

Mobile Money in Bangladesh

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Abstract

This paper briefly looks at the use of mobile money in a selected non-urban area of Bangladesh. The use of mobile technology for monetary transactions is gaining prominence in Bangladesh. Some mobile phone operators along with designated banks have started to offer mobile banking services, and the Bangladesh Post Office has also joined this trend. A survey was conducted using a questionnaire containing open and close-ended questions regarding selected aspects of mobile banking. The survey results have shown that the residents of the study site use mobile money for a variety of transactions related to the personal and professional lives. However the results cannot be generalized to the whole of the nation since the survey was carried out at one study site. There is a scope to replicate the survey in other parts of the country to obtain a more complete picture of the mobile banking scenario in the country.

Keywords: Mobile Money, Mobile Banking, Currency, Bangladesh

1. Introduction

A large majority of phone subscribers live in developing countries (UNCTAD, 2008). Though mobile phones make communication easier resulting in economic growth, they can also be useful for other innovations, one of which is mobile banking (Must and Ludewig, 2010). Due to the increasing penetration of mobile phones into rural communities, mobile payment options can bring formal banking services to the rural communities (Medhi, Gautama and Toyama, 2009). Mobile money is a tool that allows individuals to make financial transactions using cell phone technology (Jack and Suri, 2011). Mobile money is a form of electronic money, where real money is converted into e-money, and put into mobile devices. This mobile currency can then be transferred from one mobile subscriber to another, making funds transfer among individuals easier. In other words it is simply another way to send money. It is a transfer of money to a receiver in which the funds are deposited into a mobile or “virtual” wallet. A mobile wallet is an electronic account that is linked to a person’s mobile phone in which money can be electronically deposited and used the same as cash. Internationally, M-Wallets are used to pay for goods at stores, pay for public transportation, make donations and pay bills. Today, consumers have a variety of ways to send and receive funds or money transfers. Although using cash to send a money transfer is the most popular method for most people, more and more people want additional options: to send and/or receive funds on the internet, over the phone, and now, on their mobile phones.

Firms such as Western Union’s service will offer several variations----- and is unique in offering consumers options in how they send or receive funds over the mobile. Consumers can send funds:

- **Cash-to-mobile:** A consumer initiates a money transfer by submitting cash at a Western Union Agent location. The funds are sent to a receiver whose mobile operator offers mobile money transfer in partnership with Western Union. Funds are deposited into the receiver’s mobile “wallet”, or account tied to the mobile phone.
- **Mobile-to-cash:** A consumer whose mobile operator offers mobile money transfer in partnership with Western Union uses his/her phones to send a cross-border money transfer. The sender notifies the receiver via SMS or phone that the funds have been sent and provides the MTCN. The receiver then picks up the funds at a Western Union Agent location.
- **Mobile-to-mobile:** A consumer whose mobile operator offers mobile money transfer in partnership with Western Union uses his phone to send a cross-border money transfer to a receiver whose mobile operator also offers mobile money transfer in partnership with Western Union. The funds go directly into the receiver’s mobile “wallet”, or account tied to the mobile phone.

According to LIRNEasia (2009), 95% of the poor in Bangladesh have used a phone in the last 3 months while 82% have used a phone in the last week. If the figures quoted here have a high degree of accuracy reflective of the ground reality, then the poor will benefit from the mobile money transfer system, which enables clients to send a

small amount of money through a short message system (SMS). Mobile phones may not only reduce the cost of financial transactions for provider and customer, but also allow new entrants to the financial sector, and new relationships to be established for distributing services (Porteous, 2006).

2. Background

Banglalink a leading mobile operator, in partnership with Dhaka Bank Limited and money transfer company Western Union launched an international mobile money transfer service on Wednesday targeting seven million Bangladeshis abroad. The service launched will facilitate speedy transfer of money from almost every country to Bangladesh. Banglalink users with Dhaka Bank accounts will be able to send money through Western Union from more than 200 countries and territories, a press statement said. The recipients will have access to their money from any of the over 1,700 Dhaka Bank accredited Banglalink mobile cash points that are open till 8pm everyday. In future, this service may also be used in local fund transfers, utility payments and train ticket purchase. "The new service is set to open up access to basic financial services." Khondker Fazle Rashid, managing director of Dhaka Bank, said, "The international money transfer system will create a new dimension in remitting money through legal channel." Ratheesh Kumar, regional vice president (South Asia & Southeast Asia) of Western Union, said the company is celebrating its 160th anniversary and has been moving 'money for better' for more than 135 years. Bangladesh has grown to be the world's seventh largest remittance-receiving country. Remittances make up 9.6 percent of the country's gross domestic product, it added.

