

# Need of a Localized Social Network Platform for Crowdfunding in Pakistan

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**Abstract** — The social networks have empowered every person today and have become effective platforms for people to share things of their interest and concern. People and NGOs are also using social networks to raise funds for social, personal and communal causes. Different Non-profit organizations run campaigns to raise funds for their projects using some traditional techniques i.e. by trending on hashtags, tweeting and creating Facebook pages. More than 85% of Pakistan population is middle or under middle class and about 25M Pakistani use social networks. People especially students from middle/lower-middle/poor classes mostly are in need of funds to support their family, education or business but have very few platforms to raise funds. Moreover, they do not have enough technical knowledge and resources to run effective campaign for fund-raising on social networks. Working on a dataset of over 10 projects on 5 crowd-funding platforms with collective funding over Rs.1 M in Pakistan and analyzing over 20 Facebook pages and Twitter accounts about campaigns for fund-raising for different causes, this research offers a description of different factors of success and failure for crowd-funded projects and suggests that social networks based crowdfunding platform can increase projects success rate and can win trust and reliance of stakeholders. Our focus is to evaluate the need of an authentic, recommendation-based, reliable and credible platform for Pakistan where fund seekers request donations from a large group of potential donors and donors can contribute funds to qualified projects based on their preferences. This platform is also intended to overcome language barrier for peoples to work for their causes by providing localized version i.e. local language, currency and other features.

**Keywords** — *crowdfunding, localization, social network, social fundraising*

## I. INTRODUCTION

In past years, the world has observed and found many issues like huge population, inequality in education, social stratification, on the other side climatic changes which impacted on environment and caused environmental disaster. Due to huge population and less supportive resources in the world some volunteers come in front and do effort to help individuals or community to rescue them from the disastrous situation. Nevertheless, one important issue associated with charitable or helping organizations is finance. Currently the volunteers could be able to raise the funds through various ways

like internet, communicating with masses through social media or platforms for raising the funds for beneficiaries or fund-seekers.

Social fundraising is multi-tiered approach for crowdfunding, we may call it P2P because on the social media donors as a main resource create a page for fundraising but the real fundraisers on social media is another issue, they could not get the trust of other donors through social media platform. A fundraiser has its own surrounding and pay more attention at their own supports (friends, community or family members). There may be other so many channels and they are gradually becoming very important channel for youth and the number of these channels increasing day-by-day.

The channels may be categorized into three categories: (a) Direct emailing for campaigns (b) online channel (mobile giving a specific type of fundraising or crowdfunding) and (c) multi-channel a mixture of direct and online channels.

**Charity Funding:** The studies shows that in charity funding the donors are influenced very much by social media platforms, friends, family [9].

The donor's decision has a specific pattern which is based on their behaviors (by categorizing them by their giving: either they are frequent givers and amount they give). The charity funding is a kind of generosity, all individuals have no such feelings to donate as a charity but people may be convinced through building the trust on social media pages and this is again a challenge, as social supporters have no enough knowledge and experience for discovering donors, they just create pages on social media and start campaign, this type of campaign is not automated but needs the communication of people who are again not aware of this great cause, on the other side mostly these messages are ignored on social media pages.

supporters do not have enough knowledge or experience with discovering donors. They usually broadcast campaign pages (or their fundraising page if they are created) to their social media (such as share to Facebook wall or tweet on Twitter) or use message directly (such as E-Mail or Facebook message). But it will cause communication fatigue and those messages are likely ignored. Hence, "How to support novice of fundraiser at social fundraising" is one important issue about social fundraising's efficiency. This research will design a social-based recommendation mechanism that fundraisers will receive the

mostly likely list of donors based on their own social network and preference. In this paper, we will develop a recommendation mechanism considering about the relationship between donor and fundraiser, donor behavior, fundraising phase to enhance a donor’s giving willingness and relationship with fundraiser [1][1].

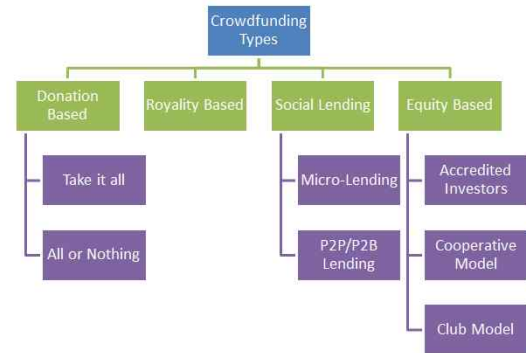
II. RELATED STUDY

A. Fundraising

The major goal of recommendation systems is to recommend most suitable content (or thing) to a specific user. In general, those systems use historical data to model specific user’s behavior and push most suitable thing to a specific user. The recommendation system can be classified to three types: content-based, collaborative filtering, and hybrid (combining content-based and collaborative filtering) [1][2].

