ОБЛІК, КОНТРОЛЬ ТА АУДИТ: ТЕОРЕТИКО-МЕТОДОЛОГІЧНИЙ АСПЕКТ

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FEATURES OF MODERN AUTOMATED ACCOUNTING INFORMATION SYSTEM AND THEIR USING IN USA COMPANIES

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ОСОБЛИВОСТІ АВТОМАТИЗОВАНИХ ІНФОРМАЦІЙНИХ СИСТЕМ БУХГАЛТЕРСЬКОГО ОБЛІКУ ТА ЇХ ВИКОРИСТАННЯ НА ПІДПРИЄМСТВАХ США

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In the article there are the characteristics and the peculiarities of using modern automated information systems of accounting and management at the enterprises of the United States. Determined advantages and disadvantages of corporate information systems, as well as factors that stimulate the growth of the commercial software market in USA

Key words: *accounting, computerized information systems, management information systems.*
Fig.: 1. Tabl.: 1. Bibl.: 7.

Розглянуто характеристики та проаналізовано особливості використання сучасних автоматизованих інфор-маційних систем бухгалтерського обліку та управління на підприємствах США. Визначено переваги та недоліки застосування корпоративних інформаційних систем, а також фактори, що стимулюють зростання комерційного ринку програмного забезпечення США.

Ключові слова: *бухгалтерський облік, автоматизовані інформаційні системи, інформаційні системи управління.*
Рис.: 1. Табл.: 1. Бібл.: 7.

Рассмотрены характеристики и проанализированы особенности использования современных автоматизиро-ванных информационных систем бухгалтерского учета и управления на предприятиях США. Определены преимуще-ства и недостатки применения корпоративных информационных систем, а также факторы, стимулирующие рост коммерческого рынка программного обеспечения США.

Ключевые слова: *бухгалтерский учет, автоматизированные информационные системы, информационные си-стемы управления.*
Рис.: 1. Табл.: 1. Библ.: 7.

Target setting. The modern state of modernization the global economy is characterized by processes: globalization and regionalization. Globalization is combined with the computerization, i.e. escalation industrial economy to knowledge economy. Against this background are developed intensively the new information technologies. Exactly they have become a prerequisite and pivot of process globalization. One method of improving the management system is the introduction of new information systems through automation of accounting as source of supply of information for this system [7].

Actual scientific researches and issues analysis. An important contribution to research a variety of accounting and information software at enterprises were done by T. P. Edmonds, F. M. McNair, J. A. Hall, P. R. Olds and other. Analysis of recent literature and periodical materials led to do the conclusion that the issue of implementation and using of modern information systems and technologies in accounting is very serious.

Uninvestigated parts of general matters defining. Today, scientific and the practical research needs issues related to the extensive using of computer technologies in order to adopt objective and effective management decisions. So is highly relevant research of questions and methods of accounting in an environment of modern information technologies, management decisions regarding the implementation and using of information systems and technologies in enterprises in the United States.

The research objective. The purpose of this article is to study the theoretical and practical aspects of information implementation of accounting in USA companies, researching the most used accounting programs.

