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IT INFLUENCE ON BUSINESS MILLENIUM III

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Abstract *The paper presents the way in which modern enterprises work, compared to traditional ones. We are now talking about "smart" business and how they have changed the business world. The concept of computer system is also presented as part of the informational system, indispensable for carrying out an activity. Additionally, it is intended to provide IT solutions to business entrepreneurs to streamline their business and achieve good results in a short time.*

Key words:
Smart business, information systems, entrepreneurship, virtual environment, organization / entity

JEL Codes:
M41
C88

1. INTRODUCTION

The success of the third millennium business depends to a large extent on the quality and amount of information on which it is based.

The organization, operation and leadership of an enterprise is the field of study of the so-called smart business, which has a solid foundation both in its development in the current market environment and in the digital environment.

This process is in continuous adaptation and enrichment, thanks to the information resource. Software solutions continue to appear, as evidenced by the many existing IT tools specifically designed to optimize the business of smart business.

To this end, every business must focus on continuously improving its information system through topical methods and tools so as to be flexible to market trends and changes.

The use of mobile devices in a company brings a number of advantages, and if they are rewarding, with well-established applications, they can become real decision-making tools, easy to access and real-time, wherever the user is, at any time of the day.

„A world without business is a concept that is hard to imagine at present, because of the important role the economic system plays in the society we live in.

The changes that have occurred so far in the information system have also had an impact on the business environment that is now familiar with the concept of the digital economy model "(Iacob, Baron, 2014).

In essence, it is based on a different view of the market, transactions, product and / or service quality, requiring greater connectivity and competitiveness of evolving companies..

Consequently, it is now necessary to restructure the strategies adopted by companies to the new conditions and challenges imposed by the growing computer system.

Decision makers have the responsibility to ensure adherence to new economic models by implementing new information and communication technologies.

2. RELATED RESEARCH

In the literature, it was considered that "smart business is the critical factor for improving a company's business performance and business competitiveness, and a modality that will effectively prepare it for a future business environment consistent with the progress of smart technology" (Yoon, 2014).

Smart business can be defined as "an approach to enhancing organizations' competitiveness by improving management activities by using intelligent technologies such as intelligent devices, networks and environmental solutions (Busquets, Rodon, Wareham, 2009); (Yoon, 2014); (Chang, Chen, Zhou, 2009); (Heck, Vervest, 2009); (Hilty, Aebischer, Rizzoli, 2014).

Smart business can be described as "a business process that uses intelligent technology environments to achieve commercial transactions" (Yoon, 2014).

Therefore, smart business (SB) can be defined as an approach to streamline the performance of business management activities by applying smart technologies, solutions and systems to business tasks and management activities in a global environment business.

According to (Sun, Ding, Gu, 2008), the company's performance includes three factors:

- improving customer satisfaction;
- increasing organizational competitiveness;
- improving the organizational image.

By exploring these studies, the work describes the enterprise's performance as the effectiveness and efficiency of its management activities, which are enhanced by using the enterprise's IT capabilities for its management activities.

The performance of the company's smart business is able to transform enterprise performance into a type of enterprise performing on the basis of a smart business performance perspective.

Therefore, business smart performance (FSBP) can be defined as the performance a firm can achieve by applying smart business capability to its management activities and business tasks in a global business environment.

Specifically, FSBP represents the total performance of smart business that a firm can achieve by applying its intelligent business capability to its management and business tasks in a smart management environment.

Based on previous studies, we extract factors and analysis elements to measure business performance in a smart business perspective: operational performance (business processes efficiency, turnover and accounts, service quality and customer satisfaction), growth performance (increase in sales revenue, market growth, increase in market value and sales add-on), profitability performance (gross margin and profit margin, net revenue growth, profit growth and cash outflow) and competitiveness performance , capital structure, market share, number of patents, share of customers and R & D expenditure).

Starting from these studies, we extract analytical factors and elements for measuring business performance in a smart business perspective: operational performance (business process efficiency, inventory and accounts, service quality and customer satisfaction), economic growth sales, market growth, market value and return on sales), profitability performance (gross sales and net profit margin growth, revenue growth and cash turnover) and competitiveness performance (rising sales rate, capital structure, market share, number of patents, customer share and R & D expenditure).

