

# **An Empirical Study of IT use in Pakistani Civil Society Organizations**

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## ***Abstract***

*As voluntary organizations are different from business and governmental organizations in terms of structure, working methodologies and decision making, we are interested in the specific IT requirements and use in this sector. In this paper we investigate the Pakistani civil society sector to analyze the involvement of technology in their work settings. The paper also discusses two successful virtual voluntary organizations to highlight the potential of new media. The findings suggest that lack of technological and financial resources hinder them to adopt innovative solutions. The technological use is mostly limited, but the realization of its importance and urge to establish ICT infrastructures exist. So there is need for appropriating technology so that this sector in collaboration with government institutions can serve the public in a better way.*

## **1 Introduction**

The rapid growth of information technology has revolutionized most aspects of human life. This advancement in technology is very helpful for civil society

organizations as well. Civil society organizations focus on information sharing, advocacy, lobbying, disaster relief, rehabilitation and strengthening development process (Mostashari, 2005). Examples of civil society organizations reach from community based organizations and non governmental organizations (NGOs) to activist groups, think tanks, trade unions, professional associations, cultural groups, religious organizations, informal citizen organizations, foundations, commissions, cooperatives, clubs and charities (Ghaus-Pasha et al. 2002).

Civil society organizations differ from business and government organizations on their objectives, organizational structure and decision making. Moreover, lack of funding and permanent employees adds further complexity in establishing IT infrastructures. In order to understand the IT requirements of these organizations, we need to analyze information about NGOs' practice. There has been related work on the use of information technology by civil society organizations. c.f. (Cogburn, 2004; Kavada, 2005; Kavada, 2007; Goatman and Lewis, 2007). These research efforts are carried out in the context of voluntary organizations based in developed countries. We are interested in finding the involvement of IT in work practices of organizations based in technologically backward areas to analyze the effects of digital divide. In order to find empirical data we focused civil society organizations in Pakistan. Pakistani civil society sector qualifies for an interesting case study due to couple of reasons along with its characteristics of technologically less advanced. The country is confronted by political, social, economic, institutional, and governance problems and there is large presence of civil society organizations. Secondly most NGOs suffer from weak management, limited access to resources and problems in their operations. Thus, these NGOs make an interesting case to adopt information technology potentials (NGORC, 2003).

The history of civil society in Pakistan goes back at the time of its independence in 1947. At that time many voluntary organizations helped refugees by providing humanitarian aid. During the early days of country's existence major focus of voluntary work was on rehabilitation and provision of basic services like health and education. Later in the 1970s military regime, NGOs started emerging to do social work welfare, and in 1980s voluntary organizations focused on local development by the availability of funding from government sources. In the 1990s there was substantial increase in the number of NGOs to take advantage of funding under the Peoples Work Program (ADB, 1999). The actual number of registered organization is estimated to be between 10,000 and 12,000 and the number is estimated to be nearly 60,000 if unregistered groups are also counted - and eight thousand trade unions exist too (Satar and Baig, 2001). Their size and scope vary from small organizations working at the grassroots level to well-networked organizations working internationally (Mostashari, 2005). They may be dependent on complete voluntary work with small budgets or they may have professional paid staff, whereas the majority lies between the middle. The source of funding for NGOs is distributed between foreign funding structures and indigenous public and private sector (Satar and Baig, 2001).

## 2 Empirical Work

In order to get an initial finding what role IT applications play in carrying out work practices by Pakistani civil society organizations, we established a detailed online questionnaire and targeted only the small voluntary organizations having a small number of permanent employees, because these organizations constitute majority of the Pakistani civil society. We further investigated two virtual organizations to get an insight of their operations by holding telephonic conversations and email questionnaires.

### 2.1 Online Questionnaire

The online questionnaire comprised twenty eight questions about the work practices of civil society organizations. Keeping in mind the low internet speed there were two alternatives of filling the form, either as an online form or by filling it in form of a Microsoft word document. We got response from eighteen different organizations, among them eleven online responses and seven email attachments. After the review of responses three responses were removed based on our eligibility criteria (small local voluntary organization) and completeness.

The geographic location of these organizations was distributed among three provinces of the country. Among them five organizations were from Sindh, three from Punjab, four from Northern Areas, N.W.F.P and Kashmir, whereas three were from the federal capital. The details of permanent staff members, IT staff and available infrastructure are described in table-1.

