



# Money Matters: Exploring Opportunities in Digital Donation to Mosques in Pakistan

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## ABSTRACT

Religious donations are a very significant financial resource, and mosques as places of worship and as religious institutions, play a strong role in collecting such donations. This is especially true in developing countries, where cash-based donations are commonplace. In this paper, through 8 semi-structured interviews with mosque leaders (Imams) and finance secretaries, and three religious and government leaders, we present qualitative findings about various donation mechanisms and the religious and legal regulations governing such transactions. We then use these findings to present suggestions for a mobile-based application that digitizes the donation mechanism for local mosques.

## CCS CONCEPTS

- Human-centered computing ~ Field studies

## KEYWORDS

Mosque, Money, HCI, Donation, Digital Donation, ICTD, Pakistan, Record keeping, Mobile Wallet, Transparency

### ACM Reference format:

Amna Batool, Naveed Ahmed, Waseem Rasool, Umar Saif and Mustafa Naseem. 2019. Money Matters: Exploring Opportunities in Digital Donation to Mosques in Pakistan. In *Tenth International Conference on Information and Communication Technologies and Development (ICTD '19), January 4–7, 2019, Ahmedabad, India*. ACM, New York, NY, USA, 5 pages. <https://doi.org/10.1145/3287098.3287143>

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ICTD '19, January 4–7, 2019, Ahmedabad, India  
© 2019 Association for Computing Machinery.  
ACM ISBN978-1-4503-6122-4/19/01...\$15.00  
<https://doi.org/10.1145/3287098.3287143>

## 1 INTRODUCTION

While organized religion plays a significant role in the lives of a great majority of the world's population [1], religious and spiritual institutions, and specifically their relationship to information communication technology (ICT) rarely appear in the literatures of HCI, information systems, and ICT for development (ICTD) [2]. In this paper, we try to understand the role of mosques as institutions and places that collect religious donations, and through user research, explore the design requirements to create a potential mobile money based digital donation mechanism. As a developing country, financial inclusion remains low in Pakistan where almost 9% of adult population have full service bank accounts [3]. However, with the advent of Digital Financial Services (DFS) and mobile money applications, the financial inclusion landscape is changing. Digital Financial Services (DFS) are financial services delivered through digital channels that reduce the limitations posed by high costs and physical networks. After the advent of 3G and 4G services in 2013, Pakistan's smartphone and mobile internet penetration rates have been steadily increasing where 75% of adult population have access to mobile phones [4]. It is estimated that 16.6% of said mobile subscribers in Pakistan own a smartphone and are expected to rise to 51% by 2020 [2]. 90% of adult Pakistanis have government issued identity known as CNIC [3]. These prerequisites make Pakistan a DFS ready country [5]. According to the state bank of Pakistan, in the first quarter of 2017, the number of branchless banking accounts in Pakistan was 23.6 Million (12% of total population) and the amount of money transferred was PKR 564.4 Billion (\$5.64 Million) [6].

Given that mobile money accounts and transactions are now gaining momentum, and expected to grow further, we are working on exploring digital donation mechanism to mosques use case scenario. In this study, we try to understand various mechanisms through which mosques collect cash donations, and the religious and legal framework that governs such donations, the role technology can play in managing in-cash donation given at mosques, and if/how making a transparent donation system at

mosques helps in raising donations. In this paper, we present findings from our first round of eight semi-structured interviews with six mosque Imams (religious leaders) and two mosque finance sectaries, and three semi-structured interviews with government officials and religious experts. These interviews were done in order to learn about mosques' donation management and mosque committees' perspective on digital donation. The key contributions of this paper are qualitative findings that help understand the various mechanisms used by mosques to collect donations, and the religious regulations and administrative structure that govern such donations. The design recommendations of a mobile-based application presented in the discussion section allow mosque management to manage their donations digitally and to inform the community/patrons via text messages about where their donations are being utilized in the mosque. As a next step, we plan to conduct a second round of interviews with mosques' patrons to know their perspective on mobile-based donation platform and the impact of donation transparency on mosque donation. We will present our findings from community interaction and mobile-based donation platform testing in future submissions.

