

**A STUDY OF THE FINANCIAL ACCOUNTING
SOFTWARE USED BY SMALL ENTERPRISES
IN OLSZTYN**

Mirostaw Kowalewski, Joanna Niedzielska

Department of Accounting
University of Warmia and Mazury in Olsztyn

Key words: financial-accounting software, accounting, small enterprise.

Abstract

The objective of this paper is to assess the financial-accounting software used in small enterprises operating business in the area of Olsztyn in Warmińsko-Mazurskie voivodship. The research material was acquired by means of the questionnaire-based survey targeted at selected small enterprises situated in Olsztyn. Out of 50 questionnaires distributed 18 (36%) were returned.

Based on the survey conducted, it was determined that the majority of the enterprises surveyed use standard, generally accessible financial-accounting software. The extensive choice of standard software in the market is the most frequently indicated factor determining the purchase of software of that type. The acquisition of accounting software is decided less frequently on the price, and more on the standard software being known to the employees and the software availability. Small enterprises use both the obligatory registers (functions) and numerous optional registers available in the financial-accounting software they possess.

**WYKORZYSTANIE OPROGRAMOWANIA FINANSOWO-KSIĘGOWEGO
W MAŁYCH PRZEDSIĘBIORSTWACH W OLSZTYNIE**

Mirostaw Kowalewski, Joanna Niedzielska

Katedra Rachunkowości
Uniwersytet Warmińsko-Mazurski w Olsztynie

Słowa kluczowe: oprogramowanie finansowo-księgowo, rachunkowość, małe przedsiębiorstwo.

Abstract

Celem artykułu jest ocena wykorzystania oprogramowania finansowo-księgowego w małych przedsiębiorstwach prowadzących działalność gospodarczą na terenie Olsztyna w województwie warmińsko-mazurskim. Materiał badawczy zgromadzono za pomocą kwestionariusza, który skierowano do wybranych małych przedsiębiorstw znajdujących się na terenie Olsztyna. Z rozślanych 50 kwestionariuszy zwrócono 18 (36%).

Na podstawie przeprowadzonych badań stwierdzono, że większość spośród badanych przedsiębiorstw wykorzystuje standardowe, ogólnodostępne oprogramowanie finansowo-księgowe (są to jednocześnie podmioty prowadzące uproszczoną księgowość). Duży wybór standardowego oprogramowania na rynku jest najczęściej wskazywany jako czynnik decydujący o zakupie tego typu programów, rzadziej natomiast o jego pozyskaniu decydują: cena, większe prawdopodobieństwo, że standardowe oprogramowanie będzie znane pracownikom oraz jego dostępność. Małe przedsiębiorstwa korzystają zarówno z rejestrów (funkcji) obligatoryjnych, jak i wielu różnych rejestrów fakultatywnych, dostępnych w programach finansowo-księgowych.

Introduction

A basic problem of contemporary small enterprises is their low survivability. One of the key factors influencing this situation is an insufficient access of small enterprises to the reliable and properly prepared information on their status and conditions of business operation (NOGALSKI et al. 2004, p. 132–136). In the information-economic paradigm accounting is the supporting system of decision-making process, providing managers with the financial information about an enterprise (JAWORSKI, Sopiński 2010, p. 65, 66). In the era of information revolution in the XXI. century, the computers and software took over the role of accounting ledgers and paper (see: JAWORSKI 2006, JAWORSKI 2007). The quantity and quality of financial information that is gathered and processed in financial evidence and accounting systems depend on system organisation and use of functions of modern technologies (JAWORSKI 2011, p. 148).