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The statement of basic materials. The information system is the set of formal procedures by which data are collected, processed into information, and distributed to users. Information system consists of accounting information system (AIS) and the management information system (MIS). We can see it on the Figure, it shows the information system of some manufacturing firm decomposed into its elemental subsystems. More often, MIS and AIS functions are integrated to achieve operational efficiency [2].
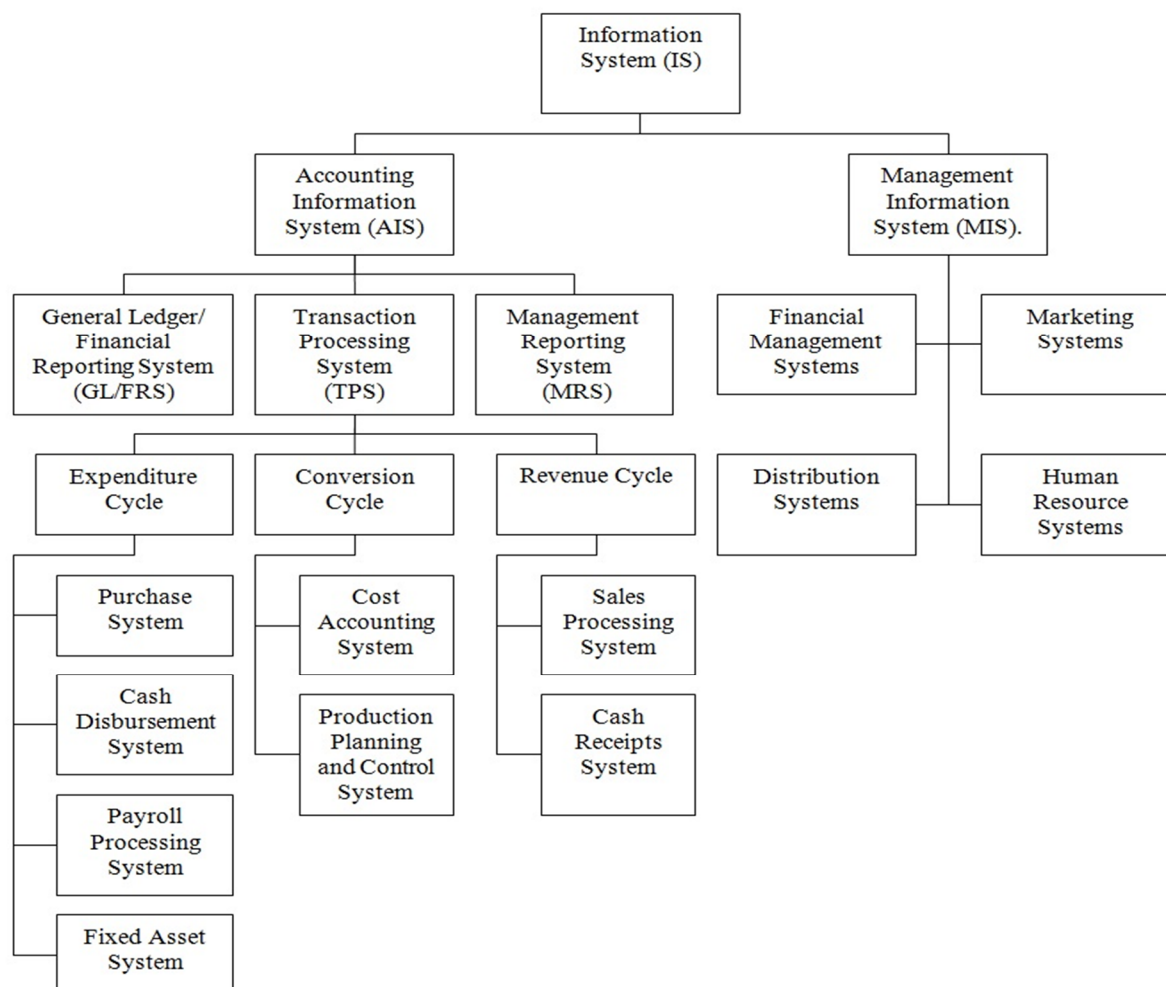

Fig. A framework for information systems

Source: [2].

AIS subsystems process financial transactions and nonfinancial transactions that directly affect the processing of financial transactions. For example, changes to customers' names and addresses are processed by the AIS to keep the customer file current. Although not technically financial transactions, these changes provide vital information for processing future sales to the customer.

The AIS is composed of three major subsystems: 1) the transaction processing system (TPS), which supports daily business operations with numerous reports, documents, and messages for users throughout the organization; 2) the general ledger/financial reporting system (GL/FRS), which produces the traditional financial statements, such as the income statement, balance sheet, statement of cash flows, tax returns, and other reports required by law; 3) the management reporting system (MRS), which provides internal management with special-purpose financial reports and information needed for decision making such as budgets, variance reports, and responsibility reports [2].

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Management often requires information that goes beyond the capability of AIS. As organizations grow in size and complexity, specialized functional areas emerge, requiring additional information for production planning and control, sales forecasting, inventory warehouse planning, market research, and so on. The management information system (MIS) processes nonfinancial transactions that are not normally processed by traditional AIS.

One of the best ways for a small business to cut costs and create savings is to deploy and utilize accounting software. Well designed accounting software can help any business reduce costs by increasing the efficiency with which incoming cash flows and payments, outgoing bill payments and liabilities, and payroll are handled.

Some are specifically tailored to accommodate certain business models or product types; others are more general, and though they will work, they might not work as well as a software package designed for business.

Below, there are a comparison of popular kinds of accounting software that are available.

QuickBooks is the ubiquitous accounting software that largely dominates the accounting software market among small and midsized businesses. By and large, QuickBooks was intended for use by small business owners with little or no formal training in accounting processes. Today, the software dominates nearly 85 % of the small business market.

Today, the software includes features such as audit trails and double-entry accounting functionality. There are also a variety of QuickBooks variants available, including those for manufacturers, wholesalers, professional service providers, contractors, non-profits, and retailers. It's easy to set up and use. And unlike spreadsheets, it does the accounting automatically. QuickBooks automatically backs up your data with bank level security so it's always safe, and always available, from any device [1; 3].

