A Multi-Setting Study on ICT Practices within a Voluntary Swimming Sector

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Abstract
This note firstly summaries my interdisciplinary doctoral research on information and communication technologies (ICTs) and voluntary sector organisations (VSOs) and then reports some developing discussion based on the generated data. Similar to other business firms and governmental agencies these organisations have also proliferated with ICTs, however, the literature is still limited in terms of insights needed to explain the process of (non-) adoption and (non-)use of digital initiatives within the sector. This research seeks to unfold the complexity of the shaping of ICT through a case of swimming sector which mostly operates on the voluntary basis. Using the approach of Social Informatics and by investigating the dynamics of ICT practices, my study seeks to understand the arrangement of such practices and hence to add to our understanding about challenges surrounding IT project in the sector. The high turnover of volunteers, the cruciality of volunteering time offered into organisation, the infrastructural nature of old software and platforms are some examples of such challenges. It also should be mentioned that this note is a developed version of the poster I presented at the iConference 2013 and also my proposal for the ECIS 2013 doctoral consortium.

Keywords: voluntary sector organisations, information and communication technologies, Volunteer as Social Actor, extended settings, infrastructural technologies


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1 Introduction
Voluntary Sector Organisations (VSOs) play a critical role in society (Kendall, 2003). To achieve their missions, VSOs, like other business firms and governmental agencies, are also welcoming digital technologies to respond to the sector challenges such as competition for funding and volunteers (Burt & Taylor, 2000). Hence, ICT has been proliferated in the sector and there is a growing demand on studying ICTs in VSOs (Pereira & Cullen, 2009).

1.1 Literature Review
Two major research streams provided insights to this topic are firstly those scholars who have investigated what can be done ‘before’ an IT project to increase adoption and use (e.g. Hackler & Saxton, 2007) and secondly studies with a focus on what happens ‘after’ an IT initiative in terms of organisational consequences (e.g. Burt & Taylor, 2003). These studies, however, suffer from a methodological and a conceptual inadequacy. The lack of multi-level analysis limits our understanding about dynamics and possible mutual effects of different actors among VSOs (c.f. Iverson & Burkart, 2007; Malina & Ball, 2005). Additionally, such studies with their deterministic approach toward ICTs have not well conceptualised the duality of technology and organisation (e.g. Hart, 2002; Zhang & Gutierrez, 2007).

1.2 Research Pathway
To generate better insights about the field, this research aims to explore ICT-related practices within the specific context of VSOs through an interdisciplinary research. To open the black-box of how ICTs are being practiced, this research narrows its focus on exploring the case of small scale VSOs which operates in...
the context of swimming industry. As will be discussed later, in the earlier stages of the ethnographic fieldwork, an issue emerged: many participants of the case study were referring to other people or contexts beyond the case when they were being interviewed about their day-to-day IT-related work. The problems of user-focused single-setting case studies have been flagged by other researches. Lamb and Kling (2003) argue that atomistic views of technology users are problematic and alternatively they introduce the notion of Social Actor to highlight the role of other external and internal factors in conceptualising the notion of user. To study technology users in VSOs as social actors, we need to cross the boundaries of the case and hence it seems that the previous ‘flat ethnographic’ case study (Williams & Pollock, 2009) should be completed with other techniques to generate data and make sense of more distributed contexts ((Monteiro, Pollock, Hanseth, & Williams, 2012).

2 Method

This project uses Scottish Swimming Sector as a case study. This sector is mainly based on the work of volunteers; but there is of course some ‘commercial stuff’ there like ‘paid coaches’. While the sector benefits from the ‘passionate and self-motivated’ volunteers, there are some challenges with regard to the continuity of their ‘inputs and commitment’. This project is based on qualitative interpretive research (Walsham 2006), used here to explore everyday ICT practices and associated social actions (Silverman 1998; Suchman 2007) within a voluntary-basis swimming context. In doing so, initially, an in-depth quasi-ethnographic case study of a leading swimming club was designed to shed light on the use of ICTs by volunteers, in particular by applying the insights generated by Social Informatics studies and IS Research. This is being followed by looking at ‘extended’ settings and actors like a new sports software vendor; since its arrival to market, some people in the club were under-exploiting the functionalities of the existing software with a hope to the procurement of that new system.

By moving between the club and other distributed settings and actors which they are being emerged through snowballing techniques, this study seeks to “grasp the mutual relationships between the local real-time accomplishment of practices and the textures that they form and in which they are implicated” (Nicolini 2010, p. 1412).

2.1 Field Setting

As for the first stage of the study, a leading swimming-club which operates on a non-profit basis has been examined to analyse ‘ICT practices within smaller voluntary organisations’. The club is managed by a Management Committee and several professional coaching-staff. Also, its operations are widely supported by various volunteering-resources, mostly swimmers’ parents. Volunteers may take some occasional-jobs such as timekeeping or marshalling-swimmers or they can get involved in more formal positions like pool-hiring and fund-raising activities. Those volunteer in more long-term jobs have usually some kind of direct-and-constant communication with the staff.

