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Norov Asror | Senior teacher

Tashkent State University of Economics

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clear that the impact of artificial intelligence on the education system can also directly affect the digital development of human capital in the country. It also became known that the healthcare system under the influence of artificial intelligence has a positive effect on the digital development of human capital.

Conclusion. Researchers in the field, Thames and Sheife state that the introduction of artificial intelligence can significantly increase the efficiency of human capital in many ways[6]. Based on the obtained results, it can be said that artificial intelligence has its advantages and disadvantages compared to human capital.

Human capital skills and cognitive abilities are cited as important factors to support the transition process, and if these are neglected, these jobs may be at risk of being lost. It is also difficult to predict the true impact of AI on human capital and labor market changes, as the technology is still developing and the potential impact on jobs remains uncertain.

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EVOLUTION OF MANAGEMENT SCIENCE

NOROV ASROR

Senior teacher of Tashkent state university of economics
E-mail: norovasror1@gmail.com

Abstract: Scientific formation and innovation management are two closely related areas of great importance for the development of modern society. In this article, we consider the stages and foundations of the scientific formation of innovation management, which are the main factors of the development of science and technology. The main stages and role of the scientific formation of innovation management in the modern world are considered in the article. The main stages of the evolution of management science under the influence of different schools and approaches are discussed.

Keywords: Management, management, innovation management, the ability to create wealth in new ways, planning stage, conditions and organization, execution stage, leadership stage, innovation cycle, distance-time aggregates, Classical school, Moral school, Scientific school, Process approach, System approach, Life Cycle Approach, Quantitative Mathematical Approaches, Project Approach, Marketing Approach.

The first stage of scientific formation began in antiquity, when people studied their surroundings and created the first scientific theories. One of the first great scientists was Aristotle, who formulated many theories in various fields of

knowledge. While the development of science slowed down in the Middle Ages, science began to develop actively again during the Renaissance. Important discoveries of that time were the works of Galileo Galilei, Isaac Newton and other scientists.

The second stage of scientific development began in the 19th century and continues to this day. At this stage, science became more organized and systematic. Scientific journals, universities and other scientific institutions were created. Many theories were formed, which are the basis for the development of modern sciences.

However, scientific progress cannot lead to such rapid development of technology and economy without innovative management. Innovation management is a management system that enables organizations to create new products, services and technologies, improve production processes and improve business efficiency.

The basis of innovation management is the innovation process, which includes several stages. The first stage is the formation of ideas. At this stage, the organization collects ideas from its employees, customers and other stakeholders. The second stage is the selection of ideas. At this stage, the organization analyzes the collected ideas and selects those with the greatest potential for implementation. The third stage is concept development. At this stage, the organization creates a new product, service or technology concept. The fourth stage is the development of a prototype. At this stage, the organization creates a prototype of a new product or technology. The fifth stage is testing and analysis. In this phase, the organization tests the new product or technology and analyzes the results.

Successful innovation management requires a well-organized project management system that allows you to control each step of the innovation process. It is also important to have qualified specialists who can effectively manage projects and create new products and technologies.

The first stage of scientific development is ancient Greek science, which arose in the 5th century BC. The main representatives of this period were Aristotle, Plato and Socrates. They were engaged in philosophy, mathematics, astronomy and other sciences. During this period, the logical and methodological foundations of scientific research were developed.

The second stage of scientific formation is medieval science. During this period, science was closely related to religion and philosophy. The main representatives of this period were Thomas Aquinas, Roger Bacon and Ibn Sina. They were engaged in philosophy, medicine, astronomy and other sciences. New research methods such as optics and alchemy were developed during this period.

The third stage of scientific development is modern science. During this period, science separated from religion and philosophy and began to develop independently. The main representatives of this period were Isaac Newton, Galileo Galilei and René Descartes. They were engaged in physics, mathematics, astronomy and other sciences. During this period, new theories and laws were developed, such as the universal law of gravitation, the theory of electromagnetism.

Today, science is developing and improving. It is more specialized and branched. Currently, science plays an important role in the economic development of the country. It is the basis of innovative development and creation of new technologies.

