Chapter 11
Information Systems Governance:
The Case of the Largest Companies in Portugal

Almiro de Oliveira
Portuguese Catholic University, Portugal

Pedro Fernandes Anunciação
Polytechnic Institute of Setubal, Portugal

ABSTRACT

The complexity of the environment and economical operation, tightly integrated with information and communication technologies, have challenged the management to adopt new paradigms and new approaches associated with new operating models. Internet of things, cloud computing, governance, and urbanism are some examples of new paradigms and new approaches in the area of information systems, which highlight the information as a basic resource for economic activity and justify the need to ensure appropriately the functions of production, storage, and distribution insofar as of its quality and availability depends on the effectiveness of corporate governance. This chapter, carried out by the European Club for Information Systems Governance in 2011 and 2012, provides evidence about the governance practices adopted in the area of information systems by large economic organizations in Portugal.

INTRODUCTION

Information and communication technologies (ICT) have assumed an increasingly important role in the development of economic activities and support for organizational activities. Economic activities are strongly dependent on ICT and they play a conditioning role in the respective management options. Through them, managers seek to improve levels of organizational efficiency and effectiveness, as well as levels of knowledge. However, organizations are simultaneously confronted with increments of organizational complexity resulting from new economic and commercial dynamics that are established supported in more interactive systems of technological characteristics.

Expressions like cloud computing, big data; information systems project management; organizational impacts; sustainability, networks privacy, ethics, return on investment; supply chain, business analytics, enterprise systems, ICT platforms, Chief Information Officer strategy, economic focus on technologies, ICT investments and associated costs, payback, security of Information Systems (IS), among other aspects, highlight the doubts associated with these issues and, consequently, the dimensions of Information Systems Governance in economic organizations (Pearlson & Saunders, 2013). Questions such as the economic value gained or the gains in competitiveness achieved through IS/ICT are examples that managers are currently facing. The answer to these and other associated questions passes through the value obtained with the main current economic resource, the information. Understanding the central role of information in the current context of society and the economy, known as the Information Society, is often hampered by the absence of an architectural framework in economic organizations.

OECD (2017) highlights some central recommendations to Government responsibilities, considering the global trends in the context of the information society challenges:

- What are the latest developments in government innovation? The recommendations for Governments are:
  - Signal innovation as a priority;
  - Enable connections across and beyond government;
  - Promote trust through transparency and responsiveness;
  - Forge partnerships with all relevant players;
- Human and machine: pairing human knowledge with innovative tools. The key recommendations are:
  - Manage data as an asset for many uses and users;
  - Open data to fuel innovation;

25 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage: www.igi-global.com/chapter/information-systems-governance/208075

Related Content

Using Artificial Neural Networks (ANNs) to Improve Agricultural Knowledge Management System (KMS)
Mriganka Mohan Chanda, Neelotpaul Banerjeeand Gautam Bandyopadhyay (2020). *International Journal of Knowledge Management (pp. 84-101).*
www.irma-international.org/article/using-artificial-neural-networks-anns-to-improve-agricultural-knowledge-management-system-kms/255134

The Evolution from Data to Wisdom in Decision-Making at the Level of Real and Virtual Networks
Andrew Targowski (2009). *Connectivity and Knowledge Management in Virtual Organizations: Networking and Developing Interactive Communications (pp. 255-277).*
www.irma-international.org/chapter/evolution-data-wisdom-decision-making/6956

Autopoietic Approach for Information System Development
El-Sayed Abou-Zeid (2008). *Knowledge Management: Concepts, Methodologies, Tools, and Applications (pp. 1035-1041).*
www.irma-international.org/chapter/autopoietic-approach-information-system-development/25156

Information Culture and Effective Use of Information Tools at Work: Conceptualizing and Measuring Group Adoption
Colin D. Furnessand Chun Wei Choo (2021). *Handbook of Research on Organizational Culture Strategies for Effective Knowledge Management and Performance (pp. 283-305).*
www.irma-international.org/chapter/information-culture-and-effective-use-of-information-tools-at-work/286320

AHP and SMART Criteria for KPI Selection in Higher Education: Case of the Candidate Selection Process
Emna Ammar Elhadjamorand Sonia Ayachi Ghannouchi (2022). *International Journal of Knowledge-Based Organizations (pp. 1-15).*
www.irma-international.org/article/ahp-smart-criteria-kpi-selection/295076