Currently the majority of processes in accounting is carried on with an application of computers and professional software, and almost all businesses use computers in accounting (ANDRZEJEWSKI et al. 2006, p. 39, HEJNAR 2014, p. 119). The level of application of IT devices in accounting is also rapidly growing in small enterprises (KACZMAREK, STĘPIEŃ 2001, p. 83). Currently an offer of IT solutions for accounting purposes in the Polish market totals to several hundred products (DYNOWSKA, KES 2014, p. 92). The dynamic development of IT technologies responds to the growing needs of a business (KUŹDOWICZ, KUŹDOWICZ 2013, p. 329). In choosing the IT solutions for accounting purposes we should consider first the size of business and its specific characteristics, the form of accounting maintained (full or simplified) as well as the information needs of the enterprise's management (see: DYNOWSKA, KES 2014, p. 93, JAWORSKI 2011, p.148). This choice must be based upon the precise recognition of the company's needs compared to the features of the systems offered in the market (KOWALSKA, SKWARNIK 2008, p. 164, 165). A producer of the system is also an important consideration. The company should choose the software of the established producer, whose products are well recognised and recommended in the market (LUTY et al. 2010, p. 16–19).

The Notion and Classification of Information Systems in Accounting

According to KRÓL-STĘPIEŃ (2013, p. 75), the information system is the most important tool aimed at supporting the accounting. The system should be designed in the way that the solutions and procedures applied in it:

- are compliant with the accounting principles,
- help satisfying the statutory requirements,
- improve enterprise management.

Technology developments as well as the needs resulting from the increasing demand for information results in continual changes in the information systems in which the existing functions are developed or new functions are added. From the perspective of the level of integration (interlinking the systems allowing mutual use of their resources (e.g. files, hardware) and the complexity of the individual elements, RUTKOWSKI (2007) identifies:

- registration-transaction systems,
- information-decision taking systems,
- decision support systems,
- expert systems,
- management information systems,
- artificial intelligence systems,
- integrated information systems.

The registration-transaction systems enable the recording of current events in the selected area of activity. Financial-accounting or human resources-payroll systems are included in that category. Supporting management at the operational-tactical level as well as controlling and coordinating activities in short time periods are the roles of the information-decision taking systems. The production control systems and sales forecasting systems also belong to that group. The strategic decision support systems are mainly used for long-term forecasting as well as production volume optimisation. The expert systems are expected not only to support the manager in the decision-taking processes by providing information, but also of imitating the decision of a manager in relation to specific aspects of activities of the enterprise. Choosing the solutions for the given problem is the main role of such systems and they are used mainly for strategic diagnosing and planning. Management information systems allow the highest-level of management to obtain rapid answers to important questions. Such systems are created or adjusted (in case they represented universal solutions) to the needs of specific persons. On the other hand, the task of the artificial intelligence systems is to draw conclusions in the situation when the complete knowledge necessary for solving a given problem is not available. Those systems are applied in widely understood

financial services. Integrated information systems are modular information systems dealing with all aspects of the enterprise operations (RUTKOWSKI 2007).

Among the registration-transaction systems, three particularly important ones can be identified:

- human resources-payroll systems,
- stocks management systems,
- financial-accounting systems.

Considering the generation within which they were created (the first generation of IT systems), such systems are usually characterised by low levels of complexity. The human resource's payroll system serves to maintain the human resource registers, computation of wages and benefits, recording the work time and settlements with the public-legal bodies, i.e. the Tax Office and the Social Insurance Institution. The stock management systems on the other hand service the goods and materials management requirements. They offer the possibility of processing warehouse documents, registration, analysis of stocks status and warehouse transactions as well as taking periodic or continual inventory.

Nature and Functions of the Financial Accounting Systems

„The financial-accounting systems are systems aimed at supporting the accounting containing the reporting components and the financial analysis tools” (KASZUBA-PERZ 2012, p. 265). That opinion is confirmed by RUTKOWSKI (2007) stating that the most important task of the financial-accounting systems is to provide „effective support to the work of the accounting departments and other units in the area of maintaining the accounting documentation in compliance with the effective legal regulations”. The financial-accounting systems also allow current analysis of the status of the enterprise finances and facilitate tax settlement by computing and printing out the tax statements as well as generating and printing financial reports, specifications and statements. Such systems that form the core component of the integrated management systems, with the IT development, transformed from the tool that served recording economic events into systems supporting management in taking decisions concerning both the current enterprise functioning and important from the point of view of the enterprise development (EBISCH-STENZEL 2013, p. 38).