S. No	Application area of the organization	Number of permanent Staff	Number of IT staff	Annual IT Budget	Number of available work stations	Internet availability
1	Water and Sanitation	163	2	3000 Dollars(approx)	15-20	Yes
2	Poverty Alleviation	2	2	100 Dollars(approx)	Zero(IT infrastructure in process of setting up)	No
3	Community Development	8	0	500 Dollars(approx)	5	Yes
4	Healthcare	0	0	0	2	No Answer
5	Healthcare	25	1	10%-20%	8	Yes
6	Community Development	11	0	0	6	Yes

7	Social development	12	0	0	4	Yes
8	Community development	35	0	10%	8	Yes
9	Women development	6	0	400 Dollars(approx)	4	Yes
10	Community development	7	2	<10%	3	No Answer
11	Education	17	2	500 Dollars(approx)	10	Yes
12	Capacity building	32	0	20%	9	Yes
13	Education	26	6	30%	12	Yes
14	Community development	23	2	20%	5	Yes
15	Emergency relief	66	0	0	3	Yes

Table-1: Basic Statistics about the Organizations

Information technology has introduced new forms of information publishing means to help voluntary organizations to get more visibility. It was observed that among fifteen of these organizations, only six had their own website and among them only one organization was able to update the website regularly. Most of the organizations cited lack of technical knowhow as the major obstacle in updating the website. On the other hand the usage of virtual media to regularly publish online newsletters and reports was also limited. Only eight of the surveyed organizations made some use of ICT applications for the publishing activity and that too was limited to sending emails about organizational activities. The use of blogs and electronic forums was not in practice in any of the organization.

As the volunteers are backbone of most civil society organizations, the mobilization is an important task for them. With the advent of new ICT applications new forms of mobilization like SMS, Emails, online advocacy and online petition campaigns have emerged. In our investigation we found out that none of the organization was maintaining its mailing list through which interested people can be reached. Among the surveyed organizations only one organization was doing virtual campaigning. Only one of the fifteen organizations was using social networking sites to enhance its public profile, although in a recent social movement in Pakistan use of such technologies was visible (Saeed et al., 2008). There was also a trend of storing the information of volunteers who indulged with the organization's activities in the past. Nine organizations were storing this information manually whereas four organizations were not storing this information. Only one organization was using database systems to store this information while one organization did not answer this question. Ten organizations were using some form of ICT in the hiring process of individuals whereas five organizations were doing the entire process manually.

The collaboration among civil society organizations, donors and government bodies is quite important for the successful completion of goals. Modern

communication technologies can improve this entire communication process. In our investigation we found that three organizations were not collaborating with other civil society organizations while the remaining twelve organizations had collaborations with local and foreign organizations. Among them nine organization described that they use email communication. While communicating with donor organizations, ten organizations described that they use email communication. It was also observed that in order to give feedback of projects to donor organization, more complex tools like collaborative authoring; video conferencing etc. were not used. Only one of the fifteen organizations was using this kind of technology to better connect with donor organizations. In order to remain in touch with field activities, multiple communication methods were applied. Twelve of the surveyed organizations used some kind of information technology service like emails and mobile telephone to remain in touch with field activities. The communication with government agencies is also an important task in the collaboration process. Since the government offices in the Pakistan are not much advanced and use of information technology services is scarce, the communication of NGOs and government representatives is mostly based on physical meetings and paper-based communication. Only six of the fifteen organizations described that they use email communication with government official for coordination.

This initial investigation highlighted that the urge for adopting modern technologies is present but shortage of financial and human resources is a big problem. Eight organizations described the shortage of finances as the main difficulty in establishing IT infrastructures. This survey concludes that there is absence of modern sophisticated technology in practice but the email communication seems to be the most used service, as there are variety of free email services available.

## ***2.2. Case Studies***

In order to portray the potential of modern technologies for civil society organizations we made two case studies of two virtual voluntary organizations working in Pakistan.

### ***2.2.1. Organization A***

This is a small virtual voluntary organization focusing on creating awareness, lobbying and knowledge sharing on drinking water and sanitation. The objective of developing this organization was to provide a platform for the water and sanitation experts in South Asia, focusing Pakistan. This platform helps other people in combating the water and sanitation issues. The start of this virtual organization carried out four years ago as the focal person behind this organization was about to retire from his job and he still wanted to carry on his work in the water and sanitation area. The originator of this organization described his

experience as wonderful even though he was not coming up from any IT background. It was also realized that this could have been done better if the IT skills of the involved individuals are improved. The useful information about the water and sanitation issues is available on the website of the organization and the discussion board allows discussing problems related to a specific region and solutions can be discussed by the experts. The group has 1573 members and the monthly email traffic statistics forms the start of the group are as follows.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2005									65	74	64	15
2006	40	44	19	56	60	23	53	25	28	52	62	81
2007	46	44	77	33	93	89	36	13	25	60	34	31
2008	25	47	33	64	48	37	45	49				

Table-2: Email traffic Statistics of Organization A

### 2.2.2. Organization B

The objective of this organization is to promote scientific technological education in the country. It is a totally volunteer-based organization where the people give suggestions and consultations in the matters related to scholarship and higher education opportunities. The evolution of this NGO is also quite interesting as a friend of the founder intended to take higher education in Germany but it was hard to find information as most of the pages were in German. Then the founder helped him to translate available information in English and this triggered to establish a forum where the education opportunities could be advertised. Keeping this in mind, the idea of setting up an education foundation emerged. The lack of financial resources limited it to only a virtual organization but now there are plans to establish a physical office as well. A website and a yahoo group were established in 2002 and recently a Face book group has also been launched. Currently there are around four thousand users of this group and if someone has any question related to educational opportunities in any institution worldwide he can get response over this group. The website was discontinued due to lack of financial resources but is planned to be available again soon. Initially it was only managed by one member but with its popularity people from other countries started managing this group and there are many active moderators who keep on managing the traffic on the group. The traffic statistics of the group are given in the table.3.

