



# **Cooperative Education Report**

## **Landscape of Mobile Wallet in Nepal**

**Written by**

**Mr. Iman Shrestha**

**Student ID-5708040080**

**This Report Submitted in Partial Fulfillment of the Requirements  
for Cooperative Education, Faculty of Business Administration  
Academic Semester 2/2017  
Siam University**

**Title** - Landscape of Mobile Wallet in Nepal

**Written by** - Iman Shrestha

**Department** - BBA (Marketing)

**Academic Advisor** - Dr. Pichit Eamsopana

We have approved this cooperative report as a partial fulfillment of the cooperative education program semester 2/2017

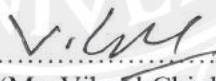
Oral Presentation Committees



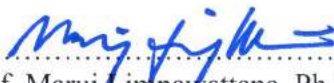
(Dr. Pichit Eamsopana)  
Academic Advisor



(Sharthak Gharti Chhetri)  
Job Supervisor



(Mr. Vibool Chinburapa)  
Cooperative Committee



(Asst. Prof. Maruj Limpawattana, Ph.D.)  
Assistant President  
and Director of Cooperative Education

**Project Title** : Landscape of mobile Wallet in Nepal.

**By** : Iman shrestha ✓

**Advisor** : Pichit Eamsopana ✓

**Degree** : Bachelor of

**Major** : Marketing

**Faculty** : Business Administration

**Semester / Academic year** : 1/2018

## **Abstract**

This is a report on 3 month internship at CG Corp Global in Nepal. The internship is conducted as Cooperative Education under the supervision of Siam University and it is required for my graduation. The internship involved working on the CG Pay Project initiated by Chaudhary group. The product, CG Pay which is to be launched very soon in the market, is a mobile based mobile wallet application for providing mobile payment services to the consumers. In this process, I got to know about the current situation of mobile wallet in Nepal as the whole report is based on the research done in the mobile wallet industry of Nepal.

As a part of the project, I worked with the team of CG Pay at the CG corporate office. This report manifests the confrontation with a specific challenge given to me by my supervisor, the solutions to it and the learning as an intern under the project CG Pay during my internship. The challenge is a review on how to create value for customers of CG Pay different than that of its competitors in the market. After gaining insights through interactions with the existing mobile payment service providers and the company itself, the customers using mobile wallet services, Merchants and Agents providing these services, this report presents suggestions on how CG Pay can create value for its customers in contrast to the existing customers and gain market access. Thus, these tasks helped me to understand the current scenario of mobile wallet in Nepal and how it works.

On a personal level, while not free of its own challenges, this project brings with an experience both interpersonally and intellectually as well as in terms of extending networks in the corporate world.

*my hand*

**Keywords:** *Mobile Wallet / Merchants / Agents / Customers*

## **Acknowledgement**

I would like to give my sincere thanks to Deeptangshu Thapa, lecturer at Kathmandu College of Management for helping me to get an internship opportunity at CG Corp between February 11, 2018 and May 10, 2018.

In association with my fellow interns Amanda Deuja and Priyanka Shakya, I would like to share my sentiment of gratitude to Mr. Sabin Joshi, Corporate Finance and Strategy and Mr. Sharthak Gharti Chhetri, Deputy Manager for arranging an environment for our internship at CG Corp, under CG PAY. As, time is money, I also wish to express my gratitude to the team of CG PAY for helping us with our queries and creating a learning environment at the work place.

I would also like to thank my academic supervisor, Dr. Pichit Eamsopana, who has successfully provided me with suggestions regarding the necessary changes and has guided me in the process of completing this report.

Finally, I would express my thanks to Kathmandu College of Management and Siam University for giving us the platform to do an internship as a part of our BBA course which has benefited me immensely enhancing my professionalism and has helped me gain valuable experience as well.

Iman Shrestha

## Contents

<b>Abstract.....</b>	<b>I</b>
<b>Acknowledgement .....</b>	<b>II</b>
<b>Chapter 1: Introduction .....</b>	<b>1</b>
1.1 Company Profile .....	2
1.2 Organizational structure .....	4
1.3 Statement of the report .....	5
1.4 Objectives of the study.....	6
1.5 Expected outcomes.....	6
1.6 Limitation of the study .....	7
<b>Chapter 2: Literature review .....</b>	<b>8</b>
2.1 LEVEL ONE PROJECT GUIDE (2017) .....	8
2.2 STUDY ON Paytm (2014).....	8
2.3 MOBILE WALLET WAR HEATS UP WITH SAMSUNG PAY, 2015.....	9
2.4 M-PESA, THE WORLD'S LEADING MOBILE MONEY SERVICE IN KENYA, 2017 .....	9
2.5 CASE STUDY OF bKash .....	9
2.6 M-PESA USE IN INTERNATIONAL TRANSACTIONS .....	10
<b>Chapter 3: Methodology.....</b>	<b>11</b>
Primary data .....	11
I. Competitors.....	11
II. Customers .....	11
III. Merchants .....	11
IV. Agents .....	11
Secondary data .....	12
3.1 Roles and responsibilities assigned by company .....	12
3.2 Project details .....	14
Mobile Wallet Companies in Nepal .....	14
Merchants .....	14
Agents .....	14
Customers .....	14

3.3 Result of the Project .....	15
3.3.1 Findings- COMPETITORS .....	15
3.3.2 Findings- MERCHANTS .....	22
3.3.3 Findings- AGENTS .....	29
3.3.4 Findings- CUSTOMERS .....	29
<b>Chapter 4: Results and Discussion .....</b>	<b>31</b>
4.1 Contributions made during the internship .....	34
4.2 Learning .....	36
<b>Chapter 5: Conclusions .....</b>	<b>38</b>
5.1 Self-assessment as future professional .....	38
5.1.1 Challenges to the adoption of Mobile Payment Service.....	38
5.1.2 Suggestions .....	40
5.2 Comparison of practical learning VS theory .....	43
<b>References .....</b>	<b>44</b>
<b>Appendices .....</b>	<b>46</b>
Appendix A- Questionnaire for Competitors .....	46
Appendix B- Questionnaire for Online Merchants .....	52
Appendix C- Questionnaire for Offline Merchants.....	53
Appendix D- Questionnaire for Agents .....	54
Appendix E- Summary of responses of customers .....	55
<b>Bibliography .....</b>	<b>66</b>

## List of Figures

Figure 1- Conversion of Cash to digital money though mobile wallet.....	1
Figure 2- Organizational Structure .....	4
Figure 3- Architecture of Mobile Wallet .....	36



## List of Tables

Table 1- eSewa Gift Voucher List .....	16
--	----





## Chapter 1: Introduction

The company that I did my three month internship is CG Corp Global which happens to be the first Nepalese Conglomerate with over 40 companies under its umbrella. (CG, [www.chaudharygroup.com](http://www.chaudharygroup.com), 2018)

I was placed in CG Pay which is a new company under CG Corp Global. It is a mobile payment company that aims to provide secure payment, banking, and wallet services with the use of internet, 3G, 4G, SMS, USSD where customers can pay directly through their mobile phones. Not only through smart phones, but also through old button mobile phones, CG Pay aims to provide those mobile payment services. Through CG Pay application and their technology, CG Pay users can utilize digital financial services such as making payments offline or online, remit money and operate other online and offline wallets using mobile phones.

After conducting the market research of mobile wallet companies, their agents, merchant, and customers, I have understood the current situation of Mobile Wallet in Nepal.

Mobile wallet is simply an application on smartphones or mobile phones that processes electronic payments. It is an application on the mobile phone that processes electronic payments. For payment, internet or mobile network is required such 3G, 4G, SMS, and USSD.

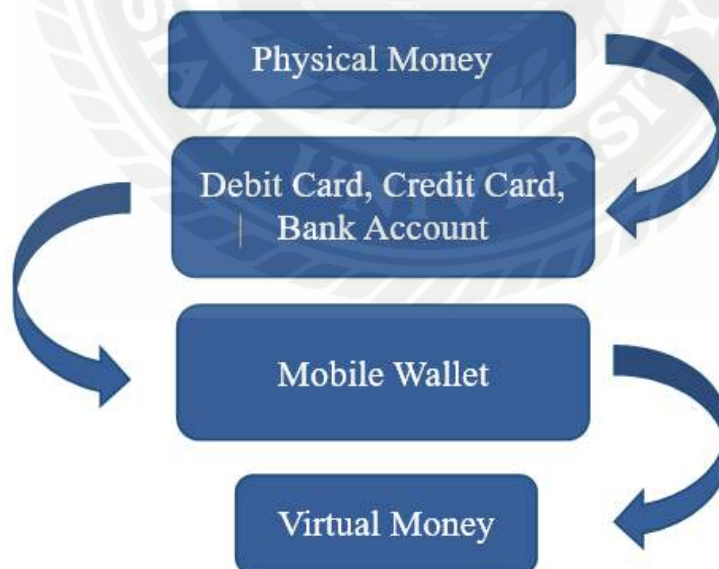


Figure 1- Conversion of Cash to digital money through mobile wallet

The above figure shows how cash (physical) is converted into digital money. First, cash needs to be deposited in any bank account. Then, the required amount is to be transferred to a wallet account through e-banking or we can ask agents to deposit money in our wallet account. That digital money in the wallet account can be used to pay mobile wallet services such as-

- Buy Air Time
- Cash in, Cash Out, Send money.
- Bill payments - DTH, ISP payment, Insurance Premium Payment, Bank EMI Payment, Electricity, and Water.
- Money Transfer/ Remittance - to individuals or retailers
- Merchant payment: Online and Offline both. Online payment: Air Ticket, Bus Ticket, Movie Ticket, e-commerce etc. Offline Payment: School Fee, Restaurant Bill etc.
- IBFT and Corporate fund transfer

Mobile wallet has many advantages. Some of them are-

- It is more secure than cash. Digital money cannot be stolen, it cannot be misplaced like cash or credit and debit cards.
- Sometimes, the amount to pay would be in change like ₹109, ₹138 and we would be running around to get a change. With m-wallets, there would not be any need for Change as it allows paying in a single tap.
- No need to fill in card numbers and passwords every time. Just linking the Dr. Card or Cr. Card and paying without hassle is more convenient.
- No disclosure of information to merchant's site or establishments unlike paying through Dr. Card or Cr. Card. Data remains confidential.
- Customers and agents can get rewards in the form of discounts, and Cashbacks.

## 1.1 Company Profile

### CG Corp Global

CG Corp Global, popularly known as Chaudhary Group, is a conglomerate based in Nepal that comprises 112 companies and 76 brands across the world. True to its corporate slogan "Touching Life Everyday", CG Corp offers a diversified range of products and services which include fast-moving consumer goods, financial services, education, hospitality, energy, infrastructure, telecommunication, consumer electronics, realty and biotech. Lead by Mr. Binod

Kumar Chaudhary, CG Corp is dedicated to its corporate mission “creating value for the customer, creating value for nation”.

#### CG Finco Ltd.

As one of the leading remittance company of Nepal, CG Finco Pvt. Ltd is involved in money transfer (inward) from all around the world since 2003. They have outlets all over the country as well. They also happen to be the current number one principal agent of Western Union for Nepal. CG Finco also offers reliable, efficient and prompt domestic money transfer services through more than 1,500 sub-agents. CG Finco is not only providing money transfer services for Nepalese working abroad but also contributing to government revenue through its efforts to minimize illegal transfer of money. (CG, 2018)

#### CG Pay Project

CG Pay is a business venture of Chaudhary Group for mobile payment system with 2 Factor authentications. CG PAY brings secure bill payments, remittance and wallet services to customer mobile handsets. Basically, it is a mobile payment technology, which enables payments via internet and telecom network. CG Pay has the vision to be the leader in establishing and developing mobile payment business in Nepal and thus contribute to CG Corp’s corporate vision to develop Nepal as a digitally smart country.

CG Pay's Mission Statement is "To Uplift and Ease the payment system in Nepal and reaching out to the unbanked population towards Financial Inclusion through Mobile Wallet Technology".

CG Pay's Vision is to "To Become the Largest and Most Preferred Mobile Wallet Service Provider in Nepal"

The main objectives of CG PAY in regards to prioritizing upon rural population are as follows:

1. Ensure access to extensive array of financial services to the financially excluded people.
2. Focus to serve the low-income, uneducated people of the country by providing financial services that are convenient, affordable, reliable and secure banking with the help of CG network
3. Provide a platform of mobile payment system as more than 85 percent of the people are connected to the mobile system.

In urban areas of Nepal, most of transactions are still cash-based. Only few people use mobile financial services to pay utility bills, and other payment services. CG Pay with its new advance feature and technology is well fit to fill this gap in the market and work towards creating a cashless economy catering to all groups of people and providing the power in their fingertips.

## 1.2 Organizational structure

The organizational culture at CG Pay is formalized and specialized. Chaudhary Group being huge company with a wide product mix, its market targeted and products and services have penetrated worldwide. Despite of rigid organizational culture all over the corporation, CG PAY in the current stage is a team of people working together in order to achieve the strategic goal of launching its product in the market with better services than what the exciting companies have been providing, also in terms of convenience and applicability to the end users.

I was placed at the research and development section in the hierarchy as an intern. All the three interns including myself worked together towards researching the market and presented the findings to the heads of all the departments. All the heads were helpful and responsive towards us (interns). The current organizational structure of CG Pay is as follows-

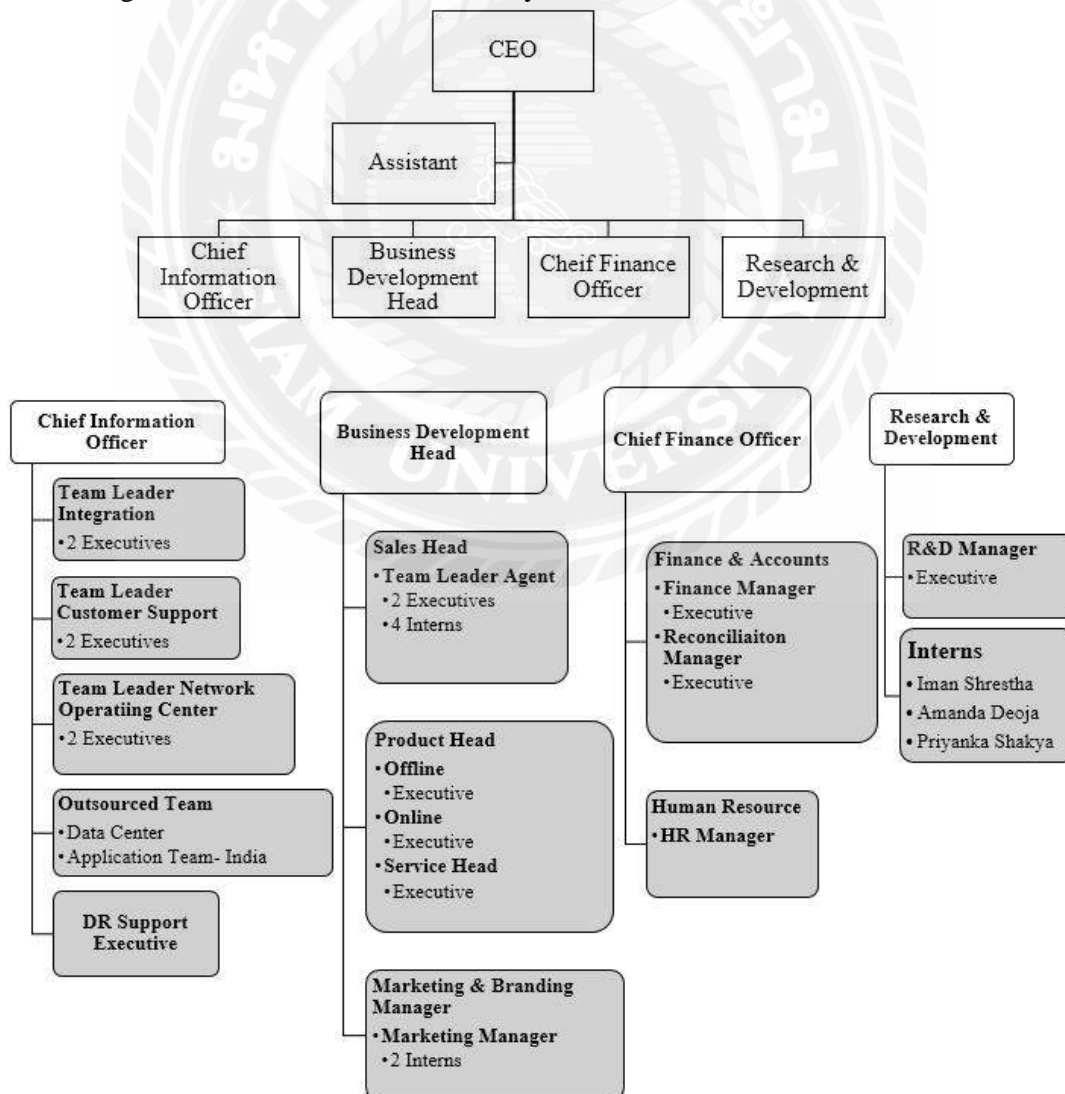


Figure 2- Organizational Structure

### 1.3 Statement of the report

The worldwide trend of payment is shifting from cash and cards to online and mobile based payments. According to the report published by Group Special Mobile Association (GSMA) in February 2017, the industry processed more than \$22 billion transactions in December 2016 alone. Per day average transaction worth forty three million dollars is done by the mobile money operators. As per GSMA report, over 500 million mobile accounts have been exceeded.(Global System for Mobile Communications, 2018). Hence, those remarkable numbers show the potential of this industry which is very promising.