2.1 Mobile Banking

Recently some banking companies and mobile network providers have launched mobile banking in Bangladesh. A new door of technology is opening in Bangladesh. Now people of Bangladesh can use their mobile phone as a bank account with balance transfer, payment, money upload and many more facilities at a low cost. bKash Limited is a joint venture between BRAC Bank Ltd., Bangladesh, and Money in Motion LLC, USA. Ensuring access to a broader range of financial services for the people of Bangladesh is the ultimate objective of bKash. It has a special focus to serve the low income people of the country and promote sustainable micro-savings to achieve broader financial inclusion by providing financial services that are convenient, affordable and reliable. bKash is working both as an extension of BRAC Bank and as a full-scale mobile phone-based payment switch. This will highly benefit the country as 83% of the population lives under \$2 a day and access to finance can help in improving their economic situation. Less than 15% of Bangladeshis are connected to the formal financial system whereas 44% of the total population uses mobile phones. Providing financial services using this mean can make the service more accessible and cost effective for the vast population of Bangladesh.

2.2 Bangladesh Post Office (BPO) with Banglalink

Bangladesh Post Office (BPO) Sunday (June 27, 2010) extended its Mobile Money Transfer Service to 606 post offices throughout the country to ensure easy and fast money transfer, official sources said. BPO Additional Director General AKM Shafiur Rahman told the FE, "Today we have started to provide Mobile Money Transfer Service at 606 post offices that will cover all districts, upazilas and some selected sub-post offices across the country." "With a view to providing money order service to mid-income and poor people, we have introduced this service with half the traditional money order service cost. The customers will get this service through mobile and web." BPO started Mobile Money Order Service in 104 post offices including those in district towns, some important upazilas and sub-post offices on May 5 last, he said.

He said, "We have a plan to cover 1,400 post offices within December this year and 8,500 post offices across the country by June 2011." "Speedy money transfer is the demand of the day. Now anyone can send money within two or three minutes through this mobile-based money transfer service while manually it takes at least three to five days and even seven days. For the mobile-based system, the post offices will charge Tk.20 for the first Tk.1,000 and Tk.10 for each of the next Tk. 1,000. Besides, Tk. 7.0 will be charged as electronic cost. Anyone can send money order worth Tk. 10,000 in the maximum at a time.

To avail this service, an interested sender will have to fill up a form mentioning his or her name, address and mobile phone number and also the name and address of the recipient. The money order issuer post office will send the data to the central server, which will in turn send an automatically-generated personal identification number (PIN) through a short message service (SMS) to the mobile phone of the sender. The sender then will tell or send the PIN number to the recipient through SMS. However, a secret code for the recipient is a must for withdrawing money from the post office nearby. The BPO has signed an agreement with Banglalink for the total connectivity of the service.

3. Literature Review

Electronic commerce (e-commerce) is the conduct of commercial transactions over electronic networks (OECD, 2002). It is viewed as a way to reduce friction in the marketplace, allow larger volumes of transactions to take

place and effectively expand markets (Zainudeen, Samarajiva and Sivapragasam, 2011). Although e-commerce takes the form of commercial transactions facilitated over the Internet in developed countries, it is now being conducted in developing economies using mobile networks because of their growing usefulness (ibid, 2011). Mobile banking is one of the numerous applications that have been developed due to the increasing deployment of wireless networks and widespread popularity of hand-held devices (Varshney, 2002). In emerging markets formal banking reaches about 37 percent of the population, compared with a 50 percent penetration rate for mobile phones (Beshouri and Gravrak, 2010). It is mobile money's ability to facilitate financial sector inclusion that gives it its enormous potential for development impact (Jenkins, 2008).

