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# Effects of Mobile Banking on the Savings Practices of Low Income Users - The Indian Experience

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#### **Abstract**

In 2011, sixty-five percent of India's population did not have access to a bank account (Global Findex 2011). India has the second largest financially excluded poor in the world with more than half of its population considered as financially underserved At the same time, India is one of the fastest growing markets for mobile phones. Given the rising mobile phone usage in the country, mobile banking (also known as M-Banking) has a great potential for enabling financial inclusion of the poor. India has attained near universal telecom access with one of the lowest–cost retail distribution networks. Among the myriad M-banking services currently underway, EKO's Simplibank offers one of the most promising initiatives in mobile money operating on a low-cost banking platform. Launched in 2007 through a partnership between the financial services start-up company EKO and the State Bank of India (SBI), this mobile money service initially operated as a pilot project in the cities of Delhi, Bihar and Jharkhand. By 2011, EKO had captured a wider consumer base as a business correspondent of SBI through its new product for domestic remittances. EKO partners with a network of agents—chemists, grocers, airtime vendors—to provide banking services to people with no access to formal bank accounts.

This paper explores the everyday use and effects of EKO mobile banking. It discusses findings from a recently concluded study of 160 customers, 20 customer service points (CSPs)/agents, and key functionaries of EKO in Delhi. The research asks the following questions:

What is the socio-economic impact of EKO's mobile money accounts on the savings behaviour of low income target users?

How do EKO customers perceive mobile money usage by contrast to existing informal and social savings arrangements?

Has EKO's mobile banking replaced, displaced, or dispelled the need for informal savings and money storage practices?

Has EKO's mobile money become a superior savings substitute to informal savings mechanisms?

The paper highlights some preliminary results regarding the effects of EKO's mobile money on the savings practices of low income users in the urban metropolis of Delhi. Further, it draws out lessons for the nascent M-banking industry in India, considering the challenges that face mobile banking services such as EKO Simplibank as they seek to scale up and to expand their customer base.

#### Introduction

In the developing economies, there are more mobile phone users than bank account owners. According to the GSM Association (GSMA), in 2011, the number of global mobile connections surpassed the 6 billion mark (GSMA 2012a). Sixty percent of mobile phone users live in the development world (UNCTAD 2008). India is a microcosm of a growing global phenomenon—namely, the disproportionate ratio between the number of people with access to financial services versus that of people with access to mobile phones. As of 2010, thirty percent of India's population lives below the poverty line (World Bank 2011). A prerequisite for poverty reduction and inclusive growth efforts in India rests on enabling the poor and underprivileged groups to access financial services. While bank accounts penetration is still relatively low in India, mobile phone usage is on the rise. A recent estimate by GSMA places India as the second largest mobile broadband market in the next four years (GSMA 2012b). India has attained near universal telecom access and has one of the lowest-cost retail distribution networks in the world. In this context, mobile money constitutes an opportunity for the financial inclusion of the poor.

India has the second highest number of financially excluded households in the world-more than half of India's population is financially underserved. The most recent World Bank data on financial inclusion indicates that only 35 percent of the population in India has a formal account in a financial institution—that leaves 65 percent of the adult population without access to financial institutions and services (Global Findex 2011). In other words, in India, as in much of the developing world, "the financial markets are quite simply failing to meet the needs of a vast swath of society - those who are poor, and especially the poor living in rural areas - in a way that is affordable, convenient, and safe" (Mas 2009:57). The banks shun the poor due to their mobile habitat, unstable livelihoods, uneven income flows, and lack of means for achieving financial discipline. Consequently, the poor rely on a number of informal mechanisms and social arrangements that are costly (in both financial and social terms) but more convenient. For instance, a recent study documents that cycle rickshaw pullers—a sizeable segment of urban migrants living on Delhi streets, public spaces, and slum settlements—use ingenious saving and storing practices (Nandhi 2010). These include keeping cash on person, at place of stay, with neighbourhood shopkeepers, with wife or rickshaw owners, and/or concealing money. The study also notes that these practices are subject to unstable local living conditions, fear of risk of losses, and uncertain level of trust and availability. Similarly, Orlanda Ruthven's (2002) research among dwellers in Kalibasti, a squatter settlement in West Delhi, suggests that networks of relations are crucial to the financial security of the urban poor. The study found that, despite the lack of access to formal financial services, most respondents were regularly leaning on friends and neighbours to cover deficits and bridge cash flow; these respondents were saving by hiding money at home, they were giving interest-free loans, and/ or they were taking private loans with interest or a wage advance.

