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WORLD PRACTICE OF DIGITALIZING FINANCIAL PLANNING

Abstract. Digitalization of financial planning, one of the most important components of the planning system, allows you to solve such vital tasks as the effective management of financial flows, ensuring the balance of financial resources and needs, optimizing management decisions, minimizing costs. However, the very content of financial planning and the financial planning mechanism requires further development, the study of the theoretical base and practical experience in order to bring them into line with modern requirements and conditions. Finance and financial relations are inextricably linked with socio-economic relations in the country and in the world. Thus, changes taking place in the country and the world community affect the content of the system of finance and financial relations, as well as financial planning as an important part of them. In order for financial planning to become the basis of effective management, it is necessary to revise and bring the tools used in theory and practice into line with modern requirements. The main objective of public finance management information systems is to facilitate informed decision-making regarding policies and government programs, as well as the publication of reliable information on budget execution.

Information systems for managing public finances can generally be described as a set of decisions that allows budget planning, automates the accounting of all financial transactions, tracks financial events and records all financial transactions, generates financial statements that affect management decisions.

The authors identified the priority areas of formation and development of the digitalization system for financial planning of the state.

The shortcomings of the digital planning systems for financial planning inherent in the state at the present stage are identified, and the specificity of the problems in the field of financial planning is analyzed, the main prerequisites for the development of financial planning systems are identified, and financial planning models and application conditions are analyzed.

The theoretical and methodological basis of the study was the work of domestic and foreign scientists and practitioners on financial planning and control.

The study is based on modeling as an experimental method for constructing a financial planning system aimed at studying the process of forming the system and the results of such formation. The leading place in the work was also given to the methods of system and comparative analysis, generalization, economic and mathematical methods and models, quantitative and qualitative methods of forecasting, methods of decision theory.

Also, during the study, general methods of scientific knowledge were used, such as observation, comparison. The deductive and inductive method, as well as argumentation, were actively used. To study the elements of the financial planning and control system, analysis and synthesis methods were used. The process of changing the financial planning system at Russian enterprises during the transition from a planned-regulated to a market economy was studied using the historical method.

Keywords: digitalization, financial planning, public finance, electronic budget.

Introduction. When creating information systems for managing public finances, a modular approach is used (figure 1). In the ideology of creating such systems, the basis, as a rule, is the Treasury information

system, which provides the ability to manage the delivery of budget data, allocate budget funds, manage revenues (mainly on the basis of a single treasury account), forecasting and cash management [1].

In addition, the main modules of the public finance management information system include modules providing for the possibility of planning and budget preparation, including macroeconomic forecasting and public investment management. According to this model, information systems for managing public finances in 51 countries of the world have been created and are currently being created. It should be noted that only two countries implemented the full-scale World Bank model: Brazil and South Korea. The remaining countries carry out the development and implementation of individual modules, ensuring their subsequent integration into a single information system. When creating and developing the Electronic Budget system, a combination of centralized and decentralized approaches is applied, ensuring the centralization of information flows that affect the completeness, reliability and efficiency of accounting for the financial and economic activities of public administration organizations and public law entities, with subsequent integration with processes covering all activities of public law entities.

To ensure the openness of the process of financial and economic activity, to create a unified environment for all participants in the budget process, organized according to uniform rules and principles, to ensure the interconnection of financial information with specific final results of activities of the authorities, the following should be undertaken:

The first is to dematerialize all storage media (primary documents of financial and economic activity). And this means creating electronic forms, rules for filling them out with the obligatory use of uniform registers and classifiers. It is this approach that will ensure comparability of information and the possibility of its use by all participants.

The second is to provide a one-time input of information. Information should be created directly in the system once at the time of the event and only be used in the future. Only this will guarantee the accuracy of the information.

The third is to ensure maximum automation of accounting operations. To do this, develop standards for all business processes of financial and economic activity, identify centers of responsibility for them, and give electronic data legal force. This will lead to transparency in the activities of state authorities.

Fourth, to make electronic data available around the clock in real time to all interested users (naturally, subject to existing restrictions). Only this will create the opportunity for citizens to participate in the management of the budget process [2].

