

Economic management of IS in the company

Sara Isaida*, Zayed Abouhdema**

* phd,candidate
** phd

DOI: 10.29322/IJSRP.12.06.2022.p12650
<http://dx.doi.org/10.29322/IJSRP.12.06.2022.p12650>

Paper Received Date: 07th June 2022
Paper Acceptance Date: 22nd June 2022
Paper Publication Date: 25th June 2022

Abstract- Information technologies are a significant tool in today's business industry globally. Possession of information systems in today's society helps companies become more associated with the world, and most importantly, with its customers - clients. This is realized in the industry by helping information systems in connecting companies with clients in a way of fast transfer information back and forth or so-called. (Feedbacak - feedback for information). A quick transmission, for example, helps suppliers learn more quickly what to offer and what the demand for their supply is. Knowing demand for offer not only creates business efficiency, but also makes customers satisfied.

Index Terms- Economy, Information systems, Internet, IT tools.

I. INTRODUCTION

The basis is the study of the most important concepts related to IS, technology and technique focused on production information that can provide the required amount of information of satisfactory quality. Otherwise, new IS systems are designed in which the basic characteristic is a high degree of human participation in their functioning within organizational systems. The term system means a set of elements that are directly or indirectly connected to each other so that they form a certain whole, which will effectively exist. Any information that appears in the IS has a certain characteristic property and is the only product in the functioning of the IS.

II. SPREAD OF THE INFORMATION REVOLUTION IN THE ECONOMY

Today, the information revolution has been stimulated by the expansion of our and the world economy. Not even one company can avoid its consequences. Dramatic reductions in the cost of obtaining, processing and transmitting information are changing the way companies operate. Most CEOs are embracing the revolution and absorbing more and more of their time and investment capital into information technology and its effects, so executives have a growing awareness that technology can no longer be the exclusive territory of an IS. As they see it, their rivals use information for competitive advantage, so they also want to recognize the need to get directly involved in the management of new technology. Faced with rapid change, however, they do not

know how to respond to the challenges of the information revolution.

The questions they need to answer are:

1. How will the advancement of information technology affect competition and sources of competitive advantage?
2. What strategies should the company follow to take advantage of the technology?
3. What are the implications of actions that competitors may have already taken?
4. Of the many opportunities for investing in information technology, which are the most urgent?

To answer these questions, managers must first understand that information technology is more than a computer. Today, information technology must be broadly conceived to encompass information that companies create and use, as well as a wide range of increasingly convergent and related information-processing technologies. In addition to computers, data recognition equipment, communication technologies, production automation, hardware and services are included.

The information revolution can affect competition in three ways:

1. It changes the structure of the industry and thus changes the rules of competition.
2. Creates a competitive advantage by giving companies new ways to outperform their rivals.
3. Starts new business, often within the company's existing business (diversification).

The reasons why information technology has gained strategic importance is an important determinant for all companies:

- New technology changes the nature of competition,
- Companies are astute to take advantage of this.
- Managers use a procedure to assess the role of information technology in their business and
- To help define investment priorities to turn technology into its competitive advantage.

III. IS IN MANAGEMENT

Management activities in the processes of economic implementation of activities have a very significant impact on IS, primarily through decisions made by management and employees in the organization, concerning the development and implementation of new information technologies and in this

context the development, application and operation of IS with minimal costs and real economic indicators.

There are four important issues in this domain that need to be considered:

- How the organization actually uses IS,
- Who has a crucial role in the development and innovation of the IS organization,
- Who works with IS,
- Why the organization accepts IS.

For rational business, the crucial role in the IS of an organization, in addition to professional technical staff, has the company's management that decides on the strategy of IS development. Strategic planning of information resources plays an important role in achieving the overall profit of the company and is based on the interaction and mutual expansion of the business strategy of the organization on the one hand and the strategy of information resources and information system on the other.

Therefore, effective strategic planning of information resources includes 3 goals:

- connecting information technology and information systems planning with strategic business planning,
- assisting in building control mechanisms for the implementation of plans,
- creating an architectural framework in which further analysis and design will enable specially developed databases, and information subsystems to be able to use and function in a harmonized manner, providing consistent information.

IV. ADOPTING OF IS TOOLS AND TECHNIQUES IN ECONOMY

Managers make key decisions about software packages, determine the types of services they will hire, from when, how, when. Organizational and personnel solutions concern formal organizational units, ie functions that are most often called IS departments, development of professional people such as system analysts, designers, managers of system software and hardware specialists and others.

So at first glance, economists have a very simple answer to the question, why does an organization accept IS. The intention may be, in order for the organization to be more efficient, to save money, labor and other resources. Although these reasons can be generally observed, valid and justified for a shorter period of time, in the long run they cannot be the only or primary reasons for accepting IS.

The concept of IT Systems is being built and used today after a detailed analysis of all the benefits they provide. They need to become vital to the organization's survival in the business world. Therefore, the reasons why an organization accepts IS is a complex issue, given that different attitudes and commitments dominate in each organization. A number of organizations are simply more inventive than others and they have the ability to embrace any kind of innovation, given the direct economic benefit to the organization.