Recent research into the economics of the poor demonstrates that low-income households do manage and save their money in one form or another, even if the amounts saved are small (Collins at al 2009; Banerjee and Duflo 2011). A survey conducted by the National Council of Applied Economic Research (NCAER) and Max New York Life Inc. (Shukla 2007), provides deeper insights into the savings behavior of Indian households. The survey found that over 81 percent of the households save part of their earnings. Further, the survey indicated that over a third of the 205.9 million households still prefer to stash cash at home, even though this does not earn them any interest in return. Another important finding of the survey was that poor households save about 40 percent of their annual income despite being in debt.<sup>2</sup>

<sup>1 &</sup>quot;Underserved" broadly includes those who get partially some kind of financial service (one might have a no frills account but no access to credit). "Unbanked" refers more narrowly to people without a bank account.

<sup>2</sup> This behaviour is in consonance with findings in other studies which indicate that households often prefer to borrow—especially from informal sources like friends and relatives—than use savings, which is earmarked for specific needs. As Jonathan Morduch

The burgeoning mobile money models in India target precisely this widespread need for alternative forms of savings for people who are unbanked and financially underserved. Among various such initiatives, the startup EKO offers a pure cell phone based model on a core banking platform called SimpliBank.<sup>3</sup> EKO's mobile money kick started in partnership with the SBI by launching the 'SBI Mini Savings Bank Account' as a pilot in February 2009 in Delhi, Bihar, and Jharkhand.<sup>4</sup> EKO partners with a network of retailers, also known as customer service points (CSPs). In EKO's model, the mobile number is the bank account number of the customer, allowing individuals to transact in their No-Frills Accounts or NFAs (accounts that allow customers to have a zero minimum balance) by simply dialling numbers on their mobiles. The money a customer deposits remains with the bank and not with EKO and the account holder gains a 3.5 percent interest per annum. The key advantage of using the EKO accounts as opposed to banks is the significantly lower transaction costs and the ease of access. By comparison to the average SBI branch transaction cost of Rs. 68 (\$1.45), EKO'S average transaction cost is only Rs. 10 (\$0.21) (Malhotra 2010).<sup>5</sup>

The users of EKO's M-Banking include migrant workers (auto drivers, rickshaw pullers, hand cart vendors, shop assistants), small business entrepreneurs (for instance, beauty parlour owners), street hawkers, daily wage labourers, vegetable/fruit sellers, petty traders, housewives, and students. Starting with an initial pool of 5,000 customers and a network of 200 agents, EKO has grown exponentially over time. It has served 912,485 customers through its 1500 customer service points (CSPs) across Delhi, National Capital Region, Bihar and Jharkhand and employs 100 people.<sup>6</sup> EKO has also launched a number of new initiatives. It has partnered with ICICI Bank, India's second largest private sector bank, launching the Apna Savings Account SCHEME. Further, it has now moved beyond the No-Frills Accounts to the large domestic remittances market in north India by adopting *Tatkal*, a remittance facility introduced by SBI in mid-2010. Early this year, CGAP Regional Representative for South Asia Greg Chen noted that the SBI-EKO Tatkal service had conducted 1.1 million transactions valued over \$800,000 within a timeframe of nine months (Chen 2012).

# Research Concerns and Objective

The resounding success of M-Pesa in Kenya has shown that the ubiquitous mobile technology offers considerable potential for lowering transaction costs and providing secure banking services to vast numbers of poor people in the developing world. Given that large segments of the urban poor in India are financially excluded, EKO's SimpliBank mobile money has a major role to play in delivering cost-effective financial services to the poor. EKO's vision in building a low-cost financial services' infrastructure for the unbanked depends on its transformative outcomes. These transformative outcomes need to be gauged with respect to two sides of the same coin – that of the provider and that of the end user (customer). For the provider, the success of mobile money focuses on a macro perspective (namely, EKO's outreach, coverage and targets); for the end user, the impact of EKO's mobile money centers on the micro unit (that is, access, safety, and cost of transaction). EKO's mobile money is a double edged tool: it serves as a phone cum savings account, thus enabling people without a formal bank account to engage in safer and more efficient savings mechanisms. The service becomes a medium of transaction in an individual user's everyday economic life. Focusing

(2010) argues, while the phenomenon of "borrowing in order to save" is puzzling from the standpoint of traditional economics, it is a regular feature in the financial practices of the poor (see also Collins et al 2009).

<sup>3</sup> Operated by EKO Aspire foundation / EKO India Financial Services Pvt. Ltd, New Delhi. EKO's SimpliBank is the application or the server that captures all mobile transaction, processes them and then reconciles the same with the core banking systems. This middleware understands transactions done by customers at a retail point and it is designed with the mobile phone as its primary transaction interface.