Digitalization has affected the tax and tax management system, budget reporting, digital signature and identification of citizens, the transition to a single platform for the provision of electronic public services, etc. The latter have significantly reduced the administrative burden on enterprises and the population, making their interaction with government bodies faster, more efficient, more convenient and less expensive. The proportion of people using e-government services (that is, visiting the websites of government agencies or interacting with them) has been constantly growing in recent years, but varies significantly across countries. For example, in Denmark in 2016 it amounted to 88 %, and in Brazil, Chile, Italy, Mexico and Colombia less than 25 %. The number of citizens submitting completed forms online also varies widely: 50 % or more in the countries of Northern Europe, Estonia, the Netherlands and France, and less than 10 % in Mexico, Japan. These differences are explained, in particular, by the underdeveloped infrastructure and the limited supply of electronic services, as well as structural problems caused by institutional, cultural or economic factors [3].

In the USA, special attention is paid to the methodology of planning and evaluating programs and projects. The Presidential Administration and Budget Office provides methodological support for the planning process, including the development of various methodological recommendations and directions in the form of circulars. At the same time, the development of strategic goals, the selection of the corresponding target indicators and indicators is an extremely important, but insufficient condition for the successful application of program approaches in practice. These issues constitute the highest level of program planning, regulated by state bodies in the person of ministries and departments. However, an equally important task is to ensure the appropriate conditions for achieving strategic goals. This, in turn, implies the implementation of numerous individual projects, each of which is aimed at solving local problems (the construction of hospitals, railways, airports, the technical re-equipment of various transport facilities, etc.).

As an example of an effective mechanism to achieve the strategic goals of ministries and departments at the expense of budgetary funds, we can cite the grant program for economic recovery through investments in the transport system - TIGER (Transportation Investment Generating Economic Recovery). The basis of this program (highly successful according to the US Department of Transportation) is a competition for grants for transport projects, the implementation of which will make a significant contribution to the development of the economy of a country, region, or metropolitan area [4].

No less important is the consideration of the experience of assessing the effectiveness of budget spending in Canada, which, like Russia, is a federal state. In Canada, budgets are also prepared using programmatic approaches, and relative indicators and rating (point) rating methods are used to evaluate their effectiveness and efficiency, which can be used in domestic practice. Canada's budget process is governed by a constitutional act and three basic laws: the Financial Administration Act (1985); Act on the Auditor General (1977); Federal Budget Law (1985). Since 1970, in Canada, in the practice of budget planning, the PPBS approach (planning, programming and budgeting system) has become widespread. During the application of the PPBS system, certain positive results were obtained: it became possible to limit costs and reduce the budget deficit.

Unlike the previous system, within the framework of the EMS system, decisions on new initiatives and corresponding resource transfers according to previous programs were made at the budget planning stage. At the same time, emphasis was placed on periodic review of programs, low-priority programs were discontinued, and released funds were used to finance new initiatives. Within the EMS system, the existence of a central reserve was recognized as ineffective, since it did not push officials to revise the programs, so the reserve was liquidated. Departments were given greater discretion in the allocation of resources allocated to them. A business planning system was introduced, within the framework of which the departments determined the strategy of changes taking into account budget goals and government priorities. The role of the relevant committees in parliament was strengthened, which assessed the prospects for expenditures, and analyzed future trends in the context of national priorities. The functioning of the EMS system is based on three principles:

1) bringing costs to transparent results, which requires the development of clear indicators of such results, their systematic evaluation, as well as periodic monitoring of price and quality combinations;

2) a thorough review of proposals for new costs, which requires the development of criteria for evaluating the effectiveness and analysis of the compatibility of proposals with existing costs and results, as well as options for moving proposals between sources of financing;

3) a strategic review of direct spending programs every four years in order to prevent their deviation from government priorities, principles of efficiency and profitability. The revision allows the termination of 5 % of the least priority and least effective programs and offers programs to replace them. The implementation of the principles presented has improved the efficiency of spending budget funds in Canada, which can serve as a positive experience and direction of adaptation [5].

Consider the public finance management process in Finland, which is a unitary state, but the experience of assessing the effectiveness of budget spending in this country is also of interest to Russia due to the similar focus of budget policy: the need to reduce public debt (internal and external) and ensure the balance of the central (federal) budget [6].