Financial inclusions lead to accessibility, affordability, and availability of financial products (The World Bank, 2018). In Nepal, more than half of the population do not have access to financial inclusions due to which they need to pay higher charges for basic financial services. Currently more than 65 percent of population in Nepal are not using or do not access to formal financial services. In reality, those people are the ones who require such financial services as they require services such as sending and receiving funds, and most importantly to improve their financial and economic conditions.

The 28 percent of the GDP in Nepal is contributed by Remittance which accounts for USD 7 Billion (Organized Sector Only). Nepal's digital transactions account for 36 percent which contributes majority transactions from the urban population. This means the rural population which comprises of almost 81percent of the total population and who are the major remittance receiver of the country are still untouched in regards to digital transactions. Majority of Digital transactions (about 70 percent) are centered on mobile recharge and top up. The population of more than 65 percent is deprived of formal financial services in Nepal (CG Corp, 2017). Accessibility of Digital Transaction is very limited and still follows traditional way of payment.

In Nepal, the financial institutions have expanded with new branches being opened in many locations. But yet, the rural and semi-rural areas have not been reached effectively. There is an impartial increment between urban, and semi-rural, rural areas. Since, mobile wallet services can be accessed through mobile network, it will eliminate the problem of geographical reach. Therefore, it would not be wrong to say that Mobile Wallet could be possibly a great substitute to cover this gap and provide people with the access of financial inclusions as about 86 percent of population are connected to mobile networks.

However, there has been a huge gap between potential and desired performance and actual performance. Practically, mobile money happens to considerably cheaper than other alternatives to cash. Less cost directly translates into money that can be saved. In a country like Nepal, where most of the people at rural areas are unbanked can be offered financial services through mobile to send

or receive payments. Hence, rural users will get more benefits of receiving payments.

#### 1.4 Objectives of the study

1. To know the business models of M-wallet payment gateway in Nepal
2. To enhance my knowledge in Mobile wallet industry.
3. To study the growth of Mobile wallet payment gateway services.
4. Understanding the current market status of Mobile Wallet payment in Nepal.
5. To discover the new trends of demographic shift that has impacted Mobile wallets usage.
6. To study the services provided by the mobile wallet providers (eSewa, Khalti, etc) and the services used by the mobile wallet users.
7. To find out the awareness and preferences of the users towards Mobile wallet service providers.

#### 1.5 Expected outcomes

I expect this research study to provide me with deep understanding of Mobile wallets in Nepal. Understanding the flow, architecture, and business model of mobile wallet is the major benefit that I wish to take away from this study.

I hope to gain more insights about the major market players in the Nepalese mobile wallet industry, their payment structure with their agents and merchants, and their source of income.

Finding out the current market leader of Mobile Wallet industry in Nepal, future market leader, strengths and weaknesses of mobile wallet companies, their main merchants, additional services that customers, agents, and the things that merchants are expecting with mobile wallet companies, finding out which services or features of mobile wallet are used the most, major reasons for customers using and not using mobile wallet services are imperative for me to know.

Most importantly, I wish to know the prospects of mobile wallet in Nepal.

### 1.6 Limitation of the study

1. The sample size taken for the study is based only on the consumers, agents, and merchants residing inside Kathmandu and do not include all demographic aspects. So, sample used for the study is small and do not cover all types of consumers.
2. The research that we conducted includes the use of online survey forms. So, some responses of those surveys may not be valid.
3. Some respondents did not give information because of their busy work schedule.
4. Since the survey is also based on sampling method, it does not disclose the character of the entire customers.
5. During the field visits, companies were too reluctant to provide information on mobile payment, as it is a relatively new sector with plethora of opportunities and beginners. This created a lot of difficulties in collecting authentic and clear information on the exact system of digital wallet.
6. Some of the main merchants and agents refused to provide us any information as they didn't want to disclose any information regarding their company.
7. Some important questions were unanswered in the surveys as well as in the interview session by customers and merchants.

## **Chapter 2: Literature review**

### **2.1 LEVEL ONE PROJECT GUIDE (2017)**

It is an initiative of 'The Bill & Melinda Gate Foundation' which is an articulation of the strategy of the financial services for the poor team at the Bill & Melinda Gates Foundation (The Bill & Melinda Gates Foundation, 2017).

The guide presents a model for how an inclusive digital payments platform based on modern technology and intended to serve the poor could be constructed within a country. This platform is a necessary enabler for the many different products and services that, together, create a system that will help reach financial inclusion.

Helping the people living in the world's poorest places and help making their lives better by connecting them with sustainable financial tools and services digitally is the main focus. This guide also outlines a set of nine adaptable principles to drive innovative financial inclusion.

The population of more than 65 percent is deprived of formal financial services in Nepal. Realizing the potential of the mobile payment network, Chaudhary Group is launching a secure mobile payment service called CG PAY, which brings secure banking or payments and wallet services to customer mobile handsets using the internet, 3G, 4G, SMSC, USSD and secure overlay element and provides payment services directly to the users' mobile devices. With CG Pay users can avail, make bill payments, remit money and operate online and offline wallets using their mobile phones.

So, the main objective of CG PAY is to tap those population who don't have access to formal banking with the help of CG network by providing a platform of mobile payment system as more than 86 percent of the people are connected to the mobile network.

### **2.2 STUDY ON Paytm (2014)**

It is a report prepared by Shwetu Kumar, Vijay Yadav, Atiqu-Ur-Rahman, Aditi Bansal (Shwetu Kumar, 2016). They examined India's most popular Mobile wallet-Paytm and studied its achievements, features, technical architecture, Supply chain management, web technology that they used, its web-based tool, and also described about electronic payment system. In Nepal, only online payment service is provided by Mobile wallet companies. Since CG PAY is also planning to provide online as well as offline payment services in Nepal like Paytm in India, this report has helped in understanding the technology, user-interface that is required to provide offline payment services.



## 2.3 MOBILE WALLET WAR HEATS UP WITH SAMSUNG PAY, 2015

It is an article that presents the fact that even the largest technology firms are now waging war over mobile wallet users. Realizing the potential and importance of mobile wallet, tech giants like Apple and Samsung have started to provide wallet services with the aim to make payments convenient anywhere.

As global tech giants like Apple and Samsung have also ventured into mobile payment and digital wallet services, mobile payments are bound to be a new global sensation. Apple Inc. launched its mobile payment service called Apple Pay in 2014 and is rolling out its worldwide expansion. Samsung has also launched similar payment service called Samsung Pay in 2014 and competing with Apple to grow worldwide. With the involvement of these tech giants, the imaginary idea of mobile phones replacing our wallets is very likely to be a reality in near future. (REISINGER, 2015)

## 2.4 M-PESA, THE WORLD'S LEADING MOBILE MONEY SERVICE IN KENYA, 2017

It is an article that shows the contribution of mobile wallet (M-PESA) in Kenya and provides some insights about the impact of mobile wallets in other nations as well (Salaam, 2018).

Mobile money has emerged as a social and commercial sensation in other countries of Africa as well which includes countries like Tanzania, Somalia, South Africa, and etc. In recent years it has been growing rapidly in developing countries of East Europe and establishing strong presence in Asian countries. In China, Online payment wallet Alipay is already widely popular with staggering 300 million active users. In India, mobile payment services like PayTm and Oxygen are establishing themselves. PayTm is funded by Alibaba Group and has above 100 million users and Oxygen also claims to serve 150 million customers annually. In Europe and America, online payment services like PayPal, Stripe are already well established.

## 2.5 CASE STUDY OF bKash

bKash is the most popular mobile wallet in Bangladesh. This case study of bKash provides the understanding of the overall process of a mobile wallet, agent network of bKash, the challenges faced while providing mobile wallet services, and the solutions towards those challenges. A detail guide of transaction thorough bKash is provided in this case study. This has helped me understand more about

how a mobile wallet company operates and the benefits that customers can get using mobile wallet (International Finance Corporation, 2017).

## 2.6 M-PESA USE IN INTERNATIONAL TRANSACTIONS

M-Pesa ('M' stands for Mobile and 'Pesa' stands for Swahili for money) is a mobile payment application introduced by the largest telecommunication company in Kenya 'Saricom'. This journal article discusses on the benefits of having owing a mobile network company due to which costs are reduced as interest needed to pay to mobile network operators do not need to be given. The discussion regarding the success of M-Pesa in international transactions vs. local financial institutions, factors affecting use of M-Pesa for out of country boundaries transactions are discussed in this journal article (Ntara, 2015).



## Chapter 3: Methodology

As an Intern, I worked on the CG Pay project as a research member. The research involved dealing with both primary and secondary data.

### Primary data

In order to understand the business model, along with the research team, we classified the research into 4 aspects i.e. Competitors, Customers, Merchants, and Agents.

#### I. Competitors

We interviewed the already established and operating mobile payment companies (Competitors) through personal interviews and field visits. In average, per interview took around one hour. In total we interviewed six major market leaders in the market, i.e. eSewa, IME Pay, ePrabhu, iPay, Khalti, and Q-pay.

#### II. Customers

We conducted survey using online survey forms. The forms were distributed via internet and social media (Facebook). The total number of responses was 109.

#### III. Merchants

Merchants are the only revenue source for mobile wallet companies. So, gathering their information was very important. We divided merchants into two categories, Online Merchants, and Offline Merchants.

1. **Online Merchants:** Those merchant accounts that have online and mobile payments.
2. **Offline Merchants:** Those traditional merchant accounts with an in-store terminal and or POS system.

We interviewed major Online Merchants who are providing mobile payment services to customers through personal questionnaire interviews. For Offline Merchants we developed an open-end questionnaire to know their current status regarding mobile wallet service usage.

#### IV. Agents

Agents of the mobile wallet companies are the ones to whom customers go to pay for utilities, or any other mobile payment services.

For the study on agents, firstly, we developed a questionnaire. Then, we selected some of the prime locations in Kathmandu valley where these agent networks are located. We took a sample of 23 agents.

Also, the team at CG Pay has also itself been the main source of information relating the distinct advantages of the product.

#### Secondary data

Company profiles and pamphlets of existing mobile payment companies collected during field visits, articles on fin-techs, and insights through relevant YouTube videos has served me as a secondary source of information.

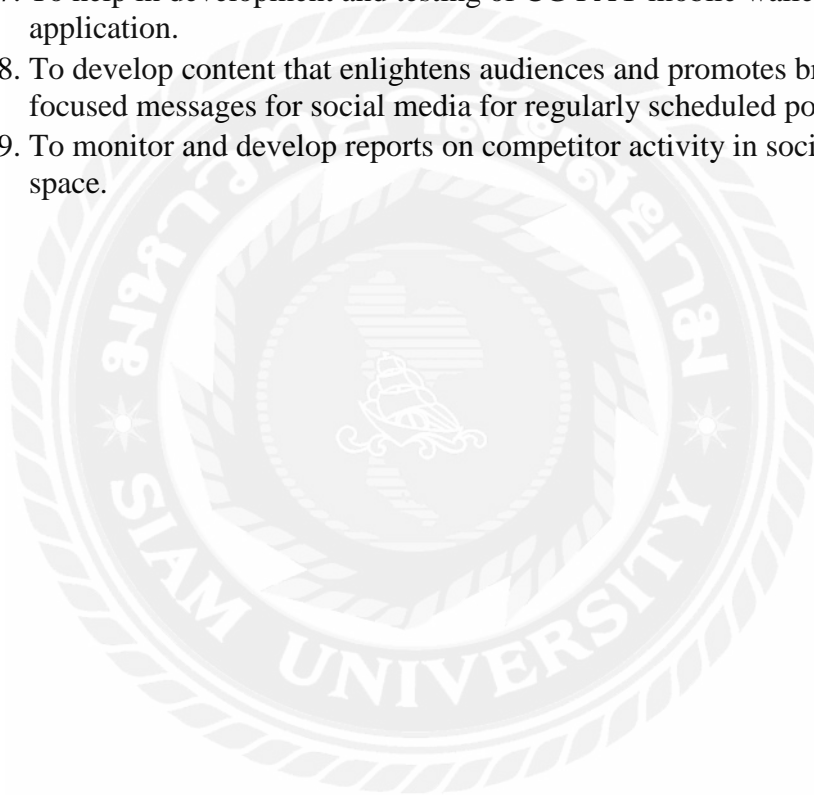
### 3.1 Roles and responsibilities assigned by company

Along with my fellow interns, we were given the responsibility to conduct a business research regarding the Competitors, Agents, Merchants, and Customers of Mobile Wallet Companies in Nepal.

Going in detail, the following are the major roles and responsibilities assigned at CG pay:

1. To understand the genesis and concept of mobile wallet payments.
2. Understanding the current market status of Mobile Wallet payment in Nepal.
3. To find out the awareness and preferences of the users towards Mobile wallet service providers.
4. To study the services provided by the mobile wallet providers and the services used by the mobile wallet users.
5. To find out whether the competitors have the technology (3G, 4G, SMSC, USSD) to provide mobile wallet service in rural areas.
6. Agent and Merchant mapping of different mobile money companies like eSewa, IME pay, Prabhu, iPay, Qpay, and Khalti according to geography and demography.
7. To conduct market research on competitors, customers, agents, and merchants of major mobile wallet companies in Nepal.
8. Finding out the main merchants of competitors, their agent network, strengths and weaknesses, and commission structure for their agents and merchants.
9. Finding out why merchants and agents started providing mobile payment services to their customers and the incentives or benefits that the merchants or agent get.
10. Finding out what could make agents switch towards becoming another company's agent.
11. Finding out the additional services that customers, agents, and merchants are looking for.
12. Finding out which services or features of mobile wallet are used the most.

13. Finding out the major reasons for customers using and not using mobile wallet services.
14. Finding the problems and changes necessary in the CG PAY mobile wallet application.
15. Enrollment of new agents and merchants as soon as the CG PAY mobile wallet application is introduced in the market.
16. To create a new agent and merchant or converting an existing agent or merchant of eSewa, IME pay, Prabhu, iPay, Qpay, and Khalti into CG pay agent or merchant.
17. To help in development and testing of CG PAY mobile wallet application.
18. To develop content that enlightens audiences and promotes brand-focused messages for social media for regularly scheduled posts.
19. To monitor and develop reports on competitor activity in social media space.



### 3.2 Project details

This internship of 3 months was actually based on a single project or assignment but very important. The assignment was to do market research of other mobile wallet companies, Merchants, Agents, and Customers. The questionnaires and survey forms used for this study can be found in the [appendices](#) of this report.

#### Mobile Wallet Companies in Nepal

The task was to find out their current status, their future plans, and current or future promotional activities, the commission structure for their agents and merchants, promotional incentives such as cashback, referral rewards, gift vouchers, etc. Basically we needed to identify what they are doing to gain more market share. The interview questionnaire used for this study is in [Appendix A](#).

#### Merchants

The objective of doing research regarding merchants was to find out the commission structure with the mobile wallet companies, the additional services that merchants want or are expecting, the problems that they were facing while doing transactions with mobile wallets, the complaints that they received by customers related to mobile wallet payments, the usage rate differences between cash vs. Card payment vs. Mobile wallet application. The questionnaires used for this study can be found in [Appendix B](#) and [Appendix C](#).

#### Agents

The goal was to find out the most motivating factor for using mobile wallet services among many mobile wallet companies, the commission structure with the Mobile wallet companies, finding out the highest commission rate, finding which services or features are used the most, which are used the least, and which services are trending the most, and finding out the benefits for agents for using wallet services. The questionnaire used for this study can be found in [Appendix D](#).

#### Customers

Identifying the demographics such as age-group, sex, profession of mobile wallet users, the reasons for using the services and not using it, the benefits of mobile wallets, the problems faced while using mobile wallets, the most popular mobile wallets for customers, the most used features of mobile wallet, the least used feature of mobile wallet, the current trending features, additional services desired by customers, etc. are some of the objectives of this study. The link for the customer survey is [https://orordocs.google.com/forms/d/1FAIpQLSfCZ9nU0exNSJLJg\\_7aa710RgwU29G-joWWJqzXnu5UBfuv7worviewform](https://orordocs.google.com/forms/d/1FAIpQLSfCZ9nU0exNSJLJg_7aa710RgwU29G-joWWJqzXnu5UBfuv7worviewform). The summary of the responses of customers are in the [Appendix E](#) at the end of the report.

### 3.3 Result of the Project

#### 3.3.1 Discoveries (COMPETITORS)

For the research study on competitors, we took a sample of 6 major mobile payment service companies in Nepal. We developed a questionnaire and personal interviews were conducted with respective personnel of each company.

