Impact Factor:	ISRA (India)	= 4.971	SIS (USA)	= 0.912	ICV (Poland)	= 6.630
	ISI (Dubai, UAE) = 0.829	РИНЦ (Russia)) = 0.126	PIF (India)	= 1.940
	GIF (Australia)	= 0.564	ESJI (KZ)	= 8.997	IBI (India)	= 4.260
	JIF	= 1.500	SJIF (Morocco) = 5.667	OAJI (USA)	= 0.350



QR – Issue

QR – Article





Umida Abzalovna Shadmanova

Tashkent Institute of Architecture and Civil Engineering Associate Professor, Tashkent, Uzbekistan

Mukhayyo Tulkunovna Azimdjanova

Tashkent Institute of Architecture and Civil Engineering Senior lecturer, Tashkent, Uzbekistan

FORMATION OF INFORMATION SYSTEM IN CORPORATE GOVERNANCE

Abstract: The research paper discusses the issues of creating and improving an information system, the effectiveness of using an information system in managing a corporation, ways to solve the problem of implementing an information system in managing a corporation, general rules for introducing a corporate information system in managing a corporations based on information.

Key words: analysis, business, change management, corporation, demand, information system, information technology, information culture, management, information, manager, strategy.

Language: English

Citation: Shadmanova, U. A., & Azimdjanova, M. T. (2020). Formation of information system in corporate governance. *ISJ Theoretical & Applied Science*, 06 (86), 20-27.

Soi: http://s-o-i.org/1.1/TAS-06-86-4 Doi: crosses https://dx.doi.org/10.15863/TAS.2020.06.86.4 Scopus ASCC: 1802.

Introduction

The reforms being carried out in our country require that all areas be brought into line with world standards and based on the most effective methods. The rapid development of new modern information and telecommunications technologies and systems is the basis for raising the quality of all processes in the country to a new level. The Address of the President of the Republic of Uzbekistan Shavkat Mirziyoyev to the Oliy Majlis emphasizes these aspects: "It is necessary and necessary to acquire digital knowledge and modern information technologies in order to achieve development. This allows us to take the shortest path to the ascent. Today, information technology is penetrating deep into all spheres of life in the world." With this in mind, one of the most pressing issues today is the organization of management methods using modern information technologies and systems, as well as the use of new methods.

The amount of information that can be processed to develop effective management solutions is enormous. Problems in the management of large-scale corporations require the widespread use of electronic computing techniques and the development of automated control systems, and as a result of these tasks set the task of creating new mathematical apparatus and economic mathematical methods.

There are a number of requirements for the organization of the organization of corporate information support. These include the analytics of information, the breadth of information, its unity, speed, rationality, and so on.

Information analytics is that regardless of the sources of information and where they come from, the economic information system must meet the requirements of the corporation leader, that is, the system to identify the impact of key factors to comprehensively study economic processes and increase production efficiency. should be a necessary tool for the leader. Therefore, all methods of information supply must be constantly evolving.

These systems are now widely used in accounting, planning and statistics in corporations. Managers in corporations are constantly reviewing the form of documents, their content and organization of



	ISRA (India) = 4.9	971 SIS (USA)	= 0.912	ICV (Poland)	= 6.630
Impact Factor:	ISI (Dubai, UAE) = 0.8	829 РИНЦ (Russia	a) = 0.126	PIF (India)	= 1.940
	GIF (Australia) = 0.5	564 ESJI (KZ)	= 8.997	IBI (India)	= 4.260
	JIF = 1.5	500 SJIF (Morocco	o) = 5.667	OAJI (USA)	= 0.350

circulation, as well as organizing new forms of data collection and storage. All these changes are made not only to the requirements of accounting and planning activities, but also to other circumstances. These changes represent the need for information support to develop management solutions.

Economic information must fully and accurately reflect the processes under study, otherwise the results of the analysis will not be consistent with the results of the tasks at hand, and the solutions proposed by corporate analysts may be detrimental to the corporation.

The next requirement for the organization of the flow of information is the unit of information coming from different sources. From this principle comes the need to compare different sources of information and eliminate their ambiguity. This means that an economic indicator needs to be formalized only once, and the results obtained are used in accounting, planning, monitoring and analysis.

The effectiveness of the analysis shows that there is a possibility to quickly influence the production process on the results. In this case, the information must be provided to the analyst immediately. At this point, the next demand for information, that is, the demand for speed, arises. Improving the speed of information is achieved through the introduction of a new tool for their processing, communication, etc.