In Finland, as in Russia, the budget is drawn up by the government, however, the Ministry of Finance plays a key role, while in the Russian Federation a draft budget is prepared jointly by all ministries and submitted to the State Duma by the Prime Minister. The budget in the compared countries is adopted by the main legislative body – parliament – in several readings in the Russian Federation and in one reading in Finland, since amendments are introduced by parliamentarians together with the Ministry of Finance of Finland before the adoption of the main draft budget.

Norway, whose experience is also useful for study, regulates the budget process by the national legislation of the country. The choice for the analysis of Norway is explained by a strong export-oriented component, which is close to the economy of the Russian Federation. As a result of the analysis of the functioning of the Norwegian financial system, it can be concluded that local government in this country is much less independent than in Russia. In our country, the value of transfers to lower-level budgets of the total number of budget expenditures is about 4 %, in Norway – more than 13 %. Moreover, if in accordance with Russian budget legislation, inter-budget transfers of a general nature are provided to the budgets of the budget system, that is, at the municipal and regional levels, then in the Norwegian budget

classification the emphasis is on the level of municipalities or "communes". In this regard, for the Russian Federation it seems appropriate in the image of Norway to strengthen financial control over the expenditures of municipalities in order to limit the observed in some cases misuse of funds and violations of budget legislation [7-8].

Germany is a federal parliamentary republic. The basis of the Grundgesetz law establishes fundamental requirements for the budget process and prescribes budget relations between federal levels of government and regions that enjoy a high level of autonomy. The budget process includes the following stages: drafting, review, approval and execution of the budget. Budgeting in Germany at the federal level is carried out in accordance with legal, constitutional and administrative regulations. The constitution incorporates the fundamental principles of public finance management and the budget process. In turn, federal laws contain principles of public finance management, which traditionally operate in all countries of the European Union.

The creation of well-informed plans, budgets, and forecasts is an essential factor that enables managers to be confident in their decision making and investment placement. In addition, the ability to respond quickly to changing business conditions is critical to ensuring that plans are based on the latest data.

However, some things are easier said than done. So, a recent Aberdeen study of financial planning, budgeting and forecasting practices found that 89 % of organizations still use spreadsheets to formulate plans, budgets and forecasts.