The true potential for mobile money in Bangladesh lies among the poor reveals a research by LIRNEasia (an Asia Pacific think tank on telecom policy and regulation). LIRNEasia researcher Dr. Erwin Alampay, who led the research, said the potential of mobile money service could be largely attributed to the innovations by telecom operators like Grameen Phone. Mobile money is essentially a form of electronic money. Real money is converted into e-money, and put into mobile wallets. This mobile currency can then be transferred from one mobile subscriber to another; thereby making funds transfer among individuals, even at a distance, easier, said a press release. Now by merging the banking and mobile technologies they are ready to offer mobile payment schemes which Bangladesh poor are certain to benefit from.

According to LIRNEasia's six country 'Teleuse at the Bottom of the Pyramid' study that surveys the telecom usage patterns of the poor 43% participants reported having owned a prepaid mobile phones in their household. This familiarity with e-reload and top-up and e-load indicates their high-trust rating for this method which can be exploited when the second wave of mobile applications such as mobile money is introduced in Bangladesh, says Dr. Alampay, who studied mobile money system in Philippines comprehensively. According to him, Bangladesh can learn extensively from Philippines experience which is already over five years old. The Philippines is a leader in many mobile applications, beginning with SMS-use.

It can be used for retail, pay utilities and can be exchanged or transferred from subscriber-to-subscriber. It is this inter-subscriber transfers which makes m-money's applications for development exciting, the study said. Besides, there is great interest in tapping the service for international remittances, which can emerge as one of the most popular and exciting uses of mobile money, it said. The Philippines experience has shown that for a USD 20 remittance, as much as 6% in transactions costs can be saved. According to the study, like the Philippines, Bangladesh has a large migrant population. In fact, as much as 10% of the BOP in Bangladesh has relatives who are international (external) migrant while another 10% has internal migrant relatives.

The role of information and communication technologies (ICT) has been growing in the social and economic spheres of life (Gatautis, 2008). The use of ICT by organizations and enterprises in improving work processes is one of the most important opportunities for the application of ICT (ibid, 2008). So this presents an option for the growth of mobile banking services in a defined area, as has been previously stated. Mobile is the form of telecommunication that has penetrated the country the most (Zainudeen, 2006). According to Porteous (2006), the rapid spread of mobile phones means that the number of mobile users may already exceed the number of banked people in many low income countries. If this is the scenario in Bangladesh, then the opportunities for the expansion of mobile banking services are tremendous.

4. Methodology

The primary goal of the survey was to extract maximum accurate general feedback in detail from a number of rural communities that covers most of the regions of Bangladesh. It might be of importance to note how the questionnaire for this survey was developed. A draft questionnaire of this particular survey was developed initially by the concerned researchers. The questionnaire was then shared with additional related researchers and academics and in this case inputs from renowned consultants were also taken into consideration. A draft final questionnaire was prepared for a sample survey in more than one focused region. The questionnaire was then finalized with necessary crucial modifications after pre-testing.

A total of four different regions of Bangladesh were selected to conduct the survey. East Shikarpur village from Chittagong district, Raichow village from Comilla district, Bazua village from Khulna district and Rotonkhali village from Rangpur district were selected for this particular survey. A total of sixteen volunteers forming four different groups interviewed overall 360 individuals from those areas filling up separate questionnaire for each person as a part of a large field trip undertaken from December 2011 to February 2012. Qualitative research approach was applied including techniques like focused group discussion and individual activity observation were also applied to make the result of the study interpretive (Stake, RE 1995). The sample size was not pre-determined; however, data were gathered from maximum possible participants and secondary sources during the month long stay in each village forming a rich data set. Raw data from the completed questionnaires were

then collected and put in to customized excel database sheets to construct necessary tables for final data analysis. Thematic analysis (Miles, MB & Huberman, AM 1994) enabled this research to identify themes from the data.

5. Survey Results

The demographic characteristics of the sample are summarized in Table 1. The sample had 360 respondents with a 166:189 male: female ratio and the majority aged between 41-50 years. Majority of the respondents (51.6%) are reported having access to bank accounts one way or another. Only 15.1 % of the respondents had more than 1 SIM whereas 25.5% had no SIM at all.

In Figure 1, 50.8% of the respondents indicated having both sent and received mobile money. Users that send money seem to be more active, with 72.6% having at least one transaction a month, as compared to those that receive money, with 61.4% having at least one transaction a month.

In Figure 2, Looking into the primary reasons that respondents use mobile money transfers, “top up mobile phone” dominated in case of receiving money whereas “Pay for Utilities, bills, fees, etc” dominated in case of sending money. In both cases, support extended to the immediate family was more than that given to the extended family.

