THE USEFULNESS OF INFORMATION SYSTEMS AT THE MANAGEMENT SCALE IN SMALL AND MEDIUM ENTERPRISES A THEORETICAL PERSPECTIVE

Par

Abderrazzak KHOHMIMIDI

PhD researcher in Management Sciences, Faculty of Judiciary Studies, Economics and Society, Agdal Rabat, University Mohammed V in Rabat.

&

Noura ETTAHIR

PhD researcher in Management Sciences, Faculty of Judiciary Studies, Economics and Society, Agdal Rabat, University Mohammed V in Rabat.

&

Nadia MOTII

Professor in Management Sciences, École Supérieure de Technologie-Salé, University Mohammed V in Rabat.

ABSTRACT

In a globalized economy, where competition is blazing, where organizations strive to offer more products and services to their clients, information is increasingly a key strategic factor. The adoption of **Information and Communication Technologies (ICTs)** plays a key role in developing business strategies that enable businesses, especially **Small and Medium Enterprises (SMEs)**, improving their competitiveness in a globalized world today. The **Information System (IS)** has become a strategic lever that enables the firms respond to the needs of different markets. Our contribution, through this paper, aims to perform a critical and an updated literature review about information systems in private corporations, to examine their benefits for Small and Medium Enterprises (SME's) at the management level, to gain in competiveness, to ensure a smooth workflow, to grasp and process relevant internal and

external information and invest it appropriately. We will also discuss some experiential cases related to the implementation of IS in Moroccan SMEs.

Keywords: Information Systems, ERP, enterprises, SME, Morocco, information Management.

RÉSUMÉ

Les **Technologies de l'Information (TI)** sont un instrument qui pourrait être utilisé par les entreprises, Notamment, les **PME** (Moyennes et Petites Entreprises) ou TPE (Très Petites Entreprises) pour gérer leur flux informationnel, améliorer leur performance et garantir leur compétitivité dans un climat d'affaires turbulent, incertain et globalisé. Les **Systèmes d'Information (SI)** représentent une plateforme technologique très bénéfique pour les PME/TPE pour opérer une bonne gestion de leur processus informationnel en vue d'une performance organisationnelle saine. Nous contribuons, à travers cet article, à l'examen par une approche théorique, du système d'information et les bénéfices qu'il pourrait générer pour les PME à l'échelle managerielle.

Mots-clés: Petites et Moyennes Entreprises, Système(s) d'information, management.

Introduction

It is commonly well admitted that the main target of private corporations is to maximize profit either in terms of improvement in business productivity or by achieving rapid expansion and market positioning. To achieve this goal, companies need to be swiftly responsive to the changes in the environments, specifically, in terms of information technology landscape and revolution. In present time, information technology is a necessity in many businesses. It is hard to gain competitive advantage and survive without some adoption or implementation of this advancement in technological products.We are in the middle of a quick development phase of technology and business innovations which is shifting the global business scene. The emergence of the Internet into a full-blown international communications system has drastically reduced the costs of operating and transacting worldwide (…) Firms producing goods and services on a global scale achieve significant cost reductions **(Laudon,Laudon,2006).**

This is to mention that the rapid growth of the Internet, intranets, extranets, and other interconnected global networks in the 1990s deeply modified the capabilities of information systems in business at the beginning of the 21st century. Besides, a major shift in the role of information systems emerged. Internet-based and Web-enabled enterprises and global e-business and e-commerce systems are becoming ordinary factors in the operations and management of today's business enterprises. Information systems are now solidly entrenched as a strategic resource in the modern organization**.(O'Brien, Marakas, 2007).** Besides, business corporations and other organizations rely on information systems to carry out and manage their operations, interact with their customers and suppliers, compete in the marketplace, and support decision making **(Zwass, 2011).**

The authors **LaudonandLaudon (2006)**argue that the information that organizations need in the decision making process, in controlling operations, analyzing problems, and creating new goods and services, is generated by information systems through some activities : input, processing, output and feedback. Input assembles raw data from within the organization or from its external landscape. These authors explained that the stage of processing converts this raw input into a meaningful form. The output transfers the processed information to the people who will use it or to the activities for which it will be destined. Information systems also require feedback, which is output that is returned to appropriate members of the organization to help them evaluate or correct the input phase.