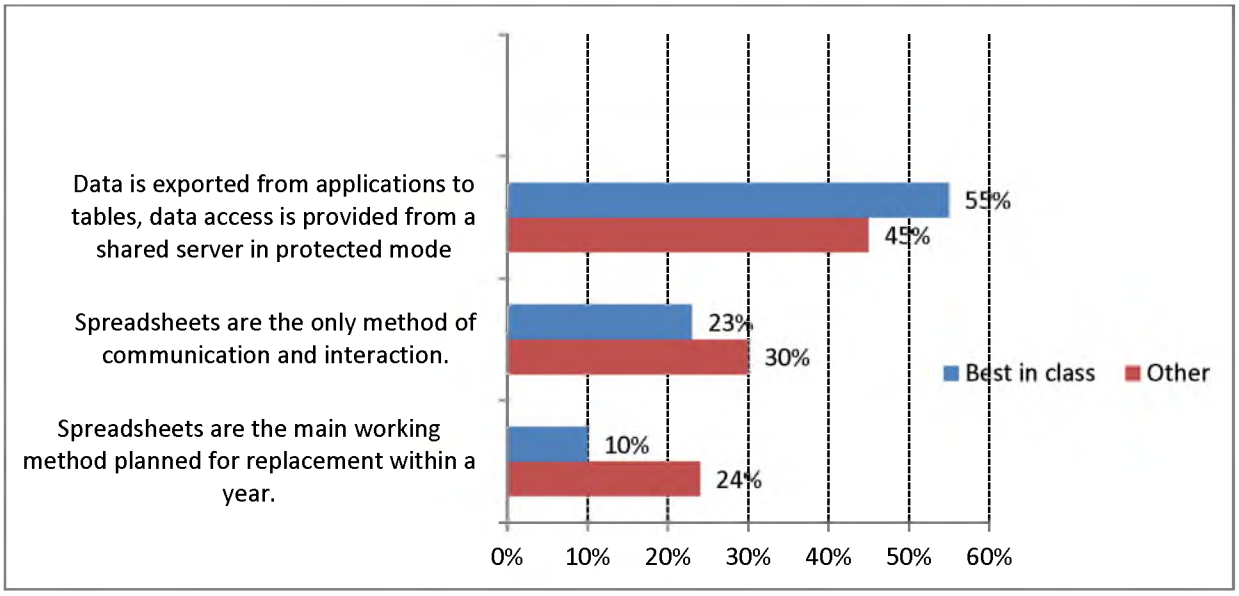

Figure 1 - Practice using spreadsheets

It is not surprising that many organizations, one way or another, rely on spreadsheets for planning and budgeting. For employees, this is a fairly convenient tool that they use for other purposes and in their personal lives outside the office. Spreadsheets are very simple and straightforward. However, according to Aberdeen analysts, they bring with them several problems:

- The complexity of collaboration and problems with version control.
- The need for manual data updates.
- Difficulties in determining the relevance of information.
- The difficulty of cooperation due to the opacity of other people's formulas or fear of damage to them.

As the study showed, "best in class" companies use a wide range of technologies in the planning, budgeting and forecasting processes. These technologies perform many functions, but it is common practice in the "best" organizations to export data from these applications to spreadsheets for further analysis. Since it is believed that a significant number of employees are comfortable working with spreadsheets, some of these applications can mimic their appearance. For example, 68 % of the "best"

companies use planning, forecasting, and budgeting applications that resemble the standard tables. The difference is where these applications are located and how they can be used.

It turned out that organizations that use the "non-tabular approach" to planning, budgeting and forecasting demonstrate better performance indicators, which can lead to greater accuracy in planning and budgeting (see figure 2). For example, such companies note an annual reduction in the time interval required to complete the forecast.

