

# Optimizing Charitable Donations with Mobile Technology: A Comprehensive Study

Muhammad Hassaan Raza Khan<sup>1</sup>, Ashish Diwakar Jha<sup>2,\*</sup>

## Abstract

*This article explores the utilization of mobile applications for charitable donations, facilitating connections with various responsible NGOs. The primary aim of these mobile applications is to streamline the donation process for individuals, enabling them to contribute money, food, clothing, and other essentials efficiently and effectively. Traditionally, donations are made via individual NGO websites or by directly transferring funds to provided account numbers. Mobile applications revolutionize this process by transforming laborious efforts into smart, streamlined actions. Using an app, users can easily find nearby NGOs without needing to search through multiple websites or contact information, thanks to integrated API software. This convenience addresses concerns about contributing to lesser-known NGOs, which are often avoided due to scams and payment security issues. Additionally, many people are unaware of the diverse initiatives offered by various NGOs to enhance societal welfare. The mobile application consolidates these resources, saving time, money, and energy by providing a comprehensive list of NGOs on a single platform. These donation apps bridge the gap between NGOs and donors, fostering direct connections and fulfilling the needs of both parties. However, like any technology, mobile donation apps have their pros and cons. While they can positively impact society by simplifying the donation process, they also present risks such as potential scams and misuse. The primary objective of this article is to assess the impact and implications of mobile applications for online donations. It aims to introduce the concept of efficient donation through apps, emphasizing the potential to bring joy and satisfaction to both donors and NGOs. The article will delve into the functionality of donation applications, the challenges faced by users, and protective measures against fraudulent activities. This research is a conceptual study based on secondary data, reflecting the author's perspectives and literature review findings.*

**Keywords:** Mobile application, NGOs, online donation, welfare, charity, mobile operation

## INTRODUCTION

In the ultramodern world, individuals use mobile bias to look after everything from reserving a flight ticket to reserving a hostel. If any association does not have a website or mobile operation designed for the druggies, they are, in fact, missing a huge occasion. A mobile operation for NGOs or charitable associations is a golden occasion for growing or increasing charity. This will help in adding donations more fluently when a mobile operation is created, allowing the benefactors to contribute further. Mobile operations are constantly evolving and developing into new commodities. We can observe that every procedure or any operation that we perform manually is being replaced by technology. To produce similar operations, the

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minimal necessity for tackling was generally set up to include computers with sufficient conditions. During the software period, people had their computers or laptops that could produce websites and use them. Up to a certain period, people used cyber-café to pierce websites. Sluggishly when people started to enjoy laptops, the number remained low compared with the population. After the preface of mobile phones, which were movable computers, the number of mobile phones bought by people was especially high, and the number of people who understood the operation multiplied. Moment, we can see that anyhow in any age group, people learn to use mobile operations effectively and efficiently. We can say that more people choose mobile operations for their stoner-friendliness and conciseness. Consequently, numerous inventors shifted to the development of mobile operations. The concept behind the creation of mobile device operations is convenient. This is because it is simpler to use mobile operations than on PCs and laptops.

There are few operations for NGOs or orphanages. These kinds of services need to be introduced in the form of a mobile app to connect the NGOs and the benefactors so that the benefactors can communicate or be informed about the NGOs on a single platform. There are numerous societal issues, such as cataracts, wars, and financial crises. Donations and charitable operations can help those in need and benefit from donors. All charitable associations and NGOs aim to do good for the people they help. They want to provide medical sources, food, clothes, aseptic, or any support they need. Mobile operations for donations are created in such a way that they encourage people to do commodity goods out of their liberality, which will help them feel good by seeing happiness or just a smile on others who need backing. Mobile operations for donations are designed for druggies in such a creative manner that they can upload or add motivational posts for benefactors to keep them posted about the charity, which will help them become involved and increase their network of people. In this way, the benefactors will have a constant link with the associations and will help them to know more about the information given easily in the mobile operation. As mentioned in the composition named “Mobile Application for Donation of particulars” published in the time 2021, a mobile operation named “UNATI SAMAJ” operation will help non-profit associations by furnishing them with coffers. It will also help the benefactors contribute to the indigent people on just one platform. This operation will help the benefactors contribute particulars to the nearest available NGO. Hence, the operation will produce an aground between the NGO and Donor and satisfy the requirements. With Reference to the composition named “*a study of the factors affecting mobile donation application use*” published in 2016, the use of smartphones is extensively being used and there is an emergence of new mobile donation operations. These operations transfer delicate tasks in an easy and accessible way without snooping into the diurnal schedule of the stoner.

## SYSTEM OVERVIEW

### Key Features of Mobile Application for Donations

Some of the key features of the mobile application for donations are listed below:

- Email verification feature added when the user registers an account.
- Adding the closest location to the donor for donations.
- Donors can donate money, food, clothes, books, etc. using a mobile device.
- The donors can see a list of NGOs available in the application.
- The donors can also see the location or address of the social institution.
- The donors can also view their donation history.
- Mobile donations help charitable institutions to increase their donations easily.
- Online payment mode which is fast and secure.
- Mobile apps are convenient and simple for charitable institutions and donors.

### Need for Mobile Application for Donations

The need for a mobile application is stated below:

- Easy donation methods help the donors to donate the items with just a tap.
- Mobile applications will allow the donors to track their donations.

- The app is a great way of offering transparency for donors.
- The application can create trust among the users by making them feel assured.
- An application is required to boost donating activities by providing appreciation posts or certificates.
- An app is a great way to engage, raise, and share funds.
- The app will keep the donors informed or alert about any critical situations.
- Through effective marketing, apps can motivate people to promote how their contribution impacts others' lives to make them feel good.

