From E-Governance Towards E-Societal Management

Nicolae Costake
Certified Management Consultant, Romania

INTRODUCTION

The purpose of this article is to contribute to the definition of the still emerging strategic concept of e-societal management (e-SM) as a key component of the information society (IS). It is a continuation of articles published in the *Encyclopedia of Digital Government* (Antiroikko, 2006; see also, Costake, 2008a, 2008b) which describe the concepts of:

(1) e-government (e-Gvt) as a set of e-services provided by the public administration (i.e., executive authority) to citizens and organizations, and

(2) e-governance (e-G) as including also the set of e-services provided by the judicial and legislative authorities of the state.

The two quoted chapters contain the historical perspectives mainly between the mid-1990s (e.g., G7 Conference on Information Society, 1995) and the mid 2000s (e.g., the EU's i2010 Program, 2006). The above definition of e-G may be interpreted also as equivalent to the e-SM at the country level and below, provided that the actions of the three authorities converge to assure continuous and sustainable socio-economic development. On the other hand, the new century started with increased global threats and also opportunities (e.g., the development of the IS). Both suggest the importance of the societal management, as well as the difference between *enterprise management,* which aims to achieve performance within a given national and international societal environment, and *societal management,* which aims to assure the societal environment best supporting developments of the economy and civilization.

It follows that the historical development of e-SM is connected to the rather slow evolution of SM and the rapidly developing IS, including e-Gvt and e-G. Its start can be considered the UN General Assembly's Declaration on Computer and Development (UN, 1968), followed by the UN's World Summit for the IS (e.g., WSIS, 2005), which adopted requirements for national and international e-SM (implicitly addressed). E-procurement for public acquisitions, the "Trans-European Administration Network" recommended for the EU by Bangemann et al. (1994), and the start of the Single Euro Payment Area project in 2002 (see SEPA, 2007, which contains complete chronology and content) are examples of other relevant milestones. E-SM is a concept built on those of socio-economic system (SES) and societal management. Many opinions were expressed.

This article begins by sketching a model of the socio-economic system as a foundation; selects, with the risk of being subjective, a number of relevant positions taken by individual institutional and authors; describes e-SM and its associated issues and trends; and proposes conclusions.

BACKGROUND

The general model of the global SES, suggested in Figure 1, includes natural resources (a component of the natural system) and the human activities system (HAS), layered above the natural system. In the absence of the HAS, the natural system was stationary, its biologic components being in a dynamic equilibrium (their growth and levels limited by the available resources). The HAS also transforms data into information, and information into knowledge, thus accumulating experience. It also enforces the concept of ownership, developing the economic activity. Some frequently mentioned risks and issues for the global SES are mentioned in Table 1.

Table 1 suggests that societal management cannot be restricted to the national domain, mankind is faced with possible irreversible dangerous processes, and the permitted duration for decision and action is shortening. The obvious conclusion is the need for e-SM.

The model of a generic SES is presented in Figure 2 as having two subsystems: (1) a societal operational subsystem (SOS) in which social, energy, material, financial, and informational processes based on natural resources and artifacts take place in communities, enterprises (non-financial and financial), markets, NGOs, and other organizations; and (2) a societal management subsystem (SMS), the institutions of which generate regulations and actions necessary for the proper organization, functioning, and development of the SES, including defense of the system's domain, protection of public order and of property, mandatory education, social security, solving conflicts and breaches of regulations (assures the necessary homeostasis), assuring relationships with the external environment, and so forth. The two subsystems are interconnected and connected with the external environment by flows of energy/matter/products/services, financial means, information, and personnel. SES may be basic (such as household), organization, territorial community

