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Information Society: European Considerations in Economic and Cultural Contexts

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We have the technical know how, the technology to do it, and the economic and institutional strategies to implement it. The obstacles, of course, are political. (Castells 1999:12)

Introduction

Data, information and knowledge are words that conjure up distinct connotations for various people. "Data society" or "knowledge society" are not common phrases, but "information society" is used with increasing frequency. What should we make of the phrase "information society"? Even a cursory review of literature shows multiple approaches that argued for enthusiastically. This paper is informed by some of those discussions, but focused on particular aspects to develop a balanced view of the information society. This paper focuses on two of Webster's (2002: 12, 18) five definitions of information society: economic and cultural. European community initiatives, particularly those in Finland, are used to explore these definitions.

Approaches

There is no universal definition of "information society" that is applicable at all times and places. The richness of the topic defies a single sentence explanation. The literature on the topic includes many vague and imprecise uses of the term. Webster (2002:4) states that, [s]Such approaches have infected - and continue to infect - a vast swathe of opinion on the information society: in paperback books with titles such as *The Mighty Micro*, *The Wired Society*, *Being Digital* and *What Will Be*, in

university courses designed to consider the 'social effects of the computer revolution', in countless political and business addresses, and in scarcely calculable amount of journalism that alerts audiences to prepare for upheaval in all aspects of their lives as a result of the coming information age." (Webster 2002:4) Webster is clearly skeptical of the "grand theory" of cultural change ushered in by the information society. He uses current social theory combined with empirical evidence to look at the cultural impact of an information society in order to to avoid a simplistic and misleading approach.

Everyday life is information rich. In an average day we may get information from a radio, television, computer, handheld computer, book, or newspaper. Theoretically, all of the above could be active at a single moment, through digital television, wireless Internet access, national radio broadcasters, etc. It is not just availability but also extraordinary variety, as Webster notes (2002:19). These are *technological* features of life. It is clear that technological revolutions have occurred in the past with pervasive outcomes. What distinguishes this technological revolution? The industrial revolution focused on energy, although it incorporated other technological fields, while the current revolution focuses on information technologies. This technological basis reformulates economic systems, communication systems, productive forces, knowledge accumulation, and the information capacity of society. While these features seem economically-focused, they are ultimately cultural; they affect professional contexts, political movements, social campaigns, life and death. Many argue that our world is essentially informational. Others debate how unique the use of information is to current society (Giddens 1981, 1991; Schiller 1991).

Economic and Cultural Approaches

Castells (1994:3) states that, "[b}y this concept, I understand a social structure where the sources of economic productivity, cultural hegemony and political-military power depend, fundamentally, on the capacity to retrieve, store, process and generate information and knowledge." Urban space may seem a strange place to apply this definition but rigourous research and argument support his perspective. Castells makes the basic point that societal change manifests itself in a variety of ways and can be best investigated through urban space; places where social groups live, work, and function. Castells argues that informationally-competent and -incompetent residents of a city inhabit distinct existences in the information society. What follows from this are spatially coexisting, socially exclusive groups and functions (Castells 1994:10). Castells argues strongly that *culturally* the information society is multifaceted and necessarily involves the social aspects of human life. The ability to access, manipulate, employ, and enjoy the information features of the world influence how social processes

occur and develop through time. These features can be entertainment, clothing, social interaction, urban space, even signs (Webster 2002:20). The way cities are developed and organized can reflect this, as do other environmental features of the world. Understanding the information society requires consideration of cultural factors--the social aspects of the world people occupy.

If the GNP of a country is dominated by information industries, can we declare that country an information society? Some work (Jonscher 1999; Porat 1977) suggests that this is the case, while others find itan extraordinarily complex exercise (Webster 2002:12). Porat and Machlup have contributed to our understanding of the economic significance of information (Bjorn-Andersen et al. 1982:3). Machlup (1962) was particularly influential in categorizing particular parts of industry as informational, thereby allowing for statistical analysis in economic terms. Two serious questions have been raised about the efforts of Machlup and Porat. First, how reliable are their classifications of informational business, and secondly, is the quantitative methodology for understanding information economies valid? The essential question is whether we can determine what is an information society by quantitative means. Can the level of a country's income justify its being called an information economy?

Purely economic analysis is limited, just as a purely social analysis would be. In the following section I will look at economic factors, along with cultural considerations, in a real world example based on research and scholarship on Finland.

The European Union (EU) has produced a series of documents outlining initiatives for an 'information society' (European Union 2000; European Union 2004a; European Union 2004b). The EU uses the word 'e-Economy' frequently with some vagueness. Their attempt to understand the e-Economy is informed by past economic trends, predominantly share market focused and challenges to the new information economy. Through their language it becomes clear that 'e-Economy' denotes the economic aspects of an information society. Examples they cite are:

• to encourage Europe's enterprises to take up informaction and communication technologies (ICT) on a wider scale

• to stimulate applied information society technologies (IST) research addressing major economic challenges

• to promote organizational change in general and new sustainable eWork paradigms

- to build ICT skills and media literacy, implementing adequate education and training and lifelong learning strategies

- to foster consumers' e-confidence (European Union 2004b)

The EU cites the importance of developing the economic side of the information society as extremely important, thus identifying key challenges and formulating plans to deal with them. Strategies, policies and targets that are economically attentive are at the forefront of developing an information society for the EU. The efforts try to combine ICT with sustainable investment in organization and in people throughout all sectors of the economy: in high-tech industries, low-tech manufacturing, services provided by the private sector, as well as in public administrations (European Union 2004b). This holistic effort recognizes that both quantity and content of informational business are important, while balancing the need to develop 'e-Work' (informational) businesses on a relatively large scale.

