data entry, the reliability of the data is measured by using the value of Cronbach's Alpha.

The value of Cronbach's Alpha of Likert scale variables is 0.812 which is greater than 0.6 verifying the reliability of the data. Under descriptive analysis, various frequency tables, percentage tables, graphs, and charts were used. Similarly, in the case of inferential analysis, Hypothesis testing, chi-square test, t-test, and other testing were used. ANOVA was used to determine whether there was a significant difference in users' perception towards availability, performance, benefits and security and trust among various demographics (age group, occupation, and income level). Sthapit (2019) was taken as a study sample of 159 using a convenience sampling method, a non-probability sampling technique to study the customer perception towards the adoption of e-banking services in Kathmandu covering Chhetrapti area, sampled the students of government-owned campus and community/private colleges.

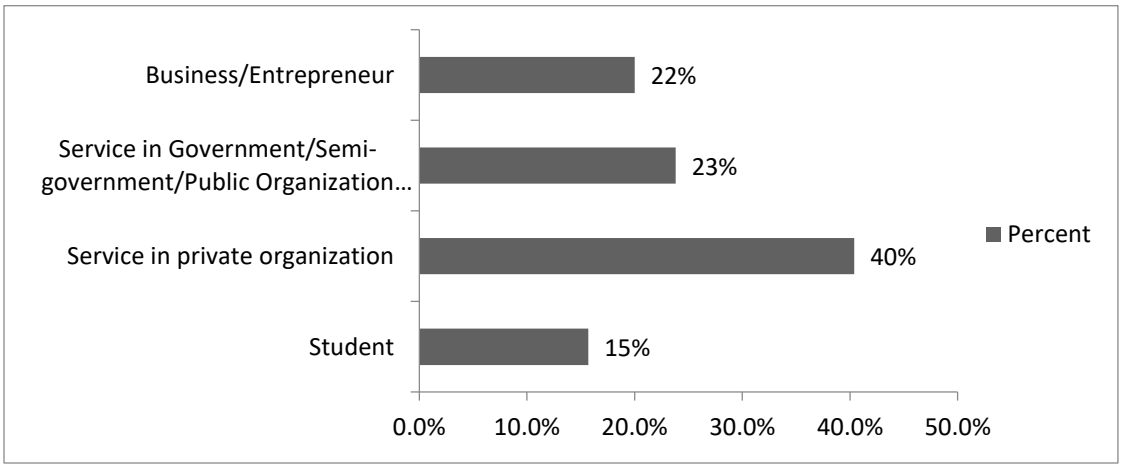
Results and Analysis

Occupation of the Respondents

Out of 220 respondents, 15% are students, 40% are employed in private organizations, 23% are employed in government/semi-government or public organizations and 22% are entrepreneurs or own their own businesses.

Figure 2

Percentage Distribution of Primary Occupation



Source: Field Survey, 2024

Comparison Between Age Group and User's Perception Towards the Use of E-Payment

Table 1

Association Between Age Group and User's Perception Towards the Use of E-Payment

		N	Mean	Minimum	Maximum	P value
Availability	25 and below	60	2.7	1.0	5.0	0.002
	26 -35	80	2.6	1.0	5.0	
	36 – 45	40	2.7	1.0	5.0	
	Above 46	40	2.7	1.0	5.0	
	Total	**220**	**2.7**	**1.0**	**5.0**	
Performance	25 and below	60	2.4	1.0	5.0	0.154
	26 -35	80	2.5	1.0	5.0	

	36 – 45	40	2.5	1.0	5.0	
	Above 46	40	2.5	1.0	5.0	
	Total	**220**	**2.5**	**1.0**	**5.0**	
	25 and below	60	3.7	1.0	5.0	
	26 -35	80	3.7	1.0	5.0	
Benefits	36 – 45	40	3.7	1.0	5.0	0.913
	Above 46	40	3.7	1.0	5.0	
	Total	**220**	**3.7**	**1.0**	**5.0**	
	25 and below	60	4.0	1.0	5.0	
	26 -35	80	4.1	1.0	5.0	
Security and Trust	36 – 45	40	3.9	1.0	5.0	0.029
	Above 46	40	4.0	1.0	5.0	
	Total	**220**	**4.0**	**1.0**	**5.0**	
	25 and below	60	3.5	1.0	5.0	
e-Payment security	26 -35	80	3.5	1.0	5.0	
in Kathmandu	36 – 45	40	3.4	1.0	5.0	0.017
Valley	Above 46	40	3.3	1.0	5.0	
	Total	**220**	**3.4**	**1.0**	**5.0**	