Table 1. Frequently mentioned global risks and issues

Risk and/or Issue	Comments and/or Mitigation
Global warming (Gore, 2006; Kyoto 2007)	Measures agreed at the Kyoto conference, but still not implemented by the highly polluting countries
Deterioration of the environment (Gore, 2006)	De-forestation, pollution of water, destruction of the ozone layer, destruction of species
Exhaustion of natural hydrocarbon energy reserves due to the increase of their consumption (Laherrère, 1998)	Implies changing the energy orientation of many present technologies, for example: use of renewable energies, green and zero-waste technologies (Greyson, 2007), increase of the efficiency of energy generators and consumers, and also possibly controlled thermonuclear power generation
Overpopulation: total human population may exceed the capacity to be supported by the natural resources (e.g., P&P, 2007)	Mitigation implies, for example: (a) genetic engineering of biological natural resources (b) industrialized food (c) conversion of sea water into drinking water
Endemic local wars, other armed conflicts (some with religious character), and terrorism	A large amount of resources is spent in weaponry and wars and/or other use of armed forces, the global arsenal being sufficient to destroy life on the planet
Global societal division, by large gaps*: (i) between rich and poor countries; (ii) between rich and poor people; (iii) digital divide (BECTA, 2001)	See also the world model with three economies: natural, developing, and advanced (e.g., Hart, 1997) and applicable theories, for example of the Open Society (e.g., Soros, 1998; Dror, 2002)
Deterioration of human behavior (e.g., Huxley, 1958; Lorenz, 1973)	Naisbit (1984) and Toffler (1970) underlined changes and the need for adaptation to change

* This issue can be also considered as a gap between long-term and general interests against short-term interests oriented on gaining as much as possible, as quickly as possible.

(such as municipality), a group of organizations, national, supranational, international, or global. As the national and supranational SESs raise most SM issues, they are first for discussion in this article.

There is a very large bibliography on SM and e-SM. As a comprehensive referencing is impossible, just a few examples are quoted. They are classified in streams and sub-streams:

Theoretical (some references are already included in Tables 1 and 2)

- *Global Governance:* Biermann (2006) proposes principles, research, and challenges such as "adap-

tive state." Heylinghen (2007) foresees the future "networked society."

- *SM Theory and Models:* Dror (2002) proposes capacity to govern in condition of global transformations, concluding also of the need for an independent societal feedback. Greer (2005) proposes an explanation why civilizations grow and then collapse due to unsustainable use of resources. Situngkir (2003) proposes an automatic control system analogy with Montesquieu's model of the powers in the state.

- *E-G Research:* E-Gvt (e.g., Lenk & Traunmuller, 2000; Scholl, 2003) => e-G (e.g., Lenk, 2003; Traunmuller & Wimmer, 2004) => Innovative e-G (e.g., Bicking & Wimmer, 2006). This sub-stream also proposes

Related Content

Developing a Homegrown Course Management System - Community/course, Action/interaction Management System (CAMS)

Brian G. Mackie, Norbert L. Ziemer, Nancy L. Russoand Wayne E. Mackie (2004). *Annals of Cases on Information Technology: Volume 6 (pp. 278-292).*

www.irma-international.org/article/developing-homegrown-course-management-system/44582

Institutional Dimensions of Information Systems Evaluation

Vassilis Serafeimidis (2005). *Encyclopedia of Information Science and Technology, First Edition (pp. 1545-1548).*

www.irma-international.org/chapter/institutional-dimensions-information-systems-evaluation/14471

Utilization and User Satisfaction in End-User Computing: A Task Contingent Model

Changki Kim, Kunsoo Suhand Jinjoo Lee (1998). *Information Resources Management Journal (pp. 11-24).*

www.irma-international.org/article/utilization-user-satisfaction-end-user/51057

New Approach to Optimize Cooperation Mobile Robots for Ideal Coverage with an Architecture Designed with Multi-Agent Systems

Mami Mohammed Amine, Khelfi Mohamed Fayçal, Zineb Laouiciand Benyettou Noria (2017). *Journal of Cases on Information Technology (pp. 49-65).*

www.irma-international.org/article/new-approach-to-optimize-cooperation-mobile-robots-for-ideal-coverage-with-an-architecture-designed-with-multi-agent-systems/189205

Migration of Legacy Information Systems

Teta Stamati, Panagiotis Kanellis, Konstantina Stamatiand Drakoulis Martakos (2009). *Encyclopedia of Information Science and Technology, Second Edition (pp. 2551-2556).*

www.irma-international.org/chapter/migration-legacy-information-systems/13944