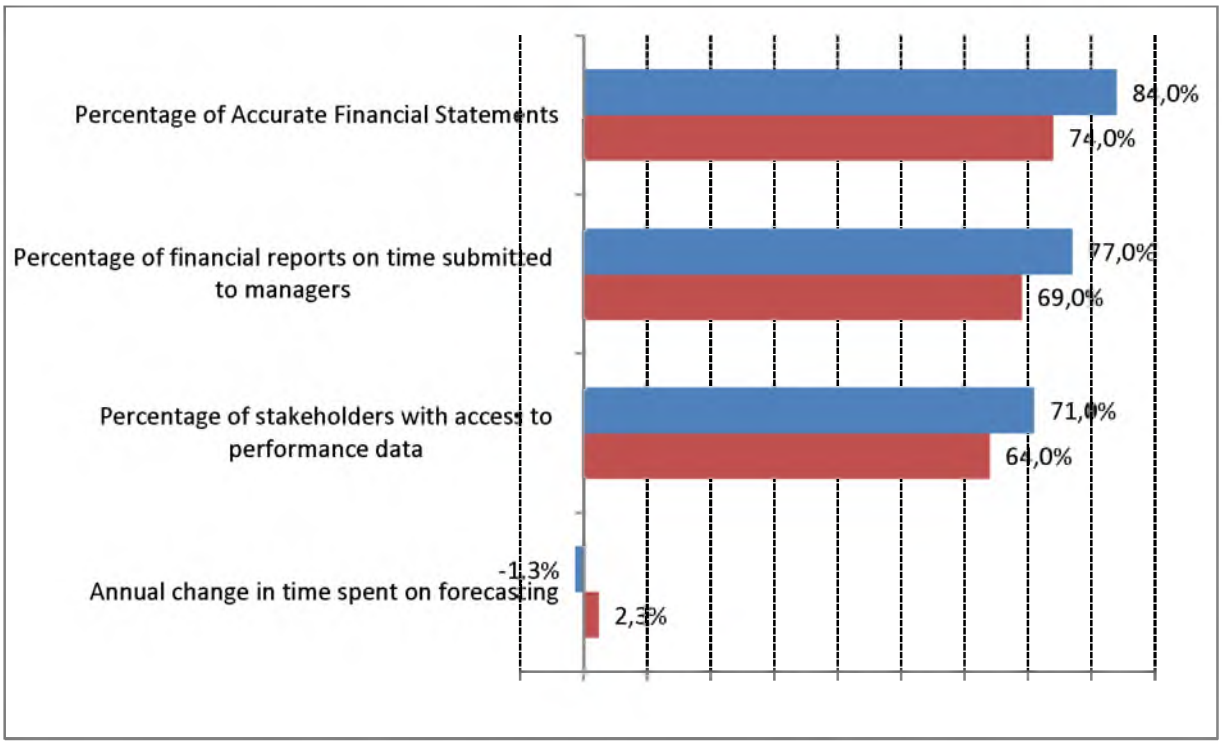

Figure 2 - Benefits of using non-tabular tools

Interesting observations on the benefits of using specialized software to support planning and budgeting were presented by John Orlando, CFO at Centage Corporation. In his opinion, the main advantages of using these solutions are:

- Improved accuracy – formulas for models based on assumptions and workflow use built-in business rules and financial analysis capabilities to ensure high accuracy.
- Centralized database – any corrections of estimates and assumptions are automatically updated in real time. Thus, all users work with a "single version of the truth".
- Easy-to-use common interface – applications are built with a focus on business concepts in order to operate with the names of business entities, rather than database conventions.
- Integration of accounting applications – automated processes import data from common accounting applications, supporting the possibility of generating a rolling budget or forecast based on data from several systems. This speeds up data transfer and minimizes errors.
- Reducing the amount of programming – eliminating the need for tabular formulas, and, therefore, minimizing errors. Predictive and budget models become an accurate reflection of the business.
- Contingency planning and sensitivity analysis with a "what if?" Scenario - Users can change variables and see a direct impact on the result. A number of models can be reproduced for subsequent analysis and comparison.
- Integrated reporting – automatic generation of reports on income, expenses, balance and cash flow with the ability to customize to special requirements.
- Collaboration – the involvement and cooperation of a large number of end users and participants in the budget process.

The main advantage of the transition from budgeting based on spreadsheets to an automated process based on innovative technological solutions is a more accurate, inclusive and timely budget with a

seriously shortened cycle of its preparation. Companies often report that they can move from annual budgeting to quarterly budgeting to make more informed budget decisions.

Methods. The study is based on modeling as an experimental method for constructing a financial planning system aimed at studying the process of forming the system and the results of such formation. The leading place in the work was also given to the methods of system and comparative analysis, generalization, economic and mathematical methods and models, quantitative and qualitative methods of forecasting, methods of decision theory.

Also, during the study, general methods of scientific knowledge were used, such as observation, comparison. The deductive and inductive method, as well as argumentation, were actively used. To study the elements of the financial planning and control system, analysis and synthesis methods were used. The process of changing the financial planning system at Russian enterprises during the transition from a planned-regulated to a market economy was studied using the historical method.

The years of the formation of our republic as a sovereign state turned out to be not only a test of strength and survival, but also years of overcoming difficult economic tests, then stabilization of the economy, the emergence of new bodies and structures to regulate the financial flows and material resources of the state, and control their targeted and rational use. To overcome the economic crisis, it was necessary to ensure the strictest accounting and control of cash in the country. It was then that the need arose to reform economic structures and, above all, state financial management.

The modern level of informatization of society determines the use of the latest technical, technological, software tools in various information systems of economic objects. Integrated computer data processing systems are designed as a complex information technology and software complex. It supports a single way of presenting data and user interactions with system components, provides information and computing needs of specialists in their professional work.

Of particular importance in such systems is the protection of information during its transmission and processing. The most widely used in protecting economic information were hardware and software methods. In particular, the use of a communication system selected for protective properties and quality of service, guaranteeing the safety of information in the process of transmission and delivery to its addressee; encryption and decryption of data by subscribers of public networks (telephone, telegraph) with the agreement of users on common technical means, encryption algorithms, etc.

The concept of the budget process is quite capacious and multifaceted. The budget process is the activity regulated by the budget legislation of the Republic of Kazakhstan on planning, reviewing, approving, executing, clarifying, adjusting, maintaining budget accounting and reporting, state financial control [9-10].