Riemenschneider and **al.(2003)**have studied the factors that influence the adoption of information technology in SMEs. They generally agreed that SMEs adoption of information technology were mainly influenced by the perceived benefits of implementing the systems and stems from the pressures received from competitors, customers, and suppliers to ensure business continuity and survival in the increasingly competitive environment.

1. Literature review: Information systems, a multi-dimensions instrument

1. 1 Information systems: A plethora of terminological definitions

When it comes to the conceptual aspect regarding information system, the literature review suggests several definitions of information system. Management science is studying closely

this practice since information and information technology have integrated many corporations at all organizational scales. Hence, the need to understand the nature of information systems and their impacts on strategic management of enterprises. The question of why we need to study information systems and information technology has evolved into a moot issue. Information systems have become as integrated into our daily business activities as accounting, finance, operations management, marketing, human resource management, or any other major business function. Information systems and technologies are vital components of successful businesses and organizations—some would say they are business imperatives. They thus constitute an essential field of study in business administration and management **(Obrien,Marakas, 2007).**

A Plurality of definitions can then be presented. Some authors point that an information system is a set of people, procedures and resources to acquire, process or transform, store and communicate information gather information, process it and distribute it within an organization **(Reix, 1983; O'Brien, 1995).**

According to **Patterson (2005)** an information system is a group of interrelated components that aim to undertake input, processing, storage, output and control actions so as to convert data into information that can be useful to support forecasting, planning, control, coordination, decision making and operational activities in an organization. **(O'Brien, Marakas 2007),**indicate that the information system (IS) can be any organized combination of people, hardware, software, communications networks, data resources, policies and procedures that stores, retrieves, transforms, and disseminates information in an organization. People depend greatly on modern information systems to develop communication links with one another through a diversity of devices (hardware) , information processing instructions and procedures (software) , communications channels (networks) , and stored data (data resources).

Reasoning furtherly, an information system can be defined technically as a set of interrelated components that collect (or retrieve), process, store, and distribute information to support decision making, coordination and control in an organization. In addition to supporting decision making, coordination, and control, information systems may also help managers and workers analyze problems, visualize complex subjects, and create new products **(Laudon,Laudon, 2006).**

1.2 Historical background of Information Systems:pioneering and founding steps

To better understand the concept of I.S in a private corporation, it should be preferable to go back in time, to assimilate of this concept. I.S are a consequence of computerization of companies (**Cherguiand al., 2016).** On the chronological ground**,** the term information system (MIS English: management information system) date from the sixties **(Moigne, 1986)**. The idiom was used in different senses and its appearance is historically linked to the use of computers in information management in the company. However, IS can be set independently

of the technology used to realize it, because the computer is a tool for performing computerized IS.

O'Brien and **Marakas (2007)**observed that until the sixties (1960s) of the last century, the role of most information systems was simple: transaction processing, record keeping, accounting, and other electronic data processing (EDP) applications. Then another role was added, namely, the processing of all these data into useful, informative reports. Thus, the concept of management information systems (MIS) was born. This new role focused on developing business applications that provided managerial end users with predefined management reports that would give managers the information they needed for decision-making purposes. Before the 70s, computers were already operational in enterprises; even if having sometimes huge physical dimensions in comparison with present day microcomputers **(Pujolle, 2014).** Back then, the urge for automization of businesses is partly due to the need to computerize tasks, increase productivity, speed, efficiency and effectiveness in the implementation and especially a good coordination of the various components of business.

Computers were not very advanced (compared to those of today), resulting in many pitfalls:
• The automation was achieved task by task.
• Lack of interactivity between applications.
• Increased cost of machinery.
• Weak machine performance and its impact on developed applications.
• The lack of application maintenance methodology.

In the 80s, PCs (Personal Computers) and LANs (Local Area Networks) appeared and desktop tasks made department less linked to IT by using Word processing spreadsheets.
Since 1990, central control and corporate learning has been a priority for managers with the appearance of Wide Area Networks and relational databases. Starting with the 2000s, Internet has enabled global enterprises and business partners to quest for data sharing through efficient systems (**Cherguiand al., 2016).**

1.3 Types, roles and functions of organizational Information Systems

The literature in information systems management refers to many types and functional classification of Information Systems. Thus, we relevantly learn that these technological instruments exist under many types and designed for a variety offunctions, tasks :

1-Transaction Processing Systems

A transaction processing system is a computerized system that performs and records the daily usual transactions necessary to the conduct of the business. Operational managers need systems that keep track of the elementary activities and transactions of the organization. Transaction Processing Systems provide this kind of information **(Laudon,Laudon, 2006).**

2-Process Control Systems

Process control systems acts as a Monitor and a controller of industrial or physical processes. Examples: petroleum refining, power generation, and steel production systems. For instance, a petroleum refinery uses electronic sensors linked to computers to monitor chemical processes

continually and make instant (real-time) adjustments **(O'Brien, Marakas, 2007)**.

