Some Information Systems Requirements in View of Organizational Sustainability in an Information Society

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ABSTRACT

The importance of information in the world and the so-called information society places information systems in the center of organizations sustainability. The authors are all both producers and consumers of economic information, there aren’t any owners of it and there isn’t any real domain over economic information systems, infrastructures and technologies and particularly over communications. Organizations and economic agents are pieces from a dynamic “puzzle” that adjust itself according to the requirements of consumers and users of information and communication technologies, promoting new developments in markets and society. These challenges display the relevance of all who assume the responsibility for management of information and technologies systems which can affect the normal functioning of markets and economic organizations. Sustainability questions focus themselves on the articulation from several economic agents, on the management of information and technological resources and on the efficiency of markets, aiming to grant a peaceful and consolidated continuity of society. Beyond several factors which can be considered relevant to achieve organizational sustainability in the frame of information and knowledge society, there are some nuclear pillars in which managers and organizations need to develop competences. In this theoretical approach, supported in a focus group research, the authors aim to propose and evaluate a group of key elements to be measured for a proper evaluation of organizations sustainability in the context of information society, taking in view future empirical studies and the application of the concept in management tasks. This article is a development, made by invitation of the scientific committee, of the investigation presented in the “Centeris 2012 International Conference” held in Vilamoura (Portugal).

Keywords: Economic Organizations, Information and Communication Technologies, Information Society, Management, Sustainability

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INTRODUCTION

The contemporary world has been growing in knowledge but also in complexity and speed. The prompt compliance of people to information and communication technologies has given rise to a wide interactive system where the demand between economic, technological and social forces generates disturbance in the economic environment.

This disturbance, following an increasing globalization and supported in the information and communication technologies, reflects itself in the possibility to access new markets, in the increasing of competition, in the loss of tangibility of products and services, in the easy access to the information, in the virtualization of organizations, in the increment of the economic speed, among others aspects, which impacts have a tendency for an “universality” in the search for answers to the emergent necessities, placing new challenges to the organizations sustainability. This could be understood as the capacity to keep a “healthful and long-term” activity.

In the present economic environment, everything is possible at any time and in any place (Daniels, 1997; Davis, 1987). In the scope of current knowledge and information society, the functioning paradigm is much more demanding, since the resources and the economic transactions are processed, by electronic way, at the speed of technology, not knowing borders or barriers. The decisions or actions that take place in remote spots of the world have consequences in distinct markets.

The economic and social dimensions are new. The virtual environment, the ubiquity, the urbanity, among others, infiltrate progressively, in a quiet and “apparently” harmless way, in the economical and organizational structures, assuming a character of permanency and vitality in their action and development.

This evolution induce in the analysis and management of organizational issues the development of urbanity principles, in the sense of finding new systemic solutions to new problems as a result of established inter-organizational dynamics.

In this domain and in order to respond properly to the organizational problems, there are a set of urbanity principles that demonstrate the complexity of the systemic functioning within a framework of economic development that is increasingly interconnected. These principles are the following: suitability, functionality, connectivity, multi-use and diversity, urban design, architectural quality and sustainability.

The “current scene” is of permanent change. The permanent “omnipresence” of this feeling of change follows the demand of balance between economic, technological, social, politic and cultural environments, as well as the constant attempt of adjustment, looking for survival in a world-wide economy more competitive each day (Kirkbridge, 1993).

New challenges of sustainability emerge in this actual context (Stacey, 1993):

1. Discontinuance versus Continuance
2. Integration versus Differentiation
3. Complexity versus Instability

The Discontinuance includes the perception that the speed of change is growing, that the result is more and more uncertain and unpredictable and that the change trends, currently, to be a break with the past, instead of being a continuous and gradual development of it. The need of continuance has to assume an anticipated capacity to adapt and to develop new management templates and tools, which must fit the new demands of the market.

Other management concern is the necessity of Integration of activities and organizations, as a result of the increasing interconnection of the business world. The increasing competition, the arrival of new products, the technological differentiation, the crushing of commercial
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