By combining different modules, the individual system components have the ability to access the data input from other modules in the other areas covered by the system (Fig. 1).

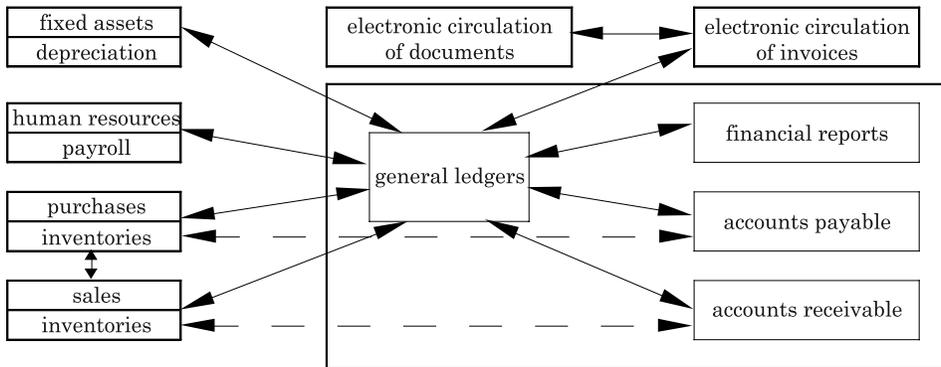


Fig. 1. Diagram of the financial-accounting system

Source: own work based on EBISCH-STENZEL (2013, p. 39).

The general ledgers are in the centre of the system and they govern the sub-ledgers, i.e. fixed assets, human resources-payroll module, sales, purchases, accounts receivable, accounts payable, financial reports generating module and electronic circulation of invoices module. Input of the data to any of the auxiliary ledgers will result in generating a record in the general ledgers and the other way round, the data input into the general ledgers will appear in the defined appropriate auxiliary module. That correspondence is also possible between some auxiliary modules, e.g. sale or purchase of products will influence the status of stocks as well as accounts receivable or accounts payable.

A good accounting system should possess certain characteristics. BARAN (2011, p. 14) lists four major characteristics that an effective accounting system should possess. The possibility of controlling the resources of the entity understood as assuring effective use of those resources and providing the information on managing them is the first of them. Compatibility, i.e. satisfying the needs of the users by the specified system functions is the second. It is important that compatibility is also defined as the possibility of simultaneous work of many people with the system and efficient performance of the routine as well as non-routine operations. Flexibility of the accounting software (the third characteristic) is the possibility of adjustment to the changes taking place in the organisation and outside it (in its environment). Finally, the cost effectiveness is understood as the advantage of benefits from use of the given system in relation to the costs required for its maintenance.

The financial-accounting system has a determined basic goal, which is to provide economic information. The information generated by the accounting system should, in addition to being understandable and useful, be characterised by timeliness (the information that has not lost its ability to influence the decisions taken), prognostic reliability (based on the information generated

