

## SELECTION OF SOFTWARE TOOLS FOR AUTOMATION OF BUSINESS PLANNING PROCESSES

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**Abstract.** *The article discusses the recent significant increase in interest in the practical application of business software (SW). Today, it is clear to everyone that management prospects are in the field of information technology. There are many software products on the market that are used for business software, management, financial and business consulting, enterprise or holding management, project management, business cycle optimization and document cycle automation.*

*The article discusses the selection of software tools for automating business planning processes, as there has been a growing interest in the practical application of business software. Business software can be classified into several categories such as enterprise management systems, accounting software, document management systems, etc. The article emphasizes that the choice of a specific software product is related to its functional features and the environment in which it is used. The article identifies three levels of management, and for each level, different requirements for software are identified. The article divides project management software into two groups, entry-level programs, and professional systems, and discusses their functionalities and costs. The article concludes that there is an intermediate position for project management software, which integrates features of the first two groups. Furthermore, it is emphasized that domestic developments in project management software are preferred by many users due to their availability and low cost. The article suggests that with project management packages, financial managers can obtain detailed financial plans, financing schemes, and business evaluations for decision making. The article concludes by outlining key factors that must be taken into account when selecting project management software, such as complexity, updating options, scalability, user interface, resources, coding, calculated fields, risk analysis, and task distribution. The article emphasizes the importance of business-planning-analytics packages in helping managers build effective financial models by dynamically simulating time-varying factors.*

**Key words:** *information technologies, management systems, accounting software, document management systems, business consulting, project management.*

**Statement of a problem.** Recently, there has been a significant increase in interest in the field of practical application of business software (SW). Today it is clear to everyone that management perspectives lie in the field of information technology. On the market business software, a large

number of software products, used for management, financial and business consulting, enterprise or holding management, project management, optimization of turnover and automation of document flow in an enterprise.

With some degree of conventionality, existing business software can be divided into the following categories:

- enterprise management systems;
- programs for business planning-analytics (project management);
- information and reference systems;
- trade automation systems;
- accounting software;
- warehouse accounting automation systems;
- document management systems.

The majority of business software users, and this is a fairly wide range, starting from students of economic universities and ending with heads of higher link, do not always clearly understand what results they want to get from the introduction of specific software products or the use of information technologies in management. At the same time, if young people are more interested in issues related, for example, to Web design, then business leaders want to get acquainted with the experience of successful implementation of corporate information systems.

When choosing a particular software product, it is necessary to take into account the fact that the functional features of programs are directly related to the environment in which it is used. For example, choosing an accounting software does not cause any particular difficulties, since everything here depends on the scale of the business: in a small business, accounting software is used mainly to facilitate accounting, and for large businesses, functions such as analysis, planning and consolidation of accounting data are relevant. The same cannot be said for the choice programs for business planning-analytics (project management), where a systematic approach is required (since all existing programs differ both in terms of functionality and integration capabilities).

At present, the task of developing modern standards and methods of project management, as well as expanding the functionality of information systems for scheduling and network planning, is becoming especially urgent.

Considering that in almost any organization there are three groups of employees involved in the process of managing its activities: senior management, managers, and field professionals, then significant differences in

the tasks performed determine the differences in the requirements that these groups of users place on software designed to improve the efficiency of their activities. For example, for the head of an enterprise planning the current activities of his enterprise, and the chiefs departments planning the workload of their employees, the most important characteristic. The software is ease of use and ease of learning. And employees involved in the detailed planning of complex complex projects and having a professional education in the field of project management, the software is subject, first of all, to the requirements power and flexibility.

**Analysis of recent researches and publications.** Welcom Software Technologies conducted a study to identify differences in requirements for software at different levels project management.

As a result, three levels of management were identified [1]:

- top management level;
- strategic level;
- operation level.

For specialists who set goals, general planning and control over the implementation of tasks (top management level), a necessary requirement for software is simplicity and ease of use, as well as the availability of opportunities for preparing visual demo reports and presentations.

