Steering the Information Society Development as a Vision-based, Multi-stakeholder Process: a Point of View

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Abstract

The steering of the information society development at country level is a desideratum for the smooth unfolding of the respective societal change – nowadays a key issue worldwide for scientific research and public governance. Some possible guidelines are presented on how to come up with a vision shared by stakeholders and how to ensure concertation among them along the way.

Keywords: Information Society, new and emerging IT, vision, stakeholders, concertation

1 Introduction

A few decades ago, Peter Drucker (1969) anticipated the "age of discontinuity", when foreseeing the future by extrapolating the facts from the past is very likely to be inefficient. He described four sources of discontinuities: a) new technologies, b) globalization, c) cultural plurality, and d) knowledge capital. Today's Information Society exhibits features that are attributable to above-mentioned factors.

The Information Society (sometimes called *e-Society*) is nowadays counted among those select issues that are top-ranked on the research agenda worldwide, as well as on the policy-making agenda of states and international organisations, such as the United Nations or the European Union. Interestingly, the tendency towards more and more diverse and refined ways of theorising the information society is paralleled by

the pragmatic quest for synergy in blueprints and initiatives within and across countries. Progressing towards the information society is a priority held in common by both developed and developing countries, although their respective approaches significantly differ. Developed countries generally focus on advancing R&D in the field of ICTs and the subsequent boost of market supply of more and more sophisticated goods and services. In turn, developing countries, faced with sharp *digital divide,* due to their lagging behind in terms of computer skills and infrastructures, are chiefly concerned with taking catching-up steps and obtaining international assistance.

The issue of information society development at large, including the particular aspect of its steering, calls for a pluralist stance being adopted in thinking and acting alike, in light of a consistent series of arguments:

- *theoretical*: the multitude of scientific disciplines concerned with studying the information society (sociology, anthropology, informatics etc.) the encounter of which turned the respective matter into a standalone interdisciplinary subject;

- *technological*: the interplay of several recent key and emerging technologies of the digital age (computing, telecommunications networks, broadband IP v6, wireless communication, cloud computing, RFID, social networks, Internet of things etc.) that came up to convergence and thus lead to new business and organisational models (pay-per-service, green computing, networked enterprise, smart factory) and types of human behaviour (virtual interactions, extended collaboration) (Bughin, Chui and Manyika, 2010; Zuehlke, 2008; Panetto, Jardin-Goncalves and Molina, 2012; Filip, 2013);

- *actional:* the development of the information society became an endeavour that is subject to enactment at various levels (national, regional, global) (Martin, 2005), a wide range of stakeholders being involved therein (the state, academia, business companies, the civil society, communities with professional, socio-cultural or territorial grounds, individual citizens).

The multiple ways in which the information society was defined along the timeline differ, depending of the perspective adopted, which can be either economical, social, technological, occupational or cultural (Webster, 2006, p. 8). Out of these, Kellerman (2002, p. 10) privileges the economical and the cultural ones; the information society is characterised, from the economic point of view, by the key role of information resources and information industries while, from the cultural one, it features a flourishing creativity and a rising intellectual standing of individuals.

At the second round of the World Summit on the Information Society, convened by the United Nations, in Tunis, in November 2005, there were consensually stated the "desire and commitment to build a people-centred, inclusive and development-oriented Information Society" (WSIS, 2005). Such an option is in line with the bolder emphasis on "I" term (information), within the "IT" construct (Davenport, 2000), and also with the reinforced anthropocentric and collaborative orientation in designing next-generation information systems. It is also in line with "VISION 2050: the New Agenda for Business" of the World Business Council for Sustainable Development, released at the World CEO Forum in New Delhi, in 2010 (WBCSD, 2010).

2 The path of the information society development

The information society development at country level can be understood as a process of evolving towards upper maturity stages of this type of societal system; the knowledge society represents the fully mature stage attainable by an information society over time.

At global scale, as Himanen (2004) remarked, "[T]he first phase of the information society focused on the development of technology, such as network connections. In the second phase, which has now begun, technological development will continue; however, the focus will shift to larger social matters and the main focus will be on changing the ways in which we operate."

The information society development path at country level can be

mapped in several modalities. The qualitative ones are generally based upon scales of successive development stages, considered either prospectively or in retrospect. Each stage is assigned specific features the actual presence of which reveals the attainment of a certain maturity degree, with a view to assessing progresses achieved or projecting the way ahead.

Miles (2002, p. 163) proposed a range of maturity stages defined in metaphorical terms: islands, archipelagos, continents, ecosystem; this approach is useful in that it renders the bottom-up information society development path intelligible, although in rather intuitive terms. Accordingly, its steering process is meant to foster the consolidation of punctual instantiations into an integrated whole.