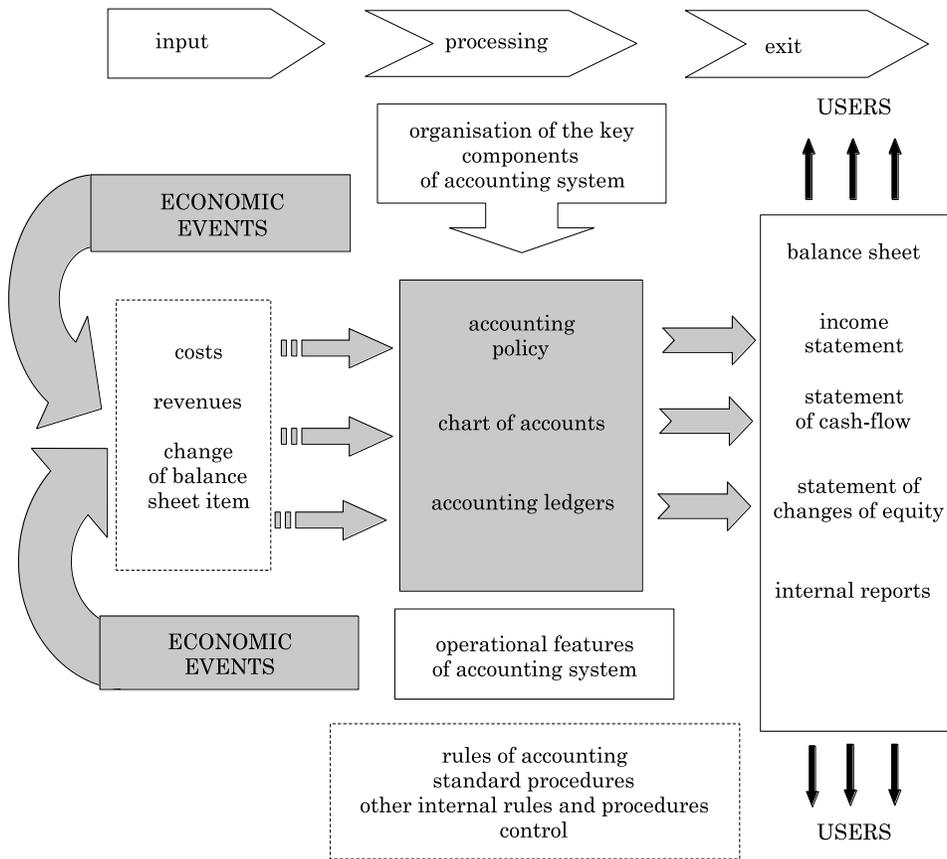


Fig. 2. IT accounting system operation

Source: own work based on GAD, WALIŃSKA (2008, p. 41).

the data concerning the future states of the phenomenon studied can be generated) and usefulness for feedback (mutual adjustment of assumptions made in the planning process) (Gad, WALIŃSKA 2008, p. 41, 42). The defined economic event is input into the system according to the principles of booking and the chart of accounts effective in the enterprise thanks to which new economic information contained in the accounting documents such as internal reports and financial specifications is obtained (Fig. 2).

Information systems as tools facilitating human work should fulfil specified functions. RUTKOWSKI (2007) considers information gathering, processing, storage and presentation to represent the most important functions of every information system, including the accounting system.

BYTNIIEWSKI (2005, p. 102) in turn identified the following key functions of the financial-accounting system:

- information function,
- management function,
- communication function,
- reporting function.

The information function is represented by the financial accounting system providing the information to the internal recipients (the owner, management, employees) and the external recipients (agencies and financial institutions) according to their needs. Within the framework of the management function, the financial-accounting system is to deliver data in the form of financial statements, reports and indicators as well as stimulate the management to improve the future economic activity results.

The communication function requires the timely delivery of information at the defined level of detail and accuracy.

Generating financial statements required by legal regulations and compliant with such regulations as well as transmitting them to the external recipients is the main objective of the reporting function (BYTNIEWSKI 2005, p. 102).

Objectives, Hypotheses and Methodology of the Study

The main objective of the study was to assess the use of financial-accounting software in small enterprises conducting business in the area of Olsztyn in Warmińsko-Mazurskie voivodship.

The following specific objectives were formulated to obtain a more specific presentation of the main research problem:

- identification of the software used by small enterprises in accounting,
- identification of factors determining the choice of financial-accounting software,
- identification of areas of application of financial-accounting software by small enterprises.

The following research hypotheses were formulated as concerns the main objective:

- small enterprises in Olsztyn use standard financial-accounting application the most frequently,
- in selecting the financial-accounting software small enterprises rely mainly on the price and ease of operation,
- small enterprises use mainly the obligatory registers (functions) while the optional registers of the financial-accounting software possessed are used to a minor extent.

