

NEED AND IMPORTANCE OF INFORMATION TECHNOLOGY IN SMALL ENTERPRISES AND THE PROCESS OF DEVELOPING A JOB DESCRIPTION BY MANAGERS

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Abstract

In today's global economy, the personnel management of enterprises is based on the use of informative data and for this reason the methodical and effective managing of information, plays a huge role. In this project we are looking forward to recognizing the features of the informatics needfulness in the small enterprises and the practices/techniques of information technology that a company uses. A company's information technology (IT) structure and its brand architecture are intended to minimize transactional costs both within the organization, and between the organization and its customers. Therefore, small companies seem to be underdeveloped as far as informatics is concerned, and a lack in the incorporation of these new technologies is obvious and small companies require a closely specialization in information technologies. Moreover, we will examine the basic qualifications that the users of management information systems should be able to know as well, in order to demand a work position in a technology field and how managers develop a job description that a company needs. A job description is a list of the general tasks, or functions, and responsibilities of a position. Typically, it also includes to whom the position reports, specifications such as the qualifications needed by the person in the job, salary range for the position, etc. A job description is usually developed by conducting a job analysis, which includes examining the tasks and sequences of tasks necessary to perform the job. The analysis looks at the areas of knowledge and skills needed by the job. Note that a role is the set of responsibilities or expected results associated with a job. A job usually includes several roles.

The process of developing a job description helps managers articulate the most important outcomes that company needs from an employee performing a particular job. A job description is also a communication tool that tells co-workers where their job leaves off and the job of another starts. A well-written job description tells an employee where their job fits within the overall department and the overall company. In addition we will analyze the role of information technology in measuring the responsibilities of each employee.

Keywords: Information technology; Job description

1. Introduction

The ability of corporations to manage their financial performance is emerging as a strategic issue for many companies. Not only the large companies face the informatics needfulness, but also small firms cope with the competitive environment which exists. The use of information technology has been found to improve business competitiveness, (Mellor, 1998) and a huge variety of innovative applications have been designed for solving many problems (Spectrum, 1997).

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2. Literature

The impact of information technology will definitely have significant effects on the structure, management and functioning of most organisations. It demands new patterns of work organisation and effects individual jobs, the formation and structure of groups, the nature of supervision and managerial roles. Although, rapid reduction in the cost of IT and reduction in the transactions risk of explicit coordination, makes possible substantially more usefully of explicit coordination with suppliers. Small firms survive through their internal cooperation, especially when dealing with industrial customers. Information technology results in changes to lines of command and authority, and influences the need for reconstructing the organisation and attention to job design (Wixom and Todd, 2005).

Computer based information and decision support systems influence choices in design of production or service activities, hierarchal structures and organisations of support staffs. Information technology may influence the centralisation/ decentralisation of decision making and control systems. Additionally, new technology has typically resulted in a flatter organisational pyramid with fewer levels of management required (Wanda J. Orlikowski, C. Suzanne Iacono, 2001). A bachelor's degree and many years of experience are generally the minimum requirements to become a computer and information systems manager. Knowledge of programming or systems analysis is also essential. In small computer installations, people without degrees who have experience as programmers can move up to become computer and information systems managers. Some college graduates gain their experience by working as a manager's assistant. College courses in mathematics, programming, and business help students prepare for jobs in data processing. A master's in business administration (MBA) may also be necessary, especially for those who want to be a manager at a large company. Many companies have training programs for their computer personnel. The federal government also sometimes offers training to people hired in lower level computer jobs.

In the case of new office technology it allows the potential for staff at clerical/operator level to carry out a wider range of functions and to check their own work (Paul P. Tallon, Kenneth L. Kraemer, 2003). Information systems affect choices such as division of work, individual tasks and responsibilities. The introduction of IT undoubtedly transforms significantly the nature of work and employment conditions for staff (Roach, S. S. 1991)

3. Methodology

One questionnaire was designed for data collection and we conducted a survey among 173 enterprises and multinational companies in Greece. The results showed that small companies typically implement a basic difference in the usage of information technologies, in comparison with large enterprises. The advantage of this survey is that is being used a variety of samples including companies from different industries, of different sizes and in different positions within groups of international organizational structures, which increases the extent to which the results can be generalized to various types of companies.

