

# Chapter 4

## Strategic Agility

### Frameworks for Information System Governance

#### **ABSTRACT**

*In the current era, multiple factors have driven information systems (IS) to be able to cope with changes caused by internal and external factors that affect organization strategy. Various environmental factors can influence organization and performance capacity and tend to change organizational strategy, including political, socioeconomic, financial, and technological changes. Early in the 21st century, other changes are expected, such as those associated with cybercrime and artificial intelligence. Here, the authors discuss the concept of agility, the dimension of agility, relevant literature studies, and proposed model and conclusions.*

#### **INTRODUCTION**

Today, the Department of Information Systems has more than ever the need to better manage their company's IT policy, which must not only make it possible to offer service availability or continuous business improvement, but above all offer competitive advantages linked to the use of information technology. In such a context, IT Departments must be based on the best approaches and practices to offer maximum agility to adapt to functional and technical evolutions and to open up in order to better connect to partners'

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processes, while safeguarding and reusing existing IT assets without calling into question the technologies used for several years. Within this framework, a new type of information system, a natural evolution of current systems, will have to be defined and developed and which must be capable of being recycled over time, of being reconfigured effectively without generating new difficulties. In our opinion, this is an important opportunity to define and use a tool-based approach based on a rigorous methodological approach to guide architects and decision-makers in their process of development, redesign and modernization of corporate information systems.

To face the internal and/or external pressures that the company undergoes, control changes with the necessary responsiveness and reduce costs, so that the company ensures its survival, sustainability and security, it is vital to manage its information system with rigor and consistency, driving important and rapid changes at all levels of all dimensions of its information system. The changes concern technologies, applications, processes, organization and human resources. All these elements influence the company's strategy and vice versa. Thus, there must be sufficient agility in an information system so that it is aligned with the company's strategy.

However, the information systems deployed within companies are not always profitable and efficient, which can be explained by their lack of agility in an evolving environment, as well as by surprising changes, a situation in which their development is often forced, more than expected.

Today, the concept of agility is recognized as a means of maintaining consistency and improving the efficiency of IS. Therefore, the challenge is to keep information systems as open as possible while preserving the company's information assets; information systems must be able to respond quickly and effectively to changes.

Recently, the subject of IS agility has increasingly attracted the interest of IT researchers and practitioners. According to (Lee, Sambamurthy, Lim, & Wei, 2007; Sharifi & Zhang, 1999), the transformation of uncertainty in the business environment is a major topic of management research. The transformation of uncertainty requires that the important functions of any IS can cope with uncertainties.

In the current era, multiple factors have driven IS to be able to cope with changes caused by internal and external factors that affect the organization's strategy. Various environmental factors can influence organizational and performance capacity and tend to modify organizational strategy, including

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