These elements are used as measures to estimate FSBP through validation and reliability review processes.

3. BUSINESS IN THE DIGITAL WORLD

The economic context of recent years has seen significant changes mainly due to the increasing use of information technology.

Depending on the extent to which this transition to the information society has taken place, businesses are divided into traditional organizations and modern organizations (Ghilic-Micu, 2008).

The following table summarizes the main features that distinguish one type of enterprise from another:

Table 1. Traditional enterprise versus modern enterprise

The traditional enterprise	The modern enterprise (computerized)
• Uses physical and cultural infrastructure • Integrates all activities under a single structure • Vertical organization (each department has its own organization) • Rigid to market changes.	• Uses physical, technological and intellectual capital infrastructure that facilitates the use of new technologies • Horizontal organization • Open to innovation • Flexible to market change.

The traditional enterprise uses both a physical and a cultural infrastructure to carry out the work it is involved in, so as to obtain satisfactory results. All activities are integrated into a single

vertically structured structure, which makes it difficult to get information flowing at the entity level and makes it more rigid for inevitable market changes.

The modern enterprise comes with additional intellectual capital to use in addition to physical infrastructure and new process automation technologies. By doing so, the company has more openness to innovation and is more flexible to change in the economic environment. Thus, the added value of the modern enterprise is closely linked to technological progress and the existence of a smart agent that adapts and implements new information trends.

As an example, an important and accessible role in information technologies is played by the Internet, and it succeeds in changing the way business is done. It provides an easier and faster way of communicating between business partners and customers, regardless of the size of the company and the location of the business. Integrating the Internet into a business has become a popular practice among traders and is a step forward in a company's computerization process.

3.1. The "smart" business

Information is the most important resource of the society we live in, but it is often confused with the notion of "data," and this can influence the efficiency of the management process in an enterprise.

Data is a coded form of facts, events, and transactions for the purpose of being collected, processed, transmitted and interpreted by computer systems or by man as an individual. In this regard, information is a representation of the processed data to be useful to a particular user category. Certain information, which has a common theme and demonstrates its usefulness, forms the so-called "knowledge". Knowledge, used in a certain way, leads to the formation of intelligence (Figure 1).

From this point of view, the concept of "smart business" can be seen in two ways. An interpretation may refer to man's ability to be intelligent and how this is applied in the business environment. From another perspective, intelligence can be approached as a series of valuable and relevant information, knowledge and efficient technologies implemented in business management (Stanciu, 2007).

In the latter context, an smart business is a large collection of applications and technologies to gather, access and analyze data to help users make effective decisions.

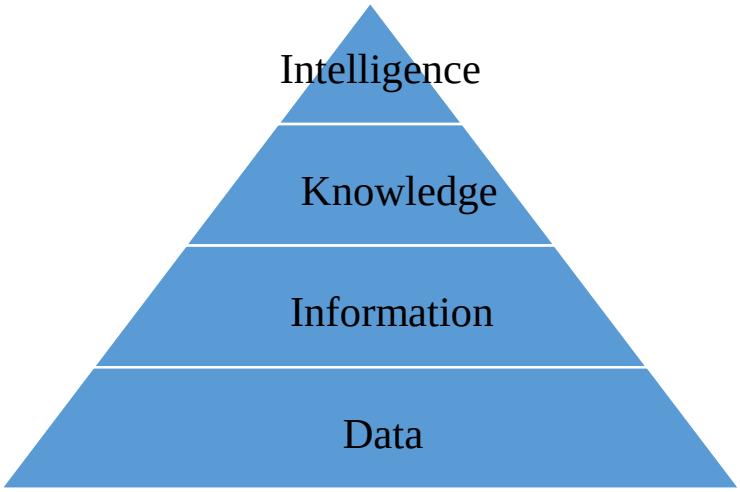

Figure 1. Data-Information-Knowledge-Intelligence Pyramid (Data-Information-Knowledge-Wisdom) to represent the concept of "intelligence" (Obreja, 2013)

All factors that may affect a company's business need to be known, such as:

- *Clients* that are a critical aspect of a company's success, because without them, a company would not exist. So it is important for a company to have information about what they like or do not like and to be able to adapt quickly to their requirements. An smart business provides the company with the ability to collect information about market trends and anticipate the need to create new products and services according to people's needs;
- *Competitors* can be a big hurdle on the way to a company's success, as they have the same goals to satisfy their customers and maximize profits. Intelligent business can help the company win the battle by showing every step taken by competitors, thus giving it the opportunity to make informed and well-informed decisions;
- *Business* partners assume that they have the same strategic information as the company to avoid possible misunderstandings. By using an intelligent business, the company and business partners can easily share any type of information;
- *The economic environment* plays an important role in the decision-making process, and a smart business must provide information about the economic situation it has and make decisions based on time and the possibilities of expanding business operations;
- *Internal operations* are the daily activities that take place in a company. A company needs good information about the internal operations that take place, both top and bottom, for proper operation. Decisions taken without documentation of the situation of the whole company may have a negative impact on the business. Business Intelligence requires full

disclosure about the organization and the way an entity operates.

One of the goals of smart business is to make well-informed decisions and to be the source of competitive advantage.

It is also desirable to improve the time and quality of the process of obtaining information. The continued and rapid movement of competition in the market determines the intelligent business behavior of being flexible and adapting quickly to the new requirements and trends that occur and which change the normal mode of operation.

To make a "business smart" project, you can call on various certified partners who have the necessary expertise to do so.

A good example is Microsoft, which, through various systems such as SQL Server, SharePoint, or Office suite, is able to leverage the data to give users more power. (Microsoft, 2015). It can also be done through its own forces through IT specialists who have the necessary technical knowledge.

Employees involved in smart business processes use software and other technologies to collect, store, analyze, gain access to data, and present all of this data in a simple and organized way. Software applications contribute to better business performance management and intend to assist people in decision-making by providing timely, up-to-date, and relevant information to the entity.

3.2. The information system in the millennium business

The digital era in which we live produces significant changes in the society we live in, so inevitably this has also influenced the economic field. Another approach to the market, transactions and the quality of products or services has led to the formation of the digital economy model concept.

This requires an adaptation of today's companies to the new conditions and a restructuring of the strategies adopted so that they can be able to respond to the new challenges. Decision makers must now respond to new trends and adhere to up-to-date economic models by implementing information and communication technologies.

3.2.1. Theoretical aspects and evolution

Due to the rapid expansion of electronic computers in all areas of activity, for the purpose of collecting, storing, processing and transmitting data, in order to obtain information to substantiate any decision, the concept of computer system is now emerging. It is part of the information system.

The information system comprises all the internal and external information used within the organization as well as the data underlying them, the procedures and techniques for obtaining the information (starting from the primary data) and the dissemination of the information, as well as the personnel involved in the collection, transmission, storage and processing of data (Cristescu, 2016a).

The computer system deals with the computerization of a company's activity by using hardware devices and software tools for managing

and organizing information. Its purpose is to process data for the purpose of obtaining information and to support operations at the operational level mainly.

Through the progress made so far and through continued development, the IT system has a growing role in the management process of a company. Despite the increase in data volume and influence factors, decision-making is improving through the simplification, accuracy and speed of deployment, due to the benefits of the information system within the information system.

The computer system tries to meet the requirements of all three components of any organization, namely the decision-making or management part, the information system and the operational system. Therefore, starting from primary data, through various techniques of production, they are processed through different procedures and disseminated in a form understandable to users. An information system comprises an informational base, ie data subject to computerization, flows and systems or code nomenclatures; a technical basis, ie the place where they have their processing (usually an electronic computer); a system of programs to ensure the functioning of the information system; a scientific and methodological basis consisting of algorithms, formulas, models; the human component of the specialized personnel and the final beneficiaries of the system and the organizational framework, specified in the Organization and Functioning Regulation (ROF), in the recipient's physical location (Iacob, 2009).

Within a small organization, the IT system is represented by a single IT application that meets the needs of the unit. Within a medium or large organization, a suite of applications and databases are required that can perform complex operations and manage a significant amount of data across different user categories.