In Figure 3, most respondents thought that the cost of sending money was cheap or average, whereas most respondents thought that the cost of receiving money was very cheap.

In Figure 4, Use of mobile money for other types of transactions besides money transfers is emerging. The most common usage is to buy airtime from your provider as indicated in Figure 4. Other transactions have been introduced such as payment for bills, etc. When asked about the main benefit of using mobile money for these other transactions, most (77.7%) responded that mobile is faster than other methods (speed).

6. Conclusion

The survey results show that mobile banking has spread to a selected non-urban area in Bangladesh. The respondents are aware of the utility of the system and use it for a variety of purposes related to their daily personal and professional lives. Therefore the acceptance of technology in a non-urban area of the country appears to have positive prospects. However, the results need to be interpreted with a degree of caution since the survey was conducted in a single site and cannot be generalized to the whole of the nation. A complete picture will only emerge after the survey has been replicated in other parts of the country.

Infrastructure reforms are important to economic development, and information-communication is a key infrastructure (Gamage, 2006). Though mobile phones were once viewed as a luxury item, their rise and global penetration has been remarkable (Britni and Ludewig, 2010). Mobile phones connect individuals to individuals, information, markets and services, and bridge urban-rural and rich-poor divides (Aker and Mbiti, 2010). The penetration of mobile banking technology in the non-urban areas of Bangladesh represents an important aspect in the economic and social growth of the country. The growing population will at some stage require reliable on site and off site banking services to manage their finances. Given the pledge of the present Government to build a Digital Bangladesh, the usefulness of mobile banking becomes paramount. Therefore the next logical step that should be adopted by the concerned public and private sector entities is to establish the supporting infrastructure and requisite human resources that can be employed to take full advantage of the growth of mobile banking in the nation.

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Table 1: Demographic Characteristics of the Sample

Rank	Financial Transaction	Frequency	%-Share
Gender	Female	189	52.5%
	Male	166	46.1%
	Cumulatively	355	98.6%
	Missing Data	5	1.4%
Cumulatively	360	100.0%	
Age	Below-20	62	17.2%
	21-30	55	15.3%
	31-40	61	16.9%
	41-50	86	23.9%
	51-60	72	20.0%
	Above-60	20	5.6%
	Missing Data	4	1.1%
Cumulatively	360	100.0%	
Education	No formal schooling	51	14.2%
	Incomplete primary school	36	10.0%
	Complete primary school (P7)	72	20.0%
	Incomplete secondary school	27	7.5%
	Complete secondary school (S6)	81	22.5%
	Post secondary e.g. certificate, diploma, degree	17	4.7%
	Degree and above	72	20.0%
	Cumulatively	356	98.9%
Missing Data	4	1.1%	
Cumulatively	360	100.0%	
Access to Bank Account	No	182	46.4%
	Yes, I have a personal account	82	20.9%
	Yes, through another household member	41	10.5%
	Yes, through work	55	14.0%
	Yes, through someone else	24	6.1%
	Cumulatively	384	9.8%
	Missing data	8	2.0%
Cumulatively	392	100.0%	
Number of SIM cards	5 SIMs	2	0.6%
	4 SIMs	5	0.1%
	3 SIMs	7	2.0%
	2 SIMs	40	11.2%
	1 SIM	212	59.4%
	0 SIM	91	25.5%
	Cumulatively	357	99.2%
	Missing Data	3	0.8%
Cumulatively	360	100.0%	

