The Ministry of Education and Science of Ukraine

Ukrainian-American Concordia University

Faculty of Management and Business

Department of International Economic Relations, Business & Management

MASTER'S QUALIFICATION WORK

MANAGEMENT OF INNOVATIVE ACTIVITIES AND IMPROVEMENT OF STAFF QUALIFICATIONS (based on Benefit Rose OÜ case)

Master student of
Field of Study 07 – Management and Administration
Speciality 073 – Management
Educ. program – Business Administration

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Abstract:

The paper investigates the relationship between innovative activity and staff qualifications. The key role played by personnel qualifications in stimulating and supporting innovation is explored. In addition, the study examines the problems faced by organizations in the implementation and support of innovative practices, in particular, the lack of an innovative culture, established communication, qualified personnel and negative internal resistance. The paper offers recommendations designed to promote a synergy between innovation and staff development, among them the development of an innovation culture, the creation of an internal innovation center and infrastructure for collaboration, stimulation and recognition, the formation of innovation teams and active feedback. The research seeks to offer actionable insights for organizational leaders, including defining an innovation strategy, creating an open culture and incentive system, an environment for knowledge sharing, investing in education and training, and defining performance metrics, to optimize the synergy between managing innovative activities and enhancing staff qualifications.

Keywords: innovative activity, staff qualifications, organizational development, competitive advantage, motivation, economic development.

Анотація:

У роботі досліджується взаємозв’язок між інноваційною діяльністю та кваліфікацією персоналу. Вивчено ключову роль, яку відіграє кваліфікація персоналу у стимулюванні та підтримці інновацій. У дослідженні розглядаються проблеми, з якими стикаються організації у впровадженні та підтримці інноваційних практик, зокрема відсутність інноваційної культури, налагодженої комунікації, кваліфікованих кадрів та негативний внутрішній опір. Робота пропонує рекомендації, створені для сприяння синергії між інноваціями та кваліфікацією персоналу, серед них розвиток інноваційної культури, створення інфраструктури

для співпраці, стимулювання та визнання, формування інноваційних команд та активний зворотній зв’язок. Дослідження пропонує дієві ідеї для організаційних лідерів, зокрема визначення стратегії інновацій, створення культури відкритості та системи стимулювання, середовища для обміну знаннями, інвестування в освіту та навчання та визначення метрик успішності, щоб оптимізувати зв’язок між управлінням інноваційною діяльністю та підвищенням кваліфікації персоналу.

Ключові слова: інноваційна діяльність, кваліфікація персоналу, організаційний розвиток, конкурентна перевага, мотивація, економічний розвиток.

PHEE-institute «Ukrainian-American Concordia University»

Faculty of Management and Business
Department of International Economic Relations, Business and Management

Educational level: **Master degree**
Specialty **073 «Management»**
Educational program **"Business Administration"**

APPROVED
Head of Department _____

__Prof. Zharova L.V._____
"15"січня 2024

TASK

FOR MASTER'S QUALIFICATION WORK OF STUDENT - *Yuliia Ben*

Topic of the master's qualification paper - **MANAGEMENT OF INNOVATIVE ACTIVITIES AND IMPROVEMENT OF STAFF QUALIFICATIONS (based on Benefit Rose OÜ case)**

Consultant of the master's qualification paper - *Lesya Leshchii, Ph.D. in Economics,*
(surname, name, degree, academic rank)
Which approved by Order of University from ***"14" September 2023 № 14-09/2023-6c.***

2. Deadline for master thesis submission "***20" December 2023 .***
3. Data-out to the master thesis - *Materials from internship in company* Benefit Rose OÜ *with consultation of company management. Information from open resources, official reporting of financial and economic activities of the company and other companies in in the field of information technology services.*

4. Contents of the explanatory note (list of issues to be developed)

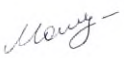
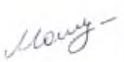
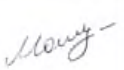
- *To investigate the existing literature and theoretical frameworks pertaining to innovation management and staff qualifications improvement.*
- *To analyze the practical implementation of innovative activities within organizations, considering such factors as culture, staff and technology.*
- *To assess the impact of improved staff qualifications on an organization*
- *To propose a comprehensive framework for integrating innovation management and staff qualifications improvement strategies within organizations.*

- *To provide practical recommendations and guidelines for organizations to enhance their innovative activities while investing in staff qualifications.*