The research material was obtained through a questionnaire survey consisting of 20 questions (closed, half-open and open) concerning:

- financial-accounting software used in the enterprises,
- the areas of its application,
- premises for the financial-accounting system implementation,
- planned changes in the financial-accounting software in the foreseeable future.

The survey was conducted among selected small enterprises from the area of Olsztyn using the survey questionnaire. Out of 50 copies of the questionnaire distributed, 18 (36%) were returned. In the survey results analysis the method of horizontal comparisons (external, spatial, geographic) concerning the same elements occurring in different economic entities was applied (STACHAK 1997, p. 203).

Results of the Study

The survey indicates that the majority of small enterprises (16 out of 18) used computer based accounting. Only two enterprises apply mixed accounting, which is a combination of manual, and computer accounting. In the most enterprises (10 cases) the owner keeps the accounting records (Fig. 3). It should be pointed out, however, that those enterprises maintain simplified forms of accounting; seven of them maintain the revenue and expense ledger (PKPiR), and three just the records of revenues (registered lump sum tax). The remaining eight enterprises maintain full accounting. In the case of five, this is done by employed accountants while three entities outsource the activity to accounting bureaus.

The fact that in the enterprises surveyed the owner was in most cases the person responsible for accounting may, on the one hand, indicate the willingness to limit costs (no remuneration has to be paid to employees or outsourced accounting bureau) while on the other hand it indicates the appropriate level of knowledge and skills of entrepreneurs in the field of accounting in the simplified form. At the same time, it can be noticed that owners of small businesses do not assume responsibility for managing the full accounting.

The surveys conducted indicate also that the majority (10) of the enterprises surveyed use standard, generally available financial-accounting software (those are at the same time the entities maintaining simplified accounting). Amongst the eight enterprises maintaining full accounting, six entities use tailor-made software developed to their individual orders while only two entities use software made available by accounting bureaus. The standard software usually works according to similar, reproduced formats

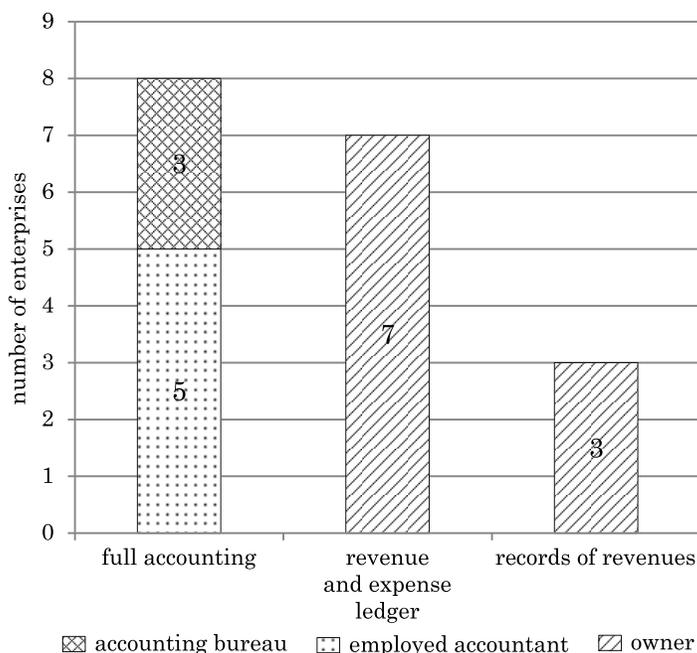


Fig. 3. Form of accounting and the person or entity responsible for accounting in the surveyed enterprises

Source: questionnaire survey.

and allows performance of the basic financial-accounting operations that are sufficient for efficient management of accounting, particularly in the simplified form. Established entrepreneurs or people with a longer history of operation in the market frequently need software that is more elaborate and better adjusted to their activities. Such entrepreneurs, maintaining full accounting records, turn to developers for customised accounting software.

