Chapter 16
Late on the Curve:
Causes and Consequences of Differences in Digital Skills

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ABSTRACT

Differences in digital skills lie at the heart of social inequality in advanced knowledge societies. The Internet access 'markets' in these societies are close to reaching saturation point, giving almost everyone access to the Net. By contrast, differences in digital skills appear to be widening over time. This chapter focuses on The Netherlands, where above all the elderly, people with a lower education level, people who are economically inactive and members of ethnic minorities lag behind. It addresses the mechanisms that underlie differences in digital skills between population groups. A lack of financial and cognitive resources seems to be of particular importance. Based on a diffusion of innovations framework the paper goes beyond the largely descriptive research on the digital divide and considers the consequences of differences in digital skills. These differences influence the labour market performance of those at a digital disadvantage and also has an impact on their personal lives.

INTRODUCTION: INEQUALITY IN KNOWLEDGE SOCIETIES

Information and communication technology (ICT) has become indispensable in modern knowledge societies, and more and more aspects of our lives have become interwoven with and dependent upon computers and the Internet. Handling these media require digital skills that not all people master to the same degree (Eurostat, 2006). Early adopters have more experience and capabilities in handling new media compared to late adopters (Rogers, 1995; De Haan, 2003). More and more digital skills seem to influence who participate fully in a knowledge society and who do not. Increasingly, the possession of these skills is a condition for pursuing a successful education career, finding work and progressing in one's career, and also for maintaining social contacts in our private lives.

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Concerns about increasing social inequality lie at the heart of the debate on the rise of knowledge societies, but too often these discussions are restricted to simple inequalities in access to new information and communication technologies (ICT). Countries with high diffusion of ICT's show diminishing divides in the possession to ICT's and widening divides in the digital skills and in use (Van Dijk & Hacker, 2002). This article deals with both causes and consequences of differences in digital skills. This focus on skills is based on a criticism of current research into the digital divide which is a) mainly descriptive, b) starting from a too simple criterion of access and c) lacking in consideration of the possible consequences of differences in ICT access. Digital skills are treated here as part of a multidimensional concept of access (consisting of motivation, possession, digital skills and use).

Citizens differ in the extent to which they possess digital skills. This article addressed the questions as to how far elderly, people with a lower education level, people who are economically inactive and members of ethnic minorities lag behind in terms of digital skills. It further explores the causes of that disadvantage and its consequences in the field of labour market participation, social participation, integration of ethnic groups and information seeking as a democratic prerequisite. These objectives are both theoretical and empirical. They are theoretical because they are based on a theoretical model of the digital divide. This model is based on socio-economic theory is general and applicable to a wide range of phenomenon and countries. They are empirical because multivariate analyses of quantitative data is based on this model and shows the consequences of the divide for different groups in different social fields. The four central research questions are:

- To what extent do the digital skills of the elderly, the low-educated, the economically inactive and members of ethnic minorities differ from those of the rest of the population?
- What difficulties do those with a skills disadvantage give for not using the Internet and what differences are found in this respect among the elderly, the economically inactive, the low-educated and ethnic minorities?
- Which factors contribute to the digital skills disadvantage of the elderly, the economically inactive, the low-educated and ethnic minorities?
- What social and economic consequences does non-use of ICT have for participation in society?

Answering these questions is based on data from the Netherlands, a relatively small country with more than 16 million inhabitants. The Netherlands is one of the leading countries in the world regarding internet penetration. It ranges among the countries where a wide majority of the population now has Internet access, just like countries such as Australia, Canada, Denmark, Finland, Iceland, Japan, Korea, the United States, and the United Kingdom (Eurostat, 2007; International Telecommunication Union, 2008). The Netherlands also belongs the European countries with the highest level of computers skills among the population (Eurostat, 2006; Weda et al., 2008: 11 and 70). In 2006 80% of the Dutch population could access the Internet at home and 66% had broadband connection (Eurostat 2007). The Netherlands is ahead in broadband compared to the United States where in 2008 some 55% of all adult Americans had a high-speed internet connection at home (Horrigan 2008). The high internet penetration in the Netherlands make this country well suited for the study of the impact of differences in digital skills. A relatively small part of these differences is due to the inadequate possession of equipment or infrastructural connections. In countries with