Innovation management is a set of methods and methods that allow management of innovation processes in an organization. It is an integral part of modern management and is the main factor of organizational success. The main tasks of

innovation management are to create new products and services, to optimize business processes and to increase the competitiveness of the organization.

One of the main tools of innovation management is innovation marketing. It allows you to assess market needs and create products and services that are required by consumers. Innovative marketing also makes it possible to determine the competitive advantage of the organization and develop a strategy for promoting products in the market.

Another important tool for innovation management is knowledge management. This allows the organization to retain and use the knowledge and experience of its employees. Knowledge management also enables the organization to generate new knowledge and innovation.

The most serious study of the processes of production renewal and, in general, the impact of new products and new technical and management solutions was carried out at the beginning of the 20th century. Austrian economist Y. Schumpeter first introduced the concept of "innovation" into economic theory. In his "Theory of Economic Development", he defines innovation as any change in order to introduce and use new products, markets and forms of company organization, and he identifies a new type of enterprising entrepreneur, which he calls the "Innovator".

The theoretical justification of the importance of innovation was carried out by the English researcher John A. Hobson (1858-1940). According to him, the real power of an entrepreneur lies in the ability to find new markets, produce new products, and discover new ways of producing products. He called such production a "progressive industry".

Y. Schumpeter's concept was developed by some other Western scientists, in particular, P. Drucker, a leading American expert on management issues, in his book "Innovation and Entrepreneurship". "Innovation," he notes, "is a special tool for entrepreneurs who use change as an opportunity to create a new type of business or service." Thus, if Y. Schumpeter theoretically justified the importance of innovation for the firm. competition, that is, for market competition based on scientific and technical achievements, P. Drucker directly shows the importance of innovation for business development.

"Innovations", - writes P. Druker, - are "superstars" of entrepreneurship, based on new knowledge. Such innovations become the object of attention and bring great benefits. Innovations must be market oriented and driven by market conditions. There is only one way to survive in times of economic shocks - this is to turn to business management. (implementation of a systematic organizational structure, long-term planning, application and control of management information). Innovation can be successful if it is supported by concentrated and coordinated efforts by all stakeholders. Briefly, these lines contain accumulated knowledge in the field of innovation process management.

The search for innovative opportunities in real economic conditions for the implementation of a specific innovative project and the formation of their effective combinations essentially represents an innovative strategy at the level of the company implementing the innovative project.

In most economic literature, there are certain differences in approaches to defining the concept of innovation. According to Y. Schumpeter's theory, economic changes are caused by "innovations". It is clear that innovation is not the same as invention. Technological factor, and innovation is an economic and social phenomenon. "Innovation is a category of entrepreneurial activity, in the sense that existing productive forces are used to solve new problems," Schumpeter said. From a technical point of view, rationalization always leads to the emergence of a new "production function"

associated with the emergence of advanced enterprises. In his opinion, new technology cannot be implemented within old enterprises. "Old" firms can survive severe economic shocks only by abandoning conservatism and radically changing under the influence of innovation.

P. Drucker largely agreed with Schumpeter, innovation is not a technical, but an economic concept, which implies changes at all levels of management, that is, management within the enterprise, production and personnel management. He calls innovation "the ability to create wealth in new ways." Thus, in his opinion, innovative activity is practically focused only on issues of production and marketing management, that is, essentially limited to economic aspects, at the same time, the development of innovation and scientific research are of decisive importance for technological progress for economic growth.

In market relations, the connection between capital accumulation and technology is so close that one process cannot be separated from the other, since the use of capital in an embodied form ensures the growth of commodity production.

The evolution of management theory and practice took place in the conditions of scientific and technical progress and the intense evolution of the external environment. The main stages of the evolution of management science under the influence of different schools and approaches are given in table 1.1.

Table 1.1

The main stages of the evolution of the science of management under the influence of different schools and approaches

Schools and approaches of management	Period, year						
	+1885	1920	1930	1940	1950	1960	Currently
Classical School of Management	→						
Moral school	→						
Scientific school	→						
Process approach	→						
Systematic approach	→						
A life cycle approach	→						
Quantitative mathematical approaches	→						
Social-psychological approach	→						
Project approach Marketing approach	→						

Knowledge and methods of various schools were used in innovative management, and the management process relied on both theoretical concepts of management and various theoretical schools and scientific approaches.