## 2 RELATED WORK

Despite its social prominence, and despite HCI's emphasis on the social context of technology, organized religion has been neglected in both the HCI and ICTD literature. Of the literature, the work most closely related to ours is of Rifat et al, which explores the relationship between mosques and technology, with an eye towards the integration of technology with existing religious institutions as a way to achieve positive social ends [2]. According to them, through their randomized controlled trial, simple SMS reminders have the ability to raise mosque donation by 57.3% [2]. This study explains how technologies like SMS amplify underlying religious forces and suggests the possibility of working with religious institutions in applying positive ICT interventions. Institutes, especially nonprofits and community organizations, work wholeheartedly to raise donations. With technology penetration, these organizations communicate with donors through technology channels regarding their activities, goals, and impact. A notable example of using technical intervention in Pakistan is that of Shaukat Khanum Memorial Cancer Hospital & Research Center (SKMCH&RC), which has been using multiple technological sources for fund raising for financially supporting around 75% of its patients [7]. The hospital is doing this by sending SMS based reminders to people for donation, social media campaigns, advertising on television and print media, as well as through their website and mobile application. With growing charity, the efficiency with which the organization spends the charity has become an increasingly important aspect of charitable performance. Transparency includes the reporting of relevant measures and proper information to understand and evaluate those measures because it is very important for the stakeholders to know [8]. Unfortunately, no prior work has been done in HCI and ICTD literature with respect to transparency of religious institutions. The goal of our study is to explore if and how donations to religious institutions are affected by digitizing the donation

process, and hence becoming more transparent, by incorporating technology.

## 3 USER RESEARCH

We conducted three semi-structured interviews with experts, with both government and religious leadership. We used a combination of convenience sampling and snowball sampling to get access to these three experts. Each of these interviews lasted approximately thirty minutes. Interview personal included: director industries department responsible for registering educational and religious institutions, director IT board of Punjab and a mufti from a local Madrassah.

We also conducted eight semi-structured interviews with six Imams of six different mosques and two finance sectaries available in two of the aforementioned mosques. We used convenience sampling to recruit Imams and finance sectaries. Two of the authors of this paper approached mosques they had frequented before, or had established prior trust and connection with, given the sensitive nature of financial dealings that were to be discussed. All six of the mosques were in Chishtian and Vehari villages of southern Punjab. Each of these interviews lasted approximately 45 to 60 minutes. After the Imams and finance sectaries gave consent for this research, audio recordings of these sessions were created and transcribed later by the research team. Participants' age ranged from 25 years to 70 years. Their experience ranged from 3 years of service to 36 years. Only two of them had education below 10<sup>th</sup> grade.

## 4 FINDINGS FROM FIELD

### 4.1 Summary of Findings from Government and Religious Leaders

**4.1.1 Mosque Registration:** We found that mosques are required by law to be registered with the Directorate of Industries as told by the director industries. The district mosque committee, established by Local Government and Community Development (LG&CD) Department, has been authorized to issue No Objection Certificates (NOCs) to new mosques. Documents related to land ownership, personal information of mosque managing committee members and mosque employees, along with copies of their identity cards and photographs, are required to be submitted to the district mosque committee. Once all documentation is verified, a registration certificate is issued. PITB's director told us that PITB, in collaboration with the Directorate of Industries, is working on digital mosque tagging by registering mosques with their geographic location at PITB's database, to be used by concerned regulation authorities. Furthermore, PITB, in collaboration with World Bank and Directorate of Industries, has developed an online Registration Portal to facilitate institutions' registration process for the public. This has reduced the registration processing time from at least 7 days to 2 days.

**4.1.2 Mosque Leadership:** We found that every mosque has a management committee, which is elected by people from within the local community. Usually this committee is elected at a religious gathering at the mosque in the presence of male members of the community. Each mosque has 7 to 10 committee members on average but the number varies with the population

attached to the community mosque. All members are elected based on their perceived integrity and credibility among the local community. The committee comprises of a President, Vice President, General Secretary, Joint Secretary, Finance Secretary and 2 to 4 general members. Serving on the committee is voluntary and uncompensated. Committee members are permanent residents of the community and have alternative source(s) of income source. They are also generally affluent members of the community, who have previously donated to the mosque.