### **OBJECTIVE**

- To understand the need and usefulness of mobile applications for NGOs.
- Create awareness of how mobile applications can reduce the costs of advanced technology.
- To address the issue of less branding or the promotion of mobile applications for genuine donations.

### **STATEMENT OF THE PROBLEM**

Mobile applications for donations or charity can help reach more people in less time. Many issues in the world need to be addressed and spread among young people, which makes them interact easily on the Internet to pay online. The mobile application for donations aims to donate a little by tapping while you do your work. This is a great and feasible way to improve a person's life.

Due to the lack or lack of promotion of such kinds of applications for donation or charity, people are not aware of the calamities or issues people are facing in the world. If this issue or society's concern is not seriously considered, then our surroundings or community will be destroyed, leading to many problems, and our future generations will not learn the art of giving or donating to others.

### **LITERATURE REVIEW**

Bennett (2006) posits that the duration of benefactor contributions to charitable organizations is limited. The author suggested that donors not only add value to these organizations but also experience a sense of fulfillment and happiness by helping those in need [1].

Chen and Travis (2013) examine the usage patterns of mobile applications for donation purposes. Their study analyzed various demographic factors, such as age, social class, and region, concerning the adoption of mobile donation apps. They noted that the increased awareness and use of these mobile applications have been significantly influenced by natural disasters occurring in America [2].

It was revealed that people set up it comfortably and useful in giving through mobile operations in times of difficulty. Therefore, benefactors were satisfied by the gift of appreciation by people who were in demand or need. Choi and Kim (2016) stated that mobile operations have developed decreasingly and converted into easy and accessible operations for druggies in their diurnal workshop of living [3]. The author also noted that mobile applications for charitable donations have become a significant factor influencing people to utilize these platforms, with the study's results indicating a positive impact on user engagement.

Chen (2018) revealed that millennials, individuals born between 1980 and 1985, tend to trust charitable organizations with higher donation rates [4]. According to online surveys, millennials are motivated by celebrity endorsements and the simplicity of the donation process offered by mobile applications.

Choi and Kim et al. (2019) [5] discuss the differences in donation habits between millennials and older generations. They suggest that millennials donate less than older generations but can be encouraged to contribute more through online platforms. The authors believe that raising awareness and promoting online donations can significantly increase the charitable contributions of millennials.

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Mon and Cheng et al. (2020) examined individual behavior toward mobile donation applications and charitable giving. Their study found that mobile donation apps successfully achieved the intended outcomes [6].

Nethra and Varshini et al. (2019) [7] highlighted a mobile application feature that informs users of the exact time a product or resource reaches the end users. In today's busy world, people often forget important tasks because of their hectic schedules. Timely reminders can reduce time and monetary waste, allowing users to perform tasks efficiently and satisfactorily.

Kim and Kim (2021) highlight the shift from traditional donation methods to online mobile applications. They pointed out the current lack of online donation apps and insufficient marketing for these platforms. The authors suggest that increased marketing and awareness could extend the reach of these apps, bringing happiness to more people [8].

Florental and Awad (2021) discuss the impact of NGOs on millennials through social media for donations [9]. They identified three motivational factors—entertainment, social morals, and private morals—that positively engage millennials with NGOs. The authors conclude that engaging millennials with NGOs is crucial, as it benefits both the needy and organizations. Hence, millennials played a major role in this study.

Belekar et al. (2021) emphasized the critical role of NGOs in societal welfare. As nonprofit organizations often lack the necessary resources for donations, the authors propose mobile applications as a creative solution to support both individuals in need and the organizations themselves [10].

## **METHODOLOGY**

This article examines how a mobile application for donations by NGOs or charitable organizations can benefit many people who need assistance. The data collected for this study was secondary, and this was done through an extensive review of literature available on the Internet and the opinions of people who donate in their day-to-day lives. Some data was collected from various articles. The main aim of this research was to link NGOs with donors with just one click of a button by simply sitting comfortably at home. In this study, the importance of technology for charitable organizations was essential, as it helped increase donations. This study is conceptual.

## **FLOWCHART FRAMEWORK**

In the face of rising food insecurity and waste, a well-designed food donation application can bridge the gap between surplus food and food in need. This framework outlines the essential components and functionalities required for an effective food donation application that facilitates seamless interaction between donors, recipients, and volunteers.

The Food Donation Application Framework provides a structured approach for developing a platform that addresses the critical need for efficient food donation and distribution, as shown in Figure 1. This framework aims to facilitate impactful food donations and reduce food waste by focusing on user needs, food safety, logistics, and security.