Some organizations approach building IS because of the ambitions of different groups within the organization, counting on better decision support, serving more customers, attracting new

customers, coordinating dispersed groups, learning and controlling staff and the like. In some cases, the reasons stem from the environment of the organization, changes in state regulations, actions of competitors and the like, expecting a satisfactory benefit from information systems. The impact of an organization on IS implies consideration of other aspects of that relationship, which emphasizes the impact of IS on the organization based on the results of a number of significant studies and some theories.

The speed of globalization, improving productivity, reaching new customers and sharing knowledge among organizations and institutions in order to achieve competitive advantage - are the terms that determine e-business and information and communication technologies. In short, synonyms for modern business are: Information and communication technologies.

The role of e-business and the Internet is to better understand the social transformations that have occurred under the influence of the Information Age. The essential value of information systems is explained by the fact that today modern companies are in a much larger and more complex situation than they were before. Today, they represent dynamic business systems that must respond in a timely and appropriate manner to all changes in the environment. Modern business systems are faced with the need to meet changes, and even to initiate and impose them. For such an active attitude towards change, it is necessary to have a large number of diverse and, often, very complex information. Such information cannot be provided without information systems.

Information systems should always be organized in accordance with the general definition of the system, according to which: a system means a set of elements or parts that form a whole and which are interconnected so that a certain goal can be achieved. At the same time, the information system itself is a subsystem of a dynamic system. In addition, the information system is dynamic, because it represents the process of constantly changing the input information about the state of the dynamic system, with the output information, ie. management messages about desired states.

The importance of information systems becomes visible with the speed and conciseness of changes in the business system environment (which is an important characteristic of business conditions). In such conditions, the management structure of the company is daily faced with problems of improving business functions, because through the processes that take place in the company circulates a large amount of data on the processing of which a significant part of professional staff is engaged.

Information technology and modern business have led industries to think market-based and create a need for competitive advantage, which has become more important in today's competitive business environment than ever before. Innovative technologies can create a competitive advantage for a company, and can help continue to pursue such a plan in the industry.

Business examples show the effect of information technology that builds the value chain. Initially, companies used information technology mainly for accounting and record-keeping functions. In these applications, computers have automated repetitive clerical functions such as order processing.

Today, information technology is expanding through the value chain and performs optimization and control functions, as well as executive functions that are more judgmental. General Electric, for example, uses a database that includes the

accumulated experience and (often intuitive) knowledge of its device service engineers to provide customer support over the phone.

Information technology generates more data on how a company conducts its activities and allows it to collect or capture information that was not previously available. Such technology also opens up space for more comprehensive analysis and use of extended data. The number of variables that a company can analyze or control has increased dramatically. Similarly, information technology has helped Sulzer Brothers engineers improve the design of diesel engines in a way that manual calculations could not.

V. GOALS, TASKS, METHODOLOGY OF INFORMATION SYSTEMS DEVELOPMENT

The goals of information system development are defined as the contribution to the realization of the organization's goals for:

- Increasing economy,
- increase labor productivity,
- shortening the period of delivery of goods (from the moment of receiving the order),
- increase capacity utilization,
- improving operational planning,
- reduction of working capital (reduction of inventories), etc.

The concept of IS is structured in such a way that it performs the necessary and specific tasks in its internal and external environment in order to achieve certain given goals. The task that IS should perform is determined by:

- 1) organizational function (production, financial, accounting, planning, etc.)
- 2) work process, production planning, production calculation, issuance of periodicals calculation),
- 3) activity in the work process, which IS implements.

The necessary Methodology for the development of economic business in industrial systems is the science of the totality of all forms and methods of research through which to obtain objective and systematic scientific knowledge. Based on

previous research in the world in the field of IS development, from theoretical and experimental research and practical confirmations, a comprehensive methodology for designing efficient information systems and their implementation and development in practice has been developed. Research studies show that in order to build an IS for a system, it is necessary to model processes, data and resources, which the framework of business methodology includes in its implementation system.

PISG methodology - design of information systems, includes methods that have built-in: organization of observation, experimentation, accurate measurement (which provides optimal conditions under which usable scientific data can be obtained), scientific data processing, analysis, measurement of results, conclusions and building theory and systems.

VI. CONCLUSION

Modern society and modern business companies determine information, which is an essential resource in which knowledge has a huge value. Information technologies represent a very important factor in the process of strategic positioning of companies. The transition process that contains both the processes of globalization and market integration provides companies with all areas to exit the freight market, but at the same time opening the boundaries of countries for the influx of foreign capital, investment and products. In such an environment, the company must transform itself as well.

A large number of information must be provided by the management team of the company to take the processes in the company at the optimal level. The company's business segment - an economic aspect representing this research is in the function of information and communication technologies, with all aspects and application opportunities.

AUTHORS

First Author – Sara Isaida phd,candidate

Second Author – Zayed Abouhdema phd.