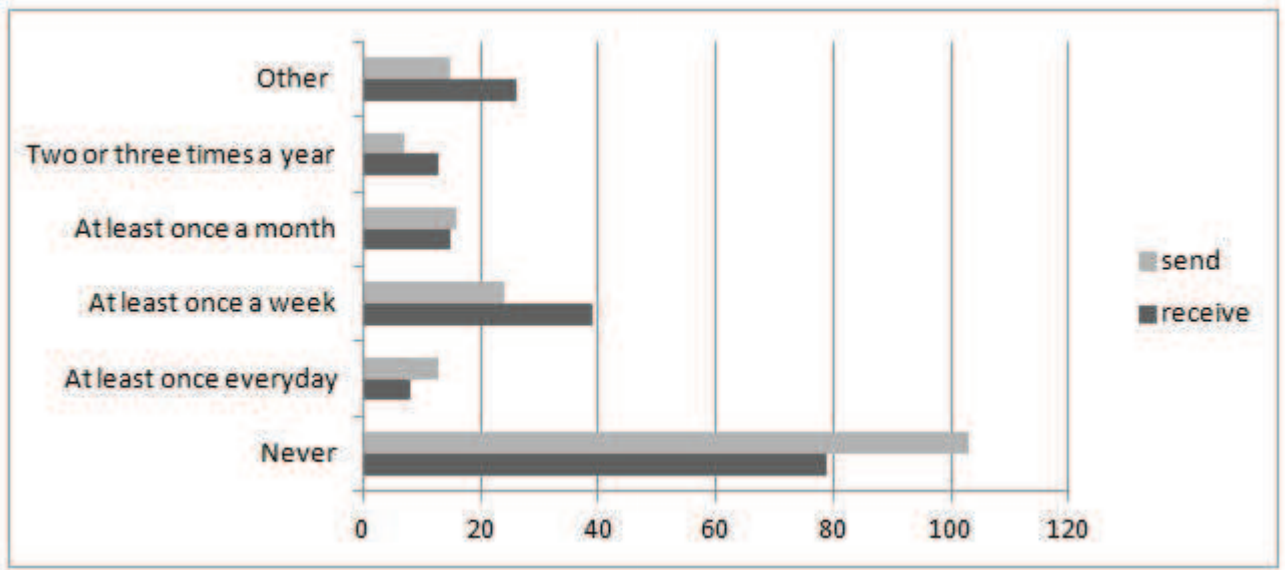


Figure 1: Frequency of using mobile money to send or receive money amongst respondents.

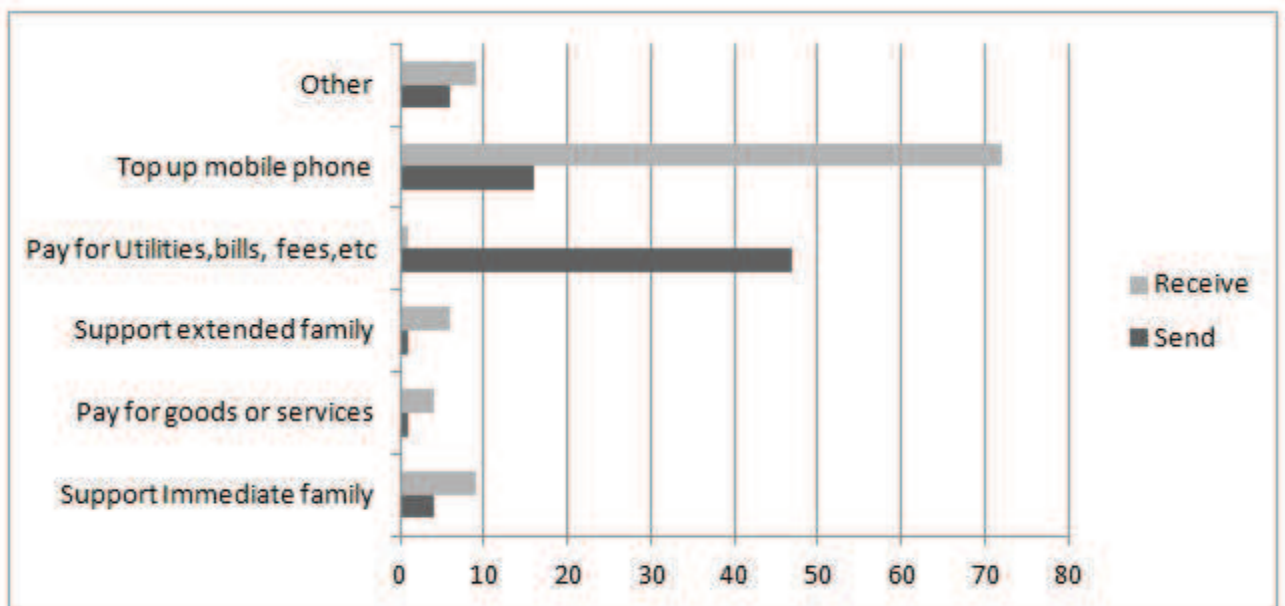


Figure 2: Primary reasons why respondents sent to or received money transfers from other people.