Requirements for information quality are determined by the physical and research area, time period, methodology for calculating indicators, and a number of other types of indicators. The information system must be efficient and require minimal costs to collect, store and use the data.

Comprehensive information is required for a comprehensive analysis of the voluntary economic process. In the absence of information, the analysis is not considered complete. Too much information prolongs the process of searching, gathering, and making decisions. From this requirement arises the need to study the useful properties of information, and on this basis to improve the flow of information by eliminating unnecessary data and entering the necessary information.

The information system should be formed and improved on the basis of the above requirements and is a necessary condition for improving the practice and efficiency of corporate governance.

Receiving information is not the goal of the business. Its purpose is to operate and profit in a competitive environment. The information system of management is important to ensure that the goals of corporations are achieved on the basis of an organized, well-structured and timely delivery of information.

Information is an important strategic source of business. The lack of necessary information leads to uncertainties. In the case of uncertainty, the accuracy of the decisions made decreases. The business is not subject to adequate management at a particular stage of development. In the event of a shortage of the necessary information, it becomes clear that there is a large amount of mutually compatible information received from different sources. In this case, there is a lack of a mechanism to quickly assess the effectiveness of this information in the management of individual businesses of corporations. Moreover, in many cases, strategic planning with effective control does not work.

For the effective development of the enterprise it is necessary to create a comprehensive management system that unites all aspects of management. At the same time, firstly, the problems of continuous management are important, and secondly, the problems of selection and implementation of information systems are relevant.

Materials And Methods

There are three ways to solve the problems of implementing information systems in the management of corporations.

The first method is to create an information system using the capabilities of the enterprise.

This method is used by many businesses. In many cases, manuals written using office software are used to automate calculations. However, when business conditions become more complex, such tools may not fully meet the requirements because such programs are not capable of managing monkeys with complex systems. Creating complete systems is costly and time consuming, and the development of a corporate business project necessitates the use of a centralized approach in the strategic management of a corporate project. Only large corporations can do such things.

The second method is to implement a universal system or a package of application systems.

The choice of this type of system is largely limited to accounting software. While the principles and structures of information are generally recognized in laws and reporting documents, commercial activity has different directions in different enterprises. The logic of the tasks performed in commercial practice also has a different appearance and it depends on different industries or forms of activity. There are not many types of universal packages available for complex automation of commercial activities. Like accounting software, they need to be customized. The basis of many such programs is accounting calculations.

The third method is to outsource the implementation of information systems and technologies.

This method is currently being used on a narrow scale. Based on the correct choice of such organizations, you can have the following opportunities:



	ISRA (India) =	4.971	SIS (USA)	= 0.912	ICV (Poland)	= 6.630
Impact Factor:	ISI (Dubai, UAE) =	= 0.829	РИНЦ (Russia)) = 0.126	PIF (India)	= 1.940
	GIF (Australia) =	0.564	ESJI (KZ)	= 8.997	IBI (India)	= 4.260
	JIF =	= 1.500	SJIF (Morocco) = 5.667	OAJI (USA)	= 0.350

1. Saving money by implementing solutions. It is important that the core of such solutions is successfully implemented in other enterprises.

2. High level of mastery of actions.

3. Service support.

4. Possibility of system development in accordance with business complexity.

There are also some risks:

1. Loss of system development opportunities.

2. Risk of information loss as a result of not knowing the structure of the data.

3. Dependence on the executing enterprise.

The software product created on the basis of high mastery has more convenience than the software products created by the employees of the corporation. The main principle of such programs is their practical viability.

Involving the enterprise in the implementation of external information systems in the corporation creates a number of advantages. One of them is business formation.

There are a number of software tools available to meet customer requirements. Such supplies must have the following characteristics:

1. Retain investments. The implementation and use of the systems requires a number of costs. First, the costs required to adapt the system to the changing conditions of the business, and second, the costs associated with the development of new technologies.

2. Reliability of the system. In this case, first of all, the guaranteed storage and access to data in case of voluntary technical failure. Second, to effectively protect data when it is approached without question.

3. The possibility of expansion of the system that is, on a scale, its expansion and modulation.

4. The degree of automation of different types of activities, ie full automation of all types of activities.

5. The intuitiveness of the interface, i.e. the ability of the user to follow the interface without comment.

6. Ability to integrate with electronic document management, ie the ability to implement document management operations in the system or integrate document management with an external system.

7. Customer adaptation to the business. The degree to which system features are adapted to customer requirements when settlements with product suppliers are completed.