<sup>4</sup> The State Bank of India (SBI) is the largest and most trusted public sector bank in India with largest number of branches and accounts across the country.

<sup>5</sup> The exchange rate of 1 USD is equal to INR 50 in the study.

<sup>6</sup> http://www.techsangam.com/2011/07/10eko-inida-financial-services-raises-5-5million

on low-income EKO customers in Delhi, this paper looks at the effects of mobile banking on their saving behavior and other informal saving practices.

#### DATA AND METHODS

Sample: The paper presents the first preliminary findings on how low-income customers view and use EKO's mobile banking based on a survey of 160 customers / users, interviewed in 2011 in three districts of Delhi (West, South and East) using a structured schedule. The study also interviewed key officials and field managers of EKO, 17 retail agents or CSPs to cross validate the information gathered from EKO customers. In addition, research involved focus group discussions with non users of mobile banking and case studies of EKO customers to supplement the survey data.

#### **Profile of EKO Customers**

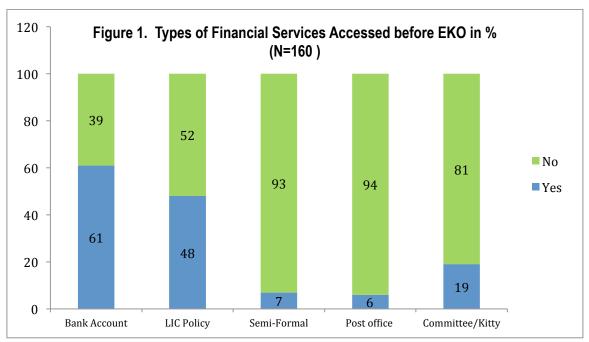
Table 1 details the profile of EKO customers. The majority (54 percent) of these users had attended up to middle school and 12 percent had no schooling. As per the users' occupational background, 31 percent worked as daily wage/casual labour, factory workers, domestic and professional workers, 19 percent were shopkeepers/petty traders, followed by sales assistants, housewives and others. Nearly the entire sample owned a mobile phone.

Seventy-eight percent of EKO users were permanent residents while 22 percent were migrants or temporary residents. At the time of the interviews, the sample respondents had been EKO customers on an average of 16 months. Sixty-one percent of EKO users in the study had a bank account and 39 percent had no bank account.

Table 1 Profile of EKO Customers				
Demographic Variables	Number (N)	Percent		
Age	32 (Mean)	100		
Gender				
Male	122	76%		
Female	38	24%		
Education				
No Schooling / Sign only	20	12%		
Up to Middle school	86	54%		
High School /Technical	32	20%		
Under graduation and above	31	19%		
Occupation				
Shopkeeper/Petty trader/Small business owner	31	19%		
Sales Assistants	26	16%		
Housewives	19	12%		
Daily wage /casual labour	17	11%		
Domestic help/worker	13	8%		
Part time employed	13	9%		
Professional workers	11	7%		

<sup>7</sup> The terms 'customers' and 'users' are used interchangeably throughout the paper.

As indicated in Figure 1, users in the study had access to some form of financial services (formal or informal) before opening an EKO mobile account. Among a sizeable portion of the sample (61 percent) who indicated having a bank account, 6 percent had not been using a bank account for various reasons, including inadequate capacity to save because of low income. Further, 48 percent of the respondents had a Life Insurance Corporation (LIC) policy, while 19 percent were members of a *committee/kitty*. Among the non-users with bank accounts, 3 had a joint account with their spouses, three had an account in their village, and two were rarely using their bank accounts.



EKO customers surveyed in the study were classified in three income brackets – those falling under less than Rs. 5,000 (\$100) per month, those falling between Rs. 5,000 to 8,000 (\$100 to \$160), and those with

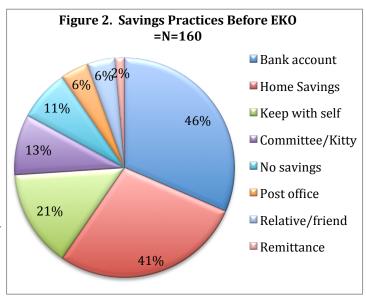
Table 2: Monthly Income of EKO users					
	Percent	Mean (INR)	Mean (USD)	Median (INR)	Median (USD)
Entire Sample	100	8,089	162	6,000	120
< INR 5000	26	3,367	67	3,850	77
INR 5000 - 8000	48	6,050	121	6,000	120
> INR 8000	26	17,560	351	14,000	280

more than Rs. 8,000 (\$160). It should be noted that, assuming a household size of 4 members and an average inflation rate of 9 percent (and food inflation hovering around 11 to 12 percent by end of October of 2011), the first two income quartiles can safely be considered as low-income consumers. While the sample mean and median income lies between Rs. 8,089 and Rs. 6,000, the range of minimum and maximum stood at INR 6,000 and 50,000.