##### a. eSewa

eSewa was developed by a software manufacturer company named F1Soft company. eSewa came into this market 10 years ago and was the first company to offer mobile payment services in Nepal. Hence, eSewa had the first mover's advantage. The banking application (e-banking) softwares of the top commercial banks of Nepal were developed by the same F1 soft company. So, eSewa had been integrated with the system of those banks due to which it became easier for customers to load money direct from e-banking sites making cash-in and cash-out more convenient for e-Sewa users. eSewa also happens to be the one of only three companies to have license to provide mobile wallet services.

Their mostly used services are Mobile balance top-up, Utility bill payments such as Electricity bill payment, ISPs, DTH, and Airlines ticket purchase (Domestic). Taking about the fees for customer for using their services, they are charging interest on transaction from wallet to partner banks with Rs.1-10 for every Rs.1000.

The statistics below show that eSewa is far more ahead than any other competitor in the market as they have the most number of agent, merchants and customers.

##### Current data of eSewa

- a. Size of Agent Network: Above 25,000 all over Nepal
- b. Size of Merchant Network: Above 2,500 all over Nepal
- c. Total No. of Registered Users: Above 60 lakhs all over Nepal
- d. Total No. of Active Users: Above 11 lakhs all over Nepal.
- e. Commission rate for Merchants: Around 3.5 percent per transaction.

eSewa's agent network is so huge that they have a separate department just to handle agents only. As the volume of transaction increases, they charge less commission to their merchants. The most trending and about to get popular service in future is Electricity bill payments and Airlines tickets payments. They conduct promotional campaigns as well. They do TVCs, Sponsor events such as CanInfoTech (which happens to be the biggest IT Exhibition), Campaigns in Electricity offices (where in every Electricity counter brochures are distributed), sponsor melas (Festival programs, games). eSewa are also providing mobile payment products such as through Syntax, SMS technology to unbanked

population. As incentives, they provide cash rewards, reward points, cashback. They also have a reward system starting from a mobile top-up worth NRs. 200 to a motorcycle worth NRs. 2,49,000.

Table 1- eSewa Gift Voucher List

Reward Points	Gift voucher
1000	NTC/NCELL recharge worth Rs 200
2000	NTC/NCELL recharge worth Rs 400 / gift hamper
3000	QFX/BIG movies Movie tickets for a couple
5000	eSewa Balance of Rs 1000
10000	Manakamana Darshan ticket for one person/ gift voucher of Muncha.com worth Rs 2000
15000	Flight from Ktm to Pokhara (One way) for oner person/ gift voucher of Bhatbhateni worth Rs 3000
20000	Android phone/ One paragliding voucher/ bungee jump for a couple
50000	18" TV set/Android Smart Phone (Samsung/Colors/Karbons/LG)
100000	13" Dell/Acer/Lenovo/Hp Laptop
1000000	Honda Unicorn/Pulsar 150 cc

(eSewa, 2018)

#### b. IME Pay

IME Pay is a new venture of IME Global Bank Limited. It is a new company in the mobile wallet market but has already acquired a good number of merchants, agents, and customers. In order to grab market share, they are providing the highest commission to agents. They are going huge in promotions as well. Advertisements in newspapers, Posters in most visible place in malls and most crowded place have made them more visible.

Except for the similar services, they are offering Inward remittance services, QR payment in Point of Sale (POS) at merchants, Cross border payments is being planned to be added next year. Their mobile application and web portal is provides a language selection of two languages that are English and Nepali. They



are currently planning to offer Peer to Peer transfer as well. Talking about providing services to unbanked populations, they are currently they are doing it with INGO's. So, it's more like government organizations to person (G2P). Their most used features happen to be mobile top-up, utility payments, and money transfer. For using their services they charge their customers some interest. Some of the interest rates charged for their services are-

- For Mobile P2P, they charge Rs.10 for Rs.5000 worth of transaction.
- For Wallet to Partner banks, they charge Rs.25-Rs.50 for Rs.5000 worth of transaction.
- For transaction from a bank to another bank they charge Rs.25-Rs.50 for every transaction worth of Rs.5000.

They provide a secure user experience to their customers. Security features such as Multi-factor authentication, Time-out due to authentication, Login with PIN, Mobile notifications (e.g., SMS text message, push notifications), Mobile device ID, Geo-location, and Biometrics (Planning to-finger print) have been provided to their customers. Their agent network is very strong as well since most of their agents IME Remit agents which is a huge remittance company of Nepal.

Talking about their commission for agents, not all agents are provided the same. Agents located at crowded location are provided more as they provide more customers to the company. The commission rates differ as per the volume, transaction, and type of services. IME Pay is on the mission to acquire more agents as they are providing highest commission and a benefit of NRs. 15 for every new customer entry (This is not done by other competitor in the market). Their selection of agents is more secured for customers as all of their agents happen to be registered business. So, chance of fraud is minimized as possible. This is what that makes IME Pay a company with positive Credibility. Credibility of the IME is the selling point for agents.

Their most prominent and popular merchants are

- Restaurants. QR Code payment in POS (Point of Sales) is placed in almost all the popular restaurants in Kathmandu. Right now, Restaurant industry is targeted the most.
- Ncell, NTC. These two network operator giants of Nepal are the prominent merchants for all the m-wallet companies in Nepal.
- The most trending merchants are Airlines companies (Buddha Airlines, Yeti Airlines) and Internet service providers (Subisu, Vianet, Worldlink)

IME Pay right now provides a commission of 2.5 percent in average per transaction to their merchants. This differs from merchant to merchant as per the contract of each merchant. Their main Motto right now is to acquire more merchants. Most effective method in doing so is by approaching them directly, door-to-door sales. However, Merchants are withdrawing their services. This is so because customers are not using mobile payment services in comparison to cash

and card payments and merchants will have to pay commission costing a small fortune.

Finding Merchants include three Series: First Approach, Second Sign agreement, and Third Training Session (30 minutes). Their upcoming promotional campaigns involve merchants - FIFA World Cup 2018. They plan to provide mobile payment products to the unbanked population- They are the main target. They are targeting Dairy and Tea businesses (via SMS and Online or Offline) For USSD, they have the technology but have not used it. Right now IME is more focused on marketing campaigns. TVC ads- about to release soon. Print media and Jingles as well. They are also planning to provide interest on wallets to customers. As incentives to customers, they provide Cash rewards and cashback. Right now, they are not focused on customers right now. Their main motive is to make agent network strong and acquire more customers through them. Their current promotional campaigns include Sports Events, Cinema halls- If movie tickets are paid using IME, everyday a winner is selected. This has also been successful till now.

#### Current data of IME Pay

- a. Size of Agent Network: 13000 plus all over Nepal. Main agents are IME remit agents.
- b. Size of Merchant Network: Above 500
- c. Total number of Registered Users: Above 60,000
- d. Total number. of Active Users: 20,000-30,000
- e. Total number of Daily Transactions: Online above 5500 and Offline above 800.

#### c. ePrabhu

ePrabhu is a venture under Prabhu Group which happens to be one of the most financially supported company under which there are many popular firms such as Prabhu Bank, Prabhu Money transfer. ePrabhu is a mobile payment service provider that offers m-wallet services to corporates only. Basically, they do B2C. They are in this business since 2012. ePrabhu is managed by Prabhu Management. Their core business is Remittance. Recently, Prabhu has acquired a older mobile wallet company that is Qpay. Most used services are Mobile top-up (NTC, Ncell), Direct to Home (DTH) bill payments, and domestic airlines ticket purchase. ePrabhu were the first to introduce Electricity bill payment in Nepal

Their upcoming services are train ticket purchase of Indian rail. Their merchant network is good which is above 500. Ncell is providing ePrabhu with 3.5 percent commission out of which they are giving 3.2 percent to the agents. They only charge interest for transaction from one to another bank. All other services are free of cost for customers. In order to retain and hold their agents, their strategy is to provide highest commission than competition. For mobile security, they only use 4 Digit pin set (for each transaction), and Login with PIN.

They have a very specialized method of managing agents. They have 3 network parts in Prabhu to hold agents, i.e. Prabhu Management, Prabhu Money transfer, Commission part. Each have their separate roles. So, holding agents is not a problem for them. Right now, their focus is on provide more platforms to drive cashless economy. Prabhu is providing more digital financial services, and infrastructures like 'e Shikshya', RuPaiya, Cloud base core accounting systems for cooperatives, and KOISK machines. They have placed 486 KIOSK machines all over Nepal. They are also providing an ecommerce platform with android and iOS app at Rs.2000 per month. Their main hurdle is lack of awareness. Merchants and customers are not getting involved with those digital financial services. The commission structure for agents normally 3.25 percent. In case of volume, they use Slab basis. Their plans to retain them are by providing highest commission than competition and provide more financial infrastructure. They are continuously acquiring agents 'Cooperatives' through call centers, marketing personnel, door to door. They have total of 37 merchants. The total online transaction per day is around 55 lakh. The commission structure for merchants is in monthly volume based with 6 percent on average, e.g. 6 percent of total business in month. The commission is paid in real time. There hasn't been a single withdrawal of their services from agents and merchants. Their upcoming promotional campaigns include workshops regarding ePrabhu in major cities with cooperatives. They are doing a Digital Financial Literacy Campaign with FWDR (Far Western Development Region) and EDR (Eastern Development Region) targeting the unbanked population. Among their total users, 20 percent are public customers. Other 80 percent are cooperatives. Almost all if their users are active. They do a calculation in every 15 days and 79 percent occur to be active. They don't plan on providing interests on wallets. They could provide digital credit in future. The only incentives tied to mobile payments that they offer is Referral Rewards.

#### Current data of ePrabhu

- a. Size of Agent Network: Above 7,000 all over Nepal
- b. Size of Merchant Network: 37
- c. Total No. of Registered Users: Above 5000
- d. Total No. of Active Users: 79 percent of total. (Approx. +3950 users)
- e. Total amount of Daily Transactions (Nepalese Rs): 55,00,000 per day

#### d. Khalti

Khalti is a new company in this industry and are gaining customers is a faster rate. Their mostly used services are Movies, Airlines, Mobile Top-up, Electricity, ISP payment (Vianet mostly). Right now, Electricity Payment and ISP payment are becoming one of the most utilized services. Being a new company, they plan to go on loss for 3 years. Right now, they are trying to get more customers. Their only source of revenue is the commission that they receive from their merchants. But right now, they are giving that commission to customers as cashbacks and reward like when purchasing movie tickets worth NRS.100, they

provide 25 percent that is NRs.25 to their customers. Their promotions include partnering with events, tie-up with the banks and doing campaigns, and training people. Recently, in Birjung, they did a campaign where they trained 200 household women regarding usage and benefits of mobile wallet.

Khalti don't have multilingual app and website right now. They are planning to offer Nepali and Maithili language in their website and app. Khalti's first priority is their customers. Their main focus is to make their Khalti app as "user friendly" as possible. They are using the latest technology in their application. As per them, other competitors are using old technology. Competitors keep on adding services but cannot update their entire services. Their agent network includes the "Sparrow SMS's" agents and Easy-Sim's 1200 agents. They used to sell dish home, top-ups in past. With the help of those Sparrow and Easy-Sim's agents, they are getting hold of other new agents. Market expansion is also a current goal of theirs. They have sent their people to Biratnagar, Lahan, and Dharan to gather more agents. Digital marketing has helped them acquire more agents. Agents are coming to them rather than them going to the agents.

Khalti believe that their app is better than the competitors' application. Hence, they believe agents will use the app that is easy to use. Here, Khalti's such thinking is wrong. Agent's most determining factor for becoming an agent happens to be the 'Commission Rate'. They don't plan acquiring too many agents in Kathmandu. Their philosophy remains that people will come to them rather than they will go to people. Their most prominent merchant is ISP's especially Worldlink and Vianet. Foodmandu is becoming quite popular as well. Their total online transaction per day on average is about 8 to 10 lakhs. Their main goal is to provide better service than competition. They think that it will not only attract and retain customers, but also the merchants and agents as well. Their website is used more than the application. They don't provide and don't plan to provide mobile payment to the unbanked population. Currently they are providing Referral Rewards, Cash reward, Rewards points or cashback their customers. In future, they aim to provide cashback, Khalti points at every possible place in Nepal. Right now, Khalti is providing 25 percent cashback in Fcube. They do Billboards advertising, trainings as promotional campaigns. Their most effective promotional campaign was Digital Birjung campaign where they trained 200 household women.

#### Current data of Khalti

- a. Size of Agent Network: Above 1200
- b. Size of Merchant Network: 18
- c. Total No. of Registered Users: Above 500,000 (Through Application 1 lakh, Through Web 400,000).
- d. Total No. of Active Users: Above 100,000
- e. Total Amount of Daily Transactions: NRs. 8-10 lakhs

e. iPay

iPay is a venture of an e-commerce company named muncha.com. iPay are in this industry since 2010. Their main core competency is their agent locator feature as well. That is customers can get info about near restaurants with discounts through iPay. Their most used services are mobile top-up, ISP payment, and Electricity bill payment. They don't charge fee for Mobile P2P, Cash in, Partner bank to customer wallet, Wallet to Partner banks, From One to another bank. Their sources of Income are Merchant commission. Their current focus is on restructuring the whole system, both mobile-app and web-app to make the application more user-friendly. For promotion, they sponsor college events to aware and target youths.

Right now, they are not interested in acquiring more agents. Their goal is to have end-user. What iPay believes is that agents will phase out in long run as everyone will have internet access. In order to tackle competition, iPay pay higher commission to agents in order to acquire and retain them. Their commission structure for agents is based on volume with Silver, Gold, Platinum Member programs. In average, they pay 3 percent to 3.2 percent per transaction. Their most prominent merchants are Vianet, NTC, Ncell, Subisu, Worldlink, Airlines (domestic). Muncha.com has travel agency as well. So, they are trying to add international airlines as merchants as well. Their commission structure for merchants is around 3.2 percent per transaction. They could give till 3.4 percent per transaction, keeping about only 0.1 percent for themselves. For revenue, they focus on volume centric ideas. iPay is more focused on making Restaurants, Apparel stores their merchants. So, offline payment system is required. From Web- 70 percent and from App-30 percent of transaction is done. Their App is not user-friendly. Fund cannot be loaded with app, so will need to go to web to do so. Their total no. of customer is about 1 Lakh. They are also planning to provide mobile payment products to the unbanked population. Currently, they are working with UNCDF 'Mobile Money program' in this related matter. They don't have the technology (USSD, SMS, Online or Offline, GPS) to tap into unbanked population. Till date they only have 9 partner Banks. 10 more banks are coming in 2-3 months. They are providing incentives such as Location-based offers, Rewards points or cashback for mobile transactions, Referral Rewards- In the process (Will finish till April 2018), and Paying with points for mobile transactions at the POS.

In future they plan to offer Cash reward or account credit for mobile wallet enrollment, all in one wallet where we can add Debit and Credit card and can choose from which card to pay, and provide viable offers unlike eSewa (1 crore transaction to get a Motorcycle). Different customers get different cashback based on transaction volume. Their most effective promotion is through social media. Also, from banner ads, everyday around 40 customers are registered but it does not mean they are active.

#### Current data of iPay

- a. Size of Agent Network: Above 500
- b. Size of Merchant Network: Above 100
- c. Total No. of Registered Users: Above 10,000
- d. Total No. of Active Users: Above 3000
- e. Total No. of Daily Transactions: Above 7000 or in amount- 20-25 lakhs per day.

#### Qpay

Prabhu has acquired Qpay recently. Qpay happen to be visible more at restaurants. Their most used services are bill payments, mobile top-up, and electricity, ISP, and Flight tickets. Their only source of income is the commission that they get from their merchants which is around 2.5 percent per transaction. If on volume basis then they can offer up to 1.5 percent per transaction which means more benefit to their merchants. Mostly pharmacies do on volume basis.

For awareness and promotion, they do social media marketing, and go door to door to acquire more merchants. They say their application is multifunctional than competitors. Other wallet applications are more Qpay lack agent network. Their say their merchants are their agents. In order to withdraw from wallet, then will need to go to merchants. Most prominent merchants of Qpay are apparel stores, liquor shops, cyber, Restaurants. From merchants the sales is very low. They do promotional campaigns in college events, and fairs, place banners at restaurants, outlets, and retail stores. Their total number of customers is around 1 lakh plus among which about 80,000 are active. They don't have plans to tap unbanked population. As incentives and offers, they only provide cashback.

#### Current data of Qpay

- a. Size of Merchant Network: +5000
- b. Total number of Registered Users: +100,000
- c. Total number of Active Users: +80,000
- d. Total amount of Daily Transactions: Rs. +1,50,000 (only from Utility)

#### 3.3.2 Discoveries (MERCHANTS)

We conducted the research on Merchants by classifying it into two categories: Online Merchants: Those merchant accounts that have online and mobile payments. Offline Merchants: Those traditional merchant accounts with an in-store terminal or POS system. We developed a questionnaire for each of the two categories. Then, we selected most prominent merchants as per different industries.