## **CONCEPTUAL FRAMEWORK**

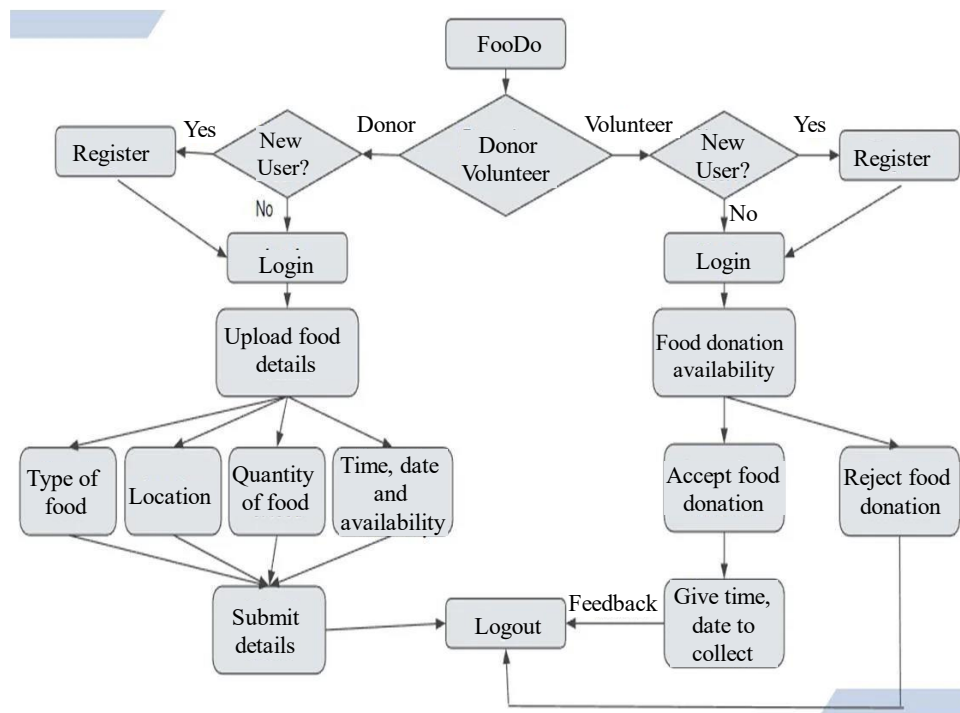
Figure 2 depicts the interaction between a donor and an admin with the application. A donor, represented as the user, is required to register by filling in all the details in the system. After registration, the donor can login to the system and control its activities.

For instance, donors can contribute money or donate to care packages listed in the system. Charitable organizations can then collect these donated items easily, as specified in the designated locations, all within a single platform. In addition, the system records all donations and orders in a database and

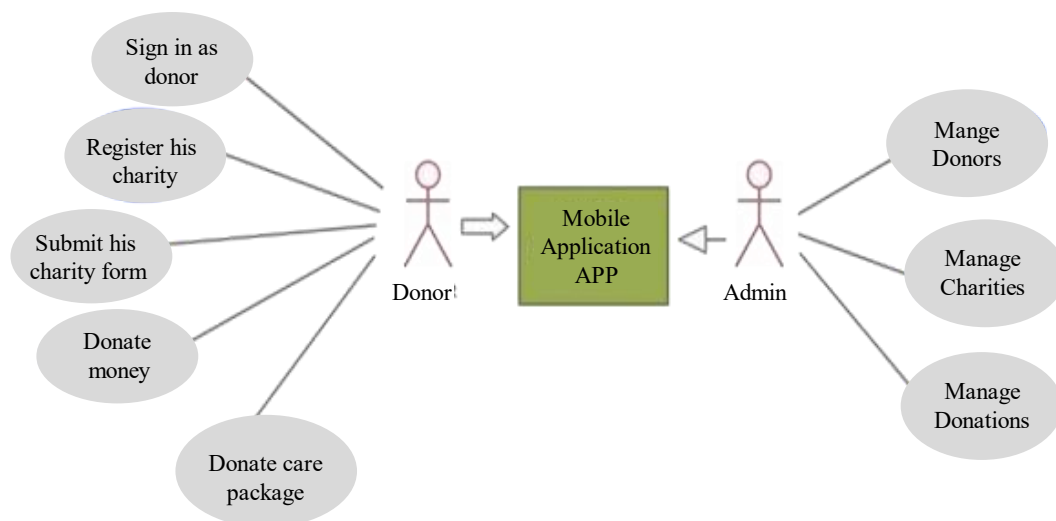
notifies the donor with reward points upon the completion of their contributions. The admin can monitor the progress when it is logged into the system. There are three buttons on which the admin can monitor and select. The first button allows the admin to view or manage donors, the second button allows the admin to view or manage charities, and the last button allows the admin to manage donations.

### Mobile Application Donation and Internet Donation

Mobile donations provide a convenient way to donors compared to people who donate via the internet. In mobile application donations, there is a list of NGOs listed in that particular application. Donors can choose the particular NGOs that they care about. In Internet donation, the donor has to search for individual NGOs that provide according to their needs. It is very difficult for each NGO to search the Internet. One disadvantage of donating through the Internet is that it can lead to many scams and fraud.