4.1.3 Mosque Employees: The mosque management committee fills the roles of an Imam (worship leader), a Muezzin (the person who calls to prayer), a Khateeb (the one who delivers the sermon) and a Mudarris (who addresses the people in the mosque). These roles may be performed by one person, or the committee can hire two or more people, as per the financial resources of the mosque. The committee pays these employees a monthly salary from the donations they receive or from their own funds, alongside accommodation that is provided within the mosque. As stated by the Imam of a mosque, they are hired due to their individual goodwill or by virtue of being the offspring of the previous employees. There is no set level of education which is required to be an Imam of a community mosque that is not owned or operated by the government.

## 4.2 Summary of Feedback from Mosque Imams and Finance Secretaries

The goal of these interviews was to understand the types of religious donations in Islam and the various mechanisms used by mosques to collect such donations.

**4.2.1 Types of Donations:** Three types of donations came up in our interviews, and they fall under two categories: i) mandatory donations and ii) voluntary donations. i) The mandatory donations are Fitrana and Zakat. Fitrana is a charitable donation given at the end of the fasting month of Ramadan, and is required of all Muslims that have the means to do so. It is used to help the poor celebrate Eid ul Fitr (religious festival). Zakat is a mandatory form of alms that is equivalent to 2.5% of the savings for a given year. It can only be given to 8 kinds of people, namely, the poor, the needy, zakat administrators, religious converts, slaves and captives, those who are debt-ridden, in the cause of God, and to travelers. ii) The voluntary donation is called Sadaqah. Sadaqah is voluntary charity that can be given to anyone for any amount. 3 out of 6 mosques that we interviewed have an associated Madrassah, or religious seminary, alongside the mosque where children from nearby villages come to get religious education. While talking about the type of donations that mosques collect from the community, one of the Imams said:

"We do not collect Zakat, or Fitrana, as it does not apply to the mosque by any means. The only charity that the mosque is eligible to receive is Sadaqah."

From our interviews, we found that only optional charity or Sadaqah can be used on the mosque for purposes such as repairs or construction. Compulsory charity like Zakat and Fitrana can only be used to maintain the expenses of the Madrassah associated with mosque, as they accommodate (food and

housing) and educate children who come there for religious education.

**4.2.2 Donation Collection Mechanism:** One of the key themes that emerged from conversation with the mosque personnel was the different types of mechanisms to collect donations, including Grahe, Donation Box, Monthly Donations, Special Campaigns, Mosque Management Committee, and Loans. Each of these is explained below.

**Grahe** is a piece of cloth or an empty cap that is used to collect donations after prayers. Mosque volunteers walk with the Grahe in front of each row of worshippers at the end of prayer, and worshippers put cash donations into the Grahe. All the six mosques use a Grahe either on Thursday, or after Friday afternoon prayers. Friday afternoon prayers, or Jumma, has a huge significance in Islam, therefore, a large number of worshippers attend the Friday afternoon prayer.

A **Donation Box** is a permanent box placed at the entrance of the mosque, and worshippers deposit cash donations as they enter or leave the mosque. Monthly Donations are fixed monthly amounts that some members of the mosque give, mostly at the start of the month, when they receive their salaries. This donation is given either to the Imam of the mosque or the finance secretary, who can also give a receipt if needed.

**Special Campaigns** are run by mosques to raise funding for specific tasks, such as mosque construction, ablution taps or toilet repairs, utility bill payments, or appliance purchases such as air conditioners and heaters. Imams announce the special donation campaigns formally, to communicate that they need a certain amount of money for a specific task. After this call, people give money to the Imam or financial secretary in the coming week. They get a receipt in return. Sometimes, affluent people in the community take over the financial responsibility of the whole task, for example, one of the Imams said:

"Last summer, we announced after Jumma prayer that we needed to buy two ACs for the mosque, and it will cost PKR 130,000 (USD 1,300). At that very moment, our very own Haji Sahab (respected community member) took the responsibility of funding one AC unit and two other people split the cost of the other unit, and within two days we got the ACs installed."

**Mosque Management Committee** fills in whenever a stopgap is needed, and each member contributes according to his or her financial situation. They also help spread the word among affluent members of the committee whenever there is a shortage of or an urgent need for funds. One Imam said:

"Our (mosque committee) president is a retired (army) major and every time we have a task we need money for, he's told us to run a special campaign and whatever (amount) is the shortage, we can take from him. Once we needed PKR 800,000 (USD 8,000) to erect a gate for the mosque. We collected around PKR 400,000 (USD 4,000) and he gave us the rest."