Results. At the present stage, in the context of computerization and automation of all public administration systems, the Treasury of the Republic of Kazakhstan could not get past this problem. As part of the treasury modernization project, the task is to automate all budget expenditures, this will greatly increase the transparency of the budget, including local budgets. The modernization of the Treasury and the creation of such systems, when the program administrator will electronically spend his funds is a very important area of the entire project, improving the entire system of movement of all financial flows, the effectiveness of their control, and evaluating their effectiveness.

Oracle Corporation, the largest producer of corporate software, in fact helped to modernize the Treasury as part of the reform of the budget system of Kazakhstan. Based on ORACLE software, a new treasury system has been developed. It represents a set of functional characteristics that are aimed at ensuring the main goal set by the President of the country – the effective management of public finances. The new treasury system was developed in accordance with the regulatory framework of the Republic of Kazakhstan, and taking into account the distribution of responsibility of the Government and local executive bodies for ensuring efficient and targeted spending of budget funds. Since May 2003, the Integrated Treasury Information System (IISC) has been operating. In 2004, the Treasury information system was introduced throughout the republic [11].

According to the Development Strategy of Kazakhstan until 2030, the integrated information system of the Treasury is aimed at ensuring the timely transfer of taxes and duties to budget revenues, budget spending, effective management of the Government of the Republic of Kazakhstan and local executive bodies with financial resources and transparency in the execution of the state budget. In other words, the

integrated treasury information system is aimed at ensuring the main goal – the effective management of public finances.

In October 2005, the Hewlett-Packard representative office in the CIS, on behalf of the World Computer Fund, was awarded a medal and a certificate by the Computers world Honors international program "Search for New Heroes" in the State and Non-Profit Organizations category for implementing the Integrated Treasury Information System [12].

An integrated information system provides effective control of financial resources, obligations and payments in Kazakhstan. The uniqueness of this project lies in the fact that the systems of planning and implementation of financial resources were previously used only for corporate commercial structures. The system of modernization of the Treasury of the Republic of Kazakhstan was first introduced in the public sector. Prior to its introduction in the world there were no analogues of such a system. The system raised the bar of state budget management standards to a new level [13-14].

Currently, the Treasury serves more than 200 budgets of various levels, including the republican budget. The system serves more than 13 thousand state institutions, more than 200 thousand permits for commitments are issued annually and about 700 thousand civil transactions are registered. Thus, we can talk about the successful application of Oracle applications in the treasury of the country.

However, in recent years, world practice indicates a significant reorientation of the main consumers of mainframe systems to the use of cheaper solutions using new computer technologies. There are several reasons for this. The creation of terminal systems most often leads to the monopolization by the supplier of the initial system of all services for their development. The intensive development of personal computers and minicomputers based on high-performance processor systems, their saturation of the information technology market has led to the emergence of low-cost competitive solutions.

The reduction in prices for computing systems based on powerful microprocessors while increasing their productivity and energy efficiency makes these systems very attractive for widespread use in areas traditional for mainframes – banks, communications, financial activities, complex corporate systems.

Improving the operating systems of personal computers and systems based on them brings them closer to mainframes in terms of performance and reliability, as well as in the field of supporting multitasking and multithreading. Developers of application software and toolkits, focusing on less qualified personnel than in the case of mainframe operation, produce products that are more user-oriented and, competing with each other on a wide market, set prices for these products significantly lower than software products of the same class for exclusive manufacturers of supercomputer systems.

By combining local computer networks of the treasury, the Client Server architecture is being organized. Association is carried out using communication equipment and software that allows remote users to efficiently and safely perform the necessary actions for information exchange and modification of remote databases [15].

In accordance with changes in the political system of the country and approaches to state planning (the transition to budgeting for a results-based budget), an analysis of the current system for planning and implementing investment projects in accordance with the World Bank proposals for investment projects, as well as the Budget Code, will be improved and approaches to planning and implementing budget investments. In general, the principles and mechanism for selecting and monitoring investment projects will be reviewed.

To date, the most actively and dynamically developing technologies for managing tax, budget systems and technologies of state-information portals that implement the interaction of governing bodies and citizens through the use of computer networks, electronic document management, information storage technologies in a single state database, information system technologies , as well as information systems of the communal and housing sectors (in the direction of introducing a single cash settlement price), geo-information systems (mainstream - education and urban cadastre). The development and implementation of IT technologies in state and local spheres of management is a strategically important task.