Because information technology is bursting forward in a seemingly chaotic manner, it is difficult to figure out relevant business patterns which help guide business decisions. Computer and information systems managers direct and manage various computer-related activities of a company. They construct business plans, oversee Internet and computer operations, assign projects to staff members, and direct the flow of work. Computer and information systems managers work in manufacturing, industry, government, and educational institutions. They generally are in charge of facilities that have many programmers, systems analysts, and peripheral equipment operations. They report to the top management of their organizations. Computer and information systems managers must have general management ability as well as specific knowledge of the firm's computer systems. They must have a thorough working knowledge of programming and systems analysis. Computer and information systems managers must be able to communicate with all department heads in the company that require computer and network systems. They must be able to translate the requirements of each department into a workable computer operation. Then they must be able to instruct the information technology staff to carry out these procedures. Moreover, we measured the needfulness of some types of information technologies in small companies along with the fundamental skills that a person must have in order to apply for an IT occupation.

4. Results

In our survey we have been used a sample of 173 enterprises in which 24.9% were companies that their activities were commercial products and 20.8% of them with services. Most of the companies are small and have few staff.

Our data analysis shows that small businesses are more likely to adopt information technologies. The majority of the companies used mainly ERP techniques, at 25, 93% and workflow automation at 22,22%. The results of the survey reveal how important the information practices are in the function of firms. The extent of information system adoption is mainly determined by organizational characteristics, such as business size and level of employees' information systems knowledge. Finally, the environmental characteristic of competition has no direct effect on small business adoption of information systems. (Figure 1)

In addition, during our survey we found out that most companies hire persons with basic qualifications without any bachelor degrees for the use of information technologies. From one hand, enterprises prefer candidates with many degrees (24,22%) , but on the other hand there is a high percentage of candidates having a degree from a private institute. In addition to that, we have to mention that there is a low percentage of candidates with MBA, or University degree and PhD in IT. We conclude that small enterprises prefer to hire people with only fundamental qualifications, probably, because this reduces the cost to pay them. A high level expert in IT will demand higher salary for their skills. For this reason Information technology is becoming more and more important in business.

For this reason, computer and information systems managers must be promoted to the top management of their organizations. For example, managers can advance to the position of vice president of information systems. Computer and information systems managers also may be given management jobs outside the field of data processing. Computer and information systems management prepares them well for the planning and organization needed by successful managers. The use of computers in business and government will continue to increase. Qualified people will be needed to run the growing number of computers, computer networks, and Internet operations. However, there will be stiff competition for computer and information systems management jobs. Those with advanced education or experience in specific types of computer applications will have the best chance of employment. The employment outlook is very good for skilled people who keep up with new developments in this ever-changing field.

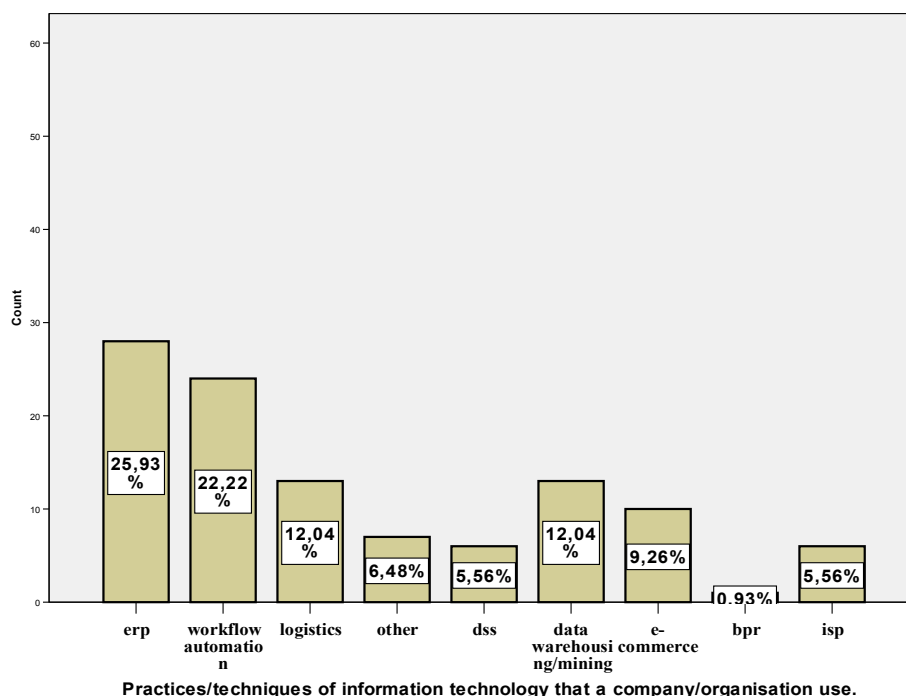


Figure 1. Practices/techniques of information technology that a company use.

5. Conclusion

The importance of information technology (IT) to businesses is widely acknowledged. Yet, while large businesses have been using computers for some time, small businesses have been slow in adopting IT. The results show that there are two main classes of variables that are important in determining adoption of an innovation: individual characteristics and organizational characteristics.

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