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IT systems in accounting – the evidence from Polish companies

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Abstract

The use of IT systems in modern accounting has become a necessity for all companies. The basic function of modern business organisations is the efficient management of information and knowledge. During decision-making processes, managers require reliable and accurate information. Managers, for both tactical and operational goals, must have data from functional areas, like accounting, production, marketing or procurement. A properly functioning information system in an enterprise ensures the flow of information between all systems and subsystems, and between an enterprise and its surroundings. The aim of this paper is to present IT systems used in the area of accounting in Polish companies. The purpose of this paper is to determine the motives of choice – which software is the best for using in the accounting subsystem of given enterprises. The used methods in this paper are a questionnaire, comparisons and explanation. Some theoretical approaches are examined by analysis of the survey. The results rely on the questionnaire among the chosen Polish companies. This study was undertaken because of the continuous changes in information technology, accounting rules and the changed approaches to accounting (or bookkeeping). This study can be helpful for managers and accountants to possess better accounting information and to make better economic decisions. The accounts supporting software used by the surveyed companies in the paper were compared and analysed. The analysis of the questionnaire allowed finding out motives of choice of a particular solution. It showed how entrepreneurs get information about the accounting software and what type of software they have implemented in companies. In addition, respondents pointed out the pros and cons of the IT systems they implemented. Finally, the survey has shown that users of various accounting software or accounting applications cannot imagine their work without them, and all IT tools bring them benefits.

Keywords: Information system, IT system, integrated management systems, IT-supported accounting, SMEs.

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1. Introduction

The use of information technology (IT) supporting business activities of entities has increased dramatically during last decades. The continuous development of IT-supported communication technologies, like e-commerce, e-business and the like, has had a major influence on modern companies. Potential customers now purchase many items via e-shops. Buyers and sellers can now undertake their business transactions from every location of the world. Some so-called e-instruments of businesses, like bar coding, can optimise costs of goods and facilitate sales (internet banking). Use of IT tools can be a really competitive advantage of running business nowadays.

1.1. The role of information systems and IT in management

Running a business in the global marketplace in the era of many dynamic changes, inside an organisation and its surrounding, requires modern business units to have access to instant and accurate information. It is essential to create such an information system that can meet the requirements set by the managers of the company.

The information system is an important part of the enterprise's management. In order to meet the required objectives, the company must use such information systems that can provide proper information in the right time to the decision-makers [4, p. 47].

The information system must be organised to provide internal users, both managers and employees, with an insight into individual data and information about the situation inside the business unit, as well as changes in the business environment. Data flow in the information system does not occur only within the company but also covers its surroundings, including suppliers, buyers and agents [2, p. 13].

Nowicki [5, p. 11] distinguishes elements of the information system, such as information collection, message sender and receiver, information channels, technical transmission and information processing. A group of information is a set of data that circulates in continuous motion and flows through information channels between senders (input) and recipients of the information (output). Data that are collected by the recipient are interpreted to make decisions. Senders and recipients of information are separate organisational units involved in the data exchange process. Information channels are the ways of communicating. Additional elements of the information system are the technical means of transmitting and processing information.

In theory and business practice, it is noted that information systems are the basis of modern enterprise management. In order to achieve the required management objectives, such an information system should be developed in order to provide relevant information to decision-makers at the right place and time.

A well-functioning information system significantly contributes to the improvement of the quality of an enterprise's management, as the efficiency of the information system significantly influences the decision-maker's ability to make proper decisions.

Contemporary companies are characterised by the complexity of information problems connected with the organisation of production, services, trade and other issues. This is accompanied by the continuous development of science and technology. This requires adequate development of information systems and their formalisation. Supporting the management of information systems is carried out mostly at the operational and tactical level of management. To fulfil the basic functions that can be used universally, widely available systems are used.

There is an increasing use of information systems and advanced IT. The transformation of IT results in the increasing number of economic events in the electronic origin. Among them are the transfer of electronic orders, creation of electronic settlements, submission of electronic banking instructions,

introduction to computer systems and transmission of various types of documentation and reports (financial, tax, etc.) via the Internet.