Source: Field Survey 2024

In the above table, the mean score of availability, performance, benefits, security and trust, and e-payment security in Kathmandu Valley score are compared with the age group using One-Way ANOVA. The mean obtained for respondents of age group 25 years and below, 26 years to 35 years, 36 years to 45 years, and above 46 years with respect to availability is 2.7, 2.6, 2.7, and 2.7 respectively. The mean scores are much less than 3. It means users perceive that the availability of e-payment systems is poor in Kathmandu and are not satisfied with the availability of e-payment systems in Kathmandu Valley. Whereas, the mean score for respondents of age group 26 years to 35 years is nearly equal to 3. They perceive that the availability of an e-payment system is fair in Kathmandu Valley. Also, there is a significant association between age group and perception of the availability of e-payment systems with a p value of 0.002 which is less than 0.05. Under the performance of the e-payment system, the mean scores are much less than 3 for respondents of the age group 26 years to 35 years and 36 years to 45 years whereas, the mean score for respondents of the age group 25 years and below and above

46 years is nearly equal to 3. However, there is no significant association between age group and perception of the performance of the e-payment system with the p value of 0.154. There is no significant difference in the perception of the performance of the e-payment system in Kathmandu among respondents of all age groups. Users perceive that the performance of the e-payment system is poor in Kathmandu Valley. Users are not satisfied with the performance of the e-payment system in Kathmandu Valley.

The mean obtained for respondents of all age groups with respect to benefits is 3.7. The mean scores are greater than 3 for respondents of all age groups. There is no significant association between age group and perception of the performance of the e-payment system with the p value of 0.913. There is no significant difference in the perception of the performance of the e-payment system in Kathmandu Valley between respondents of various age groups. Hence, it can be concluded that people of all age groups perceive that there are many benefits of the e-payment system. Users are satisfied with the benefits provided by the e-payment system in Kathmandu Valley. Similarly, the mean scores are nearly equal to 4 for respondents of all age groups. There is no significant association between age group and perception of security and trust in e-payment systems with the p value of 0.029. There is a significant difference in the perception of security and trust in e-payment systems among users of all age groups who perceive that the security and trust of e-payment are very important. The mean scores with respect to e-Payment security in Kathmandu metropolitan city are nearly equal to 3 for respondents of all age groups. There is a significant association between age group and perception of e-payment security in Kathmandu Valley with the p value of 0.017. It can be concluded that people of all age groups perceive that the e-payment system is fairly secure in Kathmandu city.

Comparison Between Occupation and User's Perception Towards the Use of E-Payment

Table 2

Comparison Between Occupation and User's Perception Towards the Use of E-Payment

		N	Mean	Min	Max	P value
Availability	Student	34	2.6	1.0	5.0	0.005
	Service in private organization	89	2.4	1.0	5.0	

	Service in Government or Semi-government or Public Organization	53	2.8	1.0	5.0	
	Business or Entrepreneur	44	2.5	1.0	5.0	
	Total	**220**	**2.7**	**1.0**	**5.0**	
Performance	Student	34	2.8	1.0	5.0	0.002
	Service in private organization	89	2.7	1.0	5.0	
	Service in Government or Semi-government or Public Organization	53	2.7	1.0	5.0	
	Business or Entrepreneur	44	2.8	1.0	5.0	
	Total	**220**	**2.8**	**1.0**	**5.0**	
Benefits	Student	34	3.7	1.0	5.0	0.070
	Service in private organization	89	3.8	1.0	5.0	
	Service in Government or Semi-government or Public Organization	53	3.7	1.0	5.0	
	Business or Entrepreneur	44	3.9	1.0	5.0	
	Total	**220**	**3.8**	**1.0**	**5.0**	
Security and Trust	Student	34	3.9	1.0	5.0	0.008
	Service in private organization	89	4.0	1.0	5.0	
	Service in Government or Semi-government or Public Organization	53	4.0	1.0	5.0	
	Business or Entrepreneur	44	4.1	1.0	5.0	
	Total	**220**	**4.0**	1.0	5.0	
e-Payment security in Kathmandu Valley	Student	34	3.2	1.0	5.0	0.124
	Service in private organization	89	3.1	1.0	5.0	
	Service in Government or Semi-government or Public Organization	53	3.3	1.0	5.0	
	Business or Entrepreneur	44	3.3	1.0	5.0	
	Total	**220**	**3.2**	**1.0**	**5.0**	