**Figure 1.** Food donation application framework.



**Figure 2.** Common applications for donations.

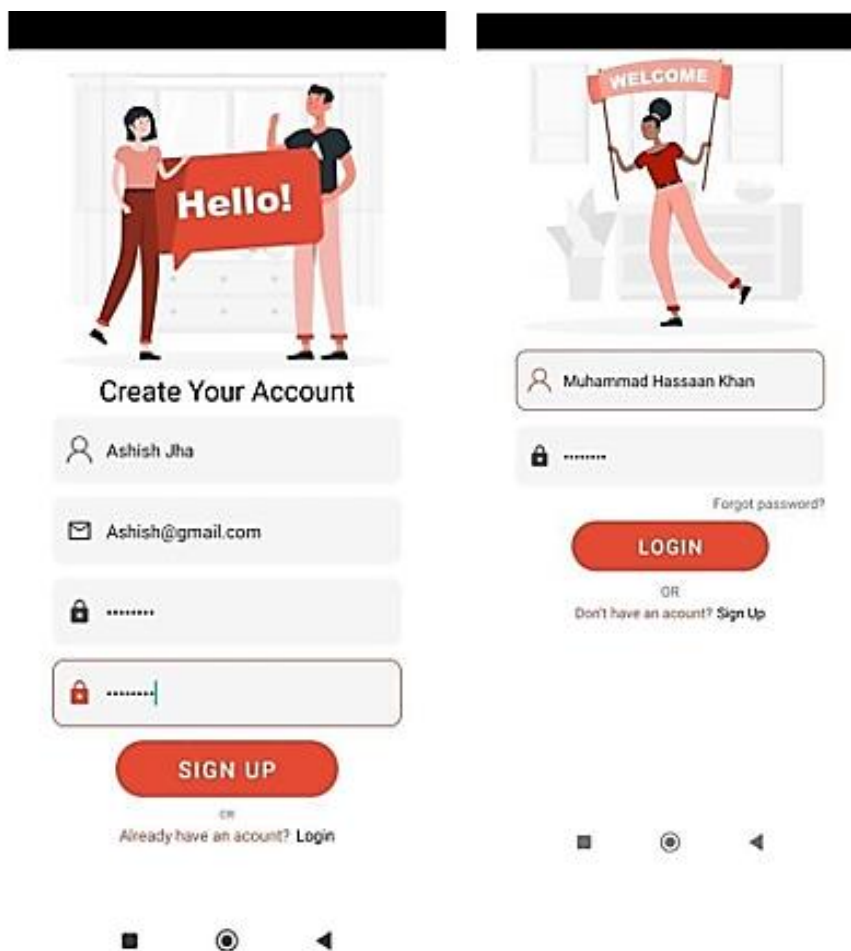
If a mobile application for donation is present, it can solve many problems, as all the NGOs listed in the application are trusted and listed by the government. Mobile application donations will also help to increase the network of people by linking many NGOs and various charitable organizations on just one platform. Most importantly, people accept or value ease in their daily lives. Mobile applications will help their lives get easier with just one click of a button that can reach out and help others by donating without complexity, which could have taken much time.

Figure 2 shows the commonly used applications for donations. Today, everything has applications and so on. These applications help donate money easily through a single window and help non-profit organizations grow and meet their missions. The emergence of smartphones has made it convenient for users to engage with various non-profit organizations. The USP of these apps is that they offer unique or creative ways to make donations and help users understand social responsibility.

### UI/UX OF APPLICATION

Creating a user-friendly and visually appealing UI/UX for a mobile application focused on charitable donations is crucial for engaging users and encouraging their participation, as shown in Figures 3–9. Some key considerations for the UI/UX design are as follows:

- Intuitive navigation
- Clean and engaging interface
- User-centric design
- One-click donations
- Responsive design



**Figure 3.** Sign up and login page.

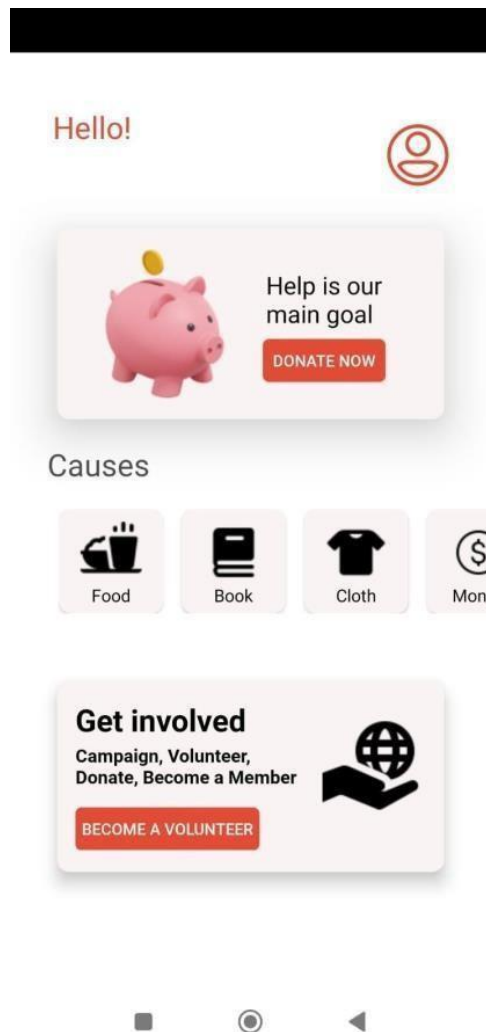


Figure 4. The main page of the application.