IT systems are divided into specific generations by their specific role (Kisielnicki 2000, pp. 24–25). These generations are constantly evaluating systems. Management information systems are divided into the following:

- recording systems,
- management information systems,
- decision support systems and
- expert systems (ES).

Recording systems are also known as transaction systems, as they represent the simplest form of the use of computer technology in the enterprise. Their functioning is related to the recording and processing of data, which are directly or indirectly related to the examined object.

Management information systems are the systems used by decision-makers to analyse certain phenomena occurring in a company or its environment. The quality and scope of the analyses carried out are highly dependent on the database.

Decision support systems are designed to assist decision-makers in solving problems. Their task is to analyse the current situation based on specific criteria.

The design of ES is different from all other systems because it is based on the achievements of artificial intelligence. To the ES, it is switched on all the knowledge of specialists (experts) from a particular field so that the system is able to make decisions or solve problems.

The role and progress of computerisation have brought new challenges to systems supporting enterprise management. We can think about an organisation as only in the context of integrated information systems [6, p. 39].

Systems implemented in the company are subject to continuous development. New software releases are also being added, as well as additional modules is added, with new features. Alternatively, some important changes are included in the existing modules, e.g. legal, because of the changes in the laws and regulations. Such systems are typically integrated with each other and enriched by the possibility of the so-called decision support systems, for example: MRP, MRP II, ERP and ERP II.

The software together with the whole enterprise's IT system can be considered as a separate element or structure. Companies are increasingly recognising the added value of integrating the whole system and creating not only an integrated system, but also an integrated enterprise. This applies to the communication between individual components of the system. This modularity allows for more efficient adaptation of the business organisation to the needs of individual system users and market requirements.

ERP systems allow integrating all levels of management in the organisation, including the highest level of strategic management. The unique achievement of ERP systems is the use of artificial intelligence, which enables decision-making in partially structured business entities. Today, the most advanced class of IT systems is the system of ERP II, which is a further development of ERP by an additional set of industry-specific application packages that generate significant value for customers in the provisioning and optimisation of operating and financial processes. Among the financial processes supported by ERP II, we can include bookkeeping, creation of purchase orders or cost estimations.

On the other hand, there are operational processes of the business entity – cooperation with its partners for the exchange of key information on common processes. In ERP systems, it is important to separate the processes into back office and front office. Subsystems serving accounting, payroll or assets management are referred to as back office applications. Instead, subsystems that carry out

both internal and external processes, such as procurement, marketing or debt enforcement, are referred to as front office applications.

Modern management information systems make multi-level, multi-stage structures in which the various systems on the lowest level are the basis for subsequent output information systems. Integration of management information systems is an important research issue today, which is an expression of changes in the approach to enterprise management.

1.2. IT systems supporting accounting

As a result of the systemic transformation in Poland, the transition from a centrally planned economy to a market economy, privatisation of state economic entities and the emergence of new ones, there was a significant change in the structure of enterprises in favour of an increase in the number of SMEs.

The demand for reliable and timely information of both public and legal natures (VAT, CIT, PIT, etc.) as well as on the free market (i.e., expansion of contacts and competition) has increased significantly. For the general use came the Internet and this is used to transfer many documents. For these reasons, the requirements in knowledge of accountants' use of computers, taxation, business law, etc. significantly increased. At the same time, bookkeeping has become technically easier.

All these factors have an impact on the current level of technology used to run accounting in Polish companies. IT solutions significantly simplify accounting, increase and accelerate access to data processing results and optimise the performance of accounting staff and reduce the cost of processing information.

The increasing complexity of economic processes, variability of the environment, increasing competitiveness and increasing information needs require managers to apply modern business management methods. These methods in the current information age will never be effective without IT support. This applies to both large companies that use complex and highly formalised management systems, as well as units of the SME sector, where the nature and severity of these systems is different.

IT systems in SMEs usually function as an instrument for gathering and categorising information, i.e., supporting financial and accounting systems.

There are significant limitations to the implementation of the instruments of management accounting and controlling supported by IT in SMEs. Financial and accounting systems for small and medium-sized companies, apart from basic accounting functions, sometimes only have modules supporting budgeting and reporting, as these are the most frequently used management accounting instruments in these enterprises.