#### **Movie Industry**

We collected information from the three major players of this industry:

- a. BigMovies

b. QFX Cinemas

c. F Cube

We found out that there wasn't a direct correlation between the use of mobile wallet payment services and the increase in ticket sales, as this entirely depended on the movie itself. However, mobile wallet service has made the process of buying tickets faster and more convenient resulting in satisfied and regular customers.

Furthermore the cinema halls have been provided with merchant portals by the mobile payment service companies that notify them via notifications or emails of the business transactions in real time.

a. Big Movies

#### Key Findings

They have been the merchant for mobile payment services for the last 5 years. They started with eSewa which is the online mobile gateway service that they provide. They also have NIBL as their Bank Gateway. However, e-Sewa is the most preferred and used gateway. The selection criteria for Payment gateways is User-friendliness of the application or website, the number of active users and the number of partner banks in order to expand their reach. As the transactions can be traced easily, mobile payment service has helped in making the operations more efficient contributing to the overall improvement of the business.

The number of sales through mobile wallet per show:

- i. Regular basis: 2-4 tickets out of 300 tickets.
- ii. Busy day: More than 80 tickets out of 300 tickets.

About 4 to 5 errors occur every week. Usually, the customers themselves are the ones making these errors (depending on the customer's ability and knowledge to use the app.). For wallets, for improvement they suggest to make the app more user-friendly app, and add more partner banks. Big Movies are also looking for a synergy that will provide more convenience to their customers.

b. FCube

#### Key Findings

Fcube has been providing mobile wallet service for more than 2 years. eSewa is used more than any other payment system. Main motive in becoming a merchant was to provide more convenience to customers like customers will not need to wait in queues, can pay at real time, will have more option of payments. The major benefits are there are no queues, no quarrels, reduce hassle for customers. They pay about Rs.10-Rs.15 per transaction to mobile wallet companies. Right now, Khalti are paying 25 percent cashback if tickets purchased using Khalti. They only have 3 mobile wallet companies; eSewa, Khalti, SCT (nPay) out of which eSewa is used the most. They don't have specific criteria for

payment gateway selection. They are more focused on reach. Youths are the most important customers for FCUBE, so they look for banks that have more youth accounts and integrate with them. Global IME has such customers and are about to integrate with FCUBE. For every transaction they receive real time messages in their merchant portal. Usually, unsuccessful transaction occurs due to slow internet speed of customers. Out of 100, only 5-10 transaction error is to be reported. The sales through mobile wallet depend upon the movies. For Hollywood movies, more customers use mobile wallet to pay the tickets. Their total transaction in a month through mobile wallet is about 30,000-40,000. About 15 to 20 percent of total sales happen through mobile wallet.

Some technical errors like payment is deducted but ticket is not received by customers occur. For such errors, they provide compensation and free tickets. Fcube is requiring a Refund service option in the applications. If customers want to cancel their tickets that they already purchased, or if they haven't received their tickets even after making the payments, getting refunded through the app would be better is what they say. They believe that more detailed explanation of process is required in wallet application such as making app more user-friendly, reducing the steps in the process of selecting the movie till receiving the tickets for customers.

c. QFX

Key Findings

They have been providing mobile payment services for about 7-8 years. They also provide Card based payment services - Visa and Debit. Right now eSewa is used more than card. People feel eSewa is more secure. Among Bank gateways NIBL is also popular. Their motive on becoming merchants of mobile payment company is to provide customers with more ease, convenience while using their service like no queues, payment from anywhere, at any time. Customers can get access to easy method of payment, which is time saving as well. It also ensures surety. The one who pays first will get the seats first. There are no extra benefits for the company. The only benefit is being able to provide good service to customers.

Their current wallet gateways are eSewa, Khalti (in process), Hello Paisa, SCT (nPay) and NIBL, Global IME as bank gateways. eSewa is used the most followed by NIBL. While selecting wallet gateways, more preference is given to a gateway with more coverage. If they have more banks, the better did not disclose commission structure and payment structures. Technical errors happen quite often. It depends upon the movies. Good movies result more customers which results more errors. Errors like money is deducted but ticket is not received occur the most. To solve such problem, they check at QFX's system and fix the problem at real time. They are not interested in additional services right now. Main concern is payment. Right now, they are not interested in doing anything other



than payments. They don't do any promotional campaigns outside the QFX premises. For the time being, they are just interested in providing Payment gateways only with huge reach.

### **Airlines Industry**

We went to 3 airlines companies- Yeti Airlines, Buddha Airlines, and Simrik Airlines but were only able to information from Yeti and Buddha airlines as Simrik did not want to disclose any information with us.

#### **a. Yeti Airlines**

##### **Key findings**

Online sales started from 2015 with eSewa. They also provide Visa, and Master Card payment services. Card based is popular in Dollar Market, and eSewa is more popular in Nepalese Market. Card Based is better than Mobile wallet. Their main motive is to have customers engage directly and reduce mediator. Sales through mobile wallet have increased. 20 percent is through online sales. From last year, it has increased by 10 percent. With mobile payments direct costs are reduced, middlemen are eliminated, and payments are received directly. In a day, 5-7 lakhs worth of sales come from wallets only. From card is about double than that of wallets. Transaction problem and Refund problems occur with an error rate of 5 to 7 percent. Additional service that Yeti is looking forward to is reliable service, more customer awareness, and QR code payment feature. They did not disclose the commission structure.

About 80 percent of their business are conducted through agent network. They pay 10 to 12 percent per transaction to agents. So, they can cut huge costs through mobile payment.

#### **b. Buddha Airlines**

##### **Key Findings**

Online sales started with PayPal via website. They started with eSewa which as their mobile payment gateway. Now they have iPay as well as IME pay along with eSewa as their mobile payment gateway. Furthermore, Buddha Airlines' agent networks use Khalti for B2B transactions. The mobile payment gateways are only used to buy airplane tickets for domestic flights. They also have HBL and Nabil as their Bank Gateways. They also accept Visa and MasterCard for international as well as domestic flight ticket payments. The selection criteria for Payment gateways is User-friendliness of the application or website, the number of active users and the number of partner banks in order to expand their reach.

### **ISP Industry**

We collected information from major merchants of Mobile Payment Service Companies for ISPs.

a. Vianet

Key Findings

Online sales started from 2014 with eSewa. They provide card based services. They prefer mobile wallet because with Card, payments are not very successful, takes time (15 to 30) days and transactions are debited. Refund is easier in mobile payment. Their main motive is to increase in transactions and provide Convenience to customers. For process of settlement, they use a merchant panel provided by the wallet companies. Their bank gateways are NIBL, SBI, HIBL and Wallet Gateways are eSewa, Khalti, iPay, and ePay.

Their selection criteria for wallets are the transaction Charge rate and system management status. All the transactions are tracked by the system on real time basis. Total sales through wallet per day are 39 percent of the total sales or 17 lakhs in amount. Some errors are seen sometimes in the system. Vianet would want wallets to work on minimization of those errors.

b. Subisu

Key Findings

Subisu has been providing Mobile wallet services for 3 years now. Initially started with eSewa and eSewa is the only wallet gateway that they provide till today. They provide mobile banking of NIBL, HBL. However, mobile wallet is used more than mobile banking. eSewa is more popular among all. About 20 to 30 percent of total sales come from eSewa alone. They became merchants so that they can have accessibility to everyone. They will also not need to go door to door to pick up payments. The manpower can be used somewhere else. Their aim is to have customers engage directly and reduce mediator. They want everything to go Online as costs of agents are reduced. While selecting a mobile wallet company their most important requirements are credibility, security, and reliability. If a new company with all those traits approaches them, they are willing to partner. Their commission structure depends upon the contract with the mobile payment companies. Usually, it lies between 5 to 10 percent per transaction. Their transaction details are shown in Portal and they receive email for every transaction. Mobile wallet has not helped them in retaining customers as the same customers paying cash are now paying through wallet agent. But yet, sales have increased. Their business has improved as well as the accessibility with their customers has increased. Communication with the mobile wallet is done through Internet. They get complaints from customers due to delay in transaction (Technical error). Subisu is not looking for additional services. They say it is enough for now. With mobile wallet they aim to reduce human resource more and make everything online. Right now they are doing massive internet campaign from Birgunj to Rajbiraj.

## **DTH Industry**

We collected information from major merchants of Mobile Payment Service Companies for DTH.

### **a. Clear TV**

The information regarding Clear TV is the same of that of Subisu as Clear TV is a product of Subisu.

### **b. Sim TV**

## **Key Findings**

Online sales started from 2015 with eSewa. Main benefits of using mobile wallet are mass reach, feasible, ease, and convenience. Their main motive through wallets is to increase sales. Mostly are done through recharge basis. Their wallet gateways are eSewa, iPay, Paypoint, ePay and ePrabhu whereas their bank Gateway is NMBL. Their Total sales are 7 to 8 lakhs or 60 percent of total sales done through wallets. Till now there is no problem with the wallet. There are some customer errors such as while transacting or entering the correct number.

SimTV doesn't have any refund provision. Therefore, when error occurs, it should be dealt by the wallet company itself. SimTV would want to minimize technical errors hence they want the wallet companies to properly integrate API. They would want the mobile wallet companies to provide higher reward points in each transaction of SimTV. To lessen any type of errors that would affect the sales of the SimTV.

### **c. Dish Home**

We couldn't get any viable information. But when we asked the agents, DishHome was in the top 5 list of the major merchants of Nepal.

## **Telecommunication Industry**

The top players in this industry NTC, and N-cell did not allow us to have an interview session, so but we collected information from an upcoming telecom provider- SmartCell.

### Key Findings

They have been providing mobile payment services for the last 3 months. They started with eSewa, Khalti, Epay, and Paypoint as their wallet gateways. They also have NIBL as their Bank Gateway. However, e-Sewa is the most preferred and used gateway. The selection criteria for Payment gateways are the scope and reach of the gateway itself. They set a target in terms of volume of transactions. If the payment gateway providers meet the target, they continue their service. As the transactions can be traced easily, Mobile payment services have helped in making the operations more efficient contributing to the overall improvement of the business. The number of sales through mobile wallet per show: Per day: 5-6 Lakhs, i.e. equivalent to 5 percent of sales per day. Transaction error occurs approximately 0.1 percent to 0.2 percent.

Scope for improvement for mobile wallets: If customers could use SmartCell's balance for other purposes like making payments instead of only texts and phone calls (currently working with Khalti regarding this matter). SmartCell is looking for a synergy that will increase their subscriber base. They currently have spread their reach in 35 districts of Nepal. They are interested in promotional campaigns and co-branding that proves beneficial to both parties involved (interested in both BTL and ATL marketing campaigns).

## **E-Commerce Industry**

We collected information from Sasto Deal which is one of the current market leaders in the context of Nepal.

### Key Findings

They have been providing mobile payment services since 2016. They started with eSewa as their wallet gateways. Now, they have SCT (nPay) as their payment gateway too. However, e-Sewa is the most preferred and used gateway. The selection criteria for Payment gateways are the scope and reach of the gateway itself. They are more focused on targeting the rural areas. Furthermore the rate of charge and the rate of commission also play a role. Also, tie-up with varied financial institutions is preferred. The maximum transaction happens through cash (via cash on delivery option), i.e. 90 percent of the transactions. Only 10 percent of sales happen through mobile wallets and banks. Mostly technical errors occur. However, they comprise of less than 5 percent of total transactions. Also, in case of e-Sewa, the transfer of cash is slow.

Scope for improvement for mobile wallets: They are focused on spreading awareness amongst customers in order to increase market adoption rather than improvements in the services right now. A synergy with Sasto Deal depends on

the market adoption of both e-commerce as well as mobile payment service. Customer awareness and market adoption is the key criteria. They are not interested in promotional campaigns at the moment. Also depends on the offerings they receive.

### 3.3.3 Discoveries (AGENTS)

For the study on agents, firstly, we developed a questionnaire. Then, we selected some of the prime locations in Kathmandu valley where these agent networks are located. We took a sample of 23 agents. Finally, we collected information by visiting these sites and conducting personal interviews. Major Locations: Pulchowk, Maitidevi, Dillibazaar, Jawalakhel, Baneshwor, Kalimati, and Boudha.

1. The most used services are mobile Top Up, ISP and NEA bill payments.
2. Lately, airline ticket payment services are also being used massively.
3. Agents get paid different rate of commission for different services.
4. The profit for agent acquisition is the highest as the agent who acquires a new sub agents gets a certain percentage of commission from each transactions conducted by the sub agent.
5. The Agent Networks are profit oriented businesses who are motivated only through higher commission rates.
6. The ongoing commission rate provided by different wallet companies ranges from 3.2 to 3.8 percent.
7. Currently, IME Pay and e-Prabhu are wallet companies that provide the highest commission rate (3.8 percent) to these agent networks.
8. Though e-Sewa is the current market leader, according to our study, agents are less likely to use its services (e-Sewa provides a commission of 3.2 to 3.5 percent) in comparison to competitors like IME Pay and e-Prabhu (who provide a commission of 3.8 percent). As the commission rate is less so is the profit for agents.

### 3.3.4 Discoveries (CUSTOMERS)

We conducted research through online survey and shared the survey through Facebook and email. The total amount of response that we got was 109. The link for the customer survey is [https://orordocs.google.com/forms/d/oreor1FAIpQLSfCZ9nU0exNSJLJg\\_7aa710RgwU29G-joWWJqzXnu5UBfuv7worviewform](https://orordocs.google.com/forms/d/oreor1FAIpQLSfCZ9nU0exNSJLJg_7aa710RgwU29G-joWWJqzXnu5UBfuv7worviewform). The summary of the responses of customers are in the appendix at the end of the report.

1. Most responses received from age group: 18-25 years(82), and 26-35 years(15 responses)
2. Out of 109 only 54 used mobile wallet service(s).
3. All the respondents have Internet access.
4. Out of them only 91 were aware of mobile wallet service in Nepal

5. Awareness -eSewa=84, Khalti= 56, IME pay= 26, iPay=22, Qpay-17, ePrabhu= 12
  6. Word-of-mouth, and Facebook are the main source for awareness
  7. Only 37 recommend using mobile wallet
  8. Among all the mobile wallets, eSewa used the most (26), followed by ePrabhu (5), and Khalti (4)
  9. Rating the Satisfaction- 9 of them rated 3, 19 of them rated-4, 7 rated 5 (where 5 was the highest and 1 with lowest)
  10. Most unused services are School fees payment (23), Insurance or EMI or Credit card payment (21), and Remittance (26)
  11. According to customers, services that are not useful- School fees payment (11 respondents), and Remittance(11 respondents)
  12. Customers recommend using mobile wallet (36 respondents) because it saves time, is easy to use, is convenient, safe to use, and is useful.
  13. Only 1 respondent did not recommend using mobile wallet.
  14. When asked customers (No. of respondents= 37) about why they don't use mobile wallets, their most common reasons were- Not required (25), Lack of awareness and knowledge (17), Too much of a hassle (15), Lack of trust (13), Complex process (12), Not Interested (11), Difficult to use (9)
- Out of 54 respondents 48 would use mobile wallet in future- If it starts working everywhere, for easy transaction at emergency time, to save time, if many places accept this method of payment, easy payments. The rest did not want to use it in future as they believe it is still in initial phase, and also due to lack of awareness about how to use it.

## Chapter 4: Results and Discussion

These 3 months of internship was more like a research work. After analyzing the findings regarding mobile wallet industry, we found that this industry is still in initial phase. There are about 9 or 10 mobile wallet companies in this industry providing similar services but only three of them are licensed by the central bank of Nepal. Rest of them do not have license to conduct this business. So, more than half of the companies have not been provided license by the Central bank of Nepal. Due to this reason alone, the credibility of mobile wallet companies is questioned by customers and neglect to use it.

Mobile wallet payment is a concept that can help people who are deprived of formal financial services. In Nepal, the rural areas have not been reached by the wallet companies. This is due to lack of proper infrastructure in rural areas such as absence of mobile network, and difficult geographical locations. So, only the urban and semi-urban areas have been reached till now. The m-wallet companies are planning to provide digital financial services to the rural areas in future. Currently, majority of Digital transactions (about 70 percent) are centered on mobile recharge and top up. Other digital payments have not been used yet as combining all other payments would be around 30 percent only. Also, the population of more than 65% is deprived of formal financial services in Nepal. Accessibility of Digital Transaction is very limited and still follows traditional way of payment that is cash.

Through the analysis of the market, some gaps in the mobile wallet market in Nepal are-

1. Payment Gateway- Payment Gateway Platform that can aggregate Financial Institutions and Card Issuers to enable Online Payments across the world with settlements done locally is absent.
2. Unified Bill Payment- Platform that can aggregate Bill Payment Service Providers is not present in the market.
3. Mobile Payments- a Mobile Commerce Platform that can aggregate both financial and non-Financial services is absent as well. With 82% mobile subscribers in Nepal, “Mobile First” payment platform is not available in the market.
4. Financial switch- Absence of Interoperable Financial Switch, which is a key to achieve collaborative financial ecosystem for Financial Inclusion.