This is explained by the high complexity and less determination (groundedness) of the management object. In fact, it was necessary to develop an algorithm for the proper management of scientific, technical, technological, social and mixed systems.

Management as a science is an interdisciplinary study that uses a wide variety of methods from sociology, psychology, logic, pedagogy, science, mathematics and cybernetics, various technical and economic sciences.

The evolution of management science is based on the enrichment of the content and principles of management, as

well as the improvement of its tasks, methods and ways.

Therefore, the need for innovative development of the economy imposes new requirements on the content, methods and forms of organizing management activities. In this regard, a unique type of management - innovative management - appeared.

President of the Republic of Uzbekistan Sh.M. Mirzieyov said: "Innovation means the future, If we start building our great future today, we should start it on the basis of innovative ideas and an innovative approach," he said in his lectures.

According to the teachings of N.Q. Yoldoshev and U.Sh. Yusupov, "Innovative management is a set of principles, methods and forms of managing innovative processes, innovative activities, organizational structures and their employees engaged in these activities."

According to H.M.Abdusattorova, innovations can belong to the sphere of production, economic, legal and social relations, science, culture, education and other spheres.

Vorabev V.P. and other authors "Innovation management is an independent field of economic science and professional activity aimed at forming and achieving innovative goals by any organizational structure through the rational use of material, labor and financial resources." - expressed their opinion.

V.R. Vesenin "Innovation management, that is, innovation as its object is the process of scientific research, practical development, creation of experimental samples and introduction of new products into production." - considered.

O. Yu. Zhukovskaya said, "Innovation management is the management of changes leading to the improvement of the competitiveness of the enterprise and its products, the management of development based on innovations.

From the point of view of the systemic approach, innovative management is a control system of management (in Greek - a whole consisting of parts), which consists of two subsystems: management (subject of management) and managed (object of management). The relationship between the subject and the object of management is carried out through the transmission of information, which (the process of dissemination and transmission of information) is the process of management. - gave an understanding.

Various concepts and approaches to innovation management as a science are given in table 1.2.

The evolution of management science is based on the enrichment of the content and principles of management, as well as the improvement of its tasks, methods and ways.

table 1.2

Classification of concepts and approaches in innovation management

Basic, basic approaches and concepts	Forms of their implementation and results
Classical school	
1. Principles of division of labor. 2. Generality of purpose and leadership. 3. Authority and responsibility. 4. The ratio of centralization and decentralization. 5. Vertical chain of management	1. Discipline. 2. Order. 3. Justice and reward. 4. Efficiency. 5. Subordination to the main purpose of the company

Basic, basic approaches and concepts	Forms of their implementation and results
Moral school	
1. Focus on human resource. 2. Formation of the organization taking into account the uniqueness of interpersonal relations. 3. Regulation of employees' behavior through needs, interests, wealth. 4. Reasons for titling employees	1. More effective use of the potential of employees. 2. Increase productivity. 3. Increasing employee satisfaction. 4. Flexible system of rewards and incentives
Scientific school	
1. Using the analysis of management activities and tasks. 2. Selection, training and placement of employees.	1. Creating conditions for proper operation. 2. Increasing labor productivity.
Process approach	
1. Understanding management as a process. 2. Analysis of factors affecting the process. 3. Management process as a system of interrelated tasks. 4. The role of coordinating command and control tasks	1. Flexibility, continuity and intensity of management. 2. Development of management tasks and coordination. 3. Interdependence of management methods and complement each other. 4. Increasing the efficiency of management decisions.
Systematic approach	
1. Consideration of management as a complex hierarchical social-economic-economic and scientific-technical system. 2. Analysis of the external and internal environment of the system. 3. Dividing the system into managing, managed providing and service providing systems. 4. Separation of scientific and technical and "human" organizers from the system 5. Taking into account the effects of direct, reciprocal relations, mutual cooperation and mutual understanding. 6. Application of the theory of expectations.	1. The rationality of the ways and methods of influence, compatibility of the manager's tasks. 2. Application of synthetic and based decisions based on analysis. 3. Increasing the effectiveness of management decisions and their effectiveness. 4. Manual of technical, socio-psychological, econometric, ergonomic and other methods. 5. Agility, flexibility and harmony to the requirements and goals of the organization. 6. Deep job satisfaction and self-reflection to achieve self-realization.
A life cycle approach	
1. Review of the life cycle of the organization as a social organism. 2. Learning the stages of life cycles. 3. Determining critical points of development. 4. Forecasting and planning based on life cycles. 5. Determining transition trends	1. Clear planning, coordination and leadership. 2. Increasing the manager's awareness and efficiency. 3. Making more accurate and appropriate decisions. 4. It is possible to develop an effective strategy.