<sup>8</sup> A kitty is a group of members, usually women, pooling a certain amount of money every month, which is auctioned or is given in full to members in turn through a draw of lots. Kitties are also know as "kitty parties" based on their form of organization as social gatherings. These are popular among the middle income urban women who become members of specific kitties based on their social networks. The regular meetings take place on a rotational basis and are hosted by the member that "wins" the lottery of contributions by all other member. Similar institutions are also common among working-class women in India. Similarly, committee is a popular method of saving among small /tiny business owners and is also known as a 'lottery' system. Both fall in the purview of informal saving mechanism. For a discussion of the similarities and differences among committees and kitties, see also RAj Mohan Sethi's (1995) seminal article, "Women's ROSCAs in Contemporary Indian Society".

Figure 2 indicates the different forms of saving practices used by the sample respondents (users) before they opened their EKO mobile banking accounts. The results of the survey indicate that 54 percent of the respondents were saving in formal institutions (banks, post office and LIC), 81 percent were using informal savings mechanisms (hoarding at home, keeping with self or a money guard, contributing to committee/kitty), and 11 percent of the sample had no savings.

Some key indicators of non users' demographics as well as their methods of saving are detailed in the Appendix. Non-users were randomly selected and included three categories: those who had access to a mobile bank but no bank account, those who had both, and those who had neither.



The non users sample has an inherent limitation because the number of non-users is not proportionately matching either with the users sample or the non-users in the areas covered. In other words, it is not truly representative of non-users among low income households in the sampled areas and the researcher's bias both in the selection of non-users as well as in limiting their numbers is undeniable. Within a limited time frame, the intention was to capture the essence of perceptions of non-users about mobile banking and its use and related issues in order to get a comparative perspective.

#### **FINDINGS**

A number of key findings emerged from the field survey. A summary of these finding is provided below followed by a detailed discussion of the key points.

First, the ability to save has improved for a majority of users through EKO mobile banking by comparison to earlier practices such as keeping cash on hand. These informal forms of savings often are susceptible to unnecessary and trivial expenditures or claimable by friends/relatives.<sup>10</sup>

Second, EKO mobile banking has become a very effective, safe, and trustworthy savings instrument for its users; importantly, dependence on risky informal methods has decreased for a large percentage of customers who were previously dependent on these practices for lack of affordable and safe savings options.

Third, EKO mobile banking is perceived as a good substitute to both traditional banking and informal forms of savings; however, it has not dispelled the need for these existing savings mechanisms. EKO is used as one among many other savings mechanisms—including informal methods—by a sizeable percentage of customers.

<sup>9</sup> This figure relates to the specific question: "Before opening the EKO account, where did you keep your savings / money?" It refers to only savings (both formal and informal). The cumulative is >100% due to multiple options.

<sup>10</sup> In the Indian context and especially that of low income households, 'cash on hand' often can be used up either because it is claimable by demanding relatives (like husbands), children (emotional blackmail), or friends (who may justifiably expect (demand) a return favour for an earlier money lent. Hence, the expression claimable is situation specific.

Fourth, EKO mobile banking is used in conjunction with or as complementary to an existing saving practice.

Finally, as per the preference of EKO mobile banking over other forms of savings, users had diverging views. The majority of users consider EKO mobile money accounts as a preferred alternative for small savings. At the same time, in spite of an expressed preference for EKO mobile money, one-third of users became inactive following the introduction of transaction charges for deposits and withdrawals.<sup>11</sup> In fact, a considerable minority of customers is concerned about the possible increase in the cost of EKO transactions. This would potentially make the service less attractive to those who are looking to save in small amounts.

# Case Study 1 Saving in Small Bits is Better than No Savings

- 1. Seeta, a slum dweller, is a part time house maid in two houses and earns Rs. 2,500 (\$50) monthly. Her unemployed husband is of no help in contributing to the household savings. Her unmarried daughter and son contribute to the household earnings. Still, Seeta's earnings are too little to maintain the required minimum balance in a formal bank account. Her bank account of many years was closed down because she was unable to deposit money regularly. A retail shop owner in Seeta's neighborhood recommended that she open an EKO account as a means of saving in small amounts. She tries to save in the amounts of Rs. 10, 20, 50 but not more than 100 (\$2) a month. Whatever little she keeps at home is spent on household needs. She does borrow short-term loans from one of her employers every now and then. One time she faced a medical emergency. She desperately needed to buy medicine but had no cash at hand. Her employer was out of town and she had no one else to turn to for an immediate loan. Luckily, she had been saving in small amounts at her EKO account. She withdrew Rs. 100 (\$2) from her EKO account to buy medicines. She was glad that her efforts to save in small amounts helped her in a time of need.
- 2. Pappu, another slum dweller, is a 20-year-old man and works as a cleaner in a shop on a monthly salary of Rs. 2500 (\$50). He is able to hand over part of the salary to his mother, who works as a maid. When he opened his EKO account, his determination to save improved because prior to opening an EKO account, when he kept his money on hand, he was unable to save it. He tries to save by cutting down his transport expenses for depositing small amounts. He intends to build up his savings to buy a bicycle to commute to work.

