Chapter 13

The Absence of One-Size-Fits-All in the Day Labour Organisations ICT4D Designs

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ABSTRACT

This chapter covers design experiences gained by working with two Non-Governmental organizations and one day-labour organization for the informal job seekers and employers—day-labour market (DLM). The three design architectures implemented for the DLM organizations are presented. On critically discussing the designs, it is found that even when users are portrayed as similar in the way they work and the things they do, their Information Management Systems (IMS) functional software requirements remain contextual up to the details. The synthesis of the designs shows that there is need to focus on the different functional information needs, including the ones that may seem insignificant even where non-functional requirements may be the same for seemingly similar users. From this argument, it is important that information systems designers, especially for Day labour market organizations, should go deeper into their users and beyond the “about us” information to understand the unique features and requirements of each user group. In conclusion, designers should not assume that seemingly similar organizations/users can be approached from the “one size fits all” IMS perspective.

INTRODUCTION

Designing systems in an ICT4D context is challenging. It involves making compromises in an effort to compensate for scarce resources (Brewer, Demmer, Ho, Honicky, Pal, Plauche, & Surana, 2006); Agarwal, Kumar, Nanavati, & Rajput, 2009). These challenges get worse when designing for NGOs and other seemingly similar organizations in the developing world. Most NGOs in - underdeveloped regions usually have limited funding and limited capacity. For example, in the experience reported in this book chapter, with two NGOs working for the informal job-seekers and employers—Day-labour Market (DLM), it was found that the NGOs Information Management Systems (IMSs) were donated by well wishers. As the NGOs evolved, they acquired fragmented software applications, which made it challenging to understand and, hence, design any other system or improve the existing systems. When

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the systems used by the NGOs were critically examined, it was noted that as the NGOs evolved, their functions changed. However, the overall descriptions of what the NGOs did and how they operated remained similar. As a result, at first, it was thought that the different NGOs having similar functions (and another one being a spin off from the first one) may require the same IMS. This was not the case, as is described in this book chapter.

The design experiences for two Non-Governmental organisations and one day-labour organisation working for the informal job seekers and employers in the DLM sector are presented in this chapter. The main components are present the three design architectures implemented for the organisations. In presenting these design architectures and experiences, it is shown that even when users are portrayed as similar in the way they work and what they do, their IMS functional software requirements remain contextual to the details i.e. they still have small important differences which needs to be considered during software design. It is evident that although non-functional requirements may be the same for seemingly similar users, there is need for different functional information needs. Consequently, designers need to know more about their users than what is given by “about us” descriptions. The key lesson drawn from this work is the need to pay attention to specific functional details of each organisation regardless of how similar it is to other known organisations working in seemingly similar contexts. In the end, the argument for this work is the absence of “one size fits all” in the IMS by describing the designs and showing their perceived organisational similarities, actual similarities and the differences as seen from the field work and engagement with the organisations.

The organization of this chapter is that after the abstract and the introduction, a summary of related work is presented in section two. An overview of the day-labour market (DLM) is in Section three while Section four details why there was the need to build applications for the NGOs. Section five gives the design process, followed by the design architectures and discussions in Section six and seven respectively. Finally the conclusion is presented in section eight.

RELATED WORK

Even though reports on Information systems requirements have had mixed reactions, there is a current trend and agreement which point to the fact that context is an important factor. This trend is however in different perspectives. The argument for the work presented in this chapter is the absence of “one size fits all” in the IMS. Other researches in this area have, in a general way, supported this argument. In their work, McPhail, Costantino, Bruckmann, Barclay & Clement, (1998) showed that computers and computer applications must be considered in the context of their workplace. Wilson (2000), pointed out the need to put the Information Systems design process in the wider context of the user. Similarly, back in 1981, Wilson (1981) had brought out the importance of context in information needs of a user. Avgerou (2008) has advocated for Research development towards considering context in Information Systems. In this work Avgerou has shown the risks of paying relatively little attention to developing theory on the interplay between IS innovation and its socio-economic context. In their research focusing on the need to balance standardization and local flexibility/localization, Braa & Hedberg, (2002), acknowledged that there exists tension between standardization and localization. Walsham & Sahay (2006), confirmed this and pointed out that, although there is need to standardize for efficiency and comparability, it makes it difficult for the same standards to be applied to diverse local contexts. This is in turn is what this chapter of the book is showing.