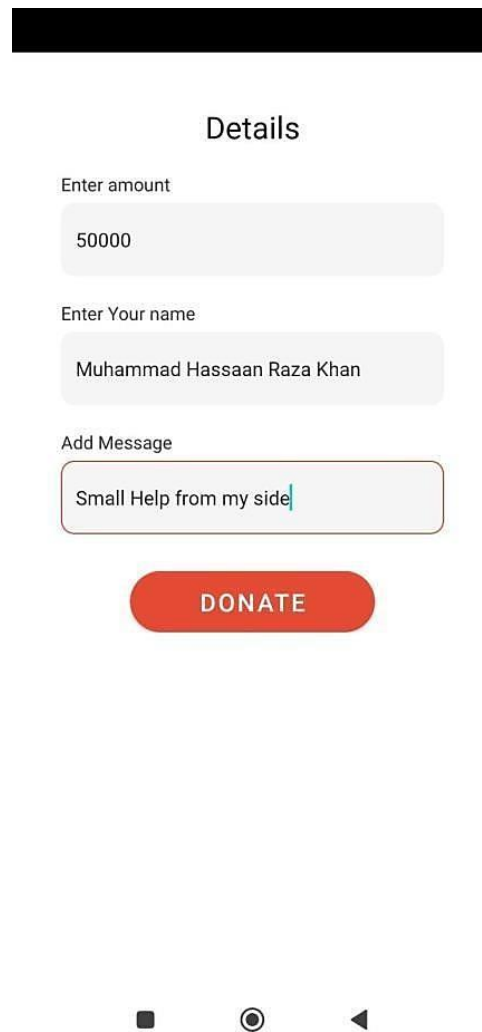
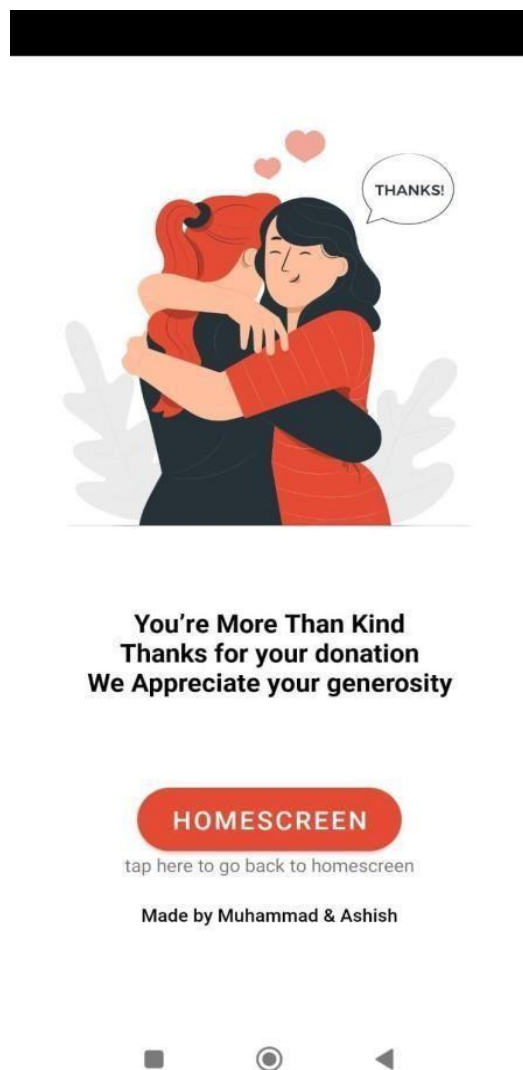


Figure 5. Details of the donation.

### Commendations

In this research article, we laid down a few recommendations that can help NGOs and donors use the application conveniently and make life easier. Some of the recommendations are as follows:

- Items may end up in the trash or go unused; therefore, mobile applications can positively impact the waste management of clothes, food, books, etc.
- The application for donation should post the resources required effectively so that the donors donate the same.
- Mobile applications should be easy to use and keep personal information safe and secure, as payment will be made online.
- Mobile applications should be free from cybercrimes, as the contact details of both donors and NGOs are posted.
- Effective campaigning or promotion of such mobile applications should be done largely to increase donations and improve lives.
- To provide knowledge to underprivileged people about mobile applications for donations in regional languages.
- The three fundamental basic needs, food, clothing, and education should be made available to people who are in need as soon as possible online.
- With extra assets and resources, people who want to return to communities that need assistance are to be guided to such mobile applications.
- To spread awareness about the welfare of the community.



**Figure 6.** Appreciation page.



**Figure 7.** Volunteer details submission page.

There are applications for shopping, paying bills, ordering food, etc., but there is no platform or an application at large in today’s world for donating the basic needs of underprivileged people or people who are unable to do it on their own. Hence, this should be addressed to the people as soon as possible.

### Survey of the Product

Figures 10–18 are the survey of the product.

### Conclusion of the Survey

A survey conducted to explore user preferences and attitudes toward mobile applications for charitable donations has yielded valuable insights into the motivations, concerns, and expectations of potential users. The findings can guide the development and enhancement of such apps to align better with user needs. The key takeaways are as follows.

#### Demographic Insights

- The majority of respondents fell within the 25–34 age group, suggesting that younger demographics are more likely to engage with charitable donation apps.
- Users across various locations and genders express an interest in the concept, highlighting the potential for widespread adoption.



### Details

Category of the Book

Chemistry

Name of the Book

R.D sharma

Pickup Time: 7:30      Pickup Date: 06/07/23

Pickup Location

Mira Road

**DONATE**

OR

You can donate Money [Tap Here](#)

**Name-** R.D sharma  
**Donated-** Chemistry  
**Location-** Mira Road

**Name-** Let us C  
**Donated-** Law  
**Location-** kurla

**Name-**  
**Donated-**  
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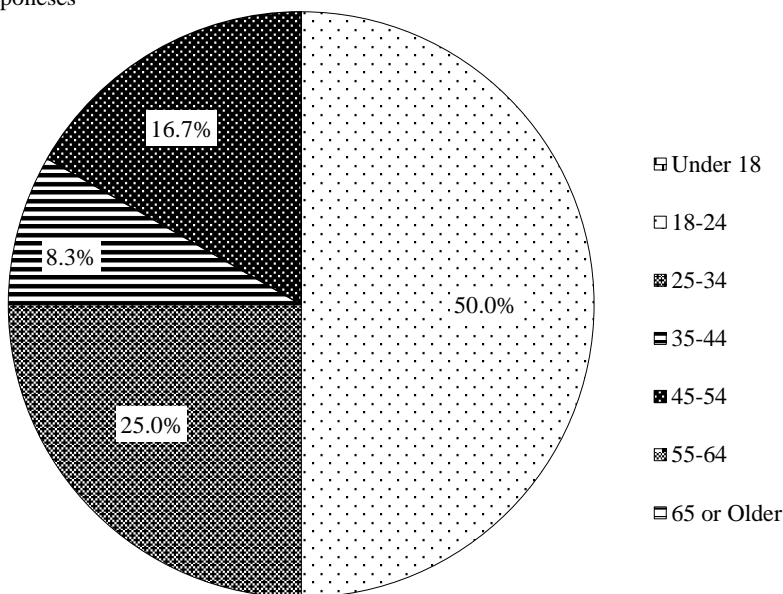
**HOMESCREEN**

tap here to go back to homescreen  
[Give Feedback](#)