Basic, basic approaches and concepts	Forms of their implementation and results
	5. To predict the growth of the company's business and to find ways of comprehensive development and penetration of new markets.
Quantitative mathematical approaches	
1. Application of econometric models. 2. Application of production task equipment. 3. Application of multiple regression (backward) methods according to the "cost-effectiveness" method. 4. Application of stochastic (probabilistic) models.	1. High accuracy, efficiency and quality of management decisions. 2. Selection of priorities for company development. 3. Accuracy of calculations of economic efficiency of production activity. 4. Eliminating uncertainty of results, reducing risks
Project approach	
1. Organization of development, implementation and commercialization of innovative project-type innovations. 2. Project business planning 3. Analysis of the project. 4. Project evaluation 5. Organization of innovative project financing	1. A special type of strategic planning, selection of necessary production-technical and marketing measures. 2. Research on innovation, its consumption and value indicators Multi-step events. Researching resource, technological and financial possibilities. 3. Technical-economic, planning, commercial, environmental and financial transfer based on balance sheet and cash flow. 4. Evaluation of financial stability and commercial efficiency of the project. Calculation of payback period, profitability index, net discounted income and internal rate of return, consideration of risks. 5. Determining the need for financing, finding sources and organizing cash flows under the project.
A marketing approach	
1. Focusing on the marketing strategy of the innovative firm. 2. Specific strategies of innovative marketing: development of competitive advantage strategy, import substitution, cost leadership, penetration of new markets, etc. 3. Development of a strategy for introducing new products into the market. 4. Operational tactical innovative marketing. Choosing the type of marketing. 5. Forecasting and planning of marketing	1. Directing the activities of the firm, its systems and employees to the commercialization of news, taking into account the requests of the future consumer. 2. Naming research of the market. Market condition analysis and forecasting. A study of market capacity, structure and segmentation. Research and forecasting of demand, competitor behavior, types and forms of competition. 3. Determining the purpose, option and time of entering the new product into the

Basic, basic approaches and concepts	Forms of their implementation and results
expenses and income.	market. Development of activities and stages of deployment of news. 4. Development of specific measures for introducing new products into the market. Creative, conversion, incentive and other types of marketing activities. Formation of sales channels. Advertising company, exhibitions, presentations, trial and direct sales, service and warranty service, etc. organize 5. Analysis and prediction of the volume of sales of news, estimation of marketing income. Determining price elasticity with respect to income. Studying the price policy of competitors. Development of innovation pricing policy. Analysis of marketing costs. Forming the costs of moving the innovation to the market.

Table 1.2 shows that the importance of different concepts and approaches to innovation management is not equal. Systematic, marketing, life-cycle and project approaches occupy the greatest place in both strategic and operational innovation management. They form a special type of innovative management. Socio-psychological and quantitative econometric methods are used in the analysis, forecasting and development of management decisions.

The information presented in the table makes it possible to distinguish the following most characteristic symptoms of innovative management:

- complex hierarchical mixed scientific-technical and socio-economic systems will be the object of innovative management;
- consists of different district innovation systems with different visions of achieving the goal of innovative management;
- innovative processes have a probabilistic character and are weakly determined (based) by their essence;
- innovative processes have a creative nature;
- in innovation systems, the innovation field is the central subject of the employee-innovator;
- the identity of the innovator and the innovative manager as subjects of innovative activity should be considered as a complex social system that requires the use of the newest methods of influence;
- flexible, adaptive moral and personal approaches should be used to increase the effectiveness of innovative activities.