The major two problems that delaying the progress of mobile wallet industry in Nepal are - *a) Lack of Digital Literacy*- For customer surveys, we took surveys in urban areas only. Among all people that we conducted survey,

more than half did not know about mobile payments. What we can conclude is that mobile wallet concept has not been yet reached to all urban customers yet. So, reaching rural areas will take longer. **b) Unhealthy competition-** Mobile wallet companies are trying to acquire agents through high commission rate. If one provides more than the other will provide even more. For example- Most of the agents were provided with 3.4 percent per transaction, now some are paying up to 3.8 percent. This practice has increased the cost for mobile wallet companies. Some companies say that they are in loss and if this continues, they will be out of business soon.

The most popular strategy that companies are using to grab market share is by penetrating the market by providing customers with discounts, and cashbacks. Even so, customers are not using their services even after providing all these incentive.

The situation is such that wallet companies are providing cashbacks, discounts to customers, huge commission to agents but do not have huge number of merchants which happens to be their only source of income. Thus, the expense exceeds the source of income. Right now, only one Wallet Company, eSewa is in profit as they were the first to introduce mobile wallet in Nepal and being a software manufacturer, they made banking applications for most of the commercial banks in Nepal and have integrated eSewa with Bank's e-banking making it easier to load money in eSewa from bank account.

The major source of income of mobile wallet companies is the commission received through merchant payments and service provider from every transaction. Merchant and services provider payment includes online payments to schools, airlines, movie theaters, airtime, ISP Bill, DTH, just to name a few. They charge users for services like inter-bank transfer and withdrawal of funds. The major services they charge users are withdrawal charge, credit card bill payment, school fee collection, insurance premium etc.

The threat of being substituted is very high. The threat from substitutes for Mobile-Wallets i.e. digital payment are: **Net Banking:** Net Banking is one such payment option which a particular bank gives a facility to its user to pay for products or services for its vendor. This is one substitute which users might opt for rather than using the digital wallet for payment. **Credit or Debit Card:** Payment for transactions done can also be done through POS (Point of Sale) at stores, even payments at websites or online transactions can be done using these cards issued by a particular bank to its user by including security features such as Verified by Visa or MasterCard. **Cash:** Cash is what a traditional as well as carried out the method of payment still by many elderly i.e. old aged people (Senior Citizen) mostly compared to young generation as they prefer cash to E-wallets.



However, some services are used well. Mobile top-up, Internet bill payment services are used the most. Airlines ticket payments, Electricity bill payments are also becoming very popular.

Customers through mobile wallet app and web portal use Mobile Top-up service and Online Movie ticket payments. However, the usage of services of m-wallet is used most through agents. What it means is that customers go to agents and through them they pay utility bills, transfer money or use any of the available mobile payment services. Thus, we can say conclude that the usage of mobile wallet payments are slowly becoming popular.

With respect to all the above discussion,

1. Mobile wallet industry possesses a lot of risk.
2. Expenses exceed revenue.
3. The ones who are to be targeted are not targeted yet (Rural areas).
4. Awareness of digital payments and unhealthy competition remains the most difficult challenge for m-wallet companies.
5. Providing discounts and cashbacks to customers is not effective even though the approach is tempting.
6. Agent network is very important as most of the sales come from agents rather than customer. Customers themselves only do small amount transactions such as mobile top-up, movie tickets payments whereas through agents huge transactions are done such as air ticket purchase, Money transfer, and Internet bill payments.

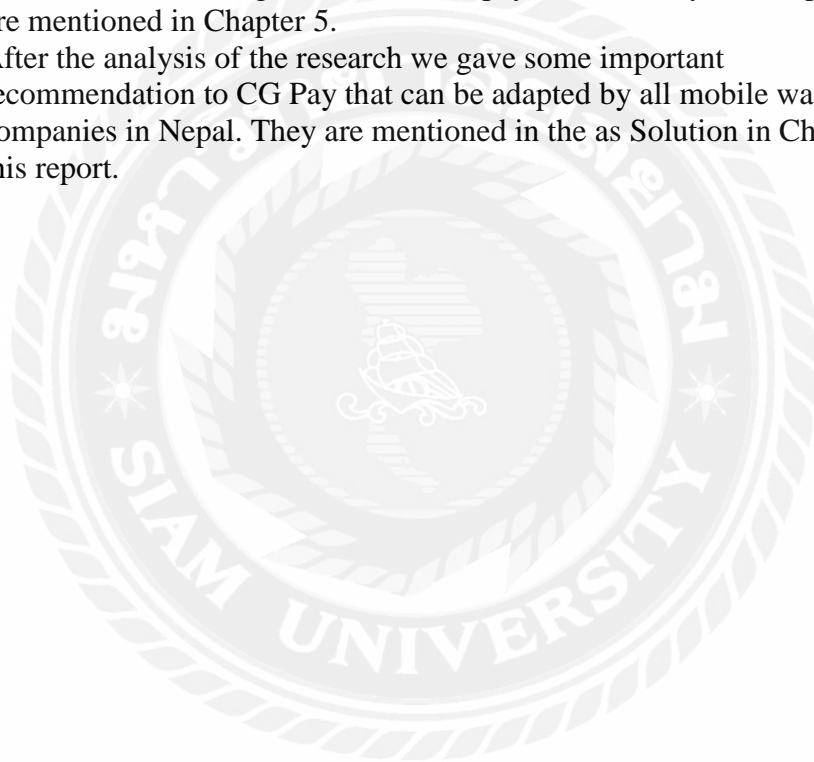
#### 4.1 Contributions made during the internship

In the time period of these 3 months at CG Pay, along with the research team I conducted various researches regarding mobile wallet industry in Nepal. Understanding the current market status of the industry, finding out the major services used by customers, agents, merchants of each competitor, finding out whether other mobile wallet companies have the technology (3G, 4G, SMSC, USSD) to provide mobile wallet service in rural area are some of the contributions made by me. I also did Agent and Merchant mapping of different mobile money companies like eSewa, IME pay, Prabhu, iPay, Qpay, and Khalti according to geography and demography. To put it all together, I along with the research team conducted a market research on competitors, customers, agents, and merchants of major mobile wallet companies in Nepal. The details of the work that I did can be found in Chapter 3. It includes all the research conducted in these 3 months.

The research that we conducted could be useful to mobile wallet companies.

1. They would know which services are the most important for customers that will help them make those particular services better.
2. Companies can do competitor analysis even better and can find the strengths, weaknesses of competitors and can find gaps in the markets making it an opportunity to grab more market share in future. One example is that, with this research we found that the rural areas are untapped. So, rural areas can be targeted.
3. With information such as merchant and agent commission structures, companies will have the idea about the benchmark for commission while approaching merchants and agents. It will be a lot easier to acquire, convert new, or existing merchants and agents in the market.
4. With accurate information such as the commission rate for agents and merchants, Mobile wallet companies can estimate their revenue more accurately. They can make precise predictions of their missions. This will make planning for future more easy and accurate.
5. With accurate information such as the commission rate for agents and merchants, m-wallet companies can know what to offer to merchants and agents in order to acquire them as their own merchants and agents.
6. Companies can save a lot of time while acquiring merchants and agents as our research also provides data such as which merchants are valuable and which are of not. The transaction number and amount of every merchant that we studied will make it easier to do so. Some merchants have millions of transaction in a day through mobile payments and some don't have a thousand.

7. While conducting out research new rules and regulations have been declared by Central bank of Nepal. One example would be that for every transaction of more than Rs.500, KYC is to be filled by customers. Such info that we found can be added in the policies of m-wallet companies.
8. If m-wallet companies knows what competitors in the market are doing currently and will do in future such as their current and future promotional campaigns, addition of new services (new payment features like QR code scan payments), etc. then they can offer new or similar services to stay in the game.
9. After the completion of the research we have identified the major problems and challenges in the mobile payment industry. These problems are mentioned in Chapter 5.
10. After the analysis of the research we gave some important recommendation to CG Pay that can be adapted by all mobile wallet companies in Nepal. They are mentioned in the as Solution in Chapter 5 of this report.



## 4.2 Learning

The internship provided me with a deep insight on Fin-tech and mobile payment business. This sector of business is a new scope of market in Nepal in relation to the technological advancement and users' convenience perspective. Among too little of people aware about it, being a part of CG Pay helped me with understanding one of the most prevalent businesses throughout the world.

As a pan of the project, I did an analysis on flourishing mobile payment in Nepal through field visits to existing businesses in mobile payment sector. These visits enhanced my interpersonal skills and confidence level on to a different extent. Thus, the work architecture of mobile wallets has been clear to me. The figure below is my understanding of the mobile wallet business.

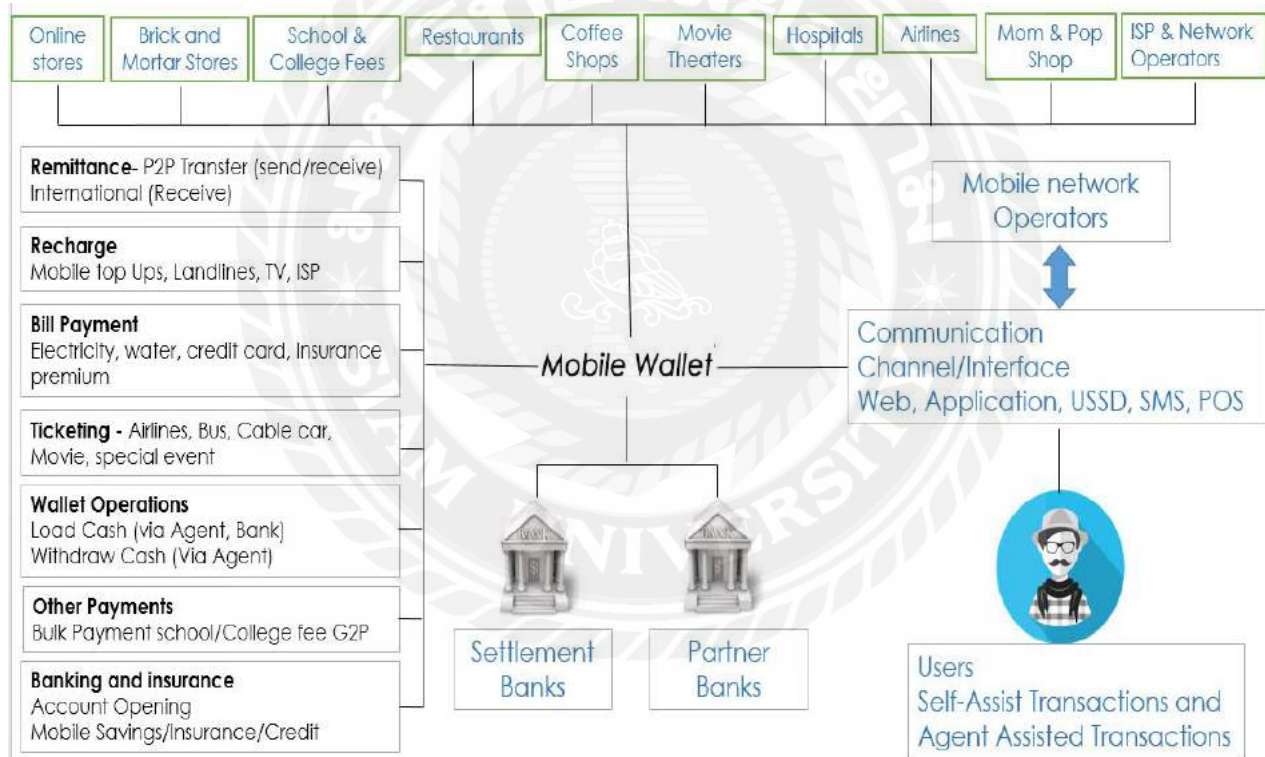


Figure 1- Architecture of Mobile Wallet

The above figure shows the operation flow of mobile wallet. Online stores, Brick and Mortar Stores, School and College Fees, Restaurants, and other at the top of the figure are the Merchants that provide Mobile wallets with the commission of connecting them with customers. The only source of income for an m-wallet company is the commission that they get from the merchants. How the process shown in the above figure works is that first the Users (Customers) through agents or self-assisted connect with m-wallet's platform through mobile

networks. Then in the mobile wallet application or Web platform customers can pay or use features shown at the left side of the figure. To do that, customers need to add fund in their own mobile wallet account. Mobile wallet application will have the partner banks and settlement banks to help customers choose the bank account to load money from the list of available banks. Then they can select which payment service to use among the list of services. All the transactions done such as sending money from one bank to different bank(s) is settled by the settlement banks. For that service, mobile wallet companies will provide some interest to the settlement bank per transaction.

I also met many professionals during these 3 months. Networking is important factor to thrive and survive in the business world. This project has provided me with a wide network of corporate people while field visits and at work place.

The internship was a remarkable experience to work with experienced and diverse team of people, gain knowledge on subjects of finance, government regulations, and remittance firms in concern to digital wallet.

The work schedule has helped me gain insights on team work, time management, and patience along with transforming myself into a more conscientious person.

## Chapter 5: Conclusions

### 5.1 Self-assessment as future professional

With the burgeoning scope of fin-techs all around the globe, the initiative of mobile wallet companies in order to acquire the market as payment service providers is an astute step towards technological advancement and transformation of financial era in Nepal. These companies are the game changing companies in order to change the way people pay for services and could even be a substitute for card system and ATMS in the field of micro-payments in the days to come. However, this industry is surrounded by many challenges and problems.

#### 5.1.1 Challenges to the adoption of Mobile Payment Service

The following are the challenges in mobile payment industry that have made it difficult for customers to adapt mobile payments in their daily lives.

1. Lack of Digital Literacy

Many in Nepal, large segment of the total targeted population are not comfortable with mobile wallet technology. In order to make them feel comfortable with the technology, wallet companies need to put more effort in making the technology and interface more simple and user-friendly. Nepali consumers are in the process of going online to access basic mobile phone services. There is a lack of understanding among consumers and merchants on how they can use mobile payments services. When transactions fail or are stuck at a certain point, they are unsure of the alternative available to them and its timeliness. Furthermore, in a country such as Nepal, mobile as a platform has to be multilingual.

2. Lack of Trust:

In Nepal, people are rigid when it comes to the financial customs. People neglect in selecting and adapting new means of payments. Cash is used by all, Bank cards are popular in urban and semi-urban areas, and Mobile payments are slowly becoming popular in urban areas. So, it is only natural for people to not trust new means of payments, especially in a country like Nepal, where more than 65 percent of population are deprived of formal financial services.

Therefore, educating consumers on how to use mobile as a banking and payment platform is critical to help build trust in the system.

3. Unhealthy Competition

Everyone is providing the same range of services and a battle of commission is going on. Business is only getting diverted. Agents keep on shifting. No new agents are acquired. Credit is also increasing for the companies. The only ones getting the most benefits are the Agents.

This market dynamic is the cause for lack of innovation and causes hindrance in financial inclusion as customers tend to rely on cash and use mobile payment services infrequently that too for a limited range of services.

4. Lack of quick transactions speed:

The transaction speed of payment through of mobile wallet is slow, especially at the Point of Sale, where customers as well as merchants can switch to another alternative easily. Also, in areas where the connectivity is bad, the failure rate of transaction is high. Therefore, the outcome remains poor customer satisfaction and de motivates them from using mobile payments.

5. Domination of Cash towards other means of payments:

Nepal is a county where everyone one prefers cash whether it be people in rural areas or people in urban areas. So, for normal payments, consumers pay via cash. For business purposes, they use cash and Bank tools such as checks. This is why adaption of mobile payment is becoming a challenge.

Making mobile wallets a preference for payments is difficult as the changing the habit of customers is very difficult. So, it is necessary to knowledge customers about the fact and incentive, e.g. mobile payments are more secure, convenient for payments, and transactions.

6. Security and Safety issues:

Mobile wallet offers safe transactions than any means of payment. It is more secure than online banking as there is no need to disclose information like Credit and Debit card payment. Thus, data remains confidential.

Safety features like Multi-factor authentication, Time-out due to inactivity, Out-of-band authentication (e.g., calls or texts to alternate phone number), Login with PIN, Biometrics (e.g., fingerprint, facial, voice recognition, etc.), Mobile notifications (e.g., SMS text message, push notifications), Mobile device ID, and Geo-location are some of the security measures that mobile wallet offers to their customers in order to protect their valuable information.

## 7. Government Policies

Mobile wallet payment is in initial phase in Nepal. The rules and regulations keep on changing and are not finalized yet. This creates problems for mobile wallet companies as they constantly need to keep changing their way of operation and methods. As policies keep on changing, m-wallet companies need to adapt those policies strictly. An industry which has no fixed policies is not trusted by customers.

### 5.1.2 Suggestions

After conducting the research, I have some suggestions for CG Pay and other mobile wallet companies that they can use to mitigate the problems and challenges currently in the market and can use in future to penetrate their products in the market, gain huge customer equity and distinguish themselves from the existing payment service providers.