Peachtree Accounting is an accounting software package that is sold by Sage Software, and is predominantly used within the United States. The software is very common among mid-sized and some larger businesses. It is generally considered to be less user friendly than QuickBooks, but is often preferred by trained accountants because it allows for more nuanced control over the accounting process. The latest version of this software, is named Sage 50 Accounting.

An easy-to-use business accounting software, Sage 50 Accounting helps to invoice customers, pay bills, manage inventory and stay on top of banking. Sage 50 brings you best-in-class accounting standards, secure desktop installation, unlimited access to support, plus new subscription plans that offer the best value for your business [1; 3].

FreshBooks lets you create professional looking invoices in seconds, automatically record expenses with ease and track your time quickly and efficiently so you can focus on what matters most - serving the needs of clients. In January 2003, Mike McDerment, co-founder and CEO for FreshBooks, was running his four-person design agency. He was using Microsoft Word to create invoices and was pulling out his hair because Word simply wasn't built to create good looking invoices efficiently. One day he accidentally saved over an old invoice, and snapped – he knew there had to be a better way. Over the next two weeks he coded up a solution and eventually turned that side project into what is now FreshBooks. Nearly a decade later and over five million users strong, FreshBooks has grown to be the first accounting specialist for small business owners [1; 3].

There are a lot of other accounting software, which are using in USA, for example: Wave, Xero, Microsoft Dynamics, Bill.com (we can see them in Table), but most used are three listed above. We think, that in our country we will use accounting programs like in the USA, which will help us make business easier and more successful that it is.

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Table

Characteristic of accounting programmes

№	Name of software	Characteristic
1.	QuickBooks	QuickBooks products are geared mainly toward small and medium-sized businesses and offer on-premises accounting applications as well as cloud based versions that accept business payments, manage and pay bills, and payroll functions
2.	Sage 50 Accounting	The Peachtree accounting system is a computerized accounting system that allows users to post entries to journals, ledgers, and subsidiary ledgers all at once. Sage 50 Accounting is the same easy-to-use software that simplifies your everyday tasks and provides insights that help save you money, all backed by security and service you can count on. Uniting our products under the same name simply helps us streamline how we deliver support and services to your business
3.	FreshBooks	FreshBooks is a cloud-based accounting software service designed for owners of the types of small client-service businesses that send invoices to clients and get paid for their time and expertise
4.	Wave	Fast, easy accounting for small business. Wave's accounting tools are 100% free, secure, and accountant-approved. Real accounting, unlimited invoicing. The world's fastest growing small business accounting software. Made specifically for entrepreneurs, freelancers, consultants and small businesses with 9 employees or less. And it's 100 % free
5.	Xero	Xero is designed to be the accounting engine for small business, giving you real time access to your financial data and access for accountant or bookkeeper for quicker, easier collaboration at any point. Log in online anytime, anywhere on your Mac, PC, tablet or phone and see up-to-date Financials. It's small business accounting software that's simple, smart and occasionally magical
6.	Microsoft Dynamics	Microsoft Dynamics GP gives small and midsize businesses complete control over their finances, inventory, and business intelligence (BI) information within an easy-to-use and easy-to-deploy enterprise resource planning (ERP) software solution
7.	Bill.com	Bill.com, the fastest-growing business payments network with over 400,000 businesses, is disrupting the payments space and changing the way businesses pay, get paid, and collaborate with their customers and vendors. Bill.com serves customers through its direct, accountant, and bank channels, bringing together people, systems, and documents to redefine how business payments are made
8.	LessAccounting	Less Everything, a successful web firm for several years began pursuing Ruby on Rails product development in 2007. They created LessAccounting. Over time they expanded the app to include online invoicing, client proposals, mileage tracking, Wesabe integration, payables and more. Everything about LessAccounting is simple and useful. They hope it brings clarity to small business accounting needs as it has done for them and thousands more

Source: developed by the authors based on monitoring market information systems Accounting US [1; 4; 5; 6].

Some companies face with many competing packages, each with unique features and attributes, and management must choose the system and the vendor that best serves the needs of the organization. And they have to make the optimal choice requires that this be an informed decision.

Four factors have stimulated the growth of the commercial software market:

1) the relatively low cost of general commercial software as compared to customized software;

2) the emergence of industry-specific vendors who target their software to the needs of particular types of businesses;

3) a growing demand from businesses that are too small to afford an in-house systems development staff;

4) the trend toward downsizing of organizational units and the resulting move toward the distributed data processing environment, which has made the commercial software option more appealing to larger organizations.