Source: Field Survey, 2024

In the above table, the mean score of availability, performance, benefits, security and trust, and e-payment security in Kathmandu Valley score are compared with the occupation using One-Way ANOVA. The mean obtained for students, those who are working in private organizations, those who are working in government, semi-

government, or public organizations, and those who own businesses or are entrepreneurs with respect to availability is 2.6, 2.4, 2.8, and 2.3 respectively. The mean scores are much less than 3 for students and those who own businesses. Users perceive that the availability of the e-payment system is very poor in Kathmandu metropolitan city. Similarly, the mean score for those who are working in private, government, semi-government, or public organizations is not much less than 3. Users perceive that the availability of an e-payment system is fair in Kathmandu metropolitan city. Users are neutral about the availability of the e-payment system in Kathmandu Valley. There is a significant association between occupation and perception of the availability of e-payment systems with the p value of 0.005. There is a significant difference in the perception of the availability of e-payment systems in Kathmandu Valley between those who are working in private, government, semi-government, or public organizations and those who are students, businesspeople, or entrepreneurs. The mean score is much less than 3 for those who own a business. They perceive that the performance of the e-payment system is very poor in Kathmandu Valley. They are not satisfied with the performance of the e-payment system in Kathmandu Valley. Whereas, the mean scores for others are not much less than 3. Users perceive that the performance of the e-payment system is fair in Kathmandu metropolitan city. There is a significant association between occupation and perception of the performance of the e-payment system with the p value of 0.002. The mean score is nearly equal to 4 for all. Users are satisfied with the benefits provided by the e-payment system in Kathmandu Valley. There is no significant association between occupation and perception of benefits of the e-payment system with the p value of 0.07.

Similarly, the mean score is slightly less than 4 for students, exactly 4 for jobholders, and greater than 4 for businesspersons. There is a significant association between occupation and perception of security and trust in an e-payment system with the p value of 0.008. There is a significant difference in the perception of security and trust in the e-payment system. It concludes that security and trust are important for everyone and it is a more important factor for businesspersons and entrepreneurs. Lastly, the mean score is slightly greater than 3 for all. There is no significant association between occupation and perception of e-payment security in Kathmandu Valley with the p value of 0.124. Users are just satisfied with e-payment security in Kathmandu metropolitan city.

Comparison Between Income Level and User's Perception Towards the Use of E-Payment

Table 4

Comparison Between Income Level and User's Perception Towards the Use of E-Payment

		N	Mean	Min	Max	P value
Availability	Not Employed	30	2.7	1.0	5.0	0.147
	Less than 20,000	38	2.6	1.0	5.0	
	20,000 – 40,000	59	2.9	1.0	5.0	
	40,000 – 60,000	49	2.7	1.0	5.0	
	Above 60,000	59	2.6	1.0	5.0	
	Total	**235**	**2.7**	1.0	5.0	
Performance	Not Employed	30	2.7	1.0	5.0	0.143
	Less than 20,000	38	2.6	1.0	5.0	
	20,000 – 40,000	59	2.5	1.0	5.0	
	40,000 – 60,000	49	2.7	1.0	5.0	
	Above 60,000	59	2.5	1.0	5.0	
	Total	**235**	**2.6**	1.0	5.0	
Benefits	Not Employed	30	3.7	1.0	5.0	0.076
	Less than 20,000	38	3.7	1.0	5.0	
	20,000 – 40,000	59	3.8	1.0	5.0	
	40,000 – 60,000	49	3.7	1.0	5.0	
	Above 60,000	59	3.7	1.0	5.0	
	Total	**235**	**3.7**	1.0	5.0	
Security and Trust	Not Employed	30	3.9	1.0	5.0	0.09
	Less than 20,000	38	3.9	1.0	5.0	
	20,000 – 40,000	59	3.9	1.0	5.0	
	40,000 – 60,000	49	4.0	1.0	5.0	
	Above 60,000	59	4.1	1.0	5.0	
	Total	**235**	**4.0**	1.0	5.0	
e-Payment security in	Not Employed	30	3.3	1.0	5.0	0.105
	Less than 20,000	38	3.1	1.0	5.0	