Thus, the results confirm the hypothesis that small enterprises surveyed use mainly the generally available (standard) software although, to be more precise, those are entities maintaining simplified accounting.

Given that the majority of the enterprises surveyed use standard, generally available financial-accounting software, an attempt was made to determine the factors that make those enterprises purchase the software of that type.

The respondents had the opportunity to indicate more than one factor. As indicated by Figure 4, the large range of standard software available in the market was indicated as the most frequent factor determining purchase of that software type by enterprises surveyed (34.62% of responses). This allows small entrepreneurs, among others, to choose software appropriate to their needs and capacity.

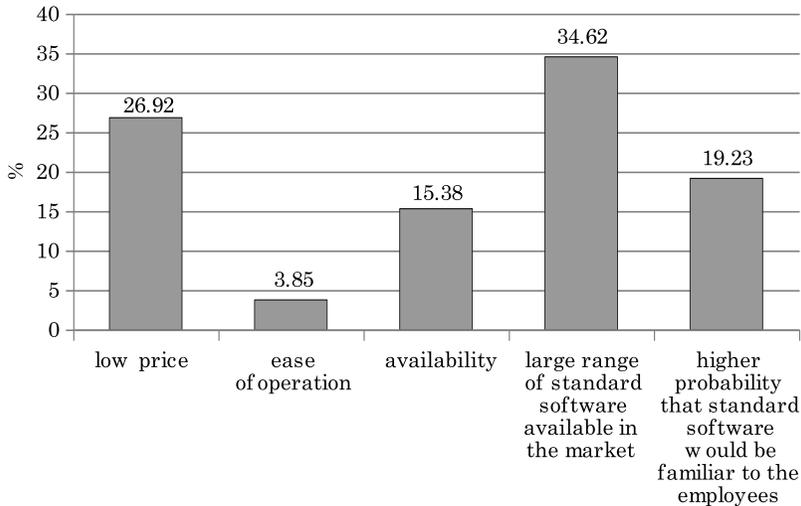


Fig. 4. Factors conditioning the choice of standard financial-accounting software (% of responses, $n=26$)

Source: questionnaire survey.

The less frequently indicated factors that make owners of small enterprises choose generally available software are the low price (26.92% of responses), higher probability that standard software would be familiar to the employees (19.23% of responses) and availability of such software (15.38% of responses). The ease of operation of such software was the least frequently indicated factor for choosing standard software, which may result from significant standardisation of the basic functions of such systems.

Thus, it should be concluded that the hypothesis according to which small enterprises base their choice of standard financial-accounting software is mainly on the price and ease of operation was confirmed only partly.

The financial-accounting software producers want to maximise their market share so they develop applications containing numerous modules (registers). The vast majority of the enterprises surveyed (16) declare that in addition to the obligatory registers related to the chosen form of business they also maintain additional registers. The other two enterprises maintain no optional registers.

Given the possibility of indicating numerous responses, the respondents declaring maintenance of additional registers in most cases marked the majority of the possible options. Consequently, the differences between the individual optional registers are minor (Fig. 5). The register of cash status and turnover is the least frequently maintained optional register. This was unexpected given the role cash plays in the enterprise activities. The fact that the