In innovation management, detailed analysis and improvement of management processes are more fully revealed in a systematic approach. The central concept of systematic analysis consists of a system, that is, a complex internal construction of components and elements that interact with each other and the environment, an object with a large number.

Understanding the organization as an open system is a key argument for innovative management. Being in close interaction with the external environment, it is exposed to a large number of influences, both direct and indirect, from the external environment. At the same time, the organization has an internal

microenvironment, the elements of which are interdependent with environmental factors.

The organization as a system consists of a complex ensemble of forces, interactions, interactions and interpenetrations of the system itself and the elements of its external and internal environment.

The external environment has a direct and indirect effect on the organization. State and legislative bodies, institutions, trade unions, scientific and innovative organizations, markets of production factors, investors, competitors, suppliers, consumers, professional intermediaries, etc. will be important elements of the direct impact environment.

Factors of the internal environment of the firm, for example, scientific and technical potential, morale, infrastructure, level of employee qualification, etc. enters.

The elements of the system are independent and qualitatively indivisible units. They describe interaction with each other and the environment as a material, energetic and informational environment. Spatial-temporal aggregates (summaries) of interacting elements with defined integrity and goal-orientation are divided into functional systems. Dividing the system into sub-systems allows us to reveal the hierarchy of the system and examine it at different levels of detail.

The complexity of the system is determined by the number of hierarchical levels, the volume of information circulating in the system, and the complexity of its structure, the number of elements and their connections. The sum of connections constitutes the structure of the system. Each system has an algorithm of operation aimed at achieving the set goal.

They form the system using a model that reflects the relationship between the system's input controllers, variables, variables, and output parameters. Large and complex systems consist of a collection of small systems and differ from them both quantitatively and qualitatively.

Large and complex hierarchical systems are characterized by:

• availability of common goals (identification);

• integrity and completeness;

• large amounts and large number of performed tasks;

• multifaceted and diverse tasks;

• the complexity of the behavior and the multifacetedness of the motivational reasons;

• existence of competitive, competing and omnidirectional tendencies.

A complex, large system consists of a set of systems and consists of multi-level, complex systems that provide, scientific, manage and control.Инновацияларни бошқаришда икки даража мавжуд:

1. The first level is represented by theories of social management of innovative systems and a system aimed at developing innovative development strategies, social and organizational changes, as well as other economic and socio-philosophical concepts that determine the functioning mechanism of the economic system.

2. The second level of innovation management is the practical theory of organization and management of innovative activities, due to which it acquires a functional and practical nature, and improves management, analyzes innovative activities, analyzes innovative activities, uses innovative technologies, employees, technical and provides a scientific and methodological basis for the development of practical solutions for the latest methods of influencing technological systems, products and financial flows.

The main stages of innovation management are presented in Figure 3 below. At each stage of the picture, the set tasks must be solved.

At the first stage (planning stage) - a strategy implementation plan is drawn up. In the second stage, conditions and tasks of organization are defined. This includes clarifying and defining resources for implementation in various departments of

the innovation period, assigning tasks to employees, and organizing work. In the third stage - the implementation stage, the development is carried out and the plan is implemented. The fourth stage, the leadership stage, involves monitoring, making corrections to actions, and gathering experience. Here, innovative projects, innovative management decisions, and the effectiveness of using innovations are evaluated.

According to economist A.M. Mukhamedyarov, the characteristics of the innovation process as a management object include three aspects:

1) disclosure of the content of the innovation cycle;

2) a clear idea of innovations in the content of the subject;

3) to determine the characteristics of innovative activities and scientific and technical developments aimed at creating innovations. any process can be managed only when the main directions of its development are known, when the features and laws of the object of management are known.

In conclusion, we can say that scientific development and innovation management are two important factors of science and technology development. Thanks to scientific development, many theories that form the basis of modern sciences have been created, and thanks to innovative management, organizations can create new products and technologies that improve people's lives and contribute to the development of the economy.

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