**Figure 8.** Book a donation page.

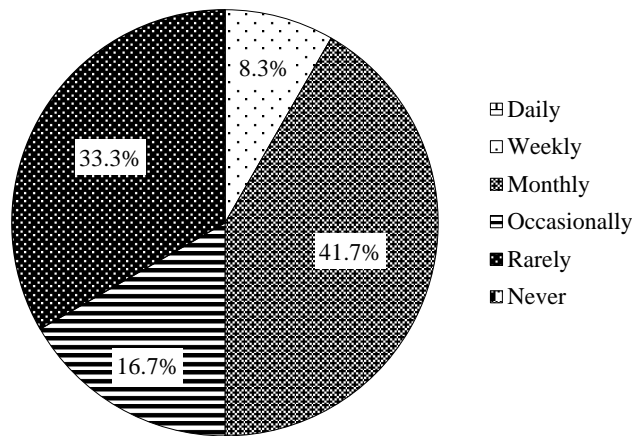
**Figure 9.** All donation lists.

Age:  
 12 responses



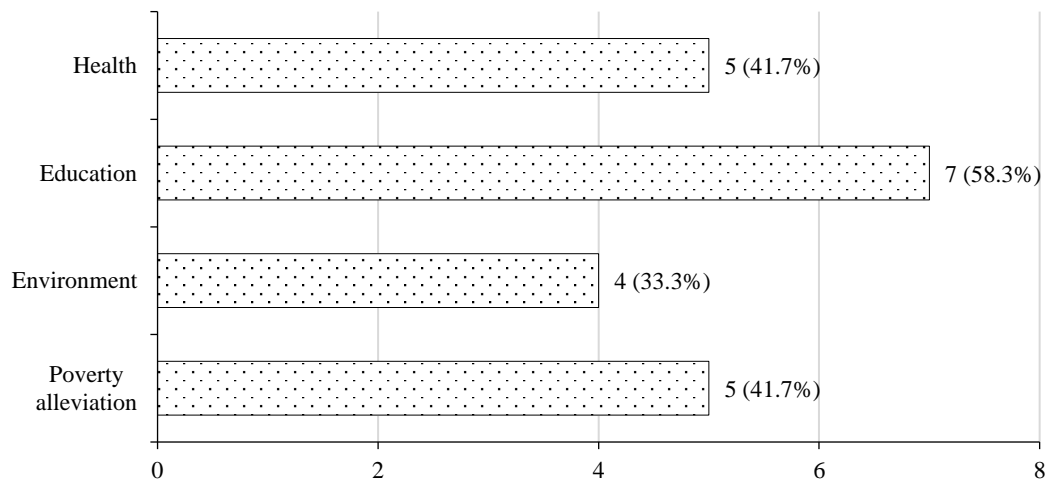
**Figure 10.** The age group of donors.

How often do you currently donate to charitable causes?  
12 responses



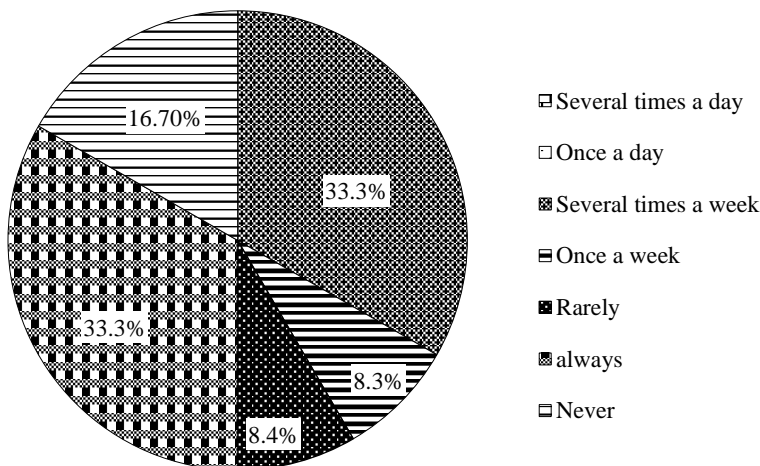
**Figure 11.** How often do you donate to charitable causes?

What types of charitable organizations do you typically donate to? (Select all the apply)  
12 responses



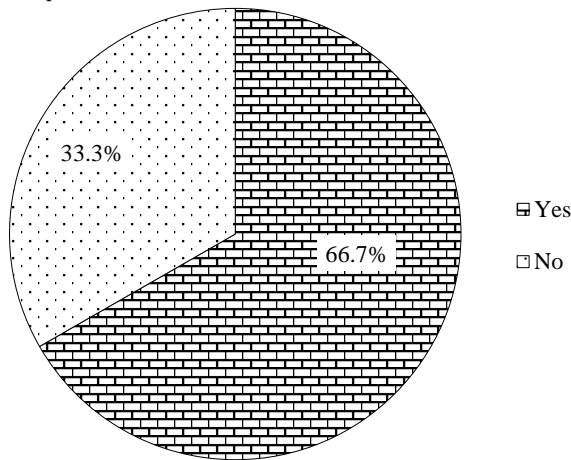
**Figure 12.** Types of charitable organizations.