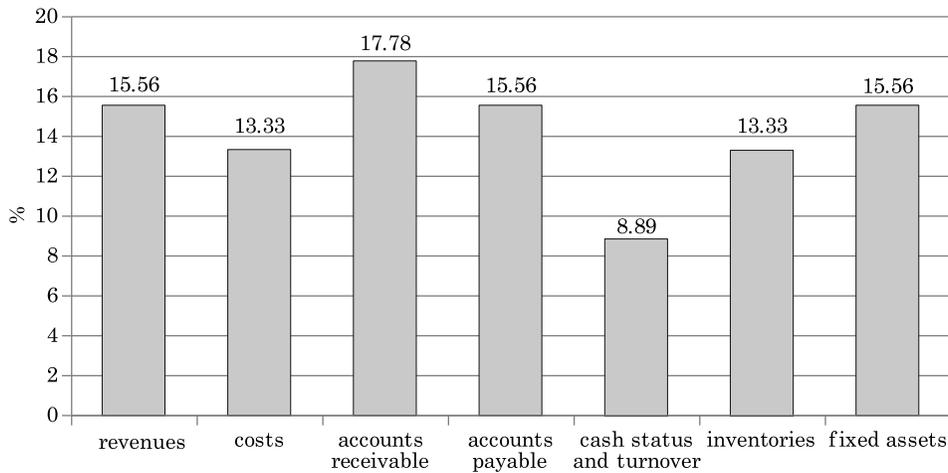


Fig. 5. Optional registers (functions) of the financial-accounting software in the surveyed enterprises (% of responses, $n=45$)

Source: questionnaire survey.

monthly turnovers generated from business activities of the business are small might be the reason for such low use of the modules supporting registration of cash status and turnover.

In the light of the results of this study, it can be concluded that the hypothesis that small enterprises use mainly the obligatory registers (functions) and only to a minor extent use the optional registers of the financial-accounting software in their possession was not confirmed.

Summary and Conclusions

The technological progress and the pace at which the environment of enterprises changes means that information systems are vital component to the prosperity of the enterprise.

The following conclusions were formulated based on the research undertaken into the accounting systems used in small business enterprises:

1. The majority of small enterprises surveyed use standard generally available financial accounting systems. It should be pointed out, however, that they are at the same time entities maintaining simplified accounting. Small enterprises maintaining full accounting records in most cases acquire software customised to their needs.

2. The vast choice of financial-accounting software in the market is the most frequently indicated factor determining the choice of standard generally

available software of that type used by the enterprises surveyed. The price, higher probability that the employees will know such software operation and software availability are less frequently indicated factors for choosing such software.

3. Small enterprises use both the obligatory registers (functions) and many different optional registers available in the financial-accounting software in their possession. This indicates the search by the entrepreneurs for the methods of making the best use of the software they have and the skills of using various items of information that can be obtained through it.

The continual development of the internet contributed to the development of numerous portals offering accounting e-services. Consequently, the entrepreneurs may not only outsource accounting ledgers to a chosen accounting bureau via the internet but they may also use on their own the chosen accounting software on-line. That possibility has initiated the new stage in the development of IT accounting where the people running a business have access to its data files at any time using the mobile computers, tablets or even advanced mobile phones.

Translated by JERZY GOZDEK

Accepted for print 30.11.2015

References

- ANDRZEJEWSKI M., GRABIŃSKI K., KĘDZIOR M. 2006. *Analiza finansowa z zastosowaniem systemów informatycznych*. Zeszyty Naukowe Akademii Ekonomicznej w Krakowie, 702.
- BARAN W. 2011. *Warunki funkcjonowania systemu rachunkowości zarządczej w generowaniu informacji zarządczej*. Zeszyty Naukowe Uniwersytetu Szczecińskiego. Finanse, Rynki Finansowe, Ubezpieczenia, 32: 13–27.
- BYTNIIEWSKI A. 2005. *Podsystem finansowo-księgowy*. In: *Architektura zintegrowanego systemu informatycznego zarządzania*. Ed. A. Bytniewski. Wydawnictwo Akademii Ekonomicznej im. Oskara Langego we Wrocławiu.
- DYNOWSKA J., KES Z. 2014. *Zastosowanie programów finansowo-księgowych w biurach rachunkowych*. In: *Metodyczne aspekty badań w rachunkowości*. Ed. H. Lelusz. Wydawnictwo UWM, Olsztyn.
- EBISCH-STENZEL M. 2013. *Kryteria wyboru systemu finansowo-księgowego i jego rola w zarządzaniu przedsiębiorstwem*. Zeszyty Naukowe Uniwersytetu Szczecińskiego. Finanse, Rynki Finansowe, Ubezpieczenia, 61(2): 35–45.
- GAD J., WALIŃSKA E. 2008. *System ekonomiczno-finansowy a system rachunkowości w zarządzaniu jednostką – teoria a praktyka*. Prace Naukowe Akademii Ekonomicznej w Poznaniu, 1196: 33–47.
- HEJNAR J. 2014. *Wpływ technologii IT na prowadzenie ksiąg rachunkowych – wybrane problemy związane z obowiązującym stanem prawnym*. In: *Współczesne problemy rachunkowości w teorii i praktyce*. Eds. H. Lelusz, R. Burchart. Wydawnictwo UWM, Olsztyn.
- JAWORSKI J. 2006. *Systemy ERP, czyli jak wykorzystać nowe możliwości e-rachunkowości*. Biuletyn Rachunkowości i Finansów, 18.
- JAWORSKI J. 2007. *Nowoczesne technologie informacyjne w rachunkowości przedsiębiorstw*. In: *Finanse i rachunkowość wobec wyzwań procesów globalizacyjnych*. Eds. J. Głuchowski, J. Patyka, S. Sojak. WSB w Toruniu, Toruń.