5. List of graphic material (with exact indication of any mandatory drawings)

The work includes: tables -7, figures -10, appendices - 9

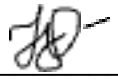
6. Consultants for parts of the master's qualification work

Part of the project	Surname, name, position	Signature, date	
		Given	Accepted
1	Lesya Leshchii, Ph.D. in Economics		
2	Lesya Leshchii, Ph.D. in Economics		
3	Lesya Leshchii, Ph.D. in Economics		

7. Date of issue of the assignment

Time Schedule

№	The title of the parts of the qualification paper (work)	Deadlines	Notes
1.	I part of master thesis	*10.10.2023*	In time
2.	II part of master thesis	*10.11.2023*	In time
3.	III part of master thesis	*10.12.2023*	In time
4.	Introduction, conclusions, summary	*20.12.2023*	In time
5.	Pre-defense of the thesis	*22.12.2023*	In time

Student 
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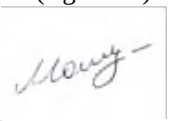
Consultant 
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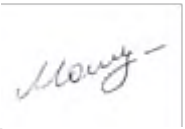
Conclusions: *The student worked diligently during the educational project, sent the sections of the work on time, took into account comments, and based on the results of the research, a scientific article was submitted for publication. The work uses the company's data and current literature in accordance with the topic. The research contains a lot of statistical data, their analysis and evaluation is given. When writing the work, the APA style of literature design was used, as well as other requirements for the design of the work were met. The work draws relevant conclusions and gives practical recommendations for the management of companies in the field of information technologies. The master's qualification work was performed at a high level and deserves an excellent rating.*

Consultant 

CONTENT

INTRODUCTION

In the ever-evolving landscape of the global economy, organizations across industries are constantly striving to remain competitive and relevant. In the times of rapid technological advancements, globalization and dynamic market forces, the ability to innovate and adapt has become paramount for business success. Simultaneously, organizations are recognizing that their most valuable assets are their employees and investing in their continuous development and qualification improvement is crucial to achieving sustained growth and competitiveness. The intersection of these two critical aspects, innovation management and staff qualifications enhancement, forms the foundation of this work.

The importance of innovation for the stable economic development of a society or organization and the need to regulate this process is currently recognized in most states and organizations of the world (Ben, 2022).

The formation of an innovative economy is usually identified as a priority task for each state/organization. Initially, a certain strategy is developed that focuses specifically on innovation. After that, a course is taken to achieve this strategic goal – that is, the process of achieving a level of economic and social development corresponding to the status of a country or organization begins (Ben, 2022)..

This goal is supposed to be solved through the formation of a powerful scientific and technological complex, ensuring the achievement and maintenance of the leadership of the state/organization in scientific research and technology in priority areas (Ben, 2022). One of the main conditions for the economy's transition to an innovative path of development is to increase the effectiveness of innovation management of business and accelerate the emergence of new innovative companies in all sectors of the economy, and primarily in the knowledge economy (Ben, 2022).

The twenty-first century has witnessed unprecedented changes in the way businesses operate. The advent of the digital age, coupled with increased connectivity and automation,

has reshaped industries and markets. Traditional business models are being disrupted and new ones are emerging at an astonishing pace. In this environment, organizations that fail to innovate are at risk of stagnation or obsolescence. Hence, the effective management of innovative activities has emerged as a vital strategic imperative for companies worldwide.

With the development of an innovative economy, the place and role of a person in a new type of management are changing significantly. The analysis of these changes entails the study of a whole range of interrelated issues: changing requirements for the workforce, reforms in the education and training system, changing traditional approaches to personnel management, etc. It is up to the personnel of the enterprise to develop innovations, introduce them into production and master them, which means that it is necessary to take into account indicators that characterize its susceptibility to change, i.e. willingness of staff to innovate.

Currently, the human capital within organizations plays an integral role in their ability to innovate and thrive. Employees are not just workers; they are the architects of innovation, the agents of change and the driving force behind organizational progress. To harness the full potential of innovation, organizations must invest in their employees' knowledge, skills and qualifications. By doing so, they not only ensure the sustainability of their workforce but also empower their teams to contribute to innovation processes effectively.