[3][1] It is need for building a community that ultimately enjoys additional private bene ts from their participation to make crowdfunding a viable alternative to investor- or creditor-based funding such as through banks, business angels or even venture capital. In setting up the initiative, the entrepreneur potentially faces the following trade. Crowdfunding al-lows for price discrimination if pre-ordering is used. The capacity to optimally implement price-discrimination between pre-ordering consumers (thecrowdfunders) and other consumers may however be constrained by the amount of capital that the entrepreneur needs to raise to cover the up-front ( xed) costs. Whenever this amount exceeds some threshold, the distortion in the price discrimination becomes excessive, in which case the probability of the crowdfunding initiative is reduced, and the entrepreneur may be better approaching a single, larger investor (a bank or a large equity investor) who can cover the full costs on its own. To our knowledge, this is the very good study a theoretical analysis of crowdfunding. It also highlights new follow-up research questions on the topic. For instance, an interesting avenue for future research is to incorporate the fact that the crowd funders can at times also participate in strategic decisions or even have voting rights. In this case, control rights and voting power become an additional for the participating crowd.

Crowdfunding through pre-ordering will have a very different e ect on in- formation and voting results than if the crowd purchases equity in the entrepreneurial rm. Also, outcomes of votes can provide valuable insights into the optimal design of products if the voting community is representative for the overall population of end-consumers.



Our focus is donation-based crowdfunding.

B. Donation-based crowdfunding

In donation-based crowdfunding, donors generally donate small amounts (again, typically between \$1 and \$1,000, but sometimes more). Like the name suggests, in a lot of donation-based crowdfunding, there isn’t always a reward beyond the gratitude of the project creator or beneficiary (and possibly a tax deduction). Donation-based crowdfunding is typically used to raise money for a non-profit or a cause, like drilling a well or building a school in Africa or for a personal campaign like an individual’s treatment or medical bills.

GoFundMe and CrowdRise are two popular donation-based crowdfunding platforms but there are lots of others. You can also do donation-based crowdfunding on Indiegogo and even Kickstarter, but you have to be within each platforms guideline. For instance, on Kickstarter you can’t promise to donate funds raised to a charity or cause.

Donors’ understanding and perceived credibility of a fundraising campaign play a pivotal role in convincing to donate money for a particular project. Also, the content provided in campaign is also a key aspect to attract donors, a video message from fund seekers, some pictorial proof and recommendations from other people is important. It is proved that quality, content and positive effects of website and content quality on both empathy and perceived credibility. It is observed that initiator reputation for donor and rating of fund-raising project is also worth it. The results associated with the impact of technological characteristic (website quality) on empathy warrant further discussion. Prior research on empathy largely considered it a personal characteristic and overlooked how technology (e.g. Website quality) stimulates empathy. Our findings add to the literature on empathy by empirically verifying how technology triggers empathy. More specifically, website quality in terms of security, navigability, visual appeal, and convenience of payment are key factors which predict funders’ empathy for charitable crowdfunding projects.[3][2].

### C. How People are using Social Media for Crowdfunding Projects

Social networks have become an integral part of people life. People plan a crowdfunding campaign; focus on the social channels that will provide the most impact. They pick the right channels, consider these questions:

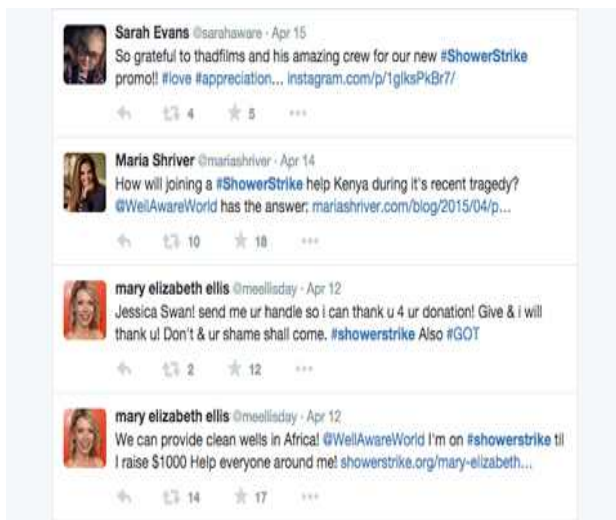
- On which channel do you have the most followers?
- Where do your prospects converse and share?
- What people have the greatest influence in your community?
- Which platform are you most comfortable with?