- JAWORSKI J. 2011. *Organizacja i funkcjonowanie systemów ewidencyjno-rachunkowych w małych przedsiębiorstwach w Polsce. Wyniki badań*. Prace Naukowe Wyższej Szkoły Bankowej w Gdańsku, 12: 147–170.
- JAWORSKI J., Sopiński P. 2010. *Luki informacyjne w zarządzaniu małym przedsiębiorstwem w świetle paradygmatu informacyjno-ekonomicznego rachunkowości*. Zeszyty Teoretyczne Rachunkowości, 59(115).
- KACZMAREK G., STĘPIEŃ M. 2001. *Podstawy budowy i wymogi formalne systemów rachunkowości informatycznej*. Wydział Zarządzania Politechniki Częstochowskiej, Zeszyt Naukowy, Finanse i Bankowość, 2.
- KASZUBA-PERZ A. 2012. *Zastosowanie informatycznych systemów zarządzania w małych i średnich przedsiębiorstwach jako przejaw technologicznej modernizacji*. Nierówności Społeczne a Wzrost Gospodarczy, 26: 258–269.
- KOWALSKA M., SKWARNIK M. 2008. *Kryteria wyboru systemów informatycznych w rachunkowości*. Zeszyty Naukowe WSZ we Wrocławiu, 25.
- KRÓL-STĘPIEŃ M. 2013. *System informatyczny rachunkowości jako narzędzie wspomagające zarządzanie jednostką gospodarczą – wymogi ustawowe a ich praktyczne stosowanie*. Zeszyty Naukowe Uniwersytetu Szczecińskiego. Finanse, Rynki Finansowe, Ubezpieczenia, 757: 75–81.
- KUŹDOWICZ P., KUŹDOWICZ D. 2013. *Integracja rachunkowości finansowej i zarządczej w systemie ERP*. Prace Naukowe UE we Wrocławiu, 290.
- LUTY Z., BIERNACKI M., KASPEROWICZ A., MAZUR A. 2010. *Rachunkowość komputerowa*. Wydawnictwo UE we Wrocławiu.
- NOGALSKI B., KARPACZ J., WÓJCIK-KARPACZ A. 2004. *Funkcjonowanie i rozwój małych i średnich przedsiębiorstw. Od czego to zależy?* OPO, Bydgoszcz.
- RUTKOWSKI T. 2007. *Systemy informatyczne w przedsiębiorstwie*. Monitor Rachunkowości i Finansów, http://www.mrf.pl/index.php?mod=m_artykuly&cid=92&id=60 (access: 23.10.2013=).
- STACHAK S. 1997. *Wstęp do metodologii nauk ekonomicznych*. Książka i Wiedza, Warszawa.