The strategy for developing of the innovation can be considered as a means of creating more favorable conditions for modernizing the economy by improving the staff qualifications in innovation management, creating an innovation infrastructure, as well as improving support measures and stimulating innovation. In this regard, the question of the professionalism of participants in innovation activities is of great importance. It is extremely important to ensure the continuity of the course for creating conditions for long-term sustainable advanced development of the economy, setting on its diversification and human nature, which is practically impossible without creating concrete basics for innovation skills and solving a number of theoretical and practical issues related to the improvement of staff qualifications manuals in innovation management (Ben, 2022).

Thus, in this work, the main directions for increasing the level of staff readiness for innovation are identified, which contributes to the improvement of the enterprise's innovative potential management system.

The relevance of the problem under consideration, its scientific and practical significance and, along with this, the insufficient development of certain aspects determined the choice of the topic of the master thesis research, its goals and objectives. In addition, at present there is no balanced and comprehensive innovation skills framework that defines the concept, the professionalism of participants in innovative activities in the field of entrepreneurship as well as organizations, which is predetermined, in particular, by insufficient scientific study of the issues of the professional status of participants in innovative activities.

The relevance of the chosen research topic is also due to the need to improve the efficiency of staff mechanisms to stimulate innovation, which is impossible without the support of theoretical and practical materials.

At the present stage of development of the world economy, the position and level of power of each country directly depend not only on the provision of those types of resources that can be considered strategic for the state, but also on the state’s success in the field of innovation, the speed of increasing scientific and technical potential, the ability to create and effectively use new knowledge that acts as a necessary condition for successful competition and economic growth.

Successful innovation management is possible only if favorable conditions are created that will make it possible to realize the accumulated and preserved innovation potential of the country with the possibility of its further expansion and the construction of an effective mechanism for managing innovation processes (Ben, 2022). And here we must not forget about one important thing - the psychological aspect of innovation management, because moving forward is impossible without overcoming innovative inertia by various entrepreneurs, owners and the state itself.

Having a good understanding of the processes of innovation, the possible result of which should initially be some kind of idea, which will accordingly push various economic

entities to actively participate in innovation activities, it is possible to form an adequate system for managing innovation processes, both at the level of an individual enterprise and throughout countries.

This master thesis paper is based on the complex professional qualification practice in the company Benefit Rose OÜ, which is one of the integral parts of study of qualified specialists of all specialties, including Business Administration. During the practice, the results of theoretical training were consolidated and concretized; the ability and skills of practical work in the chosen specialty and the qualifications assigned were acquired, which had the great influence to the analysis process and the final recommendations of this work.

The purpose of this paper is to provide a comprehensive overview of the overall activity of the company Benefit Rose OÜ, a prominent web development company specializing in IT solutions, underlining the innovation management and the company's staff qualification as an example of the research.

The rationale behind this master thesis is rooted in the recognition that innovation and staff qualifications enhancement are interdependent and mutually reinforcing concepts. A well-qualified and motivated workforce is better equipped to engage in innovation, while innovation initiatives can lead to the creation of new opportunities for employee development and growth. Therefore, this study seeks to explore the dynamic relationship between these two facets within the context of modern organizations.

The main aims of the work are to solve a significant problem, which consists in the formation of the theoretical foundations of the innovation skills of participants in innovation activities, as well as the development of recommendations for improving international frameworks of professional qualifications in innovation management.

In this paper, the theoretical and methodological principles of motivating the personnel of the innovative enterprise (innovation project teams) were developed, and the systematization of motivating measures was carried out according to the constituent elements of the subsystems of the innovative culture of the enterprise. An algorithm and procedures for motivating the processes of parallel-sequential formation and development of the enterprise's innovative culture have been developed which provides an opportunity to purposefully and effectively manage the motivation process.

This paper encompasses a comprehensive review of relevant literature, empirical research through case studies and surveys and the development of a practical framework for organizations to enhance both their innovation management and staff qualification improvement initiatives. The study draws upon examples from the company Benefit Rose OÜ and its various sectors to provide a well-rounded perspective on the topic.

The primary objectives of this paper are as follows:

- To investigate the existing literature and theoretical frameworks pertaining to innovation management and staff qualifications improvement.
- To analyze the practical implementation of innovative activities within organizations, considering such factors as culture, staff and technology.
- To assess the impact of improved staff qualifications on an organization's innovative activities and overall performance.
- To propose a comprehensive framework for integrating innovation management and staff qualifications improvement strategies within organizations.
- To provide practical recommendations and guidelines for organizations to enhance their innovative activities while investing in staff qualifications.