A scale with a more analytical format was proposed by Rao (2005), in which the informational society development stages range from the incipient ones (disarticulated, embryonic), followed by those where maturation is still underway (development, concertation, intermediate), up to the top ones (mature, advanced, world leader); the respective stages are distinguishable against 8 characteristics (connectivity, content, communities, commerce, culture, capacities, cooperation, capital).

Quantitative approaches, in turn, involve the use of specific metrics aimed at visualising the development degree reached by the information society at different levels (country, region, multi-country). Dedicated composite indexes became more popular lately and are widely used, especially by international bodies; the reasons are their transparent computation methodologies and the easiness of their assessment by policy-makers, as well as by the public at large. Their shortcomings include the fact that they are merging several dimensions, each of them having a standalone significance that could be disguised through statistical consolidation; moreover, if countries in upper ranks are perceived as de-facto standards, a race for higher scores is triggered to the detriment of cooperation. For monitoring purposes, specific indicators can also be used in their elementary forms, but they become more informative if appropriately selected and assembled into meaningful scorecards that allow for synoptic grasp.

3 The need for shared vision and concertation among stakeholders

Although the passage from the industrial society to the information society was recognised as a global mega-trend, this shift does not take place by default; an overall steering is required to ensure its pertinent orientation, sustained pace and beneficial systemic impact. Such a steering should be exerted as a vision-based, multi-stakeholder process.

The importance of adopting a multi-stakeholder approach was stressed, among others, by UNESCO; under the aegis of its "Information for All" programme, a template was issued for designing national information policy and strategy frameworks pertaining to the development of the Information Society at country level (Finquelievich, 2009).

According to Afsarmanesh and Msanjila (2010, p. 62), "[A] vision is a deeply held picture of where a person, a group of people, an organization, or a society, wants to reach in the future." It is meant to lay down the main directions towards meeting the final goal, without setting specific targets and deadlines. Foresight studies are always useful in preparing such visions of information society development at country level (Filip *et al.*, 2004; Dragomirescu and Filip, 2008)

In Europe, Finland provides an insightful example of good practice in steering the Information Society development at country level; as mentioned by Repo (2003), the Finnish Information Society Development Centre (TIEKE) "plays a key networking role in connecting various players in the development of the Finnish Information Society."

Yet another relevant example refers to Ireland, where an Information Society Steering Committee was established, in 1996, by the Minister for Employment and Enterprise, followed by the creation of the Inter-departmental Implementation Group on the Information Society (IIGIS); the government's strategy for the information society was originally laid down, in March, 2003, in the document titled "New Connections: A Strategy to realise the potential of the Information Society", progress reports having been published regularly (Mc Caffery, 2007).

Understandably, the state always plays a key role, as it is in charge with designing and implementing public policies, also administering

public spending; besides, the public sector is a major information producer. However, especially in developing countries, state bodies primacy in steering the information society development can be perceived by the other stakeholders as hegemonic, reverse effects being thus likely to occur as pluralism is weakened. A viable alternative in this respect consists of the lead being taken by independent, highly representative and forward-thinking bodies such as countries' academies of science (Dragomirescu and Filip, 2008). Consequently, governmental agencies set up to supervise the development of the information society should rather focus on operational aspects, acting on behalf of the state as one of the several stakeholders concerned.

The shared vision, once validated, allows for harmonising the unfolding of individual stakeholders' self-managed initiatives as well as their participation in joint actions. Concertation among stakeholders is a challenging endeavour though, as they have different logics and also maintain their autonomy. Cultivating autonomy in terms of choosing means and practical solutions is, nevertheless, fully compatible with cooperation on the grounds of the shared vision on information society development. At the same time, the stakeholders should be aware that e-Society might create new problems. Some of them can be seen in Table 1.

In order for stakeholders to keep a sustainable engagement, it is essential that the respective vision be generated collaboratively; further on, a regular consultation framework should be established for updating and progress evaluation purposes.

4 Conclusions

Steering the development of the information society at country level involves balancing top-down and bottom-up approaches, learning from experience and envisioning, incremental and leapfrog types of dynamics, and wisely matching means to the goals pursued. Adopting a systemic mindset, a collaborative format of the relationship among stakeholders, and smart methods of consultation and coordination are among the key success factors in performing the steering as a win-win enterprise.

Table 1. e-Society: pros and cons

Advantages	Debatable impacts
• More effective time usage • Facilitation of communication between people placed in different contexts • More comfortable work conditions • Good ecological impact	• Uniformization of human behaviour • Limiting direct human contacts • Laziness tendencies • High risks of manipulation • Functional opacity • High vulnerability of private

Source: Filip (2013)

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