Source: Field Notes of interviews held on November 2 and 3, 2011.

# EKO mobile banking has increased the capacity of low-income users to save

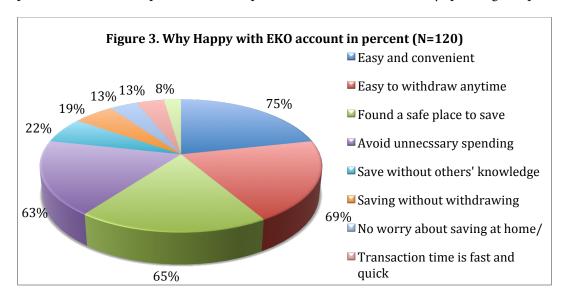
According to the study, 90 percent of users (N=144) state that their ability to save has increased with the mobile banking services of EKO. In response to a query about the extent of this improvement, 57 percent of users stated their ability to save had 'definitely improved' and 41% noted that it had become 'somewhat better' after opening an EKO account.

Users gave three important reasons for this positive effect of EKO mobile accounts on their overall savings behavior. First, keeping money in the EKO mobile accounts is much safer than keeping cash on hand (84 percent). Second, having a mobile account enables users to avoid wasteful expenses and to save rather than

11 However, these inactive users expressed their keenness to become active users subject to a reasonable pricing policy by mobile banking provider, or, the business correspondent (in this case, EKO).

spend, thus inculcating better saving habits. For instance, 66 percent of the users claimed that their EKO accounts had provided an incentive to deposit rather than spend their small amounts of extra cash. Third, their ability to save money frequently and in small amounts—as small as Rs. 10 (\$ 0.20)—has become more feasible with the No-Frills EKO accounts. This finding was endorsed by 73 percent of the users in the study.<sup>12</sup>

Users stated that they were happy to use EKO mobile banking account for a number of reasons which are detailed in Figure 3. The top four reasons why EKO customers were happy to be using the EKO-SBI Mini Savings Accounts were: because it is 'easy and convenient' (75 percent), easy to withdraw anytime' (69 percent), 'found a safe place to save' (65 percent), and 'avoid unnecessary spending' (63 percent).<sup>13</sup>



## EKO mobile account is a safe, trustworthy, and useful savings mechanism

Figure 4 below compares the saving practices and mechanisms used by customers before and after opening an EKO account. Three noteworthy findings emerged about the savings behaviour of low-income users since opening their EKO accounts.

First, EKO customers consider the services as safe and trustworthy because their savings are securely deposited with the State Bank of India, whose brand name as a leading public sector commercial bank in India lends credibility to the activities of its business correspondent, EKO. Second, after becoming EKO mobile banking customers, dependence on risky and costly alternatives in informal savings practices (keeping cash at home, under the mattress, or on person) largely diminished because EKO mobile account became a safe saving option. For instance, users' dependence on informal savings practices such as 'home savings' and 'keeping cash on person' decreased by 54 percent; likewise, savings in committee/kitty dropped from 13 percent to 6 percent. Third, 11% of the respondents who had 'no savings' before EKO accounts were able to save after they opened their EKO accounts because it created an incentive to save. While all users in the study had stated that they found a new method of saving mechanism in the EKO accounts, more than 10 percent of the users with bank accounts found it a better alternative and shifted to saving in mobile money accounts.

<sup>12</sup> This consisted of users with both bank accounts (61 percent) and no bank accounts (32 percent). By contrast, non-users of EKO show showed a limited capacity to save either due to insufficient income or because the little that was kept on hand was spent and difficult to retain as savings.

<sup>13</sup> The cumulative percentage is >100% due to the given choice of multiple answers.

This was attributed to EKO mobile accounts having a dual benefit – that of a safe, reliable, and accessible savings option and its enabling of keeping money at arms' length to disable temptation spending.