It was also observed that as the volunteers in this organization were more technology literate so they have used the services of this group pages to quite a high level. There have been arranged folders for frequently asked questions for every country and anyone can see those before posting the new question. There is

also a maintained database of the users with contact details which helps the users to get in touch with a specific individual.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2008	354	408	461	494	524	439	302	270				
2007	347	289	300	300	416	358	411	343	356	383	334	341
2006	365	254	236	307	356	278	288	313	270	286	278	323
2005	453	329	384	581	588	499	648	569	437	354	352	313
2004	282	216	194	219	296	354	481	441	455	453	441	566
2003	336	266	284	229	331	385	413	326	221	174	146	190
2002				28	22	131	287	195	181	239	273	238

Table-3 Email traffic Statistics of Organization-B

### 3 Conclusion

In this paper we investigated the Pakistani civil society sector in an effort to portray the current status of IT use in work settings. As the country is technologically less developed, the findings illustrate some effects of digital divide. The paper also describes two case studies to give an insight in how basic technology can introduce innovative ways of working for civil society organizations. Pakistan is a developing country and has strong presence of cross cultural NGOs who are deprived of modern computing powers so there is more need of collaborative work in Pakistani NGO sector to minimize the effects of digital divide in this sector. Our findings highlight that this sector lacks funding to develop IT infrastructures, thus the open source movement and its technological developments could be part of the solution to the main problem. On the other hand lack of IT skills has been observed also. In this respect wiki-based systems and end user development applications can be developed to help activists in their operations. To cope with the observed problems, participatory development projects could be helpful to develop suitable applications. Furthermore, we see a need for in-depth ethnographic studies for this important sector. The appropriation of technology can help these organizations to serve the humanity in a better way.

As voluntary organizations support the governmental organization in human development so there is requirement for strong active collaboration among them for planning and execution of activities, As voluntary organizations have reach to grass root level they can act as a bridge in governmental policy making and implementation activities. The IT appropriation among voluntary organizations can improve this communication channel so that planning, implementation and evaluation of development activities can be done in time and effectively. On the

other hand information and communication technologies can also play its role in providing field information robustly to the government institutions so that the government planning and policies could be based on public's needs. This robust information sharing can lead to proactive responses by government institutions in the emergency situations. The use of new technologies like web 2.0 in the mobilization activities by voluntary organizations increases their reach and this channel can be used to create awareness on governmental initiatives.

## References

- ADB, (1999) A Study of NGOs Pakistan, Asian Development Bank report Retrieved 11 September, 2008, from <http://www.adb.org/NGOs/docs/NGOPakistan.pdf>
- Cogburn, D., L. (2004) 'Diversity Matters, Even at a Distance: Evaluating the Impact of Computer-Mediated Communication on Civil Society Participation in the World Summit on the Information Society', *Information Technologies and International Development*, Vol. 1, No. 3-4, pp.15-40.
- Ghaus-Pasha, A.; Jamal, H. and Iqbal, M., A. (2002) 'Dimensions of the Non-Profit Sector in Pakistan' *SPDC Working Paper No.1*; Karachi; Social Policy and Development Centre and the Johns Hopkins Comparative Nonprofit Sector Project
- Goatman, A. K., and Lewis, B. R. (2007) 'Charity e-volution? An evaluation of the attitudes of UK charities towards website adoption and use', *International Journal of Nonprofit and Voluntary Sector Marketing*, Vol. 12, No. 1, pp.33-46.
- Kavada, A. (2005) 'Civil Society Organizations and the Internet: the Case of Amnesty International, Oxfam and the World Development Movement', In: W. de Jong, M. Shaw and N. Stammers (ed.), *Global Activism, Global Media* (pp 208-222), London: Pluto Press, Ann Arbor: University of Michigan Press.
- Kavada, A. (2007) *The European Social Forum and the Internet: A Case Study of Communication Networks and Collective Action*. Ph.D Thesis. University of Westminster, UK.
- Mostashari, A. (2005) *An Introduction to Non Governmental Organizations Management* Iranian Study Group MIT Retrieved 11 September, 2008, from: <http://web.mit.edu/isg/NGOManagement.pdf>
- NGORC (2003) NGO resource center annual report 2003, Retrieved 10 October, 2007, from: [http://www.ngorc.org.pk/downloads/NGORC\\_Annual\\_Report\\_2003.pdf](http://www.ngorc.org.pk/downloads/NGORC_Annual_Report_2003.pdf)
- Sattar, A. and Baig, R.. (2001). "Civil Society in Pakistan: A Preliminary Report on the CIVICUS Index on Civil Society Project" *CIVICUS Index on Civil Society Occasional Paper Series*, Vol. 1 Issue 11.
- Saeed, S.; Rohde, M. and Wulf, V. (2008) 'ICTs, An alternative sphere for Social Movements in Pakistan: A Research Framework.' *Paper Presented at IADIS international conference on E-Society. April 9-12, 2008. Algarve, Portugal.*