Employees who form the basis of the strategic level of management, typically responsible for developing detailed plans to achieve goals set by top management. They carry out the distribution of work for specific performers and control over the implementation of the tasks set plans. Therefore, the main thing in the software product used for them is, first of all, the availability of control tools for all project indicators, as well as opportunities for detailed study of individual parts of the project and sufficient the number of output forms for issuing data in a generalized form. It should be noted that when implementing fairly simple projects, the level of strategic management can be made up of employees who only plan the workload of their subordinates and for whom working with project management packages is not their main job.

For field professionals (operations level) responsible for completing specific activities on schedule, using sufficient rare project management software, the most important characteristic is ease of use mastering and ease of use at the level of input of initial data. This category includes not only performers of work, but also managers in the field.

Existing project management software can be divided into two groups [2]: entry-level (scheduling) programs that emphasize ease of use and professional systems with extended functional and communication capabilities (to create a management environment for several complex projects). And if the cost of packages of the first group, presented by AEC Software, Kidasa Software, Visio Corp., does not exceed \$200, then the cost of complex systems produced by Artemis Management Systems, Primavera Systems, Welcom Software Technologies, may exceed \$10,000. Such a division is quite conditionally, since at present software developers include in inexpensive packages the functionality inherent in professional systems. Therefore, we can assume that there is a third group of packages, costing up to \$1000, represented by Computer Associated, Microsoft, Scitor, Primavera Systems, IMSI, which occupies an intermediate position and integrates the features of the first two groups.

Many users prefer domestic developments in areas of project management software, due to their availability and relatively low cost. But in the future, prices for domestic software products will grow, approaching their real value. Price increases will also be driven by customer demands for more functionality.

While many authors [1 - 11] have considered the issue of choosing between domestic and foreign software products for financial management, there are still unresolved problems that require further research. These include the need to consider the complexity of software products, updating existing versions, scaling solutions, user-friendly interfaces, job coding, availability of calculated and custom fields, multiproject management, temporary planning units, scheduling, resource leveling, risk analysis, use of client-server technology, and distribution of tasks to performers. Therefore, it is clear that there is still much work to be done in the field of financial software management, and further research is necessary to address these challenges.

**Unresolved components of a common problem.** Some of the unresolved issues in this area of research include:

- lack of clear understanding among business software users about the results they want to achieve with the software products they use;
- choosing the right software product for a specific business environment;
- developing modern standards and methods of project

management, as well as expanding the functionality of information systems for scheduling and network planning;

- identifying differences in software requirements for various levels of project management;
- determining the most suitable software products for field professionals responsible for completing specific activities on schedule;
- assessing the functionality and cost-effectiveness of different project management software products, including domestic and international options.

**The formulation of the objectives of the article.** The objective of the article is to provide guidance on selecting appropriate software tools for automating business planning processes. The article aims to educate business software users, from students of economic universities to heads of higher management, about the different categories of business software and the importance of choosing software based on the environment in which it is used.

**Statement of the main material of the research.** The issue of whether to opt for domestic or foreign software products, given the availability, low cost, and functionality of domestic software products. With the help of project management packages, the financial manager can get the following information products:

- detailed financial plan and cash requirements for perspective;
- a scheme for financing an enterprise, assessing the possibilities and efficiency of attracting funds from various sources;
- a plan for the development of an enterprise or the implementation of an investment project;
- a series of enterprise development scenarios for different sets of values;
- factors that can affect financial results;
- risks in assessing the duration of both individual works and the entire project;
- description of the logical structure of the project work in various sections: WBS, network diagrams, coding by stages, responsible executors etc.;
- standard financial documents and key indicators;
- publication of project information on intranet/Internet-server;
- visual information about the status of work, loading resources, costs, etc.;

- business plan of the investment project.