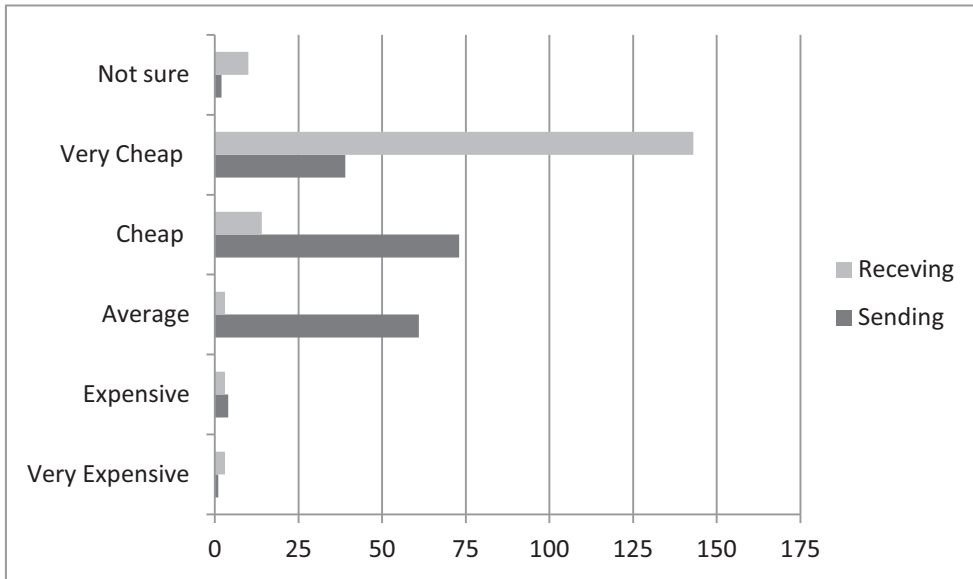


Figure 3: Respondents' perceptions on cost of sending or receiving money transfers with mobile money.

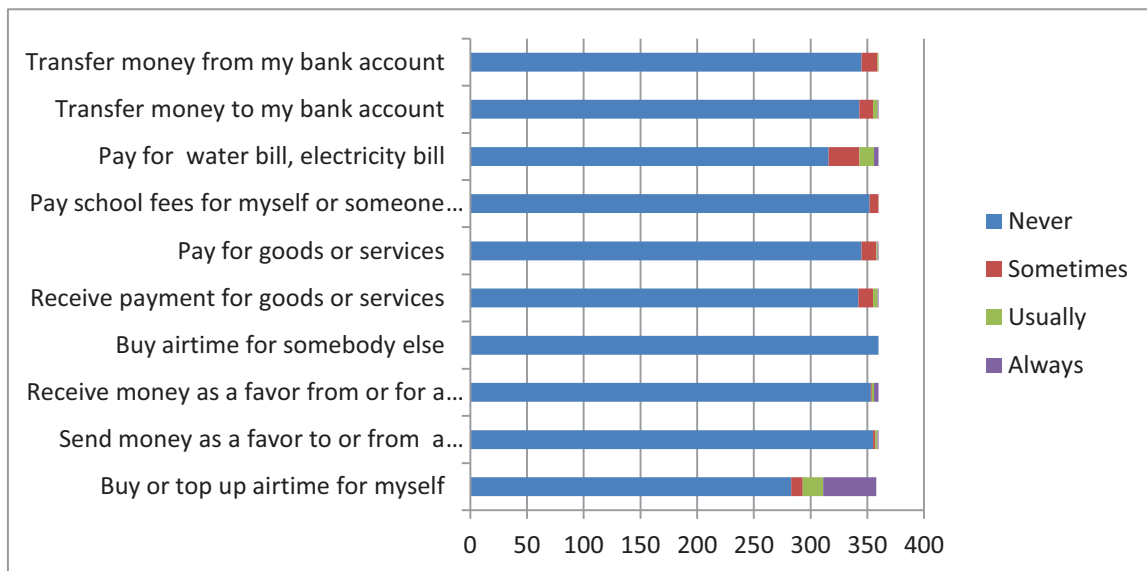


Figure 4: Respondents' usage of mobile money for other types of transactions.

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