3-Enterprise Collaboration Systems (Office Automation Systems)

Enterprise collaboration systems (Office Automation Systems) are enhancing team and workgroup communications and productivity **(O'Brien , Marakas 2007)**. Office information systems are designed to support office tasks with information technology. Voice mail, multimedia system, electronic mail, video conferencing, file transfer, and even group decisions can be achieved by office information systems **(Shim, 2000).**

4-Management Information Systems

Management information systems provide information in the form of pre specified reports and displays to support business decision making **(O'Brien, Marakas 2007)**. Management information systems (MIS) use the data collected by the TP Stoprovide supervisors with the necessary control reports **(Belle and al., 2001).**

5-Human Resource Information Systems

Human resources information systems support activities such as identify ingpotential employees, maintaining complete files on existing employees, and creating programs to develop employees' talents and skills (**Laudon, Laudon, 2006).**

6-ManufacturingandProduction Information Systems

According to **Hernandez** and **Rivera (1997)** the production information system is a computer program that manages a database of information related to production. **Shim (2000)** stated that the mission of a manufacturing information system is to apply computer technology to improve the process and the efficiency of a manufacturing system. Hence, raising quality of products and decreasing manufacturing costs

7-Salesand Marketing Information Systems

The sales and marketing function is responsible for selling the organization's product or service. Marketing is concerned with identifying the customers for the firm's products or services, determining what they need or want, planning and developing products and services to meet their needs, advertising and promoting these products and services. Sales and marketing information systems support these activities (**Laudon, Laudon, 2006).**

8-Functional Business Systems

O'Brien and **Marakas (2007)** argue that functional business systems are Information systems that focus on operational and managerial applications in support of elementary business functions.

9-Strategic Information Systems

We learn that Strategic Information Systems apply information technology to a firm's products, services, or business processes to help it gasp a strategic advantage over its competitors **O'Brien, Marakas (2007)**. In addition and according to **Belle, and al., (2001),**Strategic Information Systems are an important special type of organizational information system used to secure or sustain competitive advantage in the market place.

10-Decision Support Systems

Decision Support Systems (DSS) deal with supporting and improving managerial decision-making. DSS include personal decision support systems, group support systems, executive information systems, online analytical processing systems, data warehousing, and business intelligence **(Arnott, Pervan, 2005).**

Besides, decision support systems also serveat the management level of the corporation. These systems help managers make decisions that are new, unique, rapidly shifting and not easily known in advance. They address issues where the procedure for arriving at a solution may not befully predefined previously (**Veljanoska, Axhiu, 2013).**

In summary, the classification and typology of existing organizational information systems, the literature gives an outline of the different kinds and functions of information systems represented in **figure (1)** adapted from (**O'Brien , Marakas, 2007).**

1.4 Usefulness and value-added of Information Systems in enterprises:

Information Sytems do have numerous benefits and bottom lines with regard to corporations' management functions. The academic studies conclude to this statement by advancing that:«Information systems can help identifying and re- solving the existing problems and weaknesses of a company. They canbring alotof direct and indirect benefits, thusin creasing the financial stability of a company » **(Lipaj , Davidaviciene, 2013).**

The author **Lucey (2005),**quoted by **(Berisha-Namani, 2010),** asserts that "information systems is a system to convert data from internal and external sources into information and to communicate that information in an appropriate form to managers at all levels in all functions to enable them to maketimely and effective decisions for planning and controlling the activities for which they are responsible .

From the standing point of **Vlejanoska and Axhiu (2013)** information systems have become compulsory, online, interactive tools, which are deeply involved in the day-to-day tasks and decision making of large corporations. Thus, from economic perspective, information technology modifies both the inherent costs of capital and costs of information. Information systems technology can be levered as a means of production. The cost of information technology go down, the access to digital technologies becomes then easy.