For most crowdfunding campaigns, the right channels will typically be Facebook and Twitter, because they reach the most people and encourage the most interactivity.

But also take into account where you're most active socially and on which platforms your community is talking. Instagram is becoming increasingly popular, and LinkedIn may be more appropriate if your campaign caters to a professional audience.

### D. Select a Campaign Hashtag

Create a unique hashtag for your crowdfunding campaign and use it in all of your social media posts. This allows you to organize the posts into one topic page. With all of the conversations in one place, people can easily find them and learn more about your crowdfunding campaign.



Encourage your supporters and donors to use the hashtag as well. This helps you keep track of what people are saying about your campaign and draw in new people unfamiliar with it. Your community is the most powerful asset for meeting your crowdfunding goals. Your followers help you reach new audiences, drive donations and create social proof. Rather than rely on only your existing Facebook network, amplify your reach by creating a Facebook page for the campaign.

### E. Create a Facebook Page



A campaign-specific Facebook page is a central place to host the true believers in your community and post updates without diluting your existing brand or outreach. The Gauntlet, a crowdfunding campaign by Mox Boarding House, created a Facebook page to engage a core group of advocates within their community.

### F. Crowdfunding in Pakistan

“Faith-based organizations” (FBOs) are gaining increasing attention within development circles—among practitioners, funders, [4] [1] and policymakers as well as academics. It is argued that zakat should be incorporated into poverty reduction programs. The successful implementation of zakat collection and distribution is expected to reduce poverty and improve living standards of poor citizens in Bangladesh, Malaysia, and Indonesia and become a model for many other similar countries. Zakat is a spiritual tax paid by every Muslim under any circumstances. Therefore, the acceptance of zakat funds is relatively stable. This will ensure the sustainability of poverty reduction programs, which typically the investigation into determinants of money donation intentions while employing an extended theory of planned behavior model is limited to developed country contexts. However, given the challenges facing charitable organizations and scant theoretical evidence from developing world, such an examination can contribute pragmatically. The current study establishes the impact of subjective norms, perceived behavioral control, past behavior, and attitude on respondents’ money donation intentions to charities in Pakistan. The respondents (N=223), a non-student population living in the city of Gujranwala, completed a survey. The collected data are analyzed by means of a multivariate analysis, which was comprised of regression and correlation. The results reveal a strong support to the extended theory of planned behavior model in establishing the relationship

between identified independent and dependent variables in a developing country context of Pakistan. The study contributes to the establishment of a few strategies, which are useful for managers working in charitable organizations to attract and retain donors to support several causes [4][2].

**III. PROPOSED MODEL OF CROWDFUNDING**

Currently there are few web applications that are focused for Pakistan and providing crowdfunding platforms. Also, NGOs are using social media to raise funds for their projects.

TABLE II FACTORS OBSERVATION

Factors	Observation
Unsuccessful Projects	There is about 40% projects failure rate on crowdfunding websites and 35% rate of failure using conventional social media campaign.
False Pledges	People like campaign and pledge in comments or verbally but they later forget to transfer money intentionally or unintentionally.
Fraudulent Fund Requests	There is 20% risk that fake people come and request for funds.
Unrelated Donors	People register as donors but do not participate in any campaign. There is no mechanism in web sites to identify such people and persuade them to take part
Unattended Campaigns	There are 30 campaigns unnoticed on crowdfunding web sites and social media campaign does not reach to desired audience.
Users' retention	Users return rate is very low.

According to our study, there are many factors that lead most of the online crowdfunding projects to fail or unable to complete their goal. It is a very crucial aspect to keep people engage and convince them to support your campaign. We have studied many websites and Facebook pages, twitter accounts that are working for crowdfunding. We have surveyed from 50 donors and fund seekers each and analyzed different factors that can affect success of a crowdfunding platform. We have analyzed that if following features are added to social crowdfunding platforms then success rate of crowdfunding platforms can increase, and projects will be completed in time that will help people to raise money for their needs.

**A. Fund Preferences for Donors**

It is observed against our study that donors want more control on choosing funds. They want to set their own preferences for funds. There are different aspects that donors consider while selecting a deserving campaign.