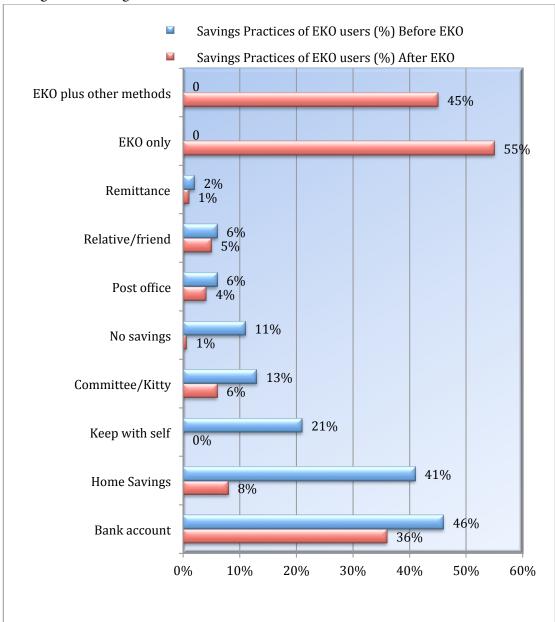


Figure 4. Savings Practices of EKO users Before and After their EKO accounts

# Case Study 2 EKO Enables To Save and Spend When Needed

Salman is an assistant to a footpath scooter mechanic and earns Rs. 4,500 (\$90) monthly. He supports his mother in looking after a sick father and a mentally unstable brother. With no bank account, he could not hope to save especially since he and his mother struggle to meet family expenses. When he opened his EKO account, he finally found a medium for safe saving. Since then, he has attempted to save by giving three-fourths of his income to his mother and keeping the balance in his EKO account, which he uses for his needs when required. In addition to saving whatever is possible, he also finds his EKO account to be an easy medium for withdrawing in order to help his mother meet household expenses.

Source: Field notes of interview held on October, 14 2011

Thirty-nine percent of the users without bank accounts felt that they finally found a safe saving medium through EKO-SBI's mobile bank accounts. This savings mechanism improved their confidence in saving and managing money. For those users with bank accounts, EKO mobile banking became a far more convenient method of saving, enabling them to save time, energy and cost of transacting in a brick and mortar bank branch. By comparison, non users had not heard about savings in EKO mobile banking account; besides they considered themselves ineligible for bank accounts either due to lack of sufficient "Know Your Customer" (KYC) proof or limited ability for saving in a bank account. Hence, they were dependent on informal social saving practices such as hiding money under the mattress or in a gulak.14

Fourth, a new and safe saving method became available to 55 percent of users (39 percent of low income users with no bank accounts plus 16 percent bank account holders). Here, it should be noted that all users in the study stated that they found a new and additional method of savings mechanism in their EKO accounts; however, this classification is to highlight the fact that more than 10 percent of users with bank accounts found EKO a better alternative and shifted to mobile money accounts as a primary means of savings.

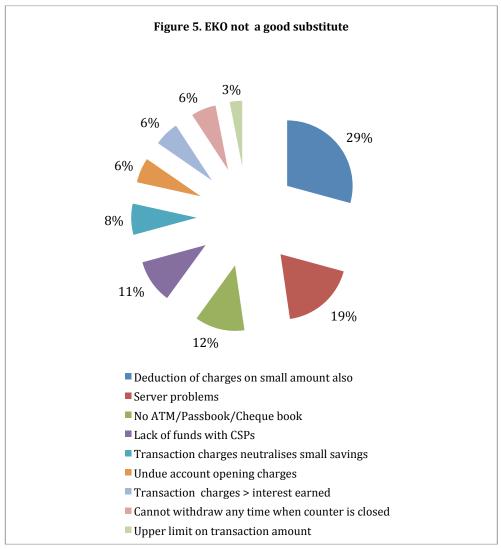
Table 3.EKO mobile account is a good substitute to informal methods	Percent
Can deposit/withdraw anytime any counter	81%
No risk of loss by theft or deception	75%
Takes minimum time to transact	74%
Reliable because it is a bank account	71%
Helped me to shift from insecure and unsafe ways of savings	63%
EKO has helped to consciously prune wasteful expenditure	59%
Helps in secrecy of savings	48%
Convenient timings	30%
No queues, paper work, or time waste	21%
Trustworthy because I alone can access my account	16%
Facilitated to send money from EKO to EKO account	12%
Agent helps/gives money even if counter is closed	11%
No need for minimum balance, can deposit even smallest amount	10%
Prompt updates through messages	8%
EKO is good substitute to bank account also	
Nearer than bank	40%

<sup>14</sup> Gulaks are piggy banks made out of clay and commonly used in India among low income households to save cash at home.