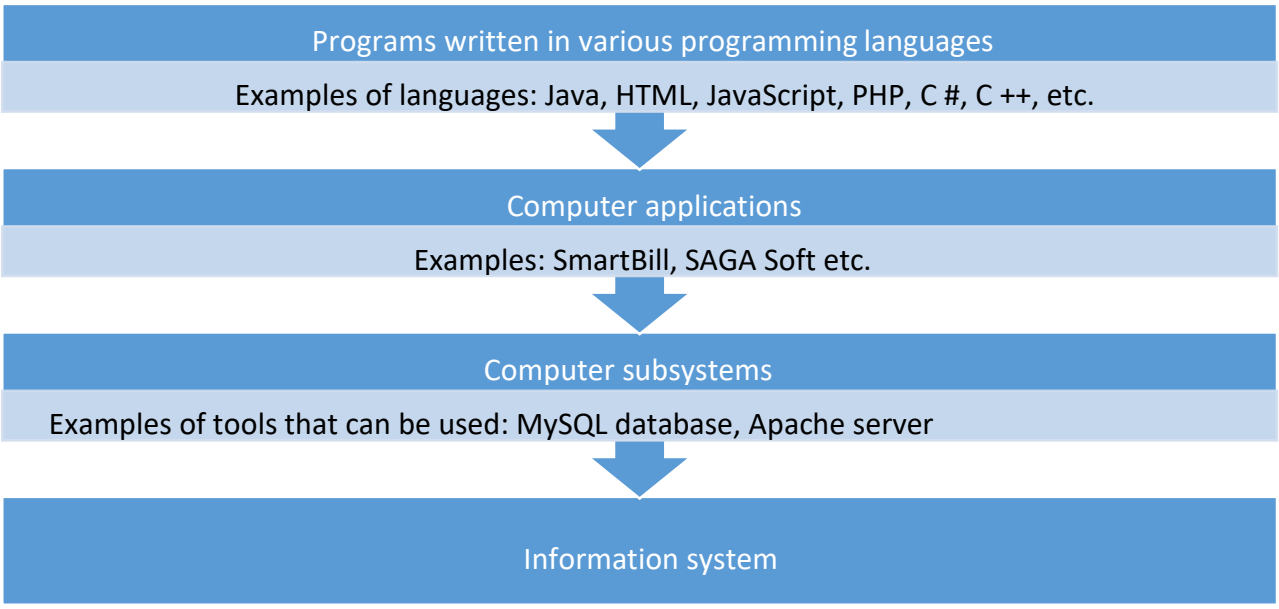

Figure 2. Components of the computer system

Due to the speed of day-to-day changes, an IT system must function as an open system that allows for later modifications and is flexible according to user needs and maintenance is a continuous process. At the same time, a system must ensure the security, integrity and confidentiality of information.

4. INFORMATION PROCESSES IN A COMPANY

Implementation of an IT system runs in three major phases, namely the analysis, design and implementation phase, but several steps are under way. For example, the cascade model can be represented as such (Cristescu, 2016b):

- *Analysis and definition of requirements* - to establish the objectives to be achieved, the services to be provided and the restrictions imposed on the IT system. All these are established by collaborating future system users with design staff;
- *Designing the system and software* - involves the design of the system's general architecture so that it performs the predefined functions;
- *Implementation and testing of program units* - the design of the system from the previous stage is transposed into a multitude of programs and the extent to which they meet the specifications initially set;
- *System integration and testing* - involves testing the whole system to verify that information requirements have been met, and then complete the system to be delivered to the beneficiaries;
- *Operation and maintenance of the system* - is the stage where the information system is actually used by the beneficiaries. At this time, any design and programming errors or requirements that were omitted at the design stage were discovered and solved.

Within an entity, the information system has applicability and utility in almost every single operation, and continuous development leads to the complete computerization of an entity's processes. Complex functions are performed depending on the domain they serve and the needs they have to meet, both inside and outside the system.

4.1. Accounting activity

Accounting activity is an important source of information for managing an entity. So it is an information system that transmits financial information about an entity's economic situation. Due to the complexity of tasks and the interdependence of accounting with other areas, the use of a manual system is no longer an effective practice, but rather the risk of errors.

Using a computer system diminishes some of the risks of the manual system if it is properly designed and brings benefits in terms of processing time, accuracy of results, or accessing history.