This paper is structured as follows to provide a comprehensive overview of the management of innovative activities and improvement of staff qualifications research:

- Introduction: This section provides an introduction to the master thesis report, outlining the objectives and background.
- Innovations and staff frameworks overview: A brief overview of innovative activities and staff qualifications frameworks are presented, including their cores, development and coherence.
- Challenges and solutions: The challenges, associated with the topic of this paper, inside the company Benefit Rose OÜ are discussed, and the strategies implemented to address them effectively are presented.
- Conclusion: This final section summarizes the report, reflects on the overall theoretical and practical materials and provides insights for potential professional

basics in order to enhance the company’s innovation management in the concept of staff qualifications.

The purpose of the paper is to determine the nature and degree of influence of measures to motivate the company's personnel on the processes of forming its innovative culture, as the main prerequisite for the transition to sustainable innovative development, as well as to develop the order and procedures for motivating the development of innovative culture in general.

The findings of this study are expected to offer valuable insights to organizations seeking to strengthen their competitive edge in today's fast-moving business environment. By understanding the relationship between innovation and staff qualifications, businesses can design strategies that not only drive innovation but also empower their workforce. This, in turn, can lead to improved productivity, employee satisfaction and sustainable growth.

The management of innovative activities and the improvement of staff qualifications are two critical elements in the arsenal of organizations striving for success in the modern business landscape. This master thesis work aims to shed light on how these elements can be effectively integrated and harnessed to create thriving, adaptable and innovative organizations.

The scientific novelty of the research consists in a comprehensive theoretical analysis of the situation of innovation management and staff qualification, social relations that develop in relation to the implementation of innovation management, the main theoretical and practical problems arising in the topic under consideration. This made it possible to formulate conclusions within the framework of the goals and objectives set in the master thesis, to propose recommendations that contribute to the development of staff qualifications in the field of innovation, as well as to increase the efficiency of international innovation management.

CHAPTER I. OUTLINE OF THE CONCEPT OF INNOVATIVE ACTIVITY IN A FRAMEWORK OF STAFF QUALIFICATIONS

1.1. Theoretical framework of innovative activities

In these days of the fast-moving world, most economic processes are closely related to innovations. As it is mentioned in the paper of Yuliia Ben for 2022, the development of innovative activities, the widespread dissemination of innovative technologies, products and services are key areas for achieving economic growth and improving the quality of life of the population in the modern world. Most of people, probably, do not differ such definitions as “innovation”, “invention”, “novelty” and ‘improvement” (Ben, 2022). Nevertheless, every definition has different nature and must be viewed separately (see Annex A). In the case of this paper, mostly innovation is important.

Different economists and scientists define the term "innovation" in slightly different ways. Timur Kogabayev, an Estonian economist, and Antanas Maziliauskas, Doctor of Engineering, argue that “the generally accepted definition of innovation does not exist” (Kogabayev & Maziliauskas, 2017). Nevertheless, there are some interesting attempts to explain the nature of innovation.

J. Schumpeter, one of the founders of the theory of innovation economics, considered the innovation “as the economic impact of technological change, as the use of new combinations of existing productive forces to solve the problems of business” (Schumpeter, 1982). Many modern managers around the world strive to learn the secret of not only successful, but also long-term business growth. Recent studies show that the gap between innovation and real business continues to widen in most of the world's economies, and enterprises' investment in innovation is shrinking. Despite efforts to support innovation and create a knowledge economy, innovation is not yet a determining factor in economic growth. Innovation remains a luxury item for most states. Schumpeter has completely dispelled the

myth that innovation is a mysterious black box for ordinary organizations. The prevailing notion of the unpredictability of success, in his opinion, is shared by even the best managers and sophisticated researchers (Schumpeter, 1982). But, if in developed markets, despite the recognition of uncertainties, they still don't try to fly without wings, in developing markets, which have little experience of market innovation development, this black box seems overwhelming. The more effective should be the evidence that the box can not only be opened, but even put its contents on the necessary shelves. Recognizing the independence of disruptive innovation from existing business models, the properties of existing products, and the size of the market can revolutionize business plan concepts. At the core of the innovation growth mechanism is evidence that disruptive innovation competes with non-consumption, creating markets where they never existed. It is possible to create such markets of the future only by knowing what work future consumers would like to entrust to future goods.