In his monograph (Systèmes d'information et management des organisations), **Robert Reix (2002)** explained that information systems efficiently contribute to the decision-making process when a system can be accessed and open to several people, regardless of their position (geographical, functional, hierarchical,...) in the organization and these systems

guarantee, according to the **same author(2002)**, the swiftness and quality of decisions through the use of models, the use of expert systems, and the possibility of simulation before the selection, etc.

Again, the benefits business organizations seek to achieve through information systems include: better safety, competitive advantage, fewer errors, greater accuracy, higher quality products, improved communications, increased efficiency and productivity, more efficient administration, superior financial and managerial decision making **(Rosca and al., 2010)**,cited by **(Matraneand al., 2015).**

1. 5 The Enterprise Resource Planning (ERP): A prototype of commonly used Information system in SMEs

As mentioned before, the literature reveals the availability of many types of information systems. Among them there is a technological application that goes by the denomination of ***(ERP) or Enterprise Resource Planning.*** According **to (Jaliland al., 2016),** it is an acronym of American origin, and is commonly used to designate the integrity management software. The term "ERP" is not totally adequate because it puts only evidence planning appearance. However the French translation "ERP" does not include the planning dimension and its use is problematic. For **Stefanou (2012),** ERP systems are enterprise-wide software packages that provide fully integrated business processes using a common database and offering data visibility and information from various viewpoints**.**

According to **Framinan (2008)**, Enterprise Resource Planning systems are regarded to beamong the best business information technology solutions of the last few decades for most of the large (and numerous medium and small) businesses.

As well,**Perotin (2002)** argues that the ERP system is defined as all "configurable and modular software applications, designed to integrate and optimize business management processes by providing a single repository and consistent and based on standard business rules".defines the ERP system as "a subset of the IS able to take over the complete management of the company, including accounting and financial management, production management and logistics, managing human resources, administrative management and the management of sales and purchases "**(Lequeux, 1999).**

Robert Reix (1999) cited by **(Jalil and al, 2016),** establishes that an ERP is a computer application that incorporates the following general features:

1-An ERP is a software package, a coherent and independent set designed to perform standard IT (Information Technology) processes, including the distribution is of a commercial nature and that a user can independently use after installation and limited training.
2-An ERP is customizable: standardized product, the ERP is designed basically to satisfy the needs of numerous businesses.
3-An ERP is modular: a set of programs or separable modules each corresponding to a management process: installation and operation can be done autonomously. The modularity of the solution facilitates the implementation to various levels of management.
4-An ERP is integrated: the various modules are not designed independently they can exchange information according to patterns provided.

5-Finally, an ERP is a management application: it captures the company's transactions and disseminates the information collected to the appropriate levels.

It appears consequently that this particular ERP is an information system that is commonly popular within the organizational and corporate sphere to support the managerial tasks and targets.

2. Information systems in Moroccan Small and Medium Enterprises: State-of-the art

In 1995 was the first introduction of internet for private use; Two years later, Morocco undertook a restructuring of the telecommunications' sector through the adoption of Law 24-96, which implicated the launch the first phase wave of liberalization of the sector. In 1998 public and Private Monitoring Committee of Information Technology (STIC) has been created, composed of representatives of public and private sectors to draw strategies, schemes and basis for information technologies in Morocco (**Cherguiand al., 2016).**Ever since the year 2000, the evolution of ICT field was accelerated, many national projects were undertaken targeting namely **(Touati, 2008)**:

• Development of e-government
• Granting satellite licenses
• Audiovisual liberalization
• Development and launch of the National Cyber strategy e-Morocco (Maroc Numeric 2010**) (Kettani ; El Mahidi,2009)**
• High speed internet, etc.

From the aforementioned, Morocco has gone advanced steps further in the implementation of information technologies within various government and private sectors to modernize the working processes and to allow the businesses to be competitive. However, what is the state-of-the art of information systems in a specific kind of companies in Morocco: the ***Small and Medium sized Enterprises (SMEs).***

2. 1 Small and Medium-sized Enterprises: a fundamental cornerstone of the economy

Small and Medium-sized Enterprises represent a fundamental element in the economic tissue in many countries. Their occupational sectors are different according to each geographical context, they contribute to local wealth but they also face various and numerous challenges as we will mention in the following.