Thus, summing up the results of the analysis of the existing software, here are some characteristics that when choosing a software product for project management, it is necessary to take into account:

- the complexity of the software product (is it possible to implement it on your own, without the involvement of third-party specialists);
- updating an existing version (expanding features, consulting and training, eliminating);
- scaling solutions (availability of a variant of a software product with an increase in the number of users);
- user-friendly interface (presence of setting functions);
- resources (the possibility of changing the cost over time, changing qualifications, hierarchy of resources);
- job coding (number of codes for one job);
- availability of calculated fields;
- number of custom fields;
- multiproject (possibility of creating subprojects, possibility of transition from a subproject to the main project);
- temporary planning units (possibility of changing one unit to another);
- scheduling (availability of the function of automatic determination of cycles);
- resource leveling (availability of multi-project leveling functions, and leveling using qualifications);
- risk analysis;
- use of client-server technology;
- distribution of tasks to performers.

Solving the financial future of a company requires a huge number of calculations. Therefore, it is difficult to overestimate the value of business-planning-analytics packages that help managers build effective financial models of the expected reality by dynamically simulating it taking into account many time-varying factors.

**Conclusions.** In conclusion, the article highlights the importance of project management software in financial planning and decision-making. The article presents a comparison of domestic and foreign software products, emphasizing the need for businesses to carefully consider the

characteristics of the software products when choosing one for project management.

The characteristics to consider include the complexity of the software, user-friendly interface, availability of calculated fields, scheduling functions, risk analysis, and distribution of tasks to performers, among others. Additionally, the article highlights the benefits of using project management software, such as the ability to create detailed financial plans, assess the possibilities and efficiency of attracting funds from various sources, and develop enterprise development scenarios.

Future research in this area could focus on the development of more advanced project management packages that incorporate artificial intelligence and machine learning technologies to further enhance financial planning and decision-making capabilities. Additionally, research could also explore the impact of using project management packages on overall project success rates and the financial performance of companies.

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## ВИБІР ПРОГРАМНИХ ЗАСОБІВ ДЛЯ АВТОМАТИЗАЦІЇ ПРОЦЕСІВ БІЗНЕС-ПЛАНУВАННЯ

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***Анотація.** У статті обговорюється, що останнім часом є значне зростання інтересу до практичного застосування програмного забезпечення для бізнесу (ПЗ). Сьогодні всім зрозуміло, що перспективи менеджменту знаходяться у сфері інформаційних технологій. На ринку представлена велика кількість програмних продуктів, які використовуються для програмного забезпечення бізнесу, менеджменту, фінансового та бізнес-консультування, управління підприємством або холдингом, управління проєктами, оптимізації бізнес-циклу та автоматизації документообігу.*

*У статті розглядається вибір програмних засобів для автоматизації процесів бізнес-планування, оскільки зростає інтерес до практичного застосування програмного забезпечення для бізнесу. Програмне забезпечення для бізнесу можна класифікувати за кількома категоріями, такими як системи управління підприємством, бухгалтерське програмне забезпечення, системи документообігу тощо. Підкреслюється, що вибір конкретного програмного продукту пов'язаний з його функціональними особливостями та середовищем, у якому він використовується. Визначено три рівні управління, і для кожного рівня визначені різні вимоги до програмного забезпечення. Розділено програмне забезпечення для управління проєктами на дві групи: програми початкового рівня та професійні системи, а також обговорено їх функціональні можливості та вартість. У статті зроблено висновок про те, що існує проміжне положення програмного забезпечення для управління проєктами, яке інтегрує ознаки перших двох груп. Крім того, наголошується, що вітчизняні розробки ПЗ для управління проєктами віддають перевагу багатьом користувачам через їх доступність і низьку вартість. У статті йдеться про те, що за допомогою пакетів управління проєктами фінансові менеджери можуть отримати детальні фінансові плани, схеми фінансування та оцінки бізнесу для прийняття рішень. На завершення у статті викладено ключові фактори, які необхідно враховувати при виборі програмного забезпечення для управління проєктами, наприклад складність, параметри оновлення, масштабованість, інтерфейс користувача, ресурси, кодування, обчислювані поля, аналіз ризиків і розподіл завдань. Наголошується на важливості пакетів бізнес-планування та аналітики, які допомагають менеджерам будувати ефективні фінансові моделі шляхом динамічного моделювання факторів, що змінюються в часі.*

***Ключові слова:** інформаційні технології, системи управління, бухгалтерське програмне забезпечення, системи документообігу.*