Professor of Human Rights, Ethics and Religion B. Twiss expressed one more opinion about innovation definition: “Innovation – a process that combines science, technology, economics and management, as it is to achieve novelty and extends from the emergence of the idea to its commercialization in the form of production, exchange, consumption” (Twiss, 1980). Any development, scientific, technological or economic, is an ongoing process that has certain causes and effects. Taking into account specifically economic development, it has a set of reasons for its beginning, specific stages and characteristics of the process, as well as various options for its continuation. There are lots of factors that have a particular effect on the economic development, as well as there are many areas where economy has its own impact and important meaning. The generally recognized direction of sustainable development of the economy, increasing its competitiveness both in developed countries and in countries with economies in transition, is innovation, which is based on knowledge. The formation of scientific knowledge, its dissemination and effective use in production are the main factors of economic growth. That is, ensuring the economic, social and environmental development of the country, the formation and use of its resource potential should be based on the innovative basis.

At last, A. Afuah, Professor of Corporate Strategy and International Business, underlines the innovation “as new knowledge incorporated in products, processes and services” (Afuah, 1997). He finds that innovations have different natures, namely, technological, market and administrative or organizational, and, thus, must be viewed from the different sides. Innovation is an ongoing process. States and organizations are constantly making changes to products, services and processes, collecting new knowledge.

Up to the modern days, specific stages and periods of economic development have been defined (Ben, 2022). The theory of the general causes of long waves says that the reasons for the emergence of six waves of innovation are found far beyond the GDP and other economic trends, on the basis of which the unevenness of their manifestation in the world economy is studied, and can be reduced to the phenomena found in the factors of long-wave dynamics associated with the introduction of innovations, the renewal of the financial system and its institutions, the change models of resource consumption, technologies for obtaining information and creating infrastructure facilities (see Annex B) (Ben, 2022).

This must be taken into account when developing a policy to stimulate the economy to enter upward trends in the economic environment, since the composition of the factors of long-wave dynamics determines the totality of areas of application of control efforts (Ben, 2022).

All the types of innovation, especially technological innovation, can be considered with confidence as “a crucial driver of growth, enhancing competitiveness and increasing social well-being in all economies of the world” (Nelunova & Artemiev & Davydova, 2016).

These words perfectly explain current economic situation in the world which is connected to the innovation changes. Expressing with more broad and diversified words, innovation means not only the creation of new technologies today, but, what is more important, it includes the diffusion and use of new products, processes and practices (Ben, 2022).

Thus, the authors of the book “Structural Change and Economic Dynamics” give an example of influence of innovations on the job space and productivity of the labor force

(Grande & de Bustillo & Macías & Antón, 2020). In the work environment, innovation has the greatest impact on work quality (Grande & de Bustillo & Macías & Antón, 2020).

This is clearly seen in examples of both international and local level. For example, if we take into account Ukraine as a single and independent country, then there is not immediately noticeable interconnection between innovation and quality of work, since we are looking at these points in a very narrow direction (Grande & de Bustillo & Macías & Antón, 2020).

But as soon as we look at Ukraine as one of many countries in the world, we gain the ability to compare different states and immediately see that the lack of the most modern innovations in Ukraine greatly affects the quality of work, while such advanced countries as the United States and most of the countries of the European Union have long ago established harmony between these two factors (Ben, 2022).

But there are also negative results from innovation in today's work environment. We already have a lot of studies that prove that labor-saving innovations negatively affect the quality of work. Automated actions are not able to control the quality of the work done – in the end, people still have to do it and very often rework. At the moment, many enterprises are trying to move away from labor-saving innovations and prefer human labor, because it is more profitable for them to pay salaries than the losses that automated machines bring.

Seeking to create a climate in which innovation can multiply and thrive, innovation policies by their very nature touch upon areas, such as education and training, skills development, science and research, the business environment, information and communications technology, and other infrastructures. In every area different types of innovation have brought significant push and development in economy what, as a result, has promoted new and unexpected dimension – the mass urbanization. Cities are standing growing since the first people had stopped on the land for the permanent living. The reason for this are many historical events, including technological progress and economic development. Today, more and more people are moving from villages to cities, because employers from big towns provide a huge number of jobs. The constant need for labor force is primarily associated with new inventions and the creation of unique industries that require

both professional workers and service personnel, which is widely available in villages and small cities.