# EKO mobile money is a good substitute to informal savings methods

The majority of low income users in the study (95 percent) perceived EKO mobile banking account as a good substitute to informal savings practices such as saving at home, cash on hand, saving with a money guard (friends/relatives). Table 3 highlights various reasons given by users in the study to justify that EKO mobile banking account is a good substitute to unsafe and uncertain informal savings mechanisms. Additionally, the users also cited that EKO mobile account is a good substitute to using a bank account (see also Table 3). In effect, convenience, security of savings, efficiency of transactions, reliability, flexibility, safety, secrecy, promptness of agent servicing were some of the main reasons why EKO mobile banking was considered as a good substitute.

There was a counterview that disagreed with this dominant assessment—one third of the users had negative perceptions about the prospects of EKO mobile money substituting existing savings mechanisms (Figure 5).<sup>15</sup>



<sup>15</sup> Figures total to more than 100% due to multiple responses.

# Co-existence of EKO mobile banking with other savings practices

Responses by EKO users in the study brings insight into how mobile money is used alongside existing savings practices as a complementary savings tool. Table 4 provides a snapshot of the diverse savings mechanisms used by users in the study. One key feature of this ecosystem is the practice of earmarking specific types of savings for specific investments (see also Zelizer 1994). For instance, 'cash at home' and 'cash on person' are used for everyday expenses on food, daily transportation and other basic needs; committee/kitty contributions are used for buying assets or to cover 'festival or ceremonial expenses'; finally, 'money at home' and 'EKO savings' are generally spent on recurring educational expenses.<sup>16</sup> Unsurprisingly, non users in the study also exhibited a similar behaviour. In addition to educational expenses, EKO savings were used extensively for the specific purpose of covering medical expenses/expenses related to death (N=87/120) as well as buying asset and consumer durables.<sup>17</sup>

Table 4. Current Methods of Saving by Types of Expenditure in Percent (N=160)					50)		
	Daily Expenses	Education	Sickness / death	Emergencies	Repay Loan	Old Age	Buy Asset
Forms of Savings↓							
EKO mobile	29	16	36	87	6	8	35
Bank account	2	10	8	34	4	15	24
Cash at home	89	16	21	41	2		8
Cash on person	71	8	7	17			
Committee/ Kitty		3		13			19
Insurance Policy	Х	12	24			25	
Interest free loan		1	2	2			3
Loan from lender		2	35				10
Post office		1	1	2	1		3
Relative/ Friend	30	11	6	22			

<sup>16</sup> However, 10 percent of the users depended on 'savings in a bank account' for meeting school fees in particular.

<sup>17</sup> The two other key sources of funding for these same forms of investment are 'borrowing from lender' followed by 'insurance policy'.

An interesting finding of this study is that the users innovate on the applications of mobile money in their everyday transactions. EKO mobile banking is used as a complementary tool to existing savings practices. For instance, in order to make monthly savings contributions (payments to committee, kitty, or insurance premiums) in a timely manner, some users first make a deposit into their EKO accounts.

# Case Study 3 Case Study 3: Shyam's Multiple Savings Systems

44-year-old Shyam works as a masonry worker on contract basis earning about Rs. 7,000 monthly. He already had a bank account before EKO. He has been saving in a Committee for his daughter's marriage and his childrens' education; and in LIC for old age/sickness. When he started his EKO account about 20 months ago, he found it a convenient medium to deposit money without wasting time. He had been depositing varied amounts instead of keeping cash on person. He started EKO not as a saving medium but as a substitute tool to cut down on his transaction time with bank and to deposit any surplus amount earned. He pays his monthly contribution for Committee and LIC from his cash earnings and not from EKO account, which he uses for paying his labour or when needed to meet unexpected expenditures. For savings less than Rs. 1,000 to 2,000, he prefers to keep at home but given a choice between EKO account and other saving modes like cash at home, he preferred EKO mobile account. Though he had been using Committee and LIC for savings, he feels his savings have gone up after EKO because he could deposit any amount, thus building up his total savings.

Source: Field notes from interview held on August 20, 2011.

# Case Study 4 Hoard Informally and Shift Formally

Neelam works at a beauty parlour as a trainee earning Rs. 3,000 (\$ 60) monthly. She tries to store her money in various ways by tucking her money among her clothes, keep in a mud gulak, keep on self, or giving it to a money guard (friend). Her intention is to convert small sums into a big amount. After opening an EKO account in January 2011, she had found a safe way to ensure that her small savings can grow into a sizeable amount. Though she faces occasional hiccups in her informal storing practices, she adopts this practice because it is easier to put small denomination coins in a gulak till it gets filled when it can be broken or she prefers to leave it with a friend, because money on hand gets spent. At the end of each month, she collects her informally stored amounts and deposits in the EKO account. She finds EKO is best among her saving mechanisms and is confident that she could build a large enough sum useful in the future.