#### **Conduct Promotional Campaigns:**

The major problem in this industry is people not being aware about mobile payments. So, TVC ad's displaying the benefits of m-wallets can be made and broadcasted in popular TV channels. Campaigns can be conducted in rural areas regarding teaching the people about financial inclusions and digital payments, making customers aware about incentives such as discounts, cash backs, etc. are some of the promotional campaigns that could aware people about mobile wallets.

#### **Offer unique services:**

In order to mitigate the problem of unhealthy competition in the market, every wallet company needs to provide something different than the rest of the competitors. If same services are provided, customers and agents will have many to choose from. So, if a unique feature or service is provided that no other competitor has, then customers and agents will have to use that feature from that particular provider. This way, agents will not demand high commission rates. Hence, costs are reduced.

#### **Acquire more online merchants:**

In Nepal, customers do not pay through mobile wallets to offline merchants. Cash and Bank cards are popular whereas, online merchants such as online Airlines, Mobile operators, ISPs, and DTH are becoming more and more popular. In India Paytm today is one of the most popular means of payment. Services from mobile top-up to e-commerce are provided by Paytm. Due to demonetization, people started using Paytm as an alternative to cash. Paytm was everywhere, from a local vegetable shop to a Branded apparel store in Shopping malls. E-commerce such as Amazon, Flipcart, Snapdeal made their business massive (Pranjal Dixit, 2017). In Nepal, e-commerce is becoming a new trend.



Online food delivery companies like Bhoj deals, Foodmandu and e-commerce companies like Daraz, Sastodeal becoming more popular. Incorporating with such businesses forms great possibility for rising of mobile payment usage.

For, merchants the most important advantage that they get from integration with wallets is the less requirement of time, money, and effort. For traditional cash transactions, merchants needed to send their staffs to collect house payments. With wallets, they do not need to send those staff, rather those human resources can be used somewhere else.

#### **Target rural areas:**

Mobile wallet companies are only targeting urban areas. However, there is huge potential in the rural areas. Services such as mobile top-up, ISP payments, ticket purchase are popular in urban areas which have low amount of transaction even though the number of transaction is high. Whereas, rural areas has the potential in remittance and money transfer which will have huge transaction amount as about 28 percent of the GDP of Nepal comes from remittance. The population of rural areas is much higher than that of urban areas. Therefore, huge market is untapped.

#### **Focus more on online merchants than offline merchants:**

Offline merchants are of no use. People do not use m-wallet to pay at point of sale. Even in popular apparel stores and restaurants, there hasn't been a single transaction using wallets.

Whereas, online merchants produce huge transactions, online merchant payments are becoming very popular. People pay their utility bills staying at their homes, purchase air tickets, and movie tickets through mobile payment. The trend is slowing changing that is gradually moving forward towards digitalization.

#### **Need to conduct more research:**

The wallet companies need to conduct more market research. There are many services that customers do not use such as school fee payments and payment of insurance premiums and some service usage rate is on next level. So, more focus is to be given to services that customers use the most such as top-up, and utility payments. When interviewing the merchants, we found that merchants are in need of few additional services such as refund feature is demanded by movie and airline merchants. Such feedbacks, newly expected features from merchants are to be collected by m-wallet companies and are to be added in their apps to ensure maximum satisfaction for merchants.

#### **Use of QR code Technology:**

Not all products are available at e-commerce. People look for more varieties and want to test products firsthand. So, mobile wallet companies can make in-house stores such as merchants and encourage them to use QR codes for collection of sales, encourage customers to use wallet and pay through it rather than cash payment. In China, use of QR codes is huge for the purpose of collecting cash. Businesses from small to big companies use QR code technology. QR code happens to be very helpful for everyone especially to customers and merchants like handling cash, and being safe as it is secure than use of cash. Use of semi-offline features and services through technology such as SMS, USSD gives advantage of having access to payment services without internet. Thus, customers and merchants can experience more convenience in regards to their transactions. Also, this assistance to merchants will ease their cash management cost, will make cash in, cash out from bank more secure and easy.

#### **Provide viable incentives and rewards:**

Wallet companies are providing discounts and gift voucher rewards. Even though the gift voucher scheme looks attractive, when looked closer and analyzed deeply, they are not viable. The reward points required to get the gift cannot be collected. It will take whole lot of time. Customers who will notice such scheme will be de motivated to use their services again. So, attractive and viable reward gift vouchers are to be provided to customers.

#### **Provide offline wallet services:**

This is a suggestion for those companies that want to target rural areas and have access to USSD technology. Since CG Pay is targeting rural areas and has USSD technology, I encourage them to focus on offline service as well. In case of payment at the location through QR code, bringing and developing innovative services to send money offline through text (USSD) where both the parties are offline could be of use. Since, internet connectivity in Nepal is expensive, and unavailable at rural areas people may not have the access to online services. Many may not have smart phone as well, so with USSD technology, people can get access to wallet services. This can also create a distinct advantage for CG-Pay as a product in the market.

#### **Promote Remittance globally through Advertisement:**

This suggestion is solely dedicated to CG Pay. CG Pay could advertise internationally about their remittance services. Even though m-wallet companies are granted only inward flow of remittance, CG Pay can benefit from it as Nepalese from all over the world can send money to Nepal through CG Pay. In Nepal, collecting remittance is a hassle process as there are queues, pin codes, sometimes frauds, and many more. To aware people about convenience of m-

wallet services, CG Pay could promote and advertise their offerings internationally to capture more market share via online transfers.

## 5.2 Comparison of practical learning VS theory

This internship has helped me connect the theories with the practical experience. An example would be using porter's five forces model to understand the situation and health of an industry. With Porter's five forces theory, an analysis of Mobile Wallet Industry is presented below:

Mobile wallet is in initial phase in Nepal. There are only handfuls of companies that are in this industry. So, in order to understand mobile wallet industry Porter's five forces model was very useful. The bargaining power of buyer is pretty high. Almost all the companies provide similar services. Right now, there are not many people who use mobile wallet but there are many alternatives from which customers can choose from. So, companies are providing cashback, referral rewards just to make customers use their products.

The supplier's power is pretty low. Almost all the mobile wallet companies provide similar services and there is no uniqueness in their offerings. Most importantly availability of substitutes such as Cash and Card payment make suppliers vulnerable

The threat of substitute is high. Customers can easily substitute with Cash or Bank Cards. Cash is used the most.

It is very hard to enter the market as there are many regulations that government have placed. There needs to be many supporting infrastructures and partnership with banks, network operators, and many more. So, it is very hard to enter the market. Today, even the market leader eSewa is facing problems with new rules and regulations placed by the central bank.

The rivalry between the competitors is intense. Battle for agents and their commission is ongoing process. Agents use the wallet that provides them with the highest commission. So, companies try to provide the highest commission rate to hold their agents. Not only agents, retaining customers is now becoming a battle. Companies are providing cashback, referral rewards, and other incentives to attract customers. So, this makes this industry very competitive.

Therefore, it would be agreeable to conclude that earning revenue is very hard. Battle for commission, providing gifts, rewards to customers and having less merchants make it hard to earn revenue. It seems that if a new entrant is to enter the market, they will have to bear loss for more than 6 years.

## References

- CG. (2018). *chaudharygroup*. Retrieved from [chaudharygroup.com:](https://www.chaudharygroup.com/index.php/our-company/financial-services.html)  
<https://www.chaudharygroup.com/index.php/our-company/financial-services.html>
- CG. (2018). *www.chaudharygroup.com*. Retrieved from [www.chaudharygroup.com:](https://www.chaudharygroup.com/index.php/our-company.html)  
<https://www.chaudharygroup.com/index.php/our-company.html>
- CG Corp. (2017). *Business Feasibility Report*. Kathmandu: CGPay.
- eSewa. (2018). *eSewa Reward Point*. Retrieved from eSewa Blog:  
<https://blog.esewa.com.np/reward-point>
- Global System for Mobile Communications. (2018). *State of the Industry Report*. Retrieved from [www.gsma.com:](https://www.gsma.com)  
[https://www.gsma.com/mobilefordevelopment/wp-content/uploads/2017/03/GSMA\\_State-of-the-Industry-Report-on-Mobile-Money\\_2016-1.pdf](https://www.gsma.com/mobilefordevelopment/wp-content/uploads/2017/03/GSMA_State-of-the-Industry-Report-on-Mobile-Money_2016-1.pdf)
- International Finance Corporation. (2017). *bKash- Built for change*. Washington, D.C: The World Bank.
- M-Pesa: The Safaricom Story*. (2014). Retrieved from [www.proudlymadeinafrica.org:](http://www.proudlymadeinafrica.org)  
[http://www.proudlymadeinafrica.org/images/uploads/docs/M-Pesa\\_CaseStudy\\_June14\\_synopsis.pdf](http://www.proudlymadeinafrica.org/images/uploads/docs/M-Pesa_CaseStudy_June14_synopsis.pdf)
- Ntara, C. (2015). An Analysis of M-Pesa Use in International Transactions. *European Journal of Business and Management*, 73-76.
- Pranjal Dixit, A. P. (2017). Heuristic Analysis of “Growth of PayTM”. *International Journal of Engineering Research & Technology (IJERT)*.
- REISINGER, D. (2015). Mobile wallet war heats up with Samsung Pay. Retrieved from [http://fortune.com:](http://fortune.com)  
<http://fortune.com/2015/10/01/samsung-pay-mobile-wallet-battle/>
- Salaam, D. e. (2018). *qz.com*. Retrieved from [https://qz.com:](https://qz.com)  
<https://qz.com/1039896/m-pesa-mtn-orange-others-lead-africas-mobile-money-revolution/>
- Shwet Kumar, V. Y.-U.-R. (2016). *A Project Report on Paytm*. Delhi. Retrieved from [Scribd.com:](https://www.scribd.com)  
<https://www.scribd.com/document/289432063/Revenuemodelofpaytm-150607144758-Lva1-App6892>

- The Bill & Melinda Gates Foundation. (2017). *Level One Project Guide 2017*. Retrieved from [www.betterthancash.org](http://www.betterthancash.org): <https://leveloneproject.org/wp-content/uploads/2015/04/The-Level-One-Project-Guide-Designing-a-New-System-for-Financial-Inclusion1.pdf>
- The World Bank. (2018). *World Bank*. Retrieved from [worldbank.org](http://www.worldbank.org): <http://www.worldbank.org/en/topic/financialinclusion/overview>



## Appendices

### Appendix A- Questionnaire for Competitors

We are students of marketing pursuing a Bachelor's degree from Kathmandu College of Management. We are conducting a survey regarding the Mobile Wallet applications in Nepal. The main objective of this survey is to determine the use of mobile wallet and its feasibility for future.

Name of the Company:

Contact Name:

Contact Title:

Contact phone: (optional)

Email:

Corporate Address:

When did you start offering mobile payment service?

---

Which mobile operating system(s) (OS) does or will your mobile payment application support? (Check ALL that apply) (Is it necessary?)

- ☐ Apple iOS
  - ☐ Google Android
  - ☐ Windows Phone
  - ☐ Blackberry OS
  - ☐ Other: (please specify)
-

### Product

What difficulties did you face while launching the product?

---

Which of the following mobile payment features do you currently offer or plan to offer to consumers? (Check ALL that apply)

Mobile Payment Feature	Currently offering	Plan to offer	No plans to offer
Mobile enrollment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Top Up or Mobile Recharge	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
View statement or balances and or transaction history	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bill payment (DTH, ISP, Insurance Premium, Bank EMI)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Utility Payment (Electricity and Water)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Money Transfer	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Remittance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Merchant Payment (Offline)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Merchant Payment (Online)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
P2P Lending	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
QR based payment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Bill presentment or Receipt	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mobile person-to-person payment (P2P)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Merchant or Agent locator	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cross-border payments	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Multilingual mobile website or app	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Others:

---

What are your top five mostly used services?

---

Please indicate ALL services for which you charge a fee. (Check ALL that apply)  
(Also please specify the amount or interest rate charged)

- ☐ Mobile P2P \_\_\_\_\_
- ☐ Cash in \_\_\_\_\_
- ☐ Partner bank to customer wallet \_\_\_\_\_
- ☐ Wallet to Partner banks \_\_\_\_\_
- ☐ From One to another bank \_\_\_\_\_
- ☐ Others: (please specify) \_\_\_\_\_

Which of the following does your company use or plan to use to enhance mobile security? (Check ALL that apply)

- ☐ Multi-factor authentication
- ☐ Time-out due to inactivity
- ☐ Out-of-band authentication (e.g., callsortexts to alternate phone number)
- ☐ Login with PIN
- ☐ Biometrics (e.g., fingerprint, facial, voice recognition, etc.)
- ☐ Mobile notifications (e.g., SMS text message, push notifications)
- ☐ Mobile device ID
- ☐ Geo-location
- ☐ Other: (please specify) \_\_\_\_\_

---

What are the biggest challenges in business?



---

---

How do you plan to mitigate them?

---

---

What is it that differentiates you from the rest of the competition?

---

---

### **Agents**

What is the size of your agent network?

---

How did you get hold of them?

---

---

What is the commission structure for agents?

---

What are your plans to retain them?

---

Do you plan to acquire more agents? If yes, how do you plan on doing so?

---

### **Merchants**

What is the size of your merchant network?

---

Who are the most prominent merchants?

---

---

What is the total number of online and offline transaction in a month?

---

What is the commission payment structure for merchants?

---

What are your plans to acquire more merchants?

---

Have there been merchants who have withdrawn your service? If yes, why?

---

What are your upcoming promotional campaigns involving merchants?

---

### Customers

How many customers have downloaded your wallet? What percentage of your customers are active and use the services on regular basis? What is the total number of Customers?

---

---

Do you provide or plan to provide any mobile payment products to the unbanked population?

- ☐ Yes, currently providing
- ☐ Yes, plan to provide within next (\_\_\_\_) years
- ☐ No

If 'No', why not?

---

How do you plan on tapping the 'Unbanked Population'? (USSD, SMS, Online or Offline, GPS). *(If they have a plan, ask for a detail explanation and know whether they have the technology and approval in place or not)*

---

For your company, which are the most common barriers to customer acquisition? (Check ALL that apply).

- ☐ Ineffective marketing by Company
- ☐ Security concerns for monetary transactions
- ☐ Difficult to use the application
- ☐ Lack of trust in the technology
- ☐ Credibility of the company
- ☐ Payment or Wallet needs are being met through other services (Bank Cards, Cash, Online banking)
- ☐ Others: (please specify)

---

What are your plans to overcome these barriers?

---

---

Are you planning to give interest on wallets to your customers?

- ☐ Yes
- ☐ No

If 'Yes', how do you plan to do it?

---

What types of incentives tied to mobile payments do you offer or plan to offer?  
(Check ALL that apply) (*What sort of reward*)

- ☐ **Location-based offers (Examples)**
  - ☐ Cash reward or account credit for mobile wallet enrollment
  - ☐ Rewards points or cashback for mobile transactions
  - ☐ Referral Rewards
  - ☐ Paying with points for mobile transactions at the POS
  - ☐ None
  - ☐ Other: (please specify)
- 

Plan to offer in future-

---

What are your current plans to retain customers?

---

What kind of promotional campaign(s) do you do? Which Promotional campaign has been the most effective?

---

Please share your ideas on how to increase customer's knowledge of mobile payment services.

---

## Appendix B- Questionnaire for Online Merchants

Company Name:

Location:

1. How long have you been providing mobile payment services?
2. Do you also provide Card Based Payment Services? How do you rate Card Based Payment against Mobile Wallet Payment?
3. Why did you become a merchant?
4. What are the benefits of becoming merchant?
5. What is the process for settlement?
6. Who are your Wallet Gateway(s)? Bank Gateway(s)? Which is used the most? (Usage difference)
7. While selecting Payment gateway, what are the selection criteria?
8. How do you know whether the payment is received or not? How do you know whether the transaction is successful or not? Is the received payment shown in real-time or in Portal?
9. Has mobile payment service helped in-
  - Retaining Customers (how)
  - Increase the sales (How much)
  - Improvement in business (how)
8. In a month, how much is the total sales through mobile wallet?
9. Do mobile wallet company visit for monitoring? How frequent do they visit and who is the most frequent?
10. Has there been any problems or complications while using the mobile payment?
11. Has there been any customer complaints regarding mobile payment?
12. What are the measures that will you take?
13. What additional services are you looking for?
14. Are you interested in Promotional campaigns? If a product is about to enter or has entered declining stage, what would you do to increase and maintain its sales?
15. What kind of Synergy are they looking for?
16. Where can the wallet improve their services?