Kathmandu Valley	20,000 – 40,000	59	2.9	1.0	5.0
	40,000 – 60,000	49	3.2	1.0	5.0
	Above 60,000	59	3.4	1.0	5.0
	Total	**235**	**3.2**	**1.0**	**5.0**

Source: Field Survey, 2024

The total mean obtained for respondents of various income levels with respect to availability, performance, benefits, security and trust, and e-payment security in Kathmandu Valley is 2.7, 2.6, 3.7, 4, and 3.2 respectively. There is no significant association between people with different income level and their perception towards availability, performance, benefits, security and trust, and e-Payment security in Kathmandu Valley with the p value of 0.147, 0.143, 0.076, 0.09, and 0.105 respectively. Hence, there is no significant difference in the perception towards availability, performance, benefits, security and trust, and e-payment security in Kathmandu Valley among people of various income levels.

Overall Analysis of Users' Perceptions Towards E-Payment System

Table 5

Overall Analysis of Users' Perceptions Towards Availability, Performance, Benefits, and E-Payment Security in Kathmandu Metropolitan City

		Min	Max	Mean
Availability	Availability of e-payment system in Kathmandu	1	5	3.8
	Locations convenience of ATM services	1	5	3.5
	Availability to pay by swiping electronic cards	1	5	2.5
	Availability to purchase online	1	5	2.5
	Total	**1**	**5**	**3.1**
Performance	Performance of ATMs.	1	5	3.3
	Performance of debit/credit card readers.	1	5	2.5
	Performance of transaction (Online/Offline)	1	5	3.5
	Not experiencing card rejections	1	5	2.5
	Preference for electronic cards due to higher reliability	1	5	3.0
	Total	**1**	**5**	**2.9**
Benefits	Easiness to use	1	5	4.0
	User-friendliness	2	5	3.9

	Convenience of transactions	2	5	3.8
	Lower transaction fees	1	5	3.5
	Speedy transfer	1	5	4.0
	Can check transaction details and statements regularly	2	5	4.1
	No queuing in bank branches	1	5	4.3
	Shopping online gives larger options	1	5	3.7
	Shopping online saves time and money	1	5	3.0
	Total	**1**	**5**	**3.9**
Security	e-payment security in Kathmandu Metropolitan City	1	5	3.6
Overall		**1**	**5**	**3.5**

Source: Field Survey, 2024

The above table shows that the average of each availability, performance, and benefit factor provides mean availability, performance, and benefit score. The total mean obtained for users' perception towards availability, performance, benefits, and security of e-payment in Kathmandu metropolitan city is 3.1, 2.9, 3.9, and 3.6 respectively. Since the mean score for availability is greater than 3; it can be concluded that the people of Kathmandu Valley perceive that the availability of the e-payment system is satisfactory. Users perceive that there are not enough ATMs, debit/credit card readers, and platforms to purchase online. The locations of ATMs are also not convenient to people. They are not fully satisfied with the availability of e-payment systems in Kathmandu metropolitan city. Similarly, since the mean score for performance is less than 3; it can be concluded that the people of Kathmandu Valley perceive that the performance of the e-payment system is poor. Similarly, the mean score for benefits is greater than 3. It can be concluded that the people of Kathmandu Valley perceive that the e-payment system provides various benefits. Users perceive that the e-payment system is easy to use, user-friendly, convenient, fast, and saves their time and money. Similarly, users perceive that the e-payment system is fairly secure in Kathmandu Valley since the mean score is greater than 3. The overall score for users' perceptions towards the use of e-payment systems is greater than 3. It concludes that users are satisfied towards the use of the e-payment system.

Discussion

Customers believe that there are insufficient ATMs, credit/debit card readers, and internet shopping platforms additionally users find the location of ATMs inconvenient. The availability of electronic payment solutions in the Kathmandu metropolitan area has not been entirely satisfied by users. Users are happy with the electronic payment system which is in line with what Barnes (2002) and Thapa (2003) say. With a p value of 0.002, which is less than 0.05, there is a significant correlation between age group and perceptions about the availability of e-payment systems. Additionally, this result is in line with Gautam and Shah's (2023) findings. With a p value of 0.017, there is a strong correlation between age group and perceptions of e-payment security in the Kathmandu Valley. One may conclude that individuals of all ages believe that Kathmandu's e-payment system is reasonably safe. People who work for private, public, semi-public, or government organizations have quite different opinions about the availability of e-payment systems in the Kathmandu Valley than do students, businesspeople, or entrepreneurs. However, people of different income levels in the Kathmandu Valley do not significantly differ in their perceptions of availability, performance, benefits, security, trust, and e-payment security. This result is consistent with Shrestha's (2020) findings.

