# Chapter 12 Workplace Location and ICTs Substituting Travel

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#### **ABSTRACT**

This chapter is based on the assumption that keeping the number and length of business and commuting trips at reasonable levels could contribute to reaching targets of environmental sustainability. The authors highlight a couple of options for reducing or avoiding business trips and commuting through workplace location or improved use of communications. They present case studies concerning travel and communications, carried out by using diaries and interviews. They also present relevant literature on social practices and sustainability goals in relation to use of ICT. The aim is to shed light on variation in the use of travel and communications on an individual level in work life. The case studies illustrate that such variation is mainly due to the concrete practices involved in execution of professional duties and roles. Duties that involve a clearly defined end result or product being delivered regularly by the member of staff are correlated to clearly defined needs for communications. Less clearly defined end results of the work duties seem to make it harder for the individual to plan and perform communication and travel in a more energy saving way. The difference in professional duties can thus be expressed in terms of clarity and maturity. Another factor that affect who can replace travel with ICTs is relations of power, e.g., when a purchaser dictates the terms for a subcontractor concerning how and where to "deliver" his working time, service or product. The importance of clarity, maturity and power aspects means that professional practices need to be studied at a detailed level to find out who could substitute ICTs for travel and how this could be done.

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#### INTRODUCTION

Today a widely recognized goal related to sustainable development is to restrict the energy use and (greenhouse gas) emissions that companies and households cause through their production and use of premises, goods, services and transport. Controlling such factors requires well informed choices based on methods like life cycle assessments, since there are risks of sub-optimizing, for instance when an energy-saving choice concerning one factor (e.g., transport) may lead to worsened environmental consequences in another area (e.g., use of premises). However, the aim of this chapter is not to go into detail regarding such effects on the system level but rather to keep them in mind as a background to the study of human practices and choices on the local and individual level. Among the activities that cause environmental consequences we will focus on transport in office work life.

ICT is frequently discussed as a means of changing, and in some instances cutting down on, travel in work life. The starting point of this discussion is the potential of ICT to make work less tied to location (less location-dependent). In order to cut down on travel, this potential has to be realized in terms of "staying where you are for longer intervals." This means, e.g., to stay at home and work or to have a meeting with someone outside your office without leaving it. When reasoning this way the existence of different alternatives for performing a certain amount of work ("a work day," "a meeting") must be presumed. One of the alternatives includes a journey while the other does not.

This means that the location and use of workplaces become important aspects. In the light of this, the chapter is based on qualitative interviews with civil servants concerning their use of ICT for meetings and business contacts and also their choice and use of workplaces.

We will present the interviews under two different headings, "Business as usual" and "Unusual

use."Under the first we consider how the interviewees travel and communicate (with customers and colleagues) on a regular basis. Under the second we focus on instances of unusual or pioneering use of ICT or workplace location in which some of the interviewees are involved.

As a background we will present a handful of research lines that we find theoretically and methodologically relevant. More specifically we want to create an overview of research suitable for answering the question: How could the use of ICT and social practices be studied in relation to issues of environmental and social sustainability?

#### **BACKGROUND**

## Studies of ICT Use

Everyday life consists of repetitive practices through time-space. An understanding of day-to-day life is therefore essential to the analysis of reproduction of institutionalized practices. As we engage in everyday practices and attend, e.g., to the working life, we also recreate and maintain them as part of the culture and society to which we belong.

The intersection between use of ICT and social practices refers to analyses on how ICT supports and changes practices in various situations, both at work and during leisure time. Social practices may transform the use of ICT as well as ICT affords possibilities to modify existing and create new practices. Analyses of ICT use are of interest for various multidisciplinary approaches within social science traditions such as Science and Technology Studies (STS). STS address the social and cultural significance of scientific and technological change, how science and technology function in different societies and how social forces attempt to shape and control these forces to serve certain objectives. Research traditions such as Computer Supported Cooperative Work (CSCW) and Human-computer interaction (HCI)

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