## Appendix C- Questionnaire for Offline Merchants

Name:

Location:

1. Do you provide mobile payment services? If yes, continue with the questionnaire. If no then why not?
2. Do you also provide Card Based Payment Services? How do you rate Card Based Payment against Mobile Wallet Payment?
3. Which mobile payment services do you provide? Which is the most used one and why?
4. How long have you been providing the service?
5. Why did you become a merchant?
6. Did you receive any form of training or tutorial?
7. What are the benefits of becoming a merchant?
8. How many customers visit your store daily?
9. How much Commission do you pay?
10. How many customers pay using mobile wallet? (Ratio of payment via Cash Vs. Debit Card Vs. Mobile Payment)
11. Do Customers ask for other mobile payment options?
12. Has mobile payment service helped in
  - Increasing the sales (How much)
  - Retaining Customers (how)
  - Improvement in business (how)
  - other\_\_\_\_\_
11. Do mobile wallet companies visit for monitoring and refresher training? How frequently do they visit and who is the most frequent?
12. Has there been any problems or complications while using the mobile payment?
13. Has there been any customer complaints regarding mobile payment?
14. Where can wallet improve their services?
15. How was your overall experience? (User friendly or transaction speed)
16. Would you recommend adoption of mobile payment to other businesses? Why or Why not?

## Appendix D- Questionnaire for Agents

Shop Name:

Location:

1. Which Mobile Wallet service(s) do you provide?
2. How long have you been providing the service?
3. Why did you become an agent?
4. Did you receive any form of training or tutorial?
5. What benefits do you receive for being an agent?
6. How much commission do you get per transaction? (Also for customer enrollment, Cash in or Cash out, Top-up etc.)
7. As an agent, what is the minimum required balance in the wallet?
8. If the balance runs out, how do you recharge your wallet? If your past transaction history is good, does the wallet company provide credit if your balance runs out?
9. Do you also personally use the service?
10. How many customers visit your store daily?
11. How many mobile wallet customers visit your store daily?
12. Are there any regular customers for mobile payment services? If yes, How many?
13. For which mobile payment service do the customers visit your store more often? (Top-up, Recharge, bill payments)
14. What is the Maximum or Minimum transaction amount- for Bill payments, Cash-in, and Cash-out transaction?
15. Have there been any improvements in the business after providing mobile wallet payment services?
16. Are there any problems or difficulties while providing the wallet service?
17. Regarding 'Mobile wallet payment', what kind of customer complaints do you face on regular basis?
18. Do mobile wallet companies visit for monitoring and refresher training? How frequently do they visit and who (which mobile wallet) is the most frequent?
19. Where can mobile wallets improve their services? *If Agent uses more than one mobile wallet, rating for all required.*
20. How was your overall experience? (User friendly or transaction speed)*If Agent uses more than one mobile wallet, rating for all required.*
21. What other mobile wallet services are you aware of?
22. If a new wallet company tries to make you an agent, would you become one?
23. What benefits would you seek before becoming an agent for other wallets?
24. Where can mobile wallets improve their services?
25. Would you recommend anyone to become an agent?

## Appendix E- Summary of responses of customers

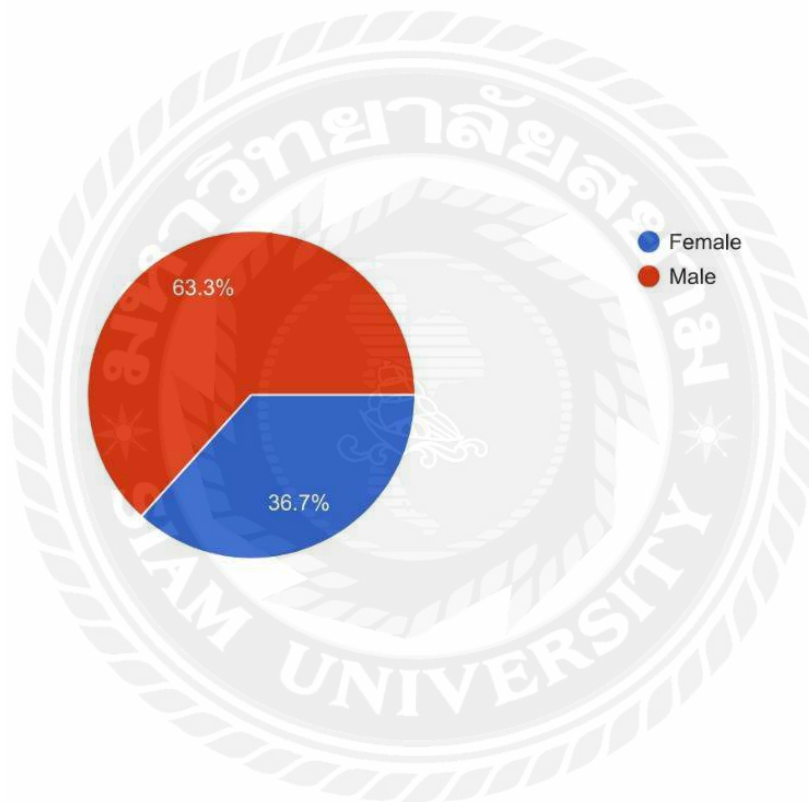
RESPONSES 109

109 responses

SUMMARY

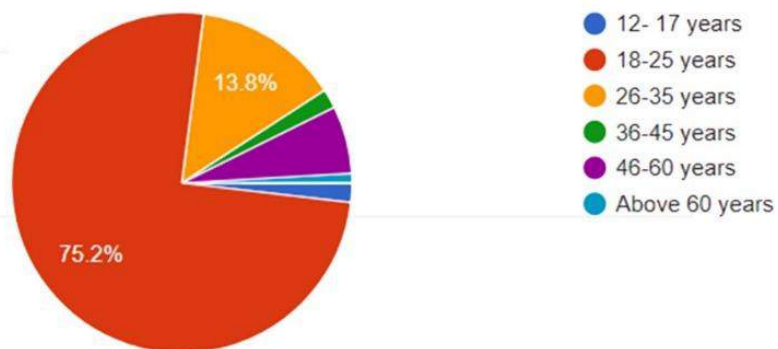
### Gender

109 responses



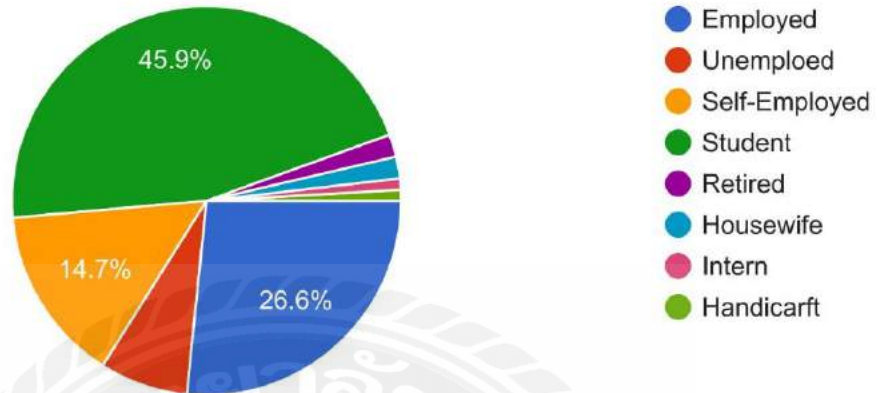
### Age group

109 responses



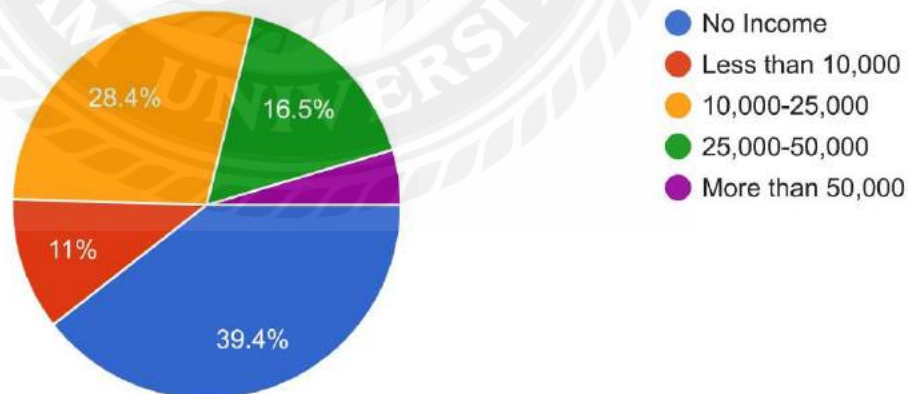
## Status:

109 responses



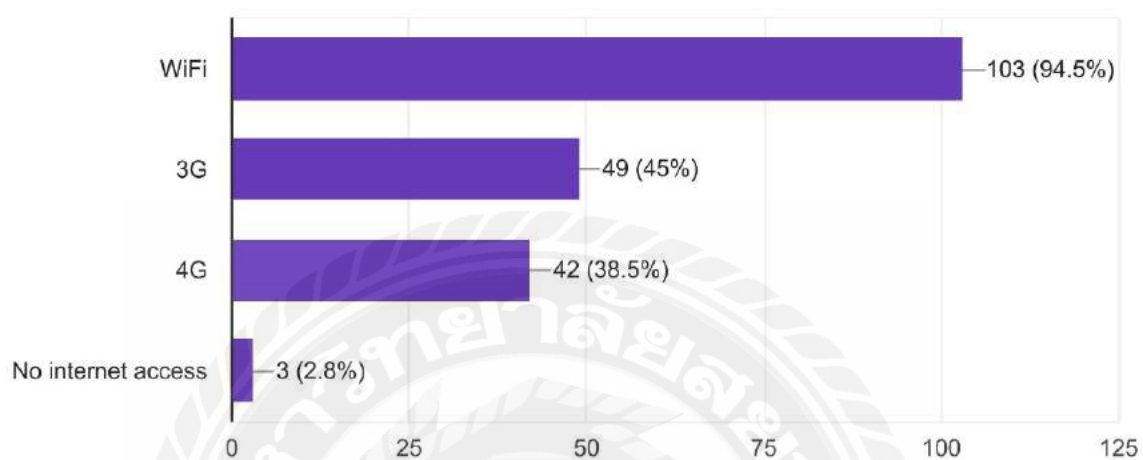
## How much is your monthly income?

109 responses



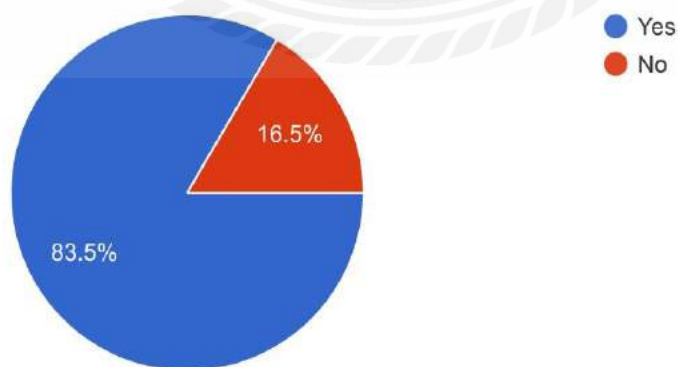


Do you use internet on your mobile phone? (Check ALL that apply)

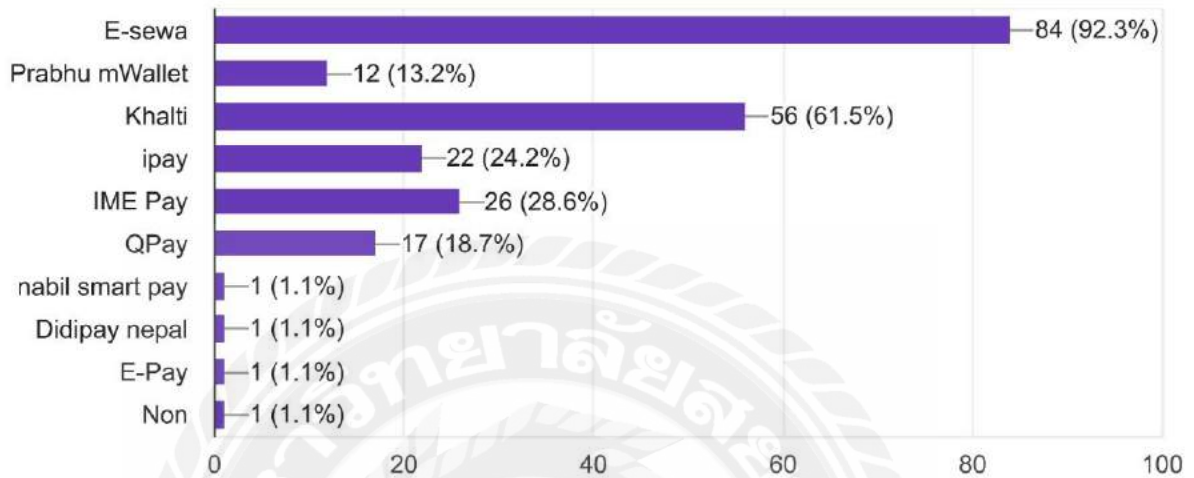


Are you aware of any Mobile Wallet services in Nepal? ( Eg. Esewa, QPay, Khalti..... )

109 responses

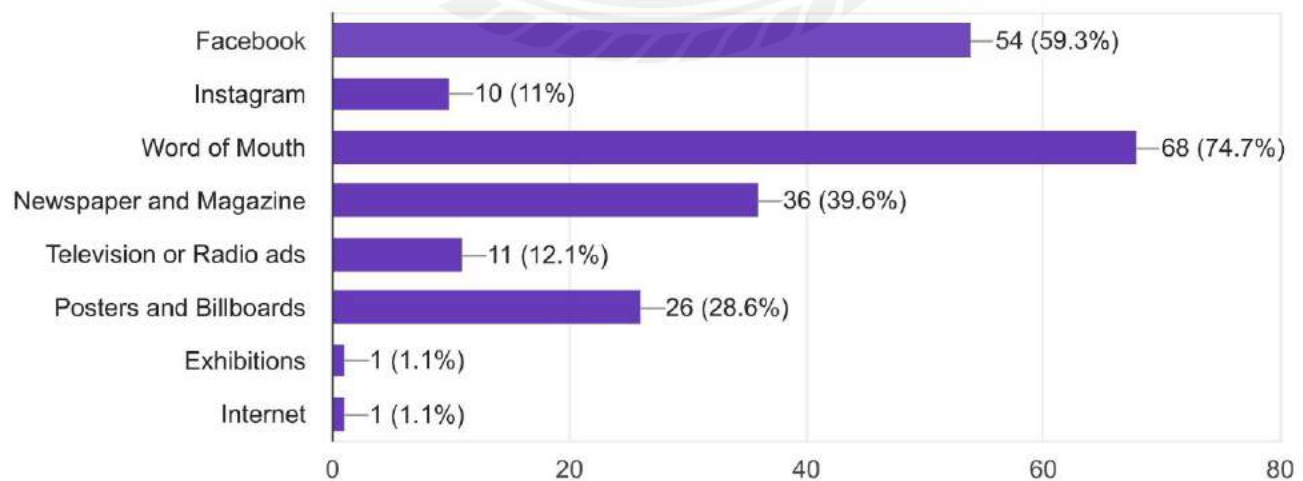


### Which mobile wallet are you aware of? (Check all that applies)



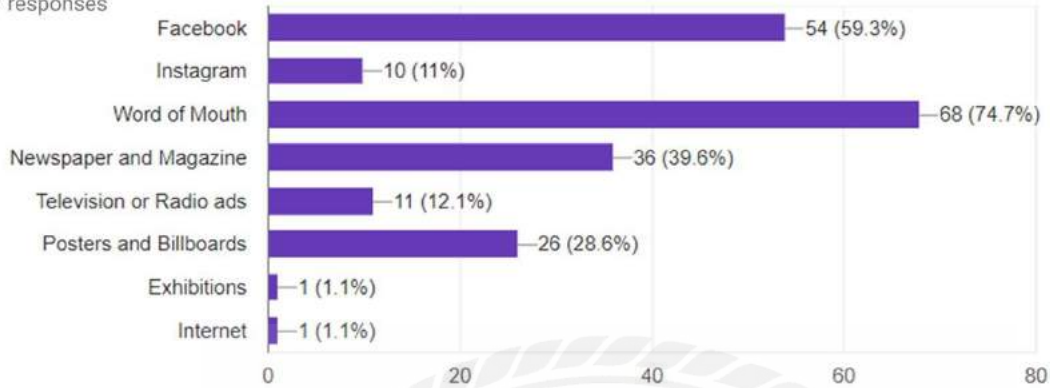
### Where did you get information about the mobile wallet? (Check ALL that applies)