8. Convenience in price.

Nowadays, we can see many tools in the activities of managers that represent the concept of new information technologies. Information technology is a set of new tools and methods of data processing applied to the organizational management system. These technologies are technological systems that are expressed in the purposeful creation, transmission, storage and reflection of information products. The transition to new information technologies is finding a new application in the

immediate improvement of the performance of corporations in terms of quality, service and speed of production processes.

Corporations face the following challenges in the development process:

1. There will be many mistakes in the old methods of management.

2. Controlling corporate governance complicates it, attracts many employees, and leads to additional costs.

3. It takes a long time to find solutions. Data will not be available for a solution.

4. The amount of financial actions and decisions taken is greater than the reasons that lead to this or that result.

Technical, administrative and organizational issues need to be addressed in the selection and implementation of the system. Creating an information system in the activities of the corporation is a joint action of employees and enterprises providing information technology. To perform this task, you need to perform the following steps:

1. Research and design of the created system, ie clear definition of the current situation and application in the created service.

2. The organization developing the information system shall configure this system. At this point, it is necessary to test the information system for errors.

3. The implementation of information systems is divided into two parts: the training of administrators from the staff of the corporation and the launch of parts of information systems in the divisions of the enterprise.

It is necessary to apply non-contradictory and mutually agreed technologies in the selection of software and hardware and individual business applications. At the same time it is necessary to follow the new technology of operation and maintenance of information systems. In addition to the above requirements, there are the following general technical requirements for the information system:

1. Rapid operation, i.e., very short system response time when processing, retrieving and entering information.

2. Reliability of protection against unauthorized access to data and taking into account the actions of corporate employees.

3. Convenience of user-friendly interface of workplaces.

4. System scaling and development opportunities.

5. Integrate user modules in a data transmission system.

6. Ability to transfer data used during the previous period to the new system.

7. High reliability of system operation.

The method of creating corporate information systems for corporations includes the following general rules:



	ISRA (India) $= 4$.	.971	SIS (USA)	= 0.912	ICV (Poland)	= 6.630
Impact Factor:	ISI (Dubai, UAE) = 0 .	.829	РИНЦ (Russia)	0 = 0.126	PIF (India)	= 1.940
	GIF (Australia) $= 0.$.564	ESJI (KZ)	= 8.997	IBI (India)	= 4.260
	JIF = 1.	.500	SJIF (Morocco)) = 5.667	OAJI (USA)	= 0.350

1. The technology of creating a system on the models of the given cases without programming the existing algorithms. In this case, the practice of creating a system shows that as a result, automation of business processes without reengineering and improvement of the existing management system does not give the expected results and is considered inefficient. The use of software applications in the activities of the corporation is an effective factor in the transition to the organization of a new form of document management, document accounting and reporting.

2. Build the system from top to bottom. If the decision to automate the state of the corporation is made and approved by the top management of the corporation, the implementation of software modules is carried out by the parent companies. At the same time, the process of creating corporate systems is much faster than the initial implementation of the system in the lower parts. With this method and the active support of management, the whole set of tasks for the implementation of information systems can be properly assessed and carried out without unplanned costs.

3. Technology of step-by-step implementation of the system. Given that complex automation includes all divisions of the corporation, then the technology of implementation in stages is important. The primary areas of automation are the regulation of the process of accounting and formation of reporting documents for higher authorities and similar units.

4. Involvement of future users in the development of information systems. When the tasks of complex automation in the merger enterprise are completed, the actions of the customer's divisions on information technology will change and the capacity of these divisions will increase in the process of transition to new effective management methods of the corporation.

5. Such a system should establish such a cooperation between the modules and the automated workstations so that this cooperation meets the requirements and technical capabilities of the user. Important parameters of an information system are reliability, scalability and security, so the client-server architecture is used in the process of creating such systems. This architecture allows tasks to be compared between client and server parts of the system, and allows the system to be developed and improved according to the characteristics of the issues being addressed.

Improving production in corporations depends on the introduction of new techniques and advanced technologies, which are now one of the main directions in the management of business based on integrated information systems.

The complexity of implementing information systems for small businesses is the diversity of enterprises, the implementation of different forms of production and the wide range of products. It is possible to design information systems based on the size and practical capabilities of small businesses, taking into account their characteristics. However, creating a separate information system for each enterprise is not effective enough.