2.1.1 Benefits of Small and Medium Enterprises:

From the point of view of **(Achargui, Zaouia, 2016)** SMEs are vital for the growth of the national economy, according to a report realized by the Moroccan Ministry of Finance (August 2003), titled "Evaluation of SME financing in Morocco" (August 2003), the SMEs constitute over 95% of companies, employ 50% of employees, and realize 31% of exports,

51% of national investment and 40% of production. Those statistics put the emphasis on the potential that SMEs have in bringing substantial contribution to the Moroccan economy.

Furthermore, these SMEs have a strong influence on the economic growth of all countries. They play an important role in employment and innovation **(Lin, 1998; Snider and al., 2009).** They differ fundamentally from large organizations in several ways, such as having limited resources, the inadequacy of employees' skills, uncertainty towards IS and a lack of vision for their prospective competitive advantages **(Salmeron, Bueno, 2006).**

The SMEs do have a positive impact on the economic setor as clarified by **(Sarwar, 2001).** Discusses that SMEs form the backbone of the private sector, make up over 90 per cent of enterprises in the world and account for 50 to 60 per cent of employment. SMEs make a vital contribution to the development process for the following reasons:
-SMEs are more labour-intensive and tend to lead to a more equitable distribution of in come than larger enterprises.
-SMEs contribute to a more efficient allocation of resources in developing countries.
-SMEs support the building of systemic productive capacities. They help to absorb productive resources at all levels of the economy and contribute to the establishment of dynamic and resilient economic systems in which small and large firms are interlinked. They also tend to be more widely dispersed geographi cally than larger enterprises, support the development and diffusion of entrepreneurial spirit and skills, and help to reduce economic disparities between urban and rural areas.

2.1.2 Definition of an SME:

As explained by **(Makhrouteand al., 2013),** it is laborious to find a unified definition that is standardized and recognized globally. Besides and within the same country, it can come across several definitions that differ according to the vision and objectives of each national, governmental and private institutions (state, local authorities, financial institutions, etc.) and international institutions (World Bank, International Monetary Fund, OECD, etc.). The SMEs in Morocco do not constitute the exception to this rule; there are different definitions mentioned through time by several stakeholders, namely GPBM (Professional Group of Banks in Morocco) , CGEM (General Confederation of Enterprises of Morocco) , the state through SMEs Charter, the investment code, etc.

Moreover, The SME is a vague concept whose definitions vary **(Julienand Morel, 1991).** The economic and legal diversity presents itself a first characteristic of the SMEs definition. It is not surprising that worldwide researchers, scientists and governments have tried repeatedly to define SMEs without reaching a comprehensive definition that considers both the legal and economic aspects. According to the (Law No. 53 - 00, July 2002), SMEs are: "any business managed and/or administered directly by individuals who are shareholders, and is not owned by more than 25% of capital or the voting rights by one enterprise or several enterprises, falling outside the SME definition". This definition is never final and may be changed, according to the economic and social circumstances, to accommodate economic operators and institutions. **(Makhrouteand al., 2013).**

2.1.3 Characteristics of Moroccan SMEs: different impediments

The research literature **(Makhrouteand al. 2013)** reports that Moroccan SMEs suffer from several hurdles, namely:

(1)-The majority of SMEs are small sized;
(2)-Feeble supervision and monitoring;
(3)-Dominance of the entrepreneur-owner and manager;
(4)-Low specialization of labor;
(5)-Weakness of management practice;
(6)-Scarcity and weakness of technology penetration and use;
This list of features of Moroccan SMEs is not exhaustive; other characteristics can be identified in a significant proportion of SMEs, such as:
(a) The preponderance of an oral culture. With the exception of a few memos, nothing is set in a clear and accurate writing;
(b) The splitting of tasks is generally less developed. The SME is seeking manpower that can adaptable to a wider range of tasks and work situations;
(c) Failure to exercise market power, including the influence on the price of goods.

It appears to us that these problems urge these SMEs to think about, conceptualize, implement and empower, even progressively and at a slow pace, efficient information systems to solve their organizational pitfalls and to improve their working processes.

