

The Problem with People and Information Security

Alexandre Cerveira
Open University, Portugal

Leonilde Reis
Polytechnic Institute of Setubal, Portugal

José Gaivéo
Polytechnic Institute of Setubal, Portugal

INTRODUCTION

Nowadays, globalization and information and communication technologies are main issues on organizations and societies, changing the way how people and organizations interact. These issues brought new and more challenges to people, organizations and societies, forcing them to change their perceptions of reality and consequently adopting new business solutions.

In this context, people, capabilities and know-how could make the difference between failure and success, particularly when organizations are facing new and emergent markets or changing their business process.

It is important to protect business information, an asset whose relevance is increasing, in order to guarantee his confidentiality, integrity and availability. This issue must be coordinated with information systems and information and communication technologies usage to support information activities through the organization. Therefore, to succeed, the focus must be put on people and on their roles in the organizations, in order to obtain their commitment with information security, according organizational needs.

In this sense, we pretend to provide the main roles identification on information security issues that people should take in account, and the options they could take to give a huge contribution to organizational performance.

PEOPLE, INFORMATION, AND ORGANIZATIONS

The globalization context, complex, demanding and technologically shaped, implies that people should

constantly adapt in response to the requirements of the organizations and societies they are a part of. Nevertheless, the diversity of challenges with which both people and the organizations are faced with arise special concerns before that same diversity. Concerns must be brought to the surface in such a way that the organizational needs are appropriately filled out, without originating additional problems for their human resources.

Considering people as a valuable organizational asset, it is essential to provide them with development conditions and drive which allows a wider use of their competencies. To accomplish this, it is necessary to simultaneously guarantee that the information systems (IS) and the information and communication technologies (ICT) can be used as tools which enable them to improve their performance.

People acquire still greater importance since they are capable of coping with new challenges, using the previously obtained competences in terms of IS and ICT. This is quite true since they are also capable of adapting the formerly obtained skills and competencies while addressing the specific objectives of organizations and of societies, in which they interact. In this way, it also becomes crucial that both training and development of IS- and ICT-related competencies, might be assumed as decisive for the performance of people and of the organizations in which they are employed.

The need for organizations to go through considerable internal changes was identified by Drucker (1988), which corroborates the emergence of a new type of organization, in other words, of information-based organizations. He defines this new type, as organizations composed broadly by specialists that guide and discipline their own actions through organized feedback of their pairs, of their customers and of their head office.

But the success of organizations also depends upon the resources (human, technological and financial) that they have to sustain their own development in the evolutionary context in which they find themselves involved. Organizational learning can, through the adoption and use of IS and ICT, act as a differentiating factor in the acquisition of competitive advantages, allowing the development of their capability through the use of resources and of accumulated knowledge, in an evolutionary and interactive process (Amaral, 1994; Ciborra & Andreu, 1998).

Since the way people interfere in organizations and societies has been shifting throughout time, fact compelled mainly by the modifications that occurred in that same societies and organizations. Those modifications are motivated by the globalization phenomenon that also led to the appearance of new relationship models, where people's role has been gaining growing importance. Attending to a society that is intended of the information, it is now even more essential that people obtain and develop competences to boost organizational performance and capability, while facing up to the challenges brought to them by the emergence of new and more complex markets. According to Ulrich (1998), two main challenges arise from the increase of collaborators' competences: their alignment with business strategy and the need to assure they are acquired through more than one mean, as not to limit their evolution.

In this way, one can assume that the discrepancy between people's needs and expectations is due to nothing more than the natural evolution of society and of organizational goals. This situation allows inferring that the way organizations understand the importance of their human resources and the competences they detain, can make the difference in the contemporary markets. In this sense, facing situations where new concepts and administration practices are demanded, Zorrinho (1994) assumes the emergence of information as a structuring resource of the organizational economical systems. He refers also that information management should be understood as an important driving element of change in the organizational structure, facing up to the competitive frame he affirms to be "very competitive, global and complex, in which the relevant factors for the steering of businesses are more and more frequent and less predictable."

On the other hand, for Earl and Feeny (1996), it has been verified that the role carried out by ICT in

the globalization context is built up of different aspects in function of its scope, referring to the following elements as being fundamental: data networks and quality information in a context of global efficiency; production systems and collaborative development supporting networks, in a local context; communication networks and knowledge management systems, in a knowledge sharing and inter-organizational systems context, before a context of global alliances.

For Zorrinho (1991), information is increasingly affirming itself as a critical success factor for organizations that bet in turbulent and highly competitive markets, the reason why the information management process becomes a primordial need for any organization.

Nevertheless, the concept of 'information' can be understood or looked at from different perspectives, depending on the context in which it is applied. In this article, the term 'information' is used in the sense presented by the Information Security Management Standard, BS ISO/IEC 17799:2005 (ISO, 2005), which defines information as an asset that has value for an organization, and which requires appropriate protection, regardless of its form or mean of storage, processing and/or transmission.

The existent perception concerning the different possible framings for information as an asset is reinforced by Peltier (2001), who understands the information classification process as being sustained in four essential aspects. Those aspects, according to the legal point of view, are: responsibility for the protection and control of the information; information integrity; information relevance; and the relevance of the IS that process it. In terms of the IS, organizations need competences in business support applications and ICT that sustain those applications, but they also require security policies that allow them to guarantee the confidentiality, integrity and availability of business information. This business information is stored and transmitted through the organization and among its different business partners, including suppliers and clients, by the above mentioned applications and ICT process.

According to this scenario, one can verify that the value that an IS is able to add to an organization depends precisely on the support it offers to the processing, storage, transmission and access of data, enabling the production of relevant information for the optimization of corporate performance (Cats-Boil & Thompson, 1997).

5 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/problem-people-information-security/17751

Related Content

Participatory Geographic Information Systems

Dulce Magalhaes de Sá and Ana Cristina M. Costa (2008). *Encyclopedia of Networked and Virtual Organizations* (pp. 1179-1184).

www.irma-international.org/chapter/participatory-geographic-information-systems/17740

Understanding Communities of Practice to Support Collaborative Research

José Córdoba and Wendy Robson (2006). *Encyclopedia of Communities of Practice in Information and Knowledge Management* (pp. 558-564).

www.irma-international.org/chapter/understanding-communities-practice-support-collaborative/10547

REVERIE Virtual Hangout: An Immersive Social and Collaborative VR Experience

Ioannis Doumanis and Daphne Economou (2021). *International Journal of Virtual and Augmented Reality* (pp. 18-39).

www.irma-international.org/article/reverie-virtual-hangout/298984

Copyright Protection through Digital Watermarking

Farook Sattar and Dan Yu (2006). *Encyclopedia of Virtual Communities and Technologies* (pp. 66-72).

www.irma-international.org/chapter/copyright-protection-through-digital-watermarking/18046

Smart Classroom-Based Innovative Solution Toward Uninterrupted Education: Perspective

Sudhir K. Routray and Sasmita Mohanty (2022). *International Journal of Virtual and Augmented Reality* (pp. 1-14).

www.irma-international.org/article/smart-classroom-based-innovative-solution-toward-uninterrupted-education/306689