Many institutional leaders now feel the need to make an immediate decision on the introduction of information technology. Implementing information systems in institutions can be costly, but maintaining the existing order can be even more expensive. The application of information systems and the technical means used to implement them in the activities of a corporation is not a sufficient condition for gaining a competitive advantage. The effectiveness of such systems can be highly effective in improving management and the organizational principle of the business. Therefore, the introduction of information technology and systems based on a systematic approach to corporate governance is a high factor in improving the effectiveness of management quality.

Information technology and systems are multifaceted, and it emerges in specific contexts.

Businesses also differ in terms of efficiency based on the implementation of computer information In some cases, the competent systems. implementation of information systems can provide a competitive advantage. For example, the efficiency of information systems increases due to the improvement of cooperation in the activities of remote business units or increasing the speed of order fulfillment. In other cases, computer technology facilitates the performance of complex tasks and helps to organize information.

No enterprise has the capacity to effectively process unlimited information that is constantly being retrieved from the external environment and work areas. In order for the information to be received to be suitable for other solutions, it must be selected, processed and reshaped as required. The quality of the solutions made by corporation executives and the products derived from them largely depend on the reliability of the messages they receive and the way they are processed.

Due to the large geographical size of corporations, the implementation of the above measures is complicated, but the solution of such issues is influenced by national and cultural characteristics, as well as financial, economic and social factors that require the attention of corporate management.

The main purpose of the corporation's head office is to collect, collect, process and analyze highquality information about various markets, which creates a wide range of management opportunities throughout the corporation.

The collection of information by the head office of the corporation is carried out in two directions:



1. Processing of marketing information collected by corporate divisions that have direct contact with customers and the market.

2. Independent collection of information about markets by corporation specialists.

Based on this information, the corporation develops and implements new plans to improve its operations.

Information-based change management in corporations.

Working with information (information culture) is one of the key activities in managing corporate change. There are currently three conditions that a corporate manager must meet in terms of information culture.

First, the information culture is not part of the overall organizational culture of the corporation. Many corporations feel the need for change to target their industries and markets. It is necessary to work with different forms of labor, market, technological and social information to influence future activities. Second, information technology enables the creation of a wide range of computer networks in corporations, and this creates a wide range of opportunities for communication between network managers. However, the creation of such a system does not guarantee the possibility of effective use of information.

Third, the information culture is different for different service departments, corporate divisions, and workgroups. This situation shows that the processes of interpreting, collecting, organizing, processing, disseminating, and using information vary. Therefore, many managers emphasize the importance of information culture for the development of corporate strategy and the implementation of changes. Uncertain propositions regarding the metaphorical form and information culture of corporations.

The metaphorical expression of corporations often contains vague propositions as to what information culture is appropriate. Managers use metaphors to offer vague ideas to corporate employees about what information to apply or not to apply.

Currently, corporations use four forms of metaphor. In the first case, as a result of the use of the command method, all operations in the corporation are carried out on the basis of centralization and control. In the second case, actions aimed at eliminating problems within the corporation are taken into account. In this case, the next one appears, that is, rebuild. At the same time, based on the use of information flows and methods, the structure of the corporation is focused on simplification, reorganization or automation.

The next metaphor expresses the form of a living organism, responds to the environment and adapts to it. Such a metaphor clearly describes the state of groups that seek internal and external information and adapt to change. The above metaphor allows corporations to receive and use information in solving problems.

The fourth view of the corporations metaphorical form represents brain activity. The corporation is defined as a neural network that has the ability to use information and knowledge in a flexible, fast-paced way. Such an organization interprets the future situation and creates new ways to succeed.

There are currently four types of information culture in corporations (Figure 1).

Practical (functional) culture	Managers use information to manage or influence employees
Culture of interaction	Managers and employees trust each other and share information to increase personal efficiency
Research culture	Managers and employees seek information to change their activities and adapt to future relationships
Culture of openness	Managers and employees understand the nature of crisis and radical change and look for ways to compete

Figure 1. Identify types of information culture

Each of these has its own impact on the way information is used and reflects the position of corporate leaders in the use of information to achieve success or eliminate shortcomings. 1. Practical (functional) culture. In doing so, the information is used to influence different employees. Such a culture applies to hierarchical corporations, where information is used primarily for management and control. In this case, the interpretation of



	ISRA (India) $= 6$	4.971	SIS (USA)	= 0.912	ICV (Poland)	= 6.630
Impact Factor:	ISI (Dubai, UAE) =	0.829	РИНЦ (Russia)) = 0.126	PIF (India)	= 1.940
	GIF (Australia) $=$	0.564	ESJI (KZ)	= 8.997	IBI (India)	= 4.260
	JIF =	1.500	SJIF (Morocco)) = 5.667	OAJI (USA)	= 0.350

information implies control. Many workflows are used for control in all aspects of corporate activities.