Specialists noted such problems that exist in the modern information society:

- the complete absence of any orientation of information resources created by state bodies towards mass services to the population with information regarding issues related to the activities of these bodies;

- the complete absence of a legislative mechanism to regulate legal relations in the field of state-information resources;

- the complete lack of coordination of the formation by federal and regional state authorities of information funds, as well as databases on legal entities and individuals, as well as on legal relations between these persons. This negatively affects the relevance and completeness of these resources, leading to a significant duplication of work related to their development and implementation;

- underestimation of the economic significance of educated informational state resources. As a consequence of this - the incompleteness, and most often the complete lack of proper accounting of these resources in enterprises and institutions. A complete register of state information resources introduced and operating in the state does not yet exist [16-18].

The solution of the above problems requires the development of coordinated national solutions in the field of information state resources management based on a clearly formulated information state policy.

Discussions. Thus, on the basis of the foregoing, it can be said that to date, the government's stated intention to increase transparency and openness of the budget system is undergoing a number of shortcomings both from the point of view of standard-setting and from the point of view of compliance and implementation of legislative requirements. It seems that the elimination of such problems would make it possible to strengthen public control over the quality of decisions made on budget issues and its implementation.

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ҚАРЖЫНЫ ЖОСПАРЛАУДЫҢ ЦИФРОВИЗАЦИЯЛАУЫНЫҢ ӘЛЕМДІК ТӘЖІРИБЕСІ

Аннотация. Жоспарлау жүйесінің маңызды құрамдас бөліктерінің бірі қаржылық жоспарлауды цифрландыру сізге қаржылық ағындарды тиімді басқару, қаржылық ресурстар мен қажеттіліктердің тепе-теңдігін қамтамасыз ету, басқару шешімдерін оңтайландыру, шығындарды азайту сияқты маңызды міндеттерді шешуге мүмкіндік береді. Алайда қаржылық жоспарлау мен қаржылық жоспарлау механизмінің мазмұны одан әрі дамуды, теориялық базаны және практикалық тәжірибені қазірғі заманғы талаптар мен жағдайларға сәйкес келтіруді зерделеуді талап етеді. Қаржы және қаржылық қатынастар елдегі және әлемдегі әлеуметтік-экономикалық қатынастармен тығыз байланысты. Осылайша, елде және әлемдік қауымдастықта болып жатқан өзгерістер қаржы және қаржылық қатынастар жүйесінің мазмұнына, сондай-ақ олардың маңызды бөлігі ретінде қаржылық жоспарлауға әсер етеді. Қаржылық жоспарлау тиімді басқарудың неғізіне айналуы үшін теория мен практикада қолданылатын құралдарды қазірғі заманғы талаптарға сәйкестендіру және қайта қарау қажет. Мемлекеттік қаржыны басқарудың ақпараттық жүйелерінің неғізгі мақсаты саясат пен мемлекеттік бағдарламалар туралы ақпараттандырылған шешім қабылдауға, сондай-ақ бюджеттің атқарылуы туралы сенімді ақпараттың жариялануына ықпал ету.

Мемлекеттік қаржыны басқарудың ақпараттық жүйелерін, әдетте, бюджетті жоспарлауға мүмкіндік беретін, барлық қаржылық операциялардың есебін автоматтандыруға, қаржылық оқиғаларды бақылауға және барлық қаржылық операцияларды есепке алуға, басқару шешімдеріне әсер ететін қаржылық есептерді жасауға мүмкіндік беретін шешімдер жиынтығы ретінде сипаттауға болады.

Авторлар мемлекеттің қаржылық жоспарлауының цифрландыру жүйесін қалыптастыру мен дамытудың басым бағыттарын анықтады.

Қазіргі кезеңде мемлекетке тән қаржылық жоспарлауды цифрландыру жүйелерінің кемшіліктері анықталып, қаржылық жоспарлау саласындағы проблемалардың ерекшелігі талданды, қаржылық жоспарлау жүйесін дамытудың негізгі алғышарттары анықталды, қаржылық жоспарлау модельдері мен қолдану шарттары талданады.