TABLE I TYPES OF DONATIONS

Type	Feature
Religious	Donations should be disbursed base of religion. e.g. Zakat can be given to Muslims only.
Ethnic	Donations are available to only for specific community.
Occasional	Donations are for disasters, Eids or some other festival
Categorical	Donations be given for Education, Orphan marriage or
General	Donations for any good purpose
Social	Donations given to social causes e.g. shelter for dogs, environment protection projects etc.

**B. Credibility of Fund Seekers**

It is proposed to add a unique feature in social crowdfunding platform that will help donors to determine the ranking and trust level of a fund-raising body. Normally, people exploit social network connections and exploit the trust of other people. If donor see the credibility level of a fund seeker to satisfaction level, it would be easy for them to decide whether to donate for them or not. Currently, stackoverflow.com uses a mechanism to give ratings and badges to its users that help other users to know the value of that user. Similarly, a credibility algorithm will be devised to know the ranking of a user. Following attributes can be used in calculating credibility of a user.

- Rating by other donors and users
- Relationship factor (between donor and fund-seeker)
- Verification by system
- Recommendation by other donors
- Localization

Localization is a very effective method to let local client know that they are important for you. Suppose our users are in Pakistan and speak Urdu then it is a good idea to localize our web application because it introduces an additional feature of our application and make it practical by users and it shows that we give regards to their local language, culture, and traditions.

**C. Recommendation Systems**

The major goal of recommendation systems is to recommend most suitable content (or thing) to a specific user. In general, those systems use historical data to model specific user's

behavior and push most suitable thing to a specific user. The recommendation system can be classified to three types: content-based, collaborative filtering, and hybrid (combining content-based and collaborative filtering). Content-based recommendation systems focus on analyzing a specific user’s historical data as user’s preference. Before ranking the item, it performs “item representation” to get characteristics of an item. It uses those characteristics of the items to construct user’s preference and ranking items by similarity of item. Finally, the system would generate the recommend list of items to user [6][1]. But this approach has some drawbacks, such as difficulty to extract characteristics of content and challenge to find other target users’ preference (over-specialization). Collaborative filtering recommendation systems focus on analyzing the similarity between a target user and like-minded users. It used like-minded users to inference the target user’s preference that is not presented [7][1]. This approach has the drawbacks or limitations, such as rating sparsity, new item problem and new user problem. Hybrid approach makes predictions based on a weighted combination of the content-based and collaborative filtering recommendation [8][1]

In Table III, we compare some of the great work of others in relevance of our work[5][1].

TABLE III RECOMMENDER ENGINE

Title of Recommender Engine	Year	References / Author
O.W.L	2000	Frank Linton, Deborah Joy, Hans-Peter Schaefer, Andrew Charron
P.R.S (Pers. Rec. System)	2009	Hendrik Drachslar, Hans Hummel, Bert van den Berg, Jannes Eshuis, Wim Waterink, Rob Nadolski, Adriana Berlanga, Nanda Boers and Rob Koper
Electronic Learn. Sys. (ELRSs)	2013	Pragya Dwivedi, Kamal K. Bharadwaj

**D. Social Networks**

The widespread use of the Internet and mobile platform has motivated the people popularly adopt social media such as Facebook or Twitter. A social network is a social media that everyone can use it to create, share and exchange their thinking through Internet. Hence, social network can disseminate information not only in small social circle but also a whole social network and results in a small world [10][1]. The first social network that we can identify is SixDegrees.com, named from six degrees of separation, in 1997(Ellison, 2007). After that, more and more successful social networking sites (e.g. LinkedIn, Facebook and Twitter) have shown up. Up to now, the social media is one of popular and important channels for

many domains such as marketing, politics and philanthropy In social network structure, each person connects with other persons and turn into a huge graph that we can extract information, knowledge, intelligence which we have never discovered with social computing [1][3].

**IV. CONCLUSIONS**

As a result of this research, we would recommend developing a social network-based platform for Pakistan that has a tailored crowdfunding recommendation engine which would help donors to donate for deserving people and campaigns. We also propose to build a credibility calculation mechanism that would build trust among donors and fund-seekers and will increase rate of success of campaigns. Our credibility model counts factors like rating by other donors, users’ relationship factor etc. Our model is based on fundraising campaign, donor preference, and relationship between donor and fundraiser. We show the possible contribution of the research from different facets as follows: For fund-seekers, our mechanism will help them to minimize entry block of donor and improve a donor’s will of charity. Donors can get notifications about fundraising campaign which is most suitable and deserving and get intimated about new fund requests from their social circle where they can contribute with confidence and faith. This system will attract common people on social networks to join this noble cause and put their share. This proposed system would need ample budget and timeline to build, we are hopeful to achieve our goal.

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