2. In a culture of collaboration, managers and professionals have a high level of mutual trust and therefore share information that is detrimental to increase efficiency and improve processes.

Direct exchange of information about possible interruptions in the corporation's activities is necessary to solve problems and adapt to changes.

3. In a research culture, managers, employees, and staff strive to understand future differences and seek to find an effective way to eliminate potential risk. The decisive information state here is the preview mode. Many corporations now have enclaves that study culture in their service divisions, and they are engaged in customer service, market research, technology research, and information gathering services.

4. Culture of openness. In this case, managers and employees are prepared for the essence of the recession and radical change. Such corporations are consciously abandoning old-fashioned approaches to business and looking for new ideas to create new jobs and services that can change the competitive environment.

The combination of the above-mentioned forms of information states is accompanied by various forms of information dysfunctions, which weaken the impact of corporations on changes in the market and the network, or increase resistance to changes in management. Many corporations implement general quality management programs. At the same time, they try to hide information about their shortcomings. General managers tend to be misinformed or encourage dysfunctional information in the process of change in corporate activities. The following figure shows four views of the dysfunctional information state (Figure 2).

Only in emerging corporations do managers use previous methods of control instead of looking for new information. The basis is the emergence of new manufacturers in the market. In almost all large corporations, the need for supervision increases over time, and this situation involves a large portion of managers 'time and creates a sign of sluggishness among employees.

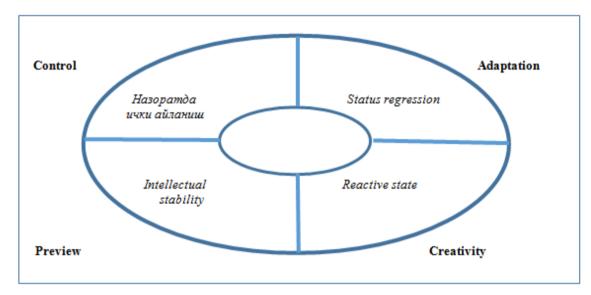


Figure 2. Four views of dysfunctional information status

When managers encounter new problems, they turn to secondary information and a situation regression occurs.

In a state of intellectual stability, a manager loses the ability to anticipate an approach or change in his or her business.

Reactive state. In doing so, the manager offers a plan of action in various forms in the event of a deep crisis in the network, but does not think about whether this action will help the plan.

In many corporations, the information culture is confirmed in a state of dissatisfaction with the strategy of change and expectations. The reason for this is the large changes in the market in these corporations and the demands of consumers, but in this case the state of information will be intended only for control actions. Other corporations implement general quality management programs. However, this does not create an atmosphere of mutual trust in corporations. In such an environment that can be created, it will be possible to constructively eliminate errors and omissions. Some corporations have created an atmosphere of mutual trust, in which the process of continuous improvement takes place. However, in order for corporations to function in the problem-solving process, radical changes need to be made in order to improve the quality of the creative state. In developing corporations, the relevance of the corporate



	ISRA (India)	= 4.971	SIS (USA) $= 0$	0.912	ICV (Poland)	= 6.630
Impact Factor:	ISI (Dubai, UAE	() = 0.829	РИНЦ (Russia) = (0.126	PIF (India)	= 1.940
	GIF (Australia)	= 0.564	ESJI (KZ) $=$	8.997	IBI (India)	= 4.260
	JIF	= 1.500	SJIF (Morocco) =	5.667	OAJI (USA)	= 0.350

information state to the strategy of changing the information culture of their management is observed. This addresses the question of how to stimulate the

state of information in addressing various aspects of complexity and uncertainty in corporate markets and networks (Figure 3).

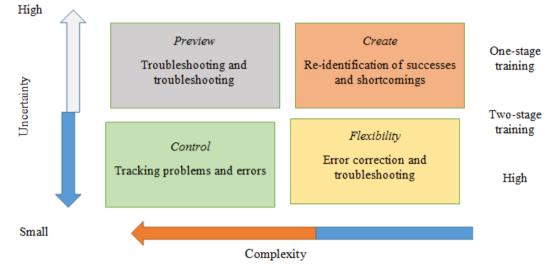


Figure 3. The effect of uncertainty and complexity on the state of information

Results And Discussion

In large and persistent markets where the level of uncertainty and the complexity of products and technologies are not high, the state of control is important to correct errors and eliminate problems. If the level of uncertainty of the markets is high and the product technology has a complex appearance, then it is possible to continuously correct errors and eliminate problems based on the principle of the general state of quality.