2.2 Information system in Moroccan SMEs: an empirical comment and Illustration

To illustrate the usefulness and purpose of an Information System within Moroccan SMEs, for the purpose of this paper, we didn't conduct ourselves a proper scientific study to accurately investigate and measure these two variables of such a system for an SME. Rather, as a scientific methodology, we have selected from the literature, a sample of empirical quantitative studies that have newly focused on an example of information systems in Moroccan the companies: the Enterprise Resource Planning (ERP). The study in question entitled "***The Impact of the Implementation of the ERP on End-User Satisfaction Case of Moroccan Companies*"** was conducted by some Moroccan authors **(Jaliland al., 2016).**

We have chosen as a study example the ERP representing a type of corporate information systems that is widely used by firms around the globe. The current context of global economic activity is characterized by a large and permanent competition as well as a large customer requirement for immediate and complex solutions. In this context, process control and continuous improvement become prerequisites for success. As a result, numerous companies around the world are trying to take advantage of an overhaul, using software packages, their information systems, and hundreds of them have opted for systems integrated management ERP (Enterprise Resource Planning) as a basis for the integration of their industrial management **(Marbert, SoniandVenkataramanan, 2000)**.

In the study the authors have selected the sample population exclusively on a sole criterion, namely: the existence of an ERP system that is already operating at all levels (all modules are already functional) or at least a good part of the system. Data collection has targeted a sample of 40 surveyed companies, with an effective response rate of (60.45%). The unit of the study in question focused only at the variable related to user satisfaction of the existing

organizational ERP system. Hence, the respondent is either the project leader or the leader or one of the senior or middle managers, or one of the last entry clerks.

The results of this aforementioned exploratory study emphasize that user satisfaction of ERP (Enterprise Resource Planning) is explained by the quality of the ERP system, the perceived usefulness and quality of information provided by this specific type of system. The study also pointed that the quality of change is a predictor factor of satisfaction measured by user involvement in the implementation of ERP, the quality of communication activity within such a project and the quality of the training given to users.

The study authors have advanced three categories of assessment factors to improve the performance and satisfaction rates from an ERP: organizational factors, environmental factors, and technological factors. According to the authors, the mentioned factors are crucial to assess the success of the project of ERP system and they contribute significantly to understanding the process of the success of this. In the absence of an ERP system, a large corporation may find itself with many software applications that do not communicate to each other and do not effectively interface.

2.3 Major challenges meeting SMEs to implement an Information System

However, and despite the several benefits of an ERP empowering, some impediments that make it uneasy for SMEs to implement Information Systems. This is what is witnessed by **(Zafarand al., 2015)** when they claim that some the challenges encountered by SMEs upon the implementation of IT/IS are the limited awareness, lack of IT support, lack of IT literacy, varying skills of IT awareness and management, inexperience in using consultants, lack of suitable Infrastructure and limited resources.

These authors explain some kinds of these organizational hurdles:

1) ***Limited Awareness***: Many SMEs do not have knowledge of the available technologies to be applied in the institutions to increase productivity and help in the decision-making process.
2) ***Lack of IT (Information Technology) Support***: It is difficult for SMEs to attract employees in IT departments, or even retain them, for large organizations need them greatly and offer them higher salaries compared to SMEs.
3) ***Lack of IT Literacy***: Employees in SMEs work for several years on a specific and consistent pattern. These employees are not IT intellectuals and they oppose changing the work patterns that have been applied for several years (change resistance).
4) ***Varying Skills of IT Awareness and Management***: The success of most organizations depends on managers‟ skills and how they make decisions. If managers are not trained in terms of management and leadership skills, incongruities will be found, as far as thinking and skills are concerned, which may cause collisions during the implementation of their plans.

Along with these factors, some researchers such as **Deros et al. (2006)** and **Kartiwi and MacGregor (2007)**, advocate that the majority of SMEs rely on out-of-date technology. The reason is that some SMEs do not trust new technology, while others are unable to afford it which, in many cases, leads to inefficiency, misinformation and inadequate in-house expertise (Deros et al., 2006)

CONCLUSION

Throught out this paper, we have tried to explore numerous aspects of the information systems and their organization albottom-line. It clearly appears that the information management variable is crucial for the development and .Moroccan private corporations and businesses should promptly establish a global strategy that makes it possible to positively and critically implement, operate, monitor and regularly evaluate the bottom line of their information system. Moroccan SME's seek a competitive advantage to grow and face the competition in a globalized economy. This means that the competitive advantage is no longer optional; it rather became inevitable for SMEs that seek to survive and grow. Here comes the need to establish information systems to meet the globalized challenges and changes rapidly, orderly and without any mistakes. So, the existence of information systems in SMEs helps create competitive advantages globally and locally**.(Zafar& al., 2015)**