Conclusion

This study aims to analyze the customers' perceptions of sample selected banks with selected areas. A descriptive research design was used while analyzing the data. Customers believe that there are insufficient ATMs, credit/debit card readers, and Internet shopping platforms. People find the locations of ATMs to be handy. Users have reported issues with transaction failure and card denial. They are only happy with how well the e-payment systems in the Kathmandu Metropolitan area work. The Kathmandu Valley's residents believe that electronic payment systems offer many advantages, it might be determined. Customers believe that the electronic payment system is simple, quick, convenient, and user-friendly, has reduced transaction fees, and saves them time and money. To sum up, users are not happy with the e-payment system's performance and availability, but they are happy with its benefits and ambivalence about its security. While people in the Kathmandu Metropolitan area are happy with the many advantages

that electronic payment systems offer, they are not happy with how well they work or how readily they are available.

Implications

Service providers should increase and diversify e-payment facilities so that people can use them on various occasions and frequently. All in all, central bank, governing bodies, and financial institutions should increase the awareness level, availability, performance, and security of electronic payment systems. For future research, the researcher can analyze the use of the e-payment system and its risk with respect to higher or lower volume transactions. The data can be collected from shopping malls, supermarkets, restaurants, or other areas throughout Nepal and also may reduce or increase the variables.

The user's perception towards e-payment systems needs to be more adaptable if it is user's friendly, cost cost-effective. Similarly, limited variables are used in this research, further researchers may take more variables and also can select the other areas and sample banks. Likewise, further research can increase the sample size to get the perception of customers in e-banking. Policymakers and regulators also should focus on users' perception, cost aspects, and e-payment awareness and encourage the users by reducing the cost charged by banks and governments in e-banking.

References

Abrazhevich, D. (2001). A survey of user attitudes towards electronic payment systems. P*roceedings of the joint AFIHM-BCS Conference on Human-Computer Interaction, IHM-HCI, 11*.

Adams, A. N., & Lamtey, A. O. (2009). *Customer perceived value in Internet banking in Sweden.* Mac Millan India Pvt. Ltd.

Adhikari, A. (2010). *Growing impacts of debit card in Nepal with reference to Nepal Investment Bank Ltd*. An Unpublished Master's Thesis, Tribhuvan University.

Adhikari, P. (2011). *E-commerce and e-payment technology*. An Unpublished Master's Thesis, Tribhuvan University.

Gautam, D. K. & Sah, G. K. (2023). Online banking practices and its impact on e-customer satisfaction and e-customer loyalty in developing country of South Asia-Nepal. *Sage Journals, 13*(3) https://doi.org/10.1177/21582440231185580.

Maharjan, U. (2009). *Internet banking in Nepal*. An Unpublished Master's Thesis, Tribhuvan University.

Rao, H. R., & Pegels, C. C. (2003). Consumer-perceived risk in e-commerce transactions. *Communications of the ACM, 46*(12), 325- 338.

Shah, P. A. (2012). A study on perceptions of customer towards e-banking services in Thane City–Maharastra (India). *Proceedings of the International Conference on Business Management & Information Systems*, 283-288.

Shrestha, R. (2020). *User's perception in e-banking in Kathmandu Valley*. An Unpublished Master's Thesis, Tribhuvan University.

Sthapit, A. (2019). Customer perception towards adoption of e-banking services in Kathmandu: A survey of business school students. *Journal of Business and Social Sciences Research IV*(1), 13-26. DOI: 10.3126/jbssr.v4i1.28995

Thapa, C. B. (2003). *The prospects and challenges of credit card business in the banking sector in Nepal*. An Unpublished Master's Thesis, Tribhuvan University.

Troy J. S., & Anthony, R. (2000). *Marketing and consumer behavior in electronic market mini-track*. Long Beach.

Yamane, T. (1967). *Statistics: An introductory analysis,* (2nd Ed.). Harper and Row.

To Cite this Article [APA Style, 7th Edition]:
Adhikari, R. (2024). Users' perceptions towards the e-payment system in Kathmandu Metropolitan City. *Journal of Durgalaxmi*, *3*(1), 216–235.
https://doi.org/10.3126/jdl.v3i1.73872