How frequently do you use mobile applications for various purposes?  
12 responses



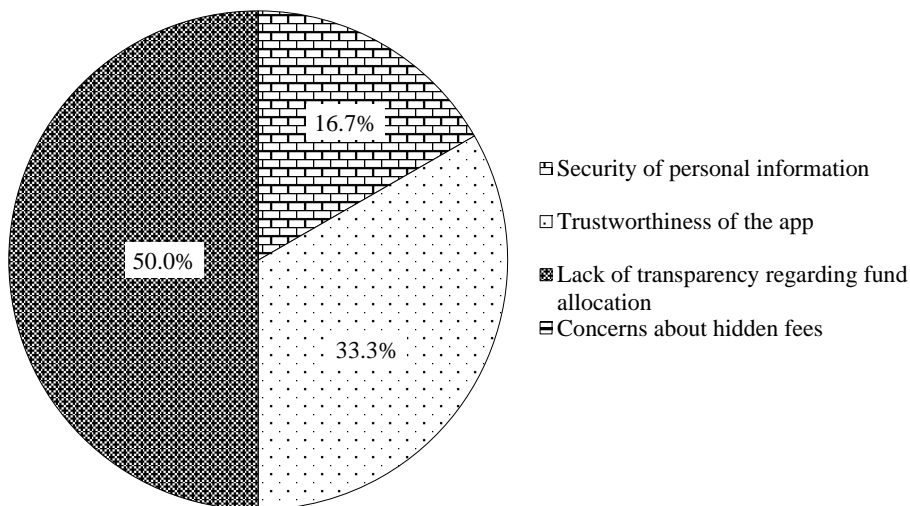
**Figure 13.** Frequently use a mobile application.

Are you comfortable using mobile apps for financial transactions, including donation  
 12 responses



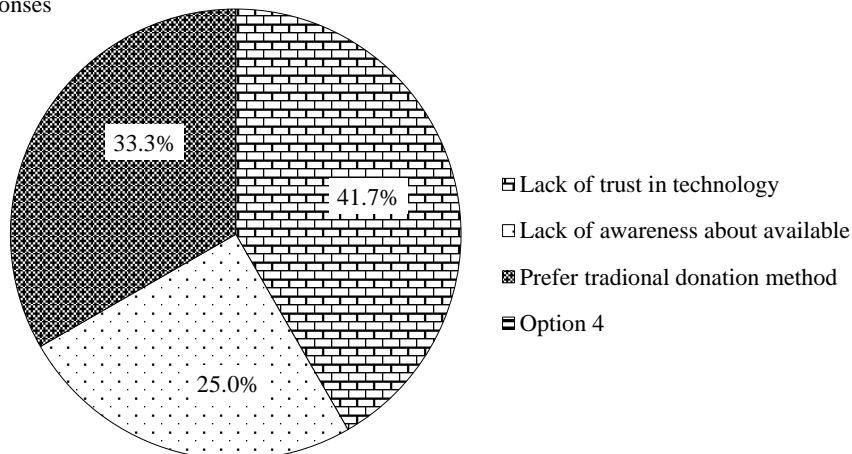
**Figure 14.** Comfortable ratio using mobile applications.

What concerns, if any, do you have about making charitable donations through a mobile app?



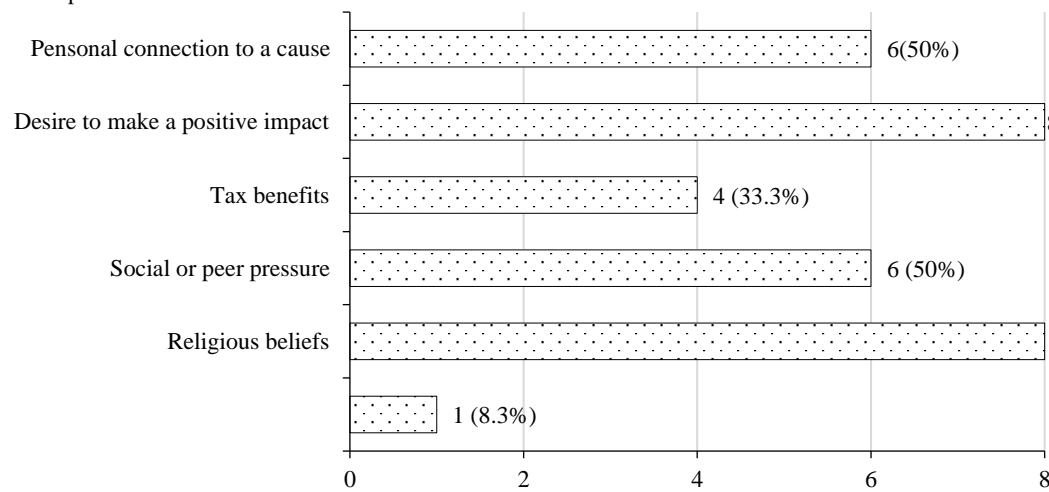
**Figure 15.** Charitable donations through mobile.

What factors might prevent you from using a mobile app for a charitable donations?  
 12 responses



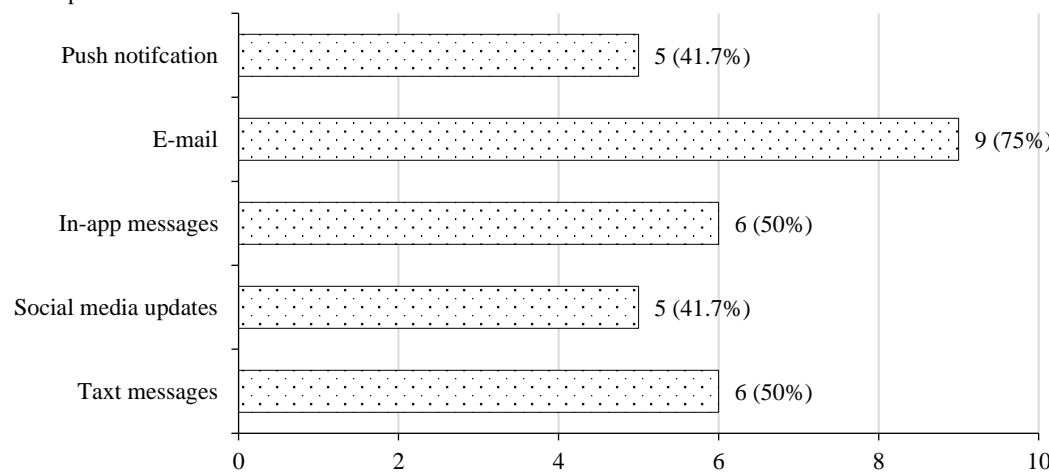
**Figure 16.** Factors affecting using mobile applications for charitable donations.