There should be consensus on the usefulness and benefits of the information system within the corporation on a mid and long terms timeline. As we learn from literature: If an information systems project has the backing and commitment of management at various levels, it is more likely to be perceived positively by both users and the technical information services staff. Both groups will believe that their participation in the development process will receive higher-level attention and priority. They will be recognized and rewarded for the time and effort they devote to implementation. Management backing also ensures that a systems project receives sufficient funding and resources to be successful **(Laudon,Laudon, 2006).**

We can assert that from a business perspective, an information system is a valuable instrument to creating value for the company. Information systems enable the enterprise to increase its revenue or decrease its costs by providing information that supports managers in taking relevant decisions or improving the execution of business processes.

At Moroccan level, SMEs should strive more to adopt and implement information systems to run their businesses, to reduce digital divide, to become more competitive and to improve their working processes. The Moroccan government should implement and facilitate funding measures to help SMEs to acquire and use information systems. This is to understand that «Continuoustechnologicaldevelopmentnotonlyresultedinincreasedperformanceofhardwareands oftware,lowered the prices and offered a greater choice of information systems for most businesses» **(Lipaj, Davidaviciene, 2013).**

We have tried through this paper to bring an intellectual and a motivated research contribution to a further an accurate understanding of the nature of the information systems, their value-added within private corporations and their plight in Moroccan SMEs.Based on the literature in the field of Information Systems with regard to management axis, we support oriented-action toward an efficient and dynamic implementation of information systems in the national SMEs.

To conclude our theoretical thought, we suggest that future researches could tackle, through scientific variables and measurement instruments, the current reality of information systems in Moroccan corporations and accomplish a scientific benchmark between the companies to better grasp the organizational dimensions of these technological levers. Studies on major

differences in the success factors of different IS projects in the organization could form a key direction for future research and prospective research could examine the use of other types of IS, in Moroccan SMEs, such as Customer Relationship Management (CRM), Supply Chain Management (SCM) and the Content Management System (CMS).

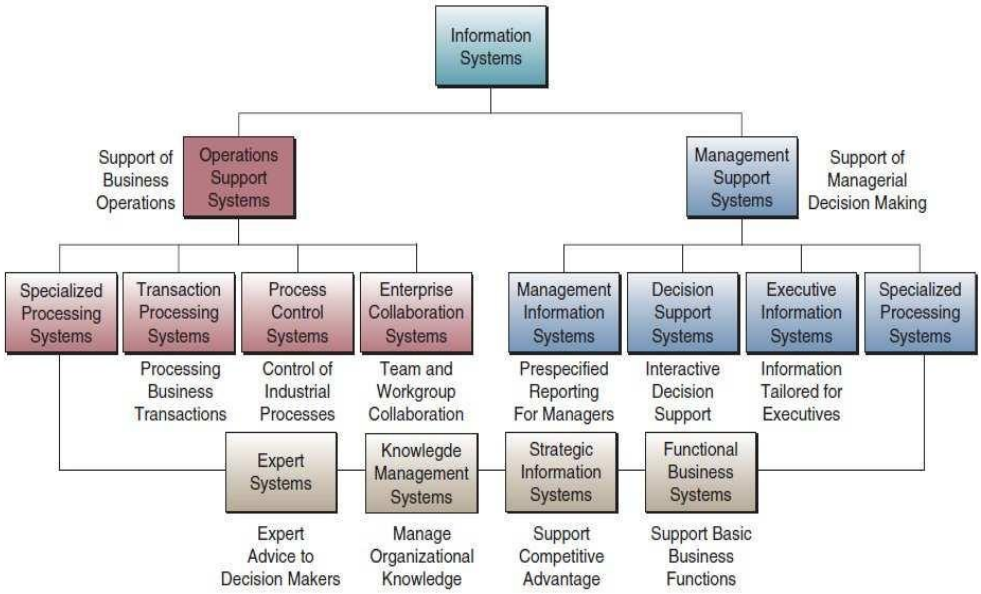

Figure 1: **Operations and Management Classifications of Information Systems.***Source : **O'Brien &Marakas, p. 13 (2007)***

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