The category of accounting operations that can be computerized includes:

- Evidence of balances and accounting trades;
- Cost calculation;
- Drawing up budgets of income and expenses;
- Analytical and synthetic accounting;
- Performing the payroll process;

- Calculation of depreciation;
- Other accounting-specific operations.

All of these operations can generate information about the entity's internal environment, and others that primarily target the external environment, based on historical data and the calculation of indicators. Depending on the type of information generated, the computer system of accounting activity can be divided into two categories:

- for *management accounting activity* - where information is provided to internal users, broken down by segment, information used for forecasting and project decisions;

- for *financial accounting activity* - analyzing past performance and financial position, with accurate reporting, especially for users outside the company, such as state institutions, banks, investors, etc.

The basis of any decision within an entity is the information provided by the accounting, but most of the times there are certain barriers to their use due to the sophisticated terminology, presentation mode and form, and this leads to deficiencies in the course of to the accounting information. All these obstacles are trying to be eliminated by using a computer system, and this contributes to the smooth running of the information circuit in an entity and implicitly to the improvement of the decision-making process.

4.2. Management activity

"The company's management system is a set of elements of decisional, informational, operational and methodological character, between which there are causal relations and acting interdependently in order to ensure the processes and management relations at the level of an organization" (Mihăiescu, 2009).

So far, quality management has gradually become a complex approach, a one-size-fits-all system that uses best-in-class quality management practices. One of the most important requirements of the new ISO 9001: 2000 standard is the use of a quality management approach in a company (Sinitsyn, 2013).

The complexity of the problem is determined by the need to make many decisions in unclear and ever-changing circumstances. The decision-maker encounters the need to collect huge amounts of information, and it is virtually impossible to guarantee the effectiveness of decisions without a system of information applications.

Much of the corporate planning and management information systems include a control module to check the efficiency of the business, a good computational scalability. However, such a system comes at a high cost and can only be purchased by large companies. Moreover, they can not perform efficiency analyzes in all spheres where they operate, their scope being quite limited.

The IT system should monitor company data and form its own performance indicators that will allow formalizing and generalizing results about the performance of any employee in an organization, for example, processing them and building efficiency criteria on their basis. The approach of such systems will allow the processing of the data volume for the whole organization's

calculation and the specialization both quantitative and qualitative, objective and subjective, integral and simple, to certain criteria.

Due to the limited possibilities of acquiring and implementing such systems, it is possible to discuss an information system on a smaller scale, accessible to a larger category of users, and which, through continuous development, can record real performance significantly facilitate the development of decision-making.

4.3. Other operations within an entity

Depending on the specificity of each entity, the information base that can be computerized is mainly found in the following areas:

- *Supply*: stock records, inputs, outputs (consumption), supply schedules, supplier records, etc;
- *Production*: recording and calculation of labor standards, consumption, used technologies etc .;
- *Selling*: inventory of goods, customers, contracts;
- *Marketing*: studying the market, demand and supply in terms of production, price trends, competition, etc .;
- *Humanresources*: conducting the payroll process, surveys and evaluations, employee record, etc .;
- *Researchanddevelopment*: investment analysis and forecasting, project evaluation, studies.

Also, other processes can be computerized within an economic entity, but this requires some training both financially and by staff, but ensures accuracy of results, saving time and comfort due to ease of process development.

5. CONCLUSIONS

The third millennium business is based on intelligent decision-making, this being true only when the decision-maker is well informed. Therefore, it is desirable to improve the time and quality of the process of obtaining information. The continued and rapid movement of competition in the market determines the intelligent business behavior of being flexible and adapting quickly to the new requirements and trends that occur and which change the normal mode of operation.

At present, any business must focus on continuously improving its information system through topical methods and tools so as to be flexible to market trends and changes.

The use of mobile devices in a company brings a number of advantages, and if they are rewarding, with well-established applications, they can become real decision-making tools, easy to access and real-time, wherever the user is, any time.

Increasing competition on the mobile device market, lowering prices, increasing performance, mobility benefits, regardless of time and space, have led to the intense use and development of business mobile solutions. Mobile devices have created great opportunities in the business world and have even changed their way of doing business in the economic world.

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