If the uncertainty of the market and the network is not high and the product and technology are relatively simple, there may be errors and problems in changing the composition of competitors or their emergence.

If the uncertainty of the markets is high and the products and technologies are high, the state of openness indicates on what principle corporations will succeed or on which principle the opposite will happen. If the rate and scale of change is too large, setting up controls, adapting, and previewing is an ineffective tool.

There are not many large centralized corporations today that belong to any single information culture. In many cases, the number of corporations with different information status is large. At this point, it is important to strike a balance between the different information cultures that are appropriate to the market conditions of corporations.

Conclusion

One of the key issues for managers today is the interrelationship between the status of management and production change strategies in corporations and the information culture. To do this, managers need to look at knowledge and information flows as tangible assets. It is inappropriate for managers to view the existing problems in the corporation as a solution to the existing information culture and information system infrastructure. Electronic networks of computers and communications are only aids in the use of knowledge and information to enhance competitiveness.

Corporate employees involved in the collection, processing and use of information are more likely to be involved in this area than managers. Such employees immediately identify dysfunctional information status of managers who do not meet the goals of corporations. Corporations that are able to be among the first in the network to link their information culture and position to market and production strategies will have a competitive advantage.

Managers need to see information technology and systems as an important tool for the corporation. Managers must constantly seek solutions to the following tasks throughout their careers:

1. What sources of information and knowledge provide a constant competitive advantage for the corporation?

2. What organizational principles and management practices affect the information culture and status of a corporation?

Z. How effective are the sets of information cultures and situations available to effectively manage current and future changes in corporations?

4. What needs to be mastered to distinguish between information culture and status and change strategy?

Managers are given full responsibility for solving existing problems in order to maintain



	ISRA (India)	= 4.971	SIS (USA)	= 0.912	ICV (Poland)	= 6.630
Impact Factor:	ISI (Dubai, UAE)) = 0.829	РИНЦ (Russia) = 0.126	PIF (India)	= 1.940
	GIF (Australia)	= 0.564	ESJI (KZ)	= 8.997	IBI (India)	= 4.260
	JIF	= 1.500	SJIF (Morocco) = 5.667	OAJI (USA)	= 0.350

competitiveness in corporations. The most important of these is the question of establishing a balance between the culture and status of information and the strategy of change.

References:

- 1. (2003). *The Constitution of the Republic of Uzbekistan*. Tashkent: Uzbekistan.
- (2020). Appeal of the President of the Republic of Uzbekistan Shavkat Mirziyoyev to the Oliy Majlis (January 24, 2020). "People's Word," January 25, 2020.
- (2012). Decree of March 21, 2012 No. PP-1730 "On measures for the further implementation and development of modern information technologies".
- 4. (2012). Decree of February 1, 2012 No. 24 "On measures to create conditions for the further development of computerization and information and communication technology in the field".
- 5. Mirbabaev, F.A. (2009). Synergetic information processes in management. *"Economics and finance"*, Moscow, No. 3.
- Mirbabaev, F.A., & Shadmanova, U.A. (2011). Development of information control system in corporate governance. *Scientific-electronic journal "Economics and Innovative Technologies"* TSU, Number 2.

- Pavlou, P., & Fygenson, M. (2006). Understanding and predicting electronic commerce adoption: An extension of the theory of planned behavior. *MIS Quarterly*, 30(1), 115-143.
- Thompson, R., Compeau, D., & Higgings, C. (2006). Intentions to use information technologies: An integrative model. *Journal of Organizational and End-User Computing*, 18(3), 25-46.
- 9. Hoch, D., & Laartz, J. (2006, September). *How IT can drive business process reorganization: An interview with the CIO of Volkswagen.* The McKinsey Quarterly.
- Cavusoglu, H., Mishra, B., & S. Raghunathan. (2004). The effect of internet security breach announcements on market value: Capital market reactions for breached firms and Internet security developers. *International Journal of Electronic Commerce*, 9(1), 69-104.
- 11. Doms, M., Jarmin, R., & S. Klimeck. (2004). IT investment and firm performance in US retail trade. *Economics of Innovation and New Technology*, 13(7), 595-613.