As for the second stage of the study, by following the club’s members’ pointers and by using theoretical insights from the Social Actor Model, two other settings were selected which their operations have sensible effect on the club’s activities. These settings are i) a ‘Scottish Swimming’ as a national governing body which itself use an online platform to provide a space for integrating the competition results, ii) the ‘Market of Swimming Software’ which serve ICT-enabled solutions for both administrative and team-management needs. The introduction of the newer systems and the dynamics with the market are both associated with a number of challenges for transforming the practices institutionalised around a specific technology.
2.2 Data Collection

Walsham (1995) has made a simple, but helpful distinction between an “outsider researcher” and an “involved researcher”. For the first stage of my research, I have been acting more as an involved researcher to make better sense of everyday practices within the adopted case i.e. the swimming club, in particular through ethnographic techniques, for example ‘shadowing’ (Czarniawska 2007) the former Head Coach who is already a honorary member of the ‘Board of Directors’. The Figure 1 shows his home-office when he and her wife entering data into the club’s software.

![Figure 1: Former head coach working with the club’s system](image)

The ‘involved study’ helped me to dive into issues and challenges surrounding the adoption and use of digital technologies by the paid staff and volunteers. However, for the second part of the research, my role has tended to be as an ‘outsider researcher’ and hence to gather the rich and relevant data I have been relying more on archival data such as website comparisons and online forum analysis as well as formal interviewing technique to engage individuals directly in a conversation and hence to generate deeper contextual understanding from the participants' social worlds (Schultze and Avital 2011).

2.3 Data Analysis

Data was collected using a variety of tools and techniques including the recording of interviews and filming of practices. This provided a rich appreciation of ICT-related practices within-and-around the swimming club. To make sense of the generated data, data analysis includes the coding of interviews, writing up the theorised stories from field-notes (Golden-Biddle and Locke 2007), and ‘to-ing-and-fro-ing’ between generated data and emerged categories to identify key themes. However, as the research is in-progress, the process of data collection and analysis, especially for the second stage, is still not ended.

3 Developing Results and Remarks

Within about nine months of quasi-ethnographic fieldwork at the club setting/level followed by one-month study around the club, a couple of issues have been emerged.

The club is planning “IT Refreshment” as unlike the club's impressive successful in delivering swimming training services, it has experienced some difficulties to use ICT to minimise time-consuming manual works and thus human-errors. This was seemed similar story within many SMEs (e.g. Ritchie and Brindley 2005), however, what makes this case quite different is that its operation is widely associated with 'coming-and-going' volunteers. Therefore, at the early stages of the fieldwork, it has been confirmed there is no or less clear standard and strategy for current and future IT-related jobs. In an interview with the coach, the coach commented:
“I have a system I use for my documents ... Liza [a pool-hiring volunteer] has her own system which she uses, ... but we don’t check to see if we have the same ... and Kayle has no system [laughing]”

The Committee's vision to expand the club’s operational area has brought to their attention that a mismatch between the club’s activities and IT-supported solutions could bring their future success into the question. A former member of the Committee noted:

“... the current club's IT system was designed some years ago ... we go to improve the club’s functional system ... things should go more on-line”

However, it was noted that the digital technologies were used in different locations such as ‘beside-the-pool’, ‘volunteers' home-offices’ and ‘the club’s less-used office’.

3.1 Time as Power

The generated data also suggests that since the club’s volunteers are different, those who have more time to offer may also have more power to shape the general pattern of ICTs use. In particular, if a key actor decides not to use a collaborative technology, that technological system would probably fail. Volunteers who works with the club’s staff are more likely to follow the established working practices while those are in touch with other volunteers or parents may change the current practices by either using new type of ‘every technologies’ such as Doodle or Dropbox or an innovative use of existing platforms. This finding in particular is inconsistent with idea that says “[f]ormal volunteering is typically carried out in the context of organizations; informal volunteering (which in this context means helping friends, neighbours, and kin living outside the household) is more private and is not organized” (Wilson and Musick 1997, p. 700). Here, it argued even with so-called ‘formal volunteering’ the type of the volunteer work is a mediator to organising practices associated with that given work.

3.2 Disposable Projects

Another issue is related to the challenges surrounding the high turnover of volunteers in smaller scale VSOs. This ‘coming-and-going’ has led to many of workarounds as people have more freedom to choose from portfolio of available technologies. This prevents the club to have an ‘IT Vision’ and hence many of developments within IT infrastructures happen by accident. For instance, the club was offered a website design about 10 years ago, but it has not been developed that much till recently. Again, a swimmer’s parent offered a re-design for the website a couple of months ago.

3.3 Intended Non-Use

The established literature suggests that VSOs suffers from the lack of resources such as lack of skills, however, the emerging data flags that there are some politics behind of the ‘issue’ of the skill, in particular certain people in this context prefer to not go online as face-to-face communications is a ‘desired’ social activity for them.

3.4 Sources of the Dislocality of Practice

The fieldwork has also revealed other distributed settings, people and non-humans which have an influence on the club’s ICTs practices. This includes a national governing body for swimming (Scottish Swimming) which uses an online intermediary to coordinate and regulate all Scottish swimming competitions (SwimScotland.co.uk), and two main software vendors, Hy-Tek and TeamUnify.