There is a strong awareness of potential cultural implications for the information society in the EU Portal. These are positively focused within the context of political aims and "selling" the concept to the public and businesses.

The Lisbon strategy (European Union 2000) is an effort to universalize information access across European communities. This strategy set the ambitious goal of ensuring that every citizen would have the skills needed to live and work in the information society. The strategy aims to create equal access for all citizens to e-information, e-goods and e-services, e-learning, e-training and e-working opportunities (European Union 2004a) . The main idea behind the Lisbon strategy is to erode the divide between information-competent and -incompetent citizens, asking the question, "[c]an the Information Society, in fact, bridge the gaps in today's society, providing new opportunities to *all* parts of society?" (European Union 2004a: emphasis in original) There are tensions between social exclusion and economic development that will make this challenging (Goodwin & Spittle 2002:226). The EU is aware of that challenge and has committed resources for both economic and cultural considerations. The EU identifies a high priority area as "eGovernment": information and communication technologies may not only make public services more effective, accessible, and responsive, they may change the underlying relationship between citizen and state (European Union 2004a).

Finland

Finland presents a rich case study into information society initiatives. Finland published its first explicit strategy for an information society in 1995 (Hautamäki 2002). Luhtanen (2004) states that, "[t]he Finnish Government sees that information society policy continues to be a core element in the pursuit of welfare. Modern information and communication technologies (ICTs) provide great potential for promoting sustainable development, transparency, accountability, democracy as well as good governance among many other things." The role the government plays in promoting and enabling an information society is very evident with 3% of the GNP going to R&D versus a 1.2% average in other OECD countries (Herring & Finnish Academies of Technology 1999:9). Heavy investment in R&D is a key issue for Finland both because of technological innovation and cultural interest. One reason for the rapid development of an information society in Finland is that Finnish people are eager to adopt technological innovations in their work and daily life (Hautamäki 2002). The interplay between R&D and cultural curiosity helps define of the information society. The Finnish model acknowledges that what is essential in an information society is the influence of information, and associated technology, on society and broad economics. The role of government in this interplay is crucial as recognized in work done by Castells and Himanen (2004) and Hautamäki (2002).

Finland 's government funds R&D at a high rate, provides free education, redistributes wealth through progressive taxation, and provides universal social security, all of which give the government a strong influence on culture. For this reason, and others, Finland invests heavily in understanding its national identity in economic terms, being a relatively small country that is heavily export-dependent (Herring & Finnish Academies of Technology 1999:11). Castells and Himanen delve into this issue of national identity as an information society because of the vested interest, economically and culturally, in making such a society work successfully.

This structured interplay between national economy and culture presents a specific model of the information society. The Silicon Valley and Singapore present alternative models, which are being contrasted in current scholarship at the Berkeley Center for Information Society (Hautamäki 2002). An information society is developed specific to its context. What principles can be gleaned from Finland that are applicable in other European countries, and indeed in other international contexts?

Various approaches to the information society draw on the distinct characteristics of each society. The interaction of these characteristics is complex and integral to developing and understanding the information

society. The social organization enables or inhibits innovation. Investment in information takes place when social stability, safety, trust and solidarity are present. Social development leads to cultural development, which leads to innovation, which leads to economic development, which fosters stability and trust; and this underlies a new, synergistic model that integrates economic growth and the enhancement of the quality of life (Castells 1999:11) .

Finland is unusual in its attempt to create a comprehensive system that gives equal access to information technology and resources.Castells (1992: 12) states that, from a social perspective, the innovation that Silicon Valley is famous for will fail because of the small proportion of 'techno-elite' in the general population. This has economic implications, with the reduction of innovation and thus market share and thus income. Finland demonstrates a strong association between economic growth and cultural development. Such an outcome is not the only option, and Castells (1992: 12) argues that the disassociation between economic growth and social development is both morally wrong and economically shortsighted.

The development of an integrated information society is a particular responsibility for information professionals. Private business initiatives can be launched the aim of generating income and also involving a wider portion of society. Governments can educate and make information technology available to more people. Schiller (1991: 45) provides insightful and challenging arguments addressing this in the American context, focusing on the democratic flow of information. Information professionals are employed in private and public contexts, and with an awareness of an integrated approach to the information society can present compelling arguments for it. Additionally, as information professionals concerned about social welfare, activism can yield results in developing a more universally information-competent society.

Conclusion

Concerning the methodology of declaring a society "informational," there is one other argument made by Webster. The core of the argument is this: if it is granted that information is not specific to current society, but it is the quantity of information in current society that is distinctive, it is difficult to see how there is something so radically new as to declare this the information society. For instance, the fact that there are more cars on the roads today than in the 1970s does not justify us in calling ourselves a "car society" (Webster 2002:22). The content or quality of the information is also important, not simply the scope. Determining quantitative change does not confirm qualitative change. The economic and cultural approaches may be the best to amalgamate the quantitative and qualitative aspects.

To understand the information society we must essentially understand the impact of information on economy and culture. Information can be measured in a variety of ways. Understanding the interplay of economic and cultural characteristics is essential. Governments can be the great catalysts or inhibitors to this interplay. Finland is clearly a strong example of this, and while not directly applicable universally can inform information professionals in other contexts concerned with these issues. This topic will be the focus of future research (Dijk 2005:193-8).

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