Зерттеудің теориялық және әдіснамалық неғізі отандық және шетелдік ғалымдар мен практиктердің қаржылық жоспарлау мен бақылау жөніндегі жұмыстары болды.

Зерттеу жүйені қалыптастыру проңесін және осындай қалыптасу нәтижелерін зерттеуге бағытталған қаржылық жоспарлау жүйесін құрудың эксперименттік әдісі ретінде модельдеуге негізделген. Жұмыста жетекші орын жүйелік және салыстырмалы талдау әдістері, жалпылау, экономикалық-математикалық әдістер мен модельдер, сандық және сапалық болжау әдістері, шешім теориясының әдістері болды.

Сондай-ақ, зерттеу барысында ғылыми білімнің жалпы әдістері қолданылды, мысалы бақылау, салыстыру. Дедуктивті және индуктивті әдіс, сонымен қатар дәлелдеу белсенді қолданылды. Қаржылық жоспарлау және басқару жүйесінің элементтерін зерттеу үшін талдау және синтез әдістері қолданылды.

Тарихи әдісті қолдана отырып, жоспарланған-реттелетін нарықтық экономикаға көшу кезінде ресейлік кәсіпорындарда қаржылық жоспарлау жүйесін өзгерту процесі зерттелді.

Түйін сөздер: цифрландыру, қаржылық жоспарлау, мемлекеттік қаржы, электрондық бюджет.

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МИРОВАЯ ПРАКТИКА ЦИФРОВИЗАЦИИ ФИНАНСОВОГО ПЛАНИРОВАНИЯ

Аннотация. Цифровизация финансового планирования – одна из важнейших составляющих системы планирования, позволяющая решать такие жизненно важные задачи, как эффективное управление финансовыми потоками, обеспечение сбалансированности финансовых ресурсов и потребностей, оптимизация управленческих решений, минимизация затрат. Однако само содержание финансового планирования и механизма финансового планирования требует дальнейшего развития, изучения теоретической базы и практического опыта для приведения их в соответствие с современными требованиями и условиями. Финансы и финансовые отношения неразрывно связаны с социально-экономическими отношениями в стране и в мире. Таким образом, изменения, происходящие в стране и мировом сообществе, влияют на содержание системы финансов и финансовых отношений, а также и на финансовое планирование как их важную часть. Чтобы финансовое планирование могло стать основой эффективного управления, необходимо пересмотреть и привести в соответствие с современными требованиями используемый в теории и практике инструментарий. Основная задача информационных систем управления государственными финансами – содействие принятию взвешенных решений в отношении политики и государственных программ, а также обнародование достоверной информации о выполнении бюджета.

Информационные системы управления государственными финансами можно в целом охарактеризовать как комплекс решений, позволяющий осуществлять планирование бюджета, автоматизировать учет всех финансовых операций, отслеживать финансовые события и фиксировать все финансовые операции, формировать финансовую отчетность, влияющую на принятие управленческих решений.

Авторами определены приоритетные направления формирования и развития системы цифровизации финансового планирования государства.

Выявлены недостатки систем цифровизации финансового планирования, присущие государству на современном этапе, и проведен анализ специфичности проблем в сфере финансового планирования, определены основные предпосылки разработки систем финансового планирования, а также проанализированы модели финансового планирования и условия применения.

Теоретической и методической основой исследования являлись труды отечественных и зарубежных ученых и практиков по вопросам финансового планирования и контроля.

В основе исследования лежит моделирование как экспериментальный метод построения системы финансового планирования, направленный на изучение процесса формирования системы и результатов такого формирования. Ведущее место в работе получили также методы системного и сравнительного анализа, обобщение, экономико-математические методы и модели, количественные и качественные методы прогнозирования, методы теории принятия решений.

Также в ходе исследования применялись общие методы научного познания, такие как наблюдение, сравнение. Активно использовались дедуктивный и индуктивный метод, а также аргументирование. Для исследования элементов системы финансового планирования и контроля применялись методы анализа и синтеза. Процесс изменения системы финансового планирования на российских предприятиях при переходе от планово-регулируемой к рыночной экономике изучался при помощи исторического метода.

Ключевые слова: цифровизация, финансовое планирование, государственные финансы, электронный бюджет.

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