3.5 Infrastructural Coordinator

SwimScotland.co.uk is simple but ‘very functional platform’. It has been archiving the ‘meet results’ since 1999. It also provides information about past and upcoming meets. When a meet (a competition) gets posted on the website, it will also provide a ‘Team Manager’ file of the event. This file is one the Hy-Tek
system file format to organise a swimming competition. Clubs need to download the file and fill the file out with the information of their swimmers and send that back to the ‘event organiser’. While the earlier idea of such online platform was to be a coordinator between clubs in their exchanges of meet data, it has also become an infrastructure which sets ‘standards’ of the ‘acceptable’ format; i.e. Hy-Tek.

3.6 Functionality vs. Time-Bank
Hy-Tek has been in the market of swimming software since 1989. Many of swimming associations like Scottish Swimming have been standardised around Hy-Tek system. However, there is growing software which provides real-time data-entering as well as ‘Website Management’ facilities. Because of its improved functionality, many clubs, including the one which I am studying, are facing a disagreement among their staff members to whether switch to TeamUnify or keep using the Hy-Tek system. Moreover, with a hope to the procurement of TeamUnify, some of the club staff do not ‘waste their time’ to work with a system which ‘seems like the platform is about 15 years old’. TeamUnify has made a feature which import/export Hy-Tek file, however, it has been claimed that its files ‘are not fully compatible with Hy-Tek’. The rivalry between ‘institutionalised’ Hy-Tek and ‘new-born’ TeamUnify has produced different interpretations among both volunteers and staff and hence it increases the complexity of the practices related to organising a meet or managing a team. There are some clubs which use both systems at the same time. Hy-Tek is just for getting into the national/local meets and TeamUnify for managing their everyday coaching programmes. Many clubs, including the case, might have not that much problem with the budge-side of new software, however, the key barrier is the ‘limited and unplannable’ volunteering time they have and the ‘huge time investment needed’ to re-shape all practices that have been fixed over the time.

3.7 The more Free, the less Useful
Exiting academic studies and industry research illuminate that financial resources are one of fundamental challenges for voluntary organisations. This could come from limited-ness of such resources or unpredictability of the money they will have. This challenge therefore makes them more conservative with spending their money, especially if the proposed expenditure is not that much urgent and visible. Recently and mainly because of advances in information technologies such as the accessibility to Software-as-a-Service options or the popularity of web 2.0 applications, there is growing attempts in envisioning a better future for voluntary organisations as such technologies are free (or at least unbelievably cheap!) and considerably easy-to-ride. The cost-related characteristic of new technologies is a great respond to the sector’s functional challenges with scarcity and discontinuity of financial resources. However, the investigated story of the adoption and use of some sort of those new technologies shows some degree of contradiction between expected and actual results emerged from certain experiences. This ‘unexpected outcome’ comes from the lack of ‘minimum standardisation’ required for a working IT infrastructure. IT projects and tools with a cheaper price to be taken-up have a tendency to be given up quickly as there might be personal preferences and situational decisions. Money could bring some sort of ‘discipline’ and as a result, a greater usefulness.

3.8 The more Simple, the more Chaotic
As mentioned in the previous section, another feature of newer technologies is simplified complexity they have and hence people can quickly grasp their affordances by a couple of hours of training or even some trial and errors. This is also good news for voluntary organisation with limited staff and high turnover of volunteers. This, in principle, makes a considerable shift in the sector in terms of the level and extent they use IT-based solutions in their everyday problems. Despite this promising idea, there are some conflicting results from the observed case. Those results identifies some ‘increased chaotic’ situation made by using a wide-ranging of those free technologies, especially because of volunteers’ good level of freedom to just get a job done with whatsoever tool they use. While simplicity was a driver for innovate process for accomplishing a task by a volunteer, on the other hand, it caused dis-organised circumstances in which the
task needs more time and workload to be done. Like the price, higher level of system's complexity could also prevent 'rushed and less-assessed' attempts in adopting such technologies. The key argument is that the 'priceless' and 'easiness' of newer technologies do not necessarily result in a better IT-empowered situation for voluntary organisations.

4 Possible Contribution

This research is expected to contribute in four main domains. Firstly, consistent with the calls for multi-locale technology studies (c.f. Koch, 2007; Pollock & Williams, 2010), this research generates insights into the role of distributed contexts such as governing bodies in shaping of ICTs practices. Secondly, although this research is informed theoretically by the social actor model, it extends the logic-of-the-model through the application and modifications needed for the context of small VSOs (c.f. Lamb 2005). Thirdly, given the Swimming Sector as a case, the research offers a basis for understanding issues and challenges surrounding swimming-oriented (information) infrastructure, in particular the role of Hy-Tek and TeamUnify in constructing of such infrastructure (c.f. Monterio et. al. 2012). Finally, the study is expected to support policy-makers and practitioners in (re)defining their ICTs plans/programmes.

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