1.3. IT systems in accounting of polish SMEs

Numerous computer software companies supporting accounting are competing in the Polish market, as well as offering more sophisticated systems supporting the control and management of the company. The use of technologically advanced information gathering systems is very crucial in the management of business organisations, including SMEs, as these entities are characterised by relatively high sensitivity to factors and external events.

The characteristics and general attempt to assess the difficulty of implementation of programs supporting financial and accounting processes in Polish enterprises are presented in Table 1. The following analysis was conducted on the basis of materials provided by IT companies in implementation offers. These software firms are accreditations of the Polish Accountant Association.

Table 1. Chosen software suppliers for SMEs in Poland

Type of software	Software supplier	Features
Accounting systems	Comarch ERP, Sage, Humansoft, Unit4 Teta, EBITDA, BPSC, Insert	Not so complicated systems with the elements of simplified financial reporting and analysis
Accounting online	iFirma.pl, Biznes – Ekspert, iComarch24, MSP Biuro, m.Biuro.pl, GUSTO, wfirma.pl	Standard software online
Integrated systems	SAP, Comarch XL, StreamSoft, Enova	Individual systems for customer's needs. New technologies, analytical instruments, enhance analysis and forecasting. Very expensive

Own study.

IT systems supporting accounting in Polish SMEs were analysed on the basis of the questionnaire. All companies were located in Silesian voivodeship.

The purpose of the survey is to answer the following questions:

- What is the direction of the SME companies choosing the accounting software?
- Which software is the most preferred?
- Do the manufacturers of accounting software properly tailor the products they offered to the needs of the surveyed units in the SME sector?
- Are the financial and accounting software offered to the surveyed business entities meeting the principles of ergonomics?
- Are any recommendations directed by accounting staff to the authors of the software?
- Are the surveyed companies signalising the need for online accounting?

The study was undertaken due to continuous changes in technology, legal regulations regarding accounting and taxes, as well as accounting approach. The answers to these questions can help accountants in other micro-, small- or medium-sized businesses make better decisions about the use of financial and accounting programs to improve the quality of information processes inside them.

There are many rankings in the popularity of accounting software. The choice of program depends on the type of the entity's accounting – double-entry bookkeeping (sometimes with some simplifications in preparing financial statements) or simplified tax books.

In the case of the surveyed companies, it was noted that the direct purchase decision was based on information from other companies, their own knowledge and experience in working with such software.

The main advantage of choosing popular accounting software is their functionality and usually more frequent updates than with niche applications. On the other hand, a large number of users may find it difficult to contact the service for quick help. Rapid access to service support is an argument for supporting less-recognisable software vendors in the marketplace, as fewer customers are more likely to rely on each one. The barrier to implementing IT systems is often the relatively high price of new releases or updates. It was also examined whether the software provided quality information and whether it was legible for the user. It was also asked in the survey whether the respondents imagine bookkeeping in a company without IT-supported accounting system. This question has allowed the author to confirm that IT systems benefit the surveyed companies.

2. Conclusion

The survey allowed to get acquainted with the opinions of selected companies belonging to the sector of small and medium enterprises on the application of their accounting support software. The benefits of implementing an appropriate system in an enterprise are faster and more accurate

decisions by direct access to strategic data; faster response to any market changes by analysing current data recorded during daily operations; current control over costs as part of the access to analytical data, as well as budgeting and monitoring; ensuring a high level of security of access and protection of data through advanced authorisation mechanisms for their users; improving the circulation of all data and documents inside and outside the organisation; increase in accounting staff efficiency by improving their organisation of working time; and saving time needed to create structured internal and external documents.

The basic advantages of the accounting software include automatic communication with the offices and less risk in tax settlements, automation of records control, compliance with current regulations, integration of individual modules related to the company's activity and guarantee of safe data storage or proper management of the company's finances by generating various types of statements and reports.

Ultimately, the survey has shown that users of various types of software or accounting applications cannot imagine their everyday bookkeeping work without them and such automated tools bring them many benefits.

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