And now we will tell you about advantages and disadvantages of commercial packages.

Advantages of commercial packages:

- implementation time: custom systems often take a long time to develop. Months or even years may pass before a custom system can be developed through in-house procedures. Unless the organization successfully anticipates future information needs and schedules application development accordingly, it may experience long periods of unsatisfied need. On the other hand, small commercial software systems can be implemented almost immediately upon recognizing a need. The user does not need to wait. The implementation of a single module of larger systems such as PeopleSoft, SAP, or ORACLE-FIN, however, could take from several weeks to a few months. An entire ERP could take years, but this is still much quicker than in-house or outsourced development would take;

- cost: single user must wholly absorb in-house development costs. However, because the cost of commercial software is spread across many users, the unit cost is reduced to a fraction of the cost of a system developed in-house;

- reliability: most reputable commercial software packages are thoroughly tested before their release to the consumer market. Any system errors that were not discovered during testing that organizations likely uncover shortly after release are corrected. Although no system is certified as being free from errors, commercial software is less likely to have errors than an equivalent in-house system.

Disadvantages of commercial packages:

- independence: purchasing a vendor-supported system makes the firm dependent on the vendor for maintenance. The user runs the risk that the vendor will cease to support the system or even go out of business. This is perhaps the greatest disadvantage of vendor-supported systems;

- the need for customized systems: the prime advantage of in-house development is the ability to produce applications to exact specifications. This advantage also describes a disadvantage of commercial software. Sometimes, the user's needs are unique and complex, and commercially available software is either too general or too inflexible;

- maintenance: business information systems undergo frequent changes. If the user's needs change, it may be difficult or even impossible to modify commercial software. On the other hand, in-house development provides users with proprietary applications that can be maintained.

Conclusions. High-quality accounting and information software are the basis for the successful doing business of any company. Information management in the United States consists of accounting and management software in the enterprise. This is very important, because the company will function successfully provided a well-organized production process and proper accounting.

References

1. Accounting software (2015). Retrieved from http://www.egafutura.com/wiki-en/accounting-software.

2. Hall, J.A. (2011). Accounting information systems. Retrieved from http://mfile.narotama.ac.id/files/ebooks/Accounting%20Information%20Systems/Accounting%20Information%20Systems%20(Seventh%20Edition).pdf.

3. *The top 20 accounting software products* (2014). Retrieved from http://www.symmetry50.com/blog/2014/11/8/the-top-20-accounting-software-products

4. *Less Accounting: Accounting Software Features*. Retrieved from https://lessaccounting.com/accounting-software-features.

5. *Xero: features*. Retrieved from https://www.xero.com/us/about/.

6. *Wave*: *software features*. Retrieved from https://www.waveapps.com/about-us/.

7. Volot, O.I. (2013). Vprovadzhennia ta vykorystannia suchasnykh informatsiinykh system i tekhnolohii u bukhhalterskomu obliku vitchyznianykh pidpryiemstv [Introduction and use of modern information systems and technologies accounting of domestic enterprises]. *Visnyk Chernihivskoho derzhavnoho tekhnolohichnoho universytetu. Seriia "Ekonomichni nauky" – Visnyk of Chernihiv State Technological University. Series "Economics"*, no. 3 (68), pp. 114–121 (in Ukrainian).

References (in language original)

1. *Accounting* software (2015) [Electronic resource]. – Access mode : http://www.egafutura.com/wiki-en/accounting-software.

2. *Hall J. A.* Accounting information systems (2011) [Electronic resource]. – Access mode : http://mfile.narotama.ac.id/files/ebooks/Accounting%20Information%20Systems/Accounting%20Information%20Systems%20(Seventh%20Edition).pdf.

3. *The top 20* accounting software products (2014) [Electronic resource]. – Access mode : http://www.symmetry50.com/blog/2014/11/8/the-top-20-accounting-software-products

4. *Less Accounting*: Accounting Software Features [Electronic resource]. – Access mode : https://lessaccounting.com/accounting-software-features.

5. *Xero:* features [Electronic resource]. – Access mode : https://www.xero.com/us/about/.

6. *Wave*: software features [Electronic resource]. – Access mode : https://www.waveapps.com/about-us/.

7. *Волот О. І.* Впровадження та використання сучасних інформаційних систем і технологій у бухгалтерському обліку вітчизняних підприємств / О. І. Волот // Вісник Чернігівського державного технологічного університету. Серія «Економічні науки». – 2013. – № 3 (68). – С. 114–121.

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