

# Business IT Systems Implementation

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Călin Gurău

GSCM – Montpellier Business School, France

## INTRODUCTION

The traditional channels of marketing are gradually being transformed by, or assimilated into, the global network represented by the Internet and modern information technology (IT) applications. Unfortunately, in most cases, the current IT systems are not fluid and dynamic enough to cope with ubiquitous customers who can contact the firm through a multitude of communication channels, such as mobile phones, Internet, or fax. The effective implementation of modern marketing strategies depends on the effective use of IT systems and procedures.

Internet-based technology can facilitate information dissemination, file transformation, data mining, and processing (Roberts, Raymond, & Hazard, 2005), which creates opportunities for the development and implementation of efficient *customer relationship management systems*. On the other hand, the new information technologies can also be used to increase the employees' satisfaction and productivity (Dorgan, 2003; Eichorn, 2004). Thus, the implementation and use of an efficient IT system for business and marketing activities becomes a fundamental task, which should be managed jointly by business specialists and IT professionals (Wierenga & Van Bruggen, 2000).

Unfortunately, these opportunities are hindered by many challenges at organisational or managerial levels, such as defining and restructuring the internal and the external sources of information, centralising the marketing database, and integrating the IT and marketing procedures at operational level.

Considering all these issues this paper attempts, on the basis of secondary data, to provide an overview of the main issues related with the implementation of IT systems in business organisations and the challenges related with the integration between information technology and marketing systems.

After a brief presentation of the previous research on this topic, the paper presents the stages of a gradual integration of IT systems in a business organisation and proposes a theoretical model

## BACKGROUND

Considered a functional perspective, the main benefits of using modern IT systems for marketing operations are

developed during three major phases: (1) automation, (2) information, and (3) transformation (Dedrick, Gurbaxani, & Kraemer, 2003).

1. **The First Stage:** IT systems are primarily used for automating manual systems of data recording and retrieving (Scott, Rosenbaum, & Jackson, 2003; Speier & Venkatesh, 2002). This level is particularly useful for improving the efficiency of routines, or simple tactical activities (Eli, Sundaram, & Chin, 2002).
2. **The Second Stage—Information:** The useful data are transformed through processing into relevant information for marketing operations and procedures (Ranchhod & Gurău, 2004). The information stage integrates the automated procedures developed in the previous phase, the data collected in the automation phase being scrutinised, selected, processed, and converted into business intelligence (information).
3. **The Third Stage—Transformation:** The company starts to adapt and use knowledge in order to enhance its strategic positioning. In this stage, the company will transform itself into a market-oriented, proactive organisation that uses IT systems in an integrated way to increase the effectiveness of every marketing operation (Roberts et al., 2005).

Many authors have emphasised the importance of IT systems for developing efficient *customer relationship management strategies* (Agrawal, 2004; Goldsmith 2004; Gurău, 2003; O'Malley & Mitussis, 2002; Plakoyiannaki & Tzokas, 2002; Roberts et al., 2005), and for employees' satisfaction (Dorgan, 2003; Eichorn, 2004). The level of IT integration in the organisational business structures and strategies is directly related with company's performance and profitability (Dedrick et al., 2003; Eichorn, 2004).

Unfortunately, in many organisations, the implementation of modern IT systems is a major source of tensions and problems, as many recent studies clearly demonstrate:

- The main reason for most B2B project failures is the incapacity of partners to implement a well-integrated technology infrastructure to support business processes (Meehan, 2002).
- A study of New Zealand corporations showed major difficulties in achieving the integration of business and

IT, both in the public and private sector (Navigate and Systems Planning Associates, 2002).

- A survey published by CFO Publishing Group indicated that 44% of chief financial officers indicate a weak alignment between IT and business strategies (Hoffman, 2003).
- An online survey showed that 91% of IT managers are aware of the necessity to integrate IT and business strategy, and 77% indicate that a poor understanding of business needs and objectives is a top barrier in the effective use of IT (Mejias, 2002).

The specialists have attempted to identify and propose solutions to these problems. A frequently used concept is that of *organisational or strategic alignment*, which emphasises the need to correlate the functioning of the IT system with business processes, in the context of organisational strategies (Roberts et al., 2005). Other authors emphasise the role of human resources in adopting, shaping, and enhancing the strategic use of IT for marketing operations (Dorgan, 2003; Speier & Venkatesh, 2002). By emphasising the role of organisational leaders, Eichorn (2004) constructs the concept of *internal customer relationship management*, and proposes the application of its principles as a solution for effective business-IT integration and performance. However, no study was able to synthesise all the aspects of *IT systems implementation* in modern business organisations.

## **The Integration Between IT Systems and Business Strategies**

The introduction of modern IT systems, especially when based on Internet connectivity, requires the restructuring of information collection, archiving, and processing capabilities at the level of the entire organisation.

The recent development of communication technology forces the firm to redefine the sources of information. Customers can contact the company using multiple communication channels, such as mail; fax; fixed or mobile phone connections; or e-mails. The organisational structure should be able to accommodate all these flows of information and to introduce filter mechanisms that analyse the content and the level of urgency of the message, and then direct the communication to the relevant people within the organisation.

On the other hand, the complexity of the input data requires a centralised system of information storage that can be accessed simultaneously by various organisational departments. The centralisation of customer and organisational databases contradicts the traditional model of departmentalised databases, which often created redundancies and limited the interdepartmental communication and collaboration. In the present competitive environment, characterised by dynamism, complexity, and unpredictability, the speed of

reaction and the capacity to work in multi-disciplinary teams are paramount for a company's survival and success.

The introduction of modern IT systems, and the restructuring of organisational processes and architecture, are often perceived as major cultural shocks by company's employees. Many studies have identified the resistance to change, and the concerns related with the use of novel IT systems as important barriers for the implementation of information technology in business organisations. This indicates that the implementation of a new IT system requires a change not only at functional level but also in the philosophy and culture of the firm. The adoption of a market-oriented, IT-based, business approach cannot succeed without the change of employees' mentality and system of values.

Another major problem in modern organisations is the interface between IT and marketing systems. Too often, the two organisational functions are independently structured, creating disparate subcultures within the same company, with different values, objectives, procedures, and approaches. The collaboration between IT and marketing becomes more difficult and complex as the culture gap widens and each group affirms and protects its primary importance in the organisational structure (Eichorn, 2004).

The adoption of a market-oriented approach by modern enterprises requires a closer collaboration between IT and marketing functions (Ranchhod & Gurău, 2004). The two functional departments need to share experience and information and to work together towards defining and realising common goals. Often, this approach is facilitated and coordinated by the top manager, who creates multi-divisional teams and establishes formal rules of cooperation, that are enforced at middle management level (Goleman, 2002).

Technology deployment represents the way in which companies plan and manage IT to enhance the marketing activities and procedures. From an organisational point of view, five main stages of this process can be defined as a gradual evolution of systems, processes, and procedures:

1. The strategic use of IT is focused on IT applications that support and enhance the competitive advantage of the company.
2. The IT management examines and improves internal IT related activities, such as the usage of new technologies, the development and adaptation of specific IT applications, or the degree of IT usage practised by the employees.
3. The enterprise information systems are restructured in order to align the IT strategy with the organisational structure and to manage more effectively the internal information networks.
4. The IT infrastructure is integrated in the company structure and its usage is formalised in order to manage more effectively the IT resources and capabilities of the organisation.

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