Source: Field notes from interview held on August 27, 2011

Some other users emphasised that, prior to their EKO accounts, when they set aside (as 'cash at home') a part of their money for meeting these monthly contributions to other saving practices, they often failed to meet their due dates because the cash at home was easily spent on other purposes. However, when they started to save through their EKO accounts, they could ensure timely payment without any late fees. Case studies 3 & 4 illustrate how EKO mobile banking is paired and adapted with other savings practices. In other words, EKO mobile money seems to help customers better manage their overall savings.

# EKO mobile banking is a preferred alternative for small savers

Asked about their preference for saving in small lump sums of Rs. 1,000 to 2,000 (\$20 to \$40), 79 percent of users in the study preferred EKO mobile banking accounts as against 26 percent who preferred 'saving at home.' This number includes 20 percent of EKO users who became inactive due to rising transaction charges. The study showed that 31 percent of the overall users became inactive subsequent to the introduction of transaction charges by EKO on the grounds that 'sudden introduction of flat fee based transaction charges' was a disincentive to save (see Case Study 5). They felt that the uniqueness of EKO mobile banking rests on its feature of facilitating small deposits frequently and conveniently. However, a large percentage of this subsegment (32 out of 49) expressed their keenness to revert back to using EKO mobile banking service if there is no transaction charges on deposits. Their positive perception after using EKO mobile banking has been a binding factor in their desire to continue using the services in the future. Unlike former users who became inactive but are keen to restart saving in EKO mobile banking account, non-users did not think that mobile banking would help them save given their inadequate income.

# Case Study 5 Gulak is better than EKO now

Radha is a sales girl, her father a daily wage labourer, her mother is a maid, and her younger sister is in school. Radha's family struggles to meet both ends meet. The family has no tools to save except using a mud gulak, which has been a common method of saving for those without access to bank accounts. Whatever Radha earns, she gives to her mother. She keeps aside about Rs. 500 (\$10) for her personal expenses. She finds it difficult to save at home and that is why she started an EKO account about 6 months back. She started depositing once a month at least some small amount of Rs. 100. Her last month and current month balance respectively was Rs. 350 and Rs. 200. She is able to retain money in her account for less than 15 days only. But she finds that saving in a gulak is preferable to EKO given the introduction of new transaction charges for deposits. Initially, Radha and her father made an effort to deposit in EKO mobile banking account a minimum amount of Rs. 10 (\$ 0.2) daily; but this practice is no longer feasible for Radha ever since EKO introduced the new daily transaction charge of Rs. 2, which constitutes a high tax on her small daily deposits. As a consequence, Radha now prefers to drop her daily deposit of Rs. 10 in her gulak instead of the EKO mobile banking account.

Source: Field notes from interview held on October 20, 2011.

#### **Conclusions**

The study brings forth several insights regarding the effects of EKO mobile banking on the savings behaviour and practices of low income users in the metropolis of Delhi. A critical finding is that EKO mobile banking service is valued as a boon for small savers and users who depended on risky informal savings practices. In particular, a high percentage of users save in EKO mobile banking for emergencies. More importantly, it is considered as a robust substitute to many informal savings mechanisms as well as a bank account. Yet, savings behaviour indicated that EKO mobile banking accounts have not dispelled the need for some of the savings mechanisms used earlier because different savings methods were perceived as having their own usefulness and purpose. Contrary to expectations, in addition to making payments and deposits easier and more accessible, EKO mobile money accounts also seem to improve efficiency and regularity of other savings mechanisms.

Overall, the positive perceptions of mobile banking in the daily lives of EKO account holders are an encouraging sign of the potential of mobile money for expanding the financial inclusion of large numbers of low income households in India. The negative perceptions of non users with regard to their saving capacity speak on the one hand, to their irregular income and, on the other hand, to their lack of awareness of the potential of mobile banking for improving their financial opportunities. This lack of awareness raises the need for more creative strategies for reaching out to the poor in India and elsewhere. This alone will ensure their financial inclusion.

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# Apendix

Table 3: Profile of Non-Users N=20				
	N=20	Percent		
Age	29 (Mean)	100		
Gender				
Male	13	65%		
Female	7	35%		
Education				
No Schooling	9	45%		
Upto Middle school	3	15%		
High School /Technical	8	40%		
Under graduation				
Occupation				
Street vendor	2	10%		
Sales assistant	3	15%		
Daily casual/rickshaw puller	2	10%		
Housewife/parlour maids	5	25%		
Security guard/workers	5	25%		
Shop assistants	3	15%		
Domicile status				
Migrants/temporary	12	60%		
Permanent	8	40%		