

Chapter 11

A Cup of Coffee: Users' Needs and Experiences of ICT in Homecare

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ABSTRACT

The area of homecare is not normally associated with the use of Information and Communication Technology (ICT). Today ICT and mobile ICT are being implemented within homecare practice to make the job of caring more effective and attractive. This chapter focuses attention on the human aspects when an automatic planning system and a handheld computer were implemented in a homecare practice. The aim of the chapter is to explore care workers' experiences of how these technologies supported and facilitated their day-to-day work, but also how they affect daily work in practice. The authors' findings indicate that some of the wants and needs for ICT of the homecare team regarding their work practice were met. The integration of principles from Participatory Action Research (PAR) in the Participatory Design (PD) process made it possible for staff to participate during the full development process, take part in the design process and make decisions during the whole trial.

INTRODUCTION

Information and Communication Technology (ICT) is seen as a means to maintain the Swedish welfare state and offer services and care to citizens (Jansson, Mörtberg & Berg, 2007). As in many other western countries, the elderly population in

Sweden is increasing while the working population is decreasing. Healthcare and care of the elderly in Sweden are today directed towards enabling the elderly to stay in their own homes and this is one of the objectives in the national goals for elderly politics in Sweden (Socialstyrelsen, 2005). The consequence of these objectives is that a large portion of care and rehabilitation following an illness or disease has moved from the hospital to

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the private residence (SOU, 2004: 68). As more and more elderly people stay in their own homes, greater efforts in health and social care are needed. In dominant discourses the assumption is that technology will give rise to a great number of improvements, such as effectiveness and ability to follow up and evaluate the performance of the services provided.

The homecare area is not, however, generally associated with the use of ICT. In spite of this, technology has always been an important part of homecare work (Hedström, 2004; Jansson & Melander Wikman, 2005), for example household technology. Therefore homecare personnel, care assistants, are used to working with technology, but not with ICT, as a support for their caring work. In order to simplify administrative work and to make the work of care more attractive, ICT and mobile ICT are now being implemented into homecare practice (Jansson, 2005; Orre, 2005).

The development and implementation of new technologies bring to the fore the question of knowledge and understanding of the performance of activities in various working practice. The notion that knowledge about work and work organisation is required in information systems (IS) development is a common understanding in IS research (e.g., Bratteteig, 2004). Research has shown that to develop useful and efficient ICT, knowledge about work and work organisation are required (Bratteteig, 2004; Bødker, Kensing & Simonsen, 2004).

Within the Scandinavian tradition of participatory design (PD), research has shown that situating systems development in an organisational context contributes to organisational change (Bratteteig, 2004). A key characteristic of participatory design is user involvement. The reason for participation is, commonly, to share experience and knowledge between users and systems designers which will enable effective and efficient design of the technology (Bratteteig, 2004; Fagerström, 2003). This means that, to produce feasible designs or re-designs of information systems, those who

are involved in the organisational change should participate in the design process (Bratteteig & Stolterman, 1997). Implementing IT systems within the practice of home healthcare services brings about change for the professionals working in the field.

Even though participatory design (PD) has been a tradition in the Scandinavian tradition of systems design since the 1970s, we find that this tradition has not been employed to any noticeable degree when it comes to the working practices of the homecare area (Jansson, 2007). This might be for various reasons. One of these is that homecare workers have low status so their views and contributions towards developing new ICT are under-represented, as low-status craft knowledge is often overlooked (Jansson, 2005; Jansson, 2007). The area of ICT and homecare is also relatively unexplored, and literature in the area is scarce (Koch, 2005; Jansson, 2007). Furthermore, the development and use of ICT is, so far, limited in the homecare sector, and initiatives concerning information systems (IS) are generally less well-developed than, for example, in the health care sector (Riley & Smith, 1997). Development and use of ICT systems and services is more common in such application areas as hospital treatment and chronic patients receiving treatment at home – see for example the DITIS- and Linkcare-projects. There are also projects that focus on elderly people and independent living such as ‘Ambient Assistive Living’ projects. One project in this area is the SOPRANO project that focuses on smart home environments services and the development of easy graphical user interfaces for older people. In addition the SOPRANO project also focuses on user-participation i.e. older people as participants. However, this chapter will focus on care workers in a specific trial in a home healthcare project that was based on principles and techniques in PD combined with Participatory Action Research (PAR). This chapter focuses attention on human aspects when an automatic planning system and a handheld computer (Palm Pilot) were imple-

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