91 responses

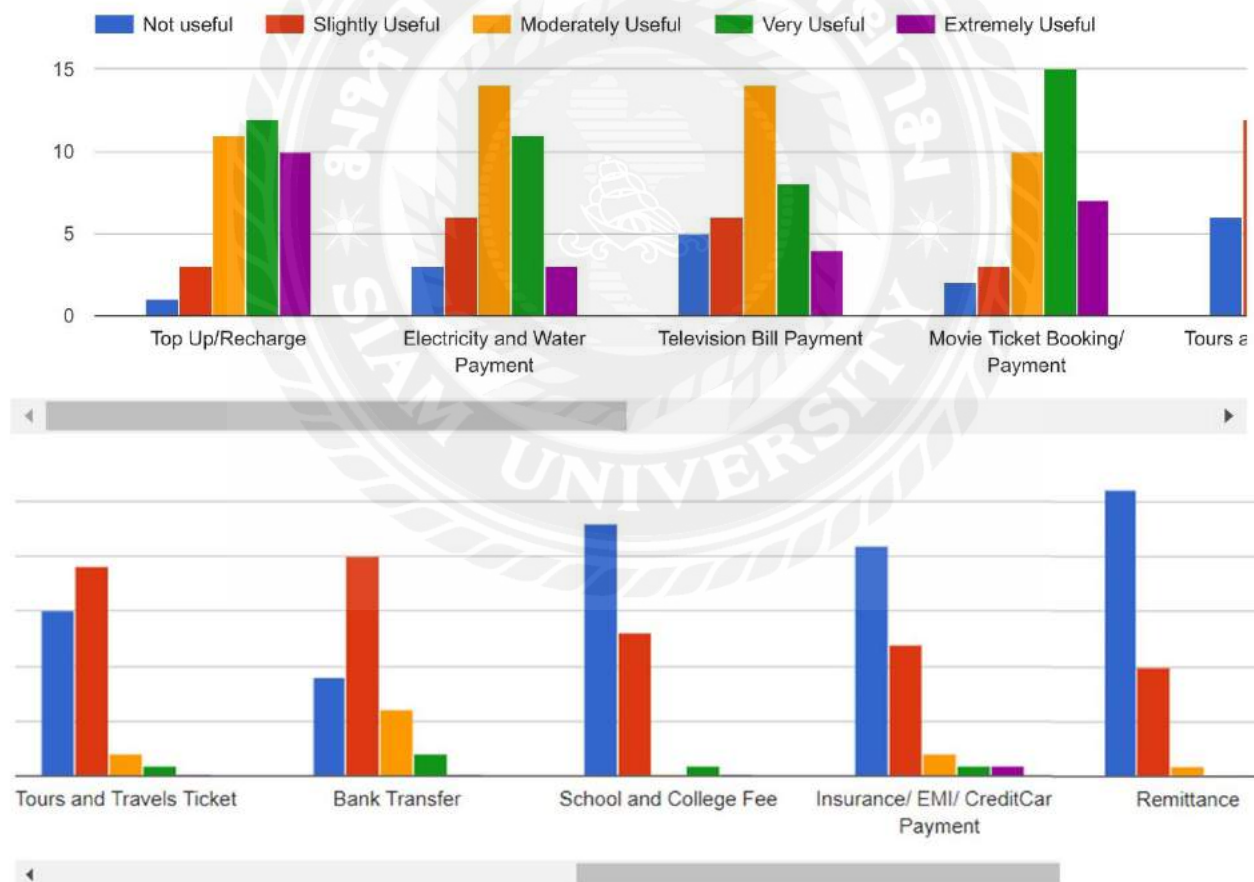


## How satisfied are you with the mobile wallet that you are currently using?

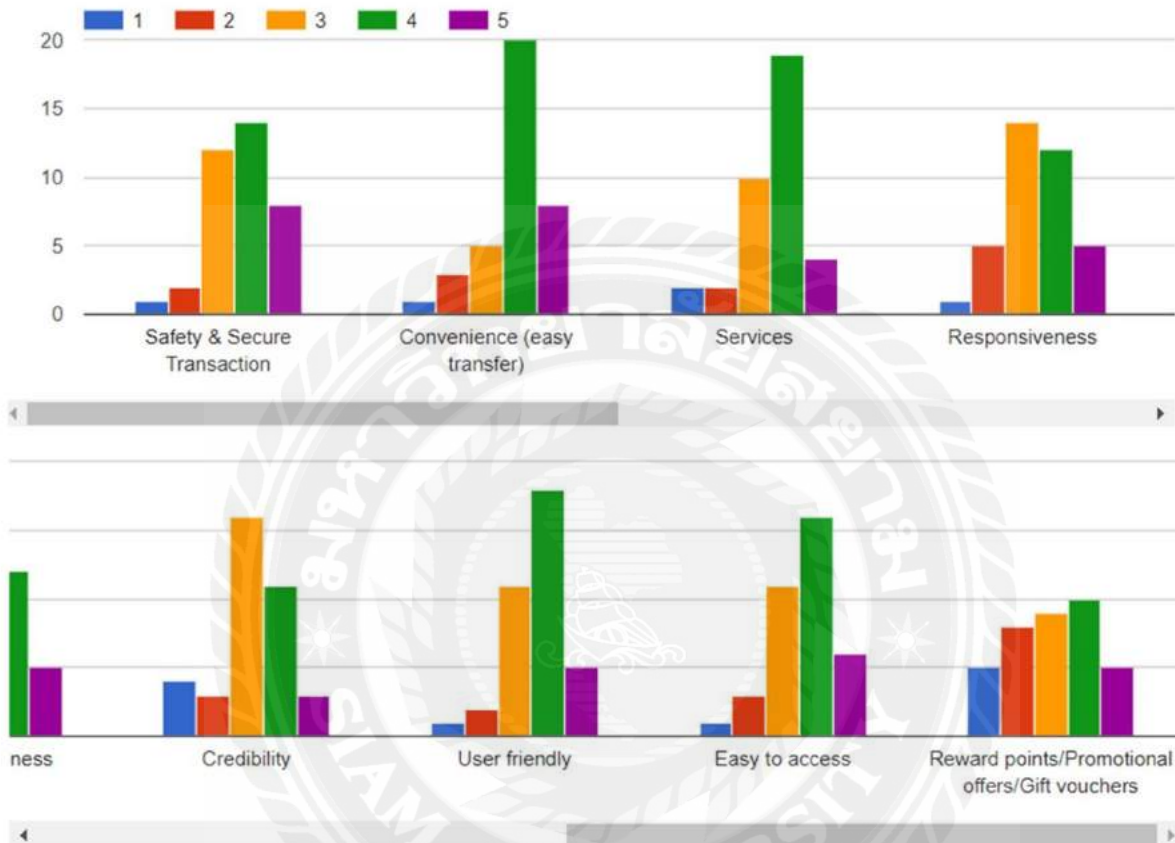
37 responses



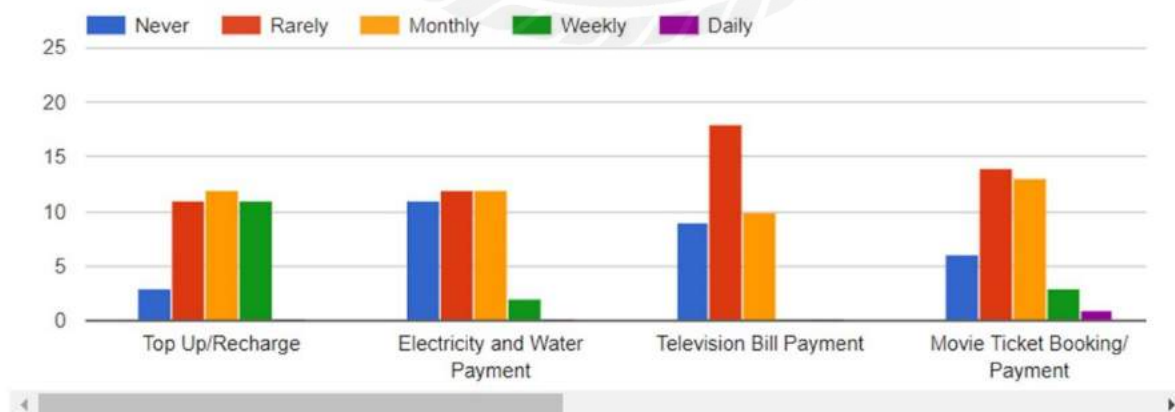
## Rate the following based on the mobile wallet you use:

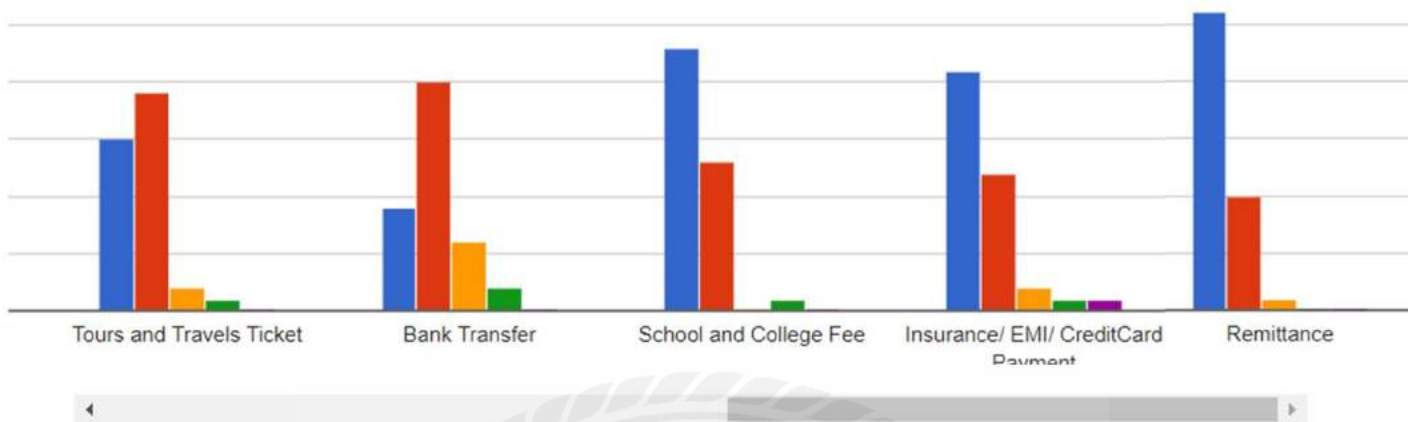


Rate the following based on the mobile wallet you use: ( 1 being the lowest and 5 being the highest)



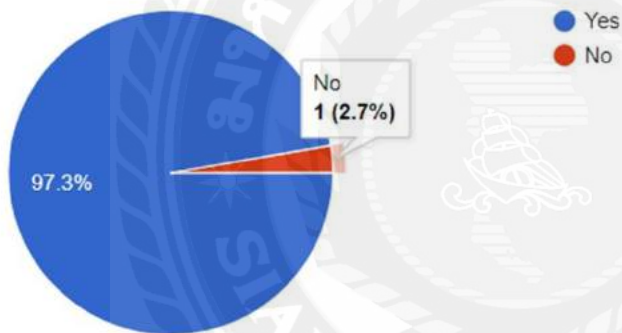
How frequently do you use mobile wallet for the following feature(s)?





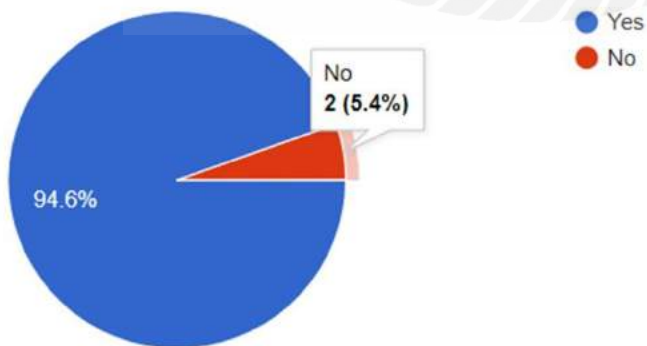
Do you want to continue using the current mobile wallet?

37 responses



Would you recommend anyone to use Mobile Wallet?

37 responses



## Why/why not?

37 responses

Because it saves time

Easy to use, makes banking transactions much easier along with payments of other bills.

Digitization is necessary in the era we are.

Very convenient, saves time and effort

Less time consuming

Moving towards modernization

Easy and convenient

Easy to use and convenient.

Because it makes it convenient

Convenient, easy to access

Online transactions are safer, easier and highly mobile. Thus, saves time.

Because u don't need to go to pay bills in Ktm's traffics just sit back and pay by phone

still not so familiar with it

it is easier

H

Very Very Very Useful

Just

Easier and better

Easy

Because its very useful

It is really helpful and effective.

It saves time

very useful

-

Yeah obviously. It's safe, fast and makes your life easier. 😊

Becoz its easy

Convenience

Time saving

Comes in handy sometimes. World is moving more towards digitalization. Also, it is more safer than other means of payment.



Technical freindly

It's easier to pay Water/Electricity bills

it saves you lot of time, convenient, saves paper

Coz its not easy to use

Because it saves time

It's easy

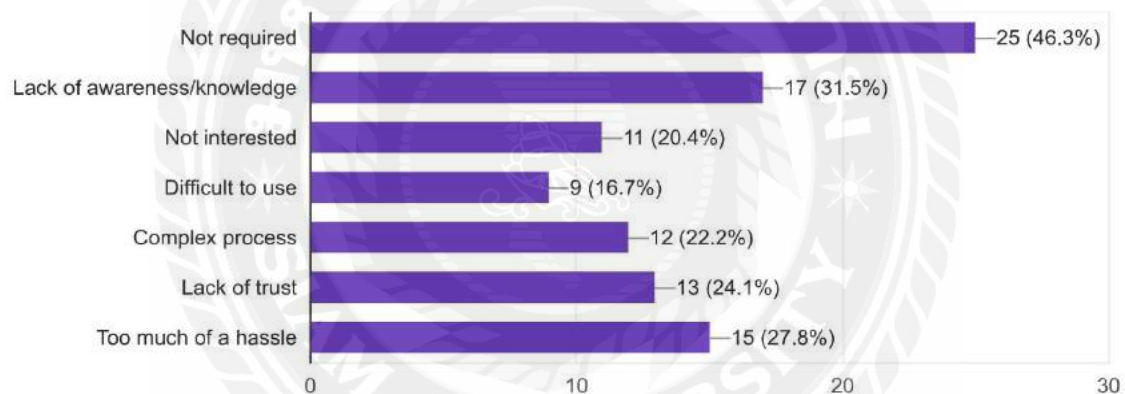
because their time, physical effort and energy will be saved by using it.

Better quality

#### Section 4 (If you 'do not' use mobile wallet application)

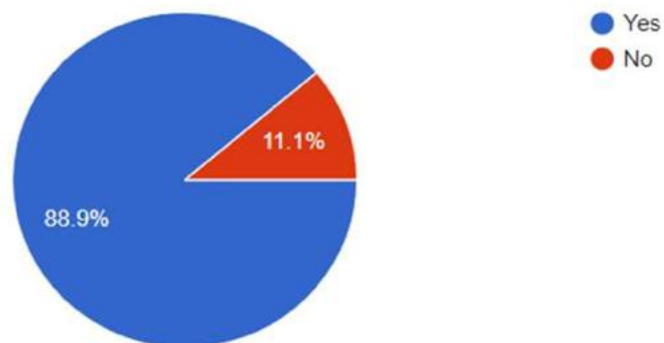
##### Why don't you use mobile wallet? (Check ALL that applies)

54 responses



##### Would you use mobile wallet in the future?

54 responses



## Why/why not?

54 responses

For a better experience.

If it starts working everywhere

Convenience

for easy transaction at emergency time

For emergency

Already mentioned why i dont use, then obviously the same reason

Depends upon service provided

To save time

If sufficient places accept this method of payment i would use it.

sounds fancy

khoooo

When mobile wallet is used by many stores, I will use it.

easy for doing any transaction and if user friendly

It will definitely be reliable and easy to pay bills from anywhere , saving your time first and foremost.

Convenient

Because it will be easier to pay through wallets

Because it will be more convenient for me to manage my expenses once I start earning equally as much.

It's future anything can happen!

Cause i dont have ample cash to keep in bank.

its in its pilot phase so

Adapting with changing technologies is important. Plus it saves a lot of time and energy and makes many of the dealings and payments easier.

Maybe in the future

As transactions are being more digital with the growth in the internet usage

When I will know all technicalities I will start using mobile wallet system

I need to know detail benefit out of it

Online Transaction would be far more easier than going to the respective shops/ places and paying; an easy answer to a busy lifestyle!

for easiness

convenient and reliable means of payment

Easy in future



If extra charges are minimized and e-banking becomes simpler and less complicated.

This may be helpful .

I like

Just

Cause its the future. Already thinking about it.

Lets see

Because through mobile wallet you can carry out your credit card or debit card information in a digital form on your mobile device.

Time saving

as the generation is advancing day by day, there is a need of everything which can be used in the mobile phones. and also as everyone is using mobile wallets and also as my curiosity is increasing about the mobile wallets, i would really want to use the mobile wallet later on.

Not sur. May be with advance tech I'll use. Idk

It is simple and Convenient

It saves your time

Its easier

i would use because it saves your time and makes ur payment process easier.

if it can be used

It is a helpful app of what I see till now

Easy to use for paying utility bills

Cashless future and need to adapt to changes :)

Lack of knowledge

If it's good, I'll use it.

Making payments will be easy.

Maybe, it will be more user friendly in future.

Don't have any idea how to use

Yes

## Bibliography



**Name-Surname** - Iman Shrestha

**Student ID** - 5708040080

**Email** - iman2018@kcm.edu.np

**Department** - BBA (Marketing)

**Faculty** - Business Administration

**Address** - Ratopul, Kathmandu