**Loans** are taken out in cases of emergency. These are interest free loans given by members of the mosque in case some urgent expenditure is required. This loan can either be in the form of cash, or in-kind supplies from neighboring shopkeepers. The loan is paid back once the donations have been raised. While speaking about renovations of his mosque, one finance secretary said:

"We have an ongoing 'khaata' (log of financial dealings on credit) with the nearby hardware shop. They respect us and whenever we go to them to buy material for mosque repairs and construction, they do not ask for money. If we have money, we give it to them on the spot, and if we do not, we send it to them once we collect the donations."

**4.2.3 Mosque Management and Administration:** 5 out of the 6 mosques were registered. The Imam of the unregistered mosque said:

"We went to the district office for registration but community members from a different sect created a conflict at the office and did not allow us to register. In order to avoid any serious situation in our village, our mosque's management decided not to register, and so we are still not registered."

He further told us that unregistered mosques lack proper management, as they do not have committee members, or associated funds. Imams of such mosques usually do not get any salary and do their work for the sake of God. We found out that almost all donations are in the form of cash, but in some rare cases, they may be in the form of a check. The Imam and other mosque employees count all the donations they receive once a week and hand it over to the finance secretary.

**4.2.4 Donation Record, Storage, Spending and Transparency:** The finance secretary keeps the record of all transactions on his register manually and keeps the invoices of all purchases. Upon asking mosque personnel about digital record keeping through smart phones, one Imam said:

"I cannot operate a mobile phone except calls but our finance secretary is technology literate and have a touch phone (smartphone). He can add the record of community individuals who wish to make their donation entries in mobile phone."

To both finance secretaries, digital record keeping seemed appealing as one of them said:

"This paper-based record is prone to damage. I have a smartphone and I would be happy to add details provided I have to add limited details. I hope we can save data in mobile phone for a longer duration than these papers."

Out of the 6 mosques that we interviewed, only 1 had a bank account. While asking them the reason for not having bank accounts, all Imams said that their finance secretaries want to avoid the hassle to go and open up a bank account. One Imam said:

"We do not collect that much money from donations that we go and do all that documentation at banks to open up an account. Our finance secretary keeps the cash and we use it as per the needs."

In terms of deciding the priority of expenditure, the Imam brings all issues to the mosque management committee, and gets approval on projects that are of higher priority. The Imam, finance and joint secretary then do the purchases and start the work. There is very little transparency towards the public, where members of the mosque only find out about the use of their funds in the case of special donation campaigns. Most mosque personnel welcomed the opportunity for increased transparency, and one Imam said:

"It is all about building trust. Whether they ask for it or not, we should tell the donors where their money is being used. And it can help us getting more donors."

## 5 DISCUSSION AND FUTURE WORK

Interviewing mosque personnel and experts revealed that mosques receive both compulsory and optional donations on regular basis, but have no defined system to manage this donation. The current financial record registers show that the mosques' management lacks sorely in proper record keeping of transactions, which leads to poor or zero transparency of the same. The Imams expressed great interest in increased transparency, as they felt that this could lead to greater fund collection. We believe that better record keeping, leading to increased transparency, can be made possible with mobile devices, and mobile money. 2 out of 6 Imams we interviewed owned smartphones while the rest had feature phones. Finance secretaries of 5 mosques had access to smartphones. Based on these findings, keeping in view the mobile penetration in Pakistan and the 23.6 million branchless banking accounts [4], we propose the creation and exploration (in future submissions) of a mobile-based application for mosques' finance secretaries with three distinct features:

**(i) Record Keeping:** A simple record keeping mobile-based application for finance secretaries to keep a record of donations; it will be used to create local contact books of different mosque patrons, identify the category of donations, and send messages for specific campaigns.

**ii) Mobile Wallet:** The mobile-based application will be linked to the mosque's account at a mobile money operator, and the finance secretary will be able to see the balance and transactions of the account.

**iii) Transparency Messages:** The application will automatically send regular updates in the form of SMS to donors and patrons about the utilization of funds.

In addition to investigating transparency messages impact from donors, in our next round of interviews, we will explore the implication of digital donation platform that allows patrons to transfer funds from their mobile money accounts to the mosque's account.

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