What motivates you to make charitable donations? (Select up to three)  
12 responses



**Figure 17.** Motivation to make donations.

How would you prefer to receive update and information from a charitable donation app  
(Select all that apply)  
12 responses



**Figure 18.** Notification updates for applications.

**Current Charitable Donation Habits**

- A significant proportion of respondents made occasional donations, emphasizing the need for apps to cater to varying donation frequencies.
- Health and poverty alleviation are popular causes, underscoring the importance of including diverse charitable organizations’ in-app offerings.

**Mobile App Usage**

- A substantial number of respondents were comfortable using mobile apps for financial transactions, creating a favorable environment for the adoption of donation apps.

**Charitable Donation App Preferences**

- User-friendly interfaces and secure transactions have emerged as top priorities, emphasizing the importance of a seamless and trustworthy user experience.
- The potential impact of gamification elements and rewards on user engagement suggests the importance of incorporating these features into app design.

In conclusion, a successful charitable donation app should prioritize security, user-friendliness, and personalization, while addressing concerns related to transparency and awareness. Engaging users through effective communication and incorporating features that align with their motivations can contribute to the overall success and adoption of such applications. This survey provides a foundation for further research and development of the ever-evolving landscape of mobile applications for charitable donations.

## **CONCLUSION**

In conclusion, this study aims to promote social welfare on a large scale through a mobile application that centralizes essential services for underserved individuals and charitable organizations. By providing a single platform, the app addresses the numerous challenges faced by disadvantaged communities, offering satisfaction and joy to both donors and recipients. The mobile donation application acts as a bridge between NGOs and benefactors, enabling donors to easily select and support NGOs of their choice. This facilitated the growth and development of NGOs through enhanced support.

The potential of mobile donation applications should be recognized and widely promoted to help create a prosperous and joyful future for those in need. Many people are unaware of the initiatives undertaken by NGOs, and although they are willing to contribute, they face barriers. This application can alleviate such issues, making the process simpler and more effective, and ultimately enriching the lives of both donors and beneficiaries.

## **Future Scope**

The future scope of mobile applications for charitable donations presents exciting opportunities for innovation, growth, and positive social impacts. Several trends and development areas can be explored to enhance the effectiveness and reach of mobile donation applications.

### ***Blockchain Technology***

Integrating blockchain can enhance transparency in donation tracking, providing donors with real-time visibility on how their contributions are utilized. This technology can also address concerns related to the misuse of funds and foster trust among users.

### ***Artificial Intelligence (AI) and Personalization***

Leveraging AI algorithms can enable apps to provide personalized recommendations based on user preferences, thereby making the donation experience more engaging and relevant. AI can also assist in optimizing marketing strategies and improving user communications.

### ***Virtual Reality and Augmented Reality***

Immersive technologies, such as virtual reality (VR) and augmented reality (AR), can be leveraged to create interactive experiences, highlighting the impact of donations. Virtual tours of project sites or augmented reality overlays that provide information about the cause can deepen users' emotional connections and understanding.

### ***Social Media Integration***

Strengthening integration with social media platforms can amplify the reach of charitable donation applications. Incorporating features that allow users to easily share their contributions, milestones, or campaigns on social media can facilitate organic growth and community-building.

### ***Cryptocurrency Donations***

Embracing cryptocurrency donations can broaden the scope of international research. Accepting various cryptocurrencies as a form of donation can attract tech-savvy audiences and streamline cross-border transactions.

### ***Impact Measurement and Reporting***

Developing robust systems to measure and report the impact of donations in a transparent and easily understandable manner can enhance accountability. Apps providing clear, concise, and visual impact reports can foster donor satisfaction and trust.

### ***Partnerships with Corporations***

Collaborating with corporations for corporate social responsibility (CSR) initiatives can open new avenues for fundraising. Apps can facilitate partnerships, enabling corporations and individuals to contribute collectively to social causes.

### ***Gamification for Social Good***

By expanding on gamification elements, apps can introduce interactive challenges, competition, and achievements linked to charitable contributions. This approach not only incentivizes giving but also fosters a sense of community and friendly competition among users.

### ***Educational Initiatives***

Integrating educational components within the app can increase awareness of social issues and the impact of charitable donations. Providing users with information about the causes that they support can contribute to a more informed and socially conscious user base.

### ***Global Collaboration and Crowdsourcing***

Enabling global collaboration through crowdfunding initiatives can collectively empower communities to address both local and global challenges. Apps can facilitate the creation of campaigns to attract a diverse range of supporters worldwide.

### ***Data Security and Privacy***

Given increasing concerns about data privacy, future apps should prioritize robust data security measures to protect users' personal and financial information, fostering trust and confidence among donors. The future of mobile applications for charitable donations lies in embracing emerging technologies, enhancing user engagement, and addressing evolving societal needs. Continuous innovation, commitment to transparency, and user satisfaction will play pivotal roles in shaping the success and impact of these apps in the future.

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