Robert Gordon, one of the most influential macroeconomists in the world, in his speech “The death of innovation, the end of growth” predicts not only a complete cessation of innovation and further development and evolution of mankind in the near future, but also a return to past ways of life, that is, he assumes the degradation of our world (Gordon, 2013). Robert Gordon believes that economic growth has already reached its limit and the best years of the world economy are in the past (Gordon, 2013). The economist states: «There are four headwinds that are just hitting the economy in the face. They are demographics, education, debt and inequality. So we need a lot of innovation to offset this decline. And here is my theme: Because of the headwinds, if innovation continues to be as powerful as it has been in the last 150 years, growth is cut in half. If innovation is less powerful, invents less great, wonderful things, then growth is going to be even lower than half of history” (Gordon, 2013).

We have many different problems in the world that affect economic development no less than innovation. It means one thing: We need to maintain a perfect balance between all factors of the economy in order to keep it stable. But to improve the economy, we need at least twice as good and faster to implement innovations (Gordon, 2013). Robert Gordon makes the following conclusions: “The problem we face is that all these great inventions, we have to match them in the future, and my prediction that we are not going to match them brings us down from the original two-percent growth down to 0.2, the fanciful curve that I drew you at the beginning. So here we are back to the horse and buggy” (Gordon, 2013).

Another version of future flow of the sixth wave of innovation belongs to Olivia Solon who has written an article “Resource Efficiency: The Sixth Wave of Innovation” (Solon, 2011). In this work, first of all, she writes about Dr. James Bradfield Moody, who is the author of the book “The Sixth Wave”. He predicted resource efficiency in the near future, that is more positive view of the development of the economy. Dr. Moody relies on the economic cycle of the economist Nikolai Kondratieff, which is well-known among economists (Moody & Nogrady, 2013).

The last thought about the possible future of the economic development belongs to Greece's former finance minister Yanis Varoufakis and Zambian economist Dambisa Moyo. They presented their opinions during the talk with TED's European director Bruno Giussani on a conference where they argued that "during these uncertain economic times we should question ideologies, discard certitudes and adapt to a messy, new economic reality" (Kedmey, 2015). Their opinions are that capitalism, socialism, as well as communism must be withdrawn as economic systems and there should be provided and developed new system which will suit our modern global situation. Economists and politics should revive the global economy for the future.

1.2. Specifics of modern innovative activity management and its interconnection with staff qualifications trends

Technological innovation and economic growth are closely related, therefore, innovation waves are also correlated with the development of the world economy. The economy is a constant variable which is unceasingly changing. The term "stability" in the field of economy is seen as the relative absence of global changes that affect the whole world in a positive or negative way. "Economic stability" is seen as regular, habitual, traditional changes in the local economy. Such changes undoubtedly affect the world economy, but they do not turn it upside down, but, on the contrary, leave it the same, but with regular progress. Thus, "economic stability" can also be called economic development.

The innovation sphere is an area of interaction between innovators, innovators and investors. Thus, the innovation space consists of three components that determine supply and demand: market of innovations (innovations); market for innovative entrepreneurship; investment market.

The innovation market is formed by innovative projects that need financing and implementation. The supply on the innovation market is formed by the following subjects of innovation management: research institutes and universities, small innovative firms,

individual inventors. Innovative projects offered on the innovation market may be at different stages of development: idea; applied research; prototype; an innovative product being mastered in production. The price of an innovation is determined by the commercializability of the innovation, which depends on the degree of development, as well as practical and commercial significance. Innovation turns into innovation as a result of practical use (Tidd & Bessant, 2021).

Today, the market for innovative entrepreneurship is formed by companies that introduce and use innovations and know-how. These include innovation firms that promote innovations on the market, as well as consumers who apply innovations in their activities. The investment market is formed by sources of capital used to finance innovation processes.

The subjects of investment in innovative activities are: corporations, banks, investment funds, private capital, the state, and the population. The peculiarity of financing innovation processes is the potential to increase the invested capital many times over and a high degree of risk of loss of investment investments (Antonelli & Crespi & Scellato, 2012). To reduce risks, a detailed analysis of the prospects and usefulness of the future innovative product is carried out, and mechanisms for return of the provided investments and risk management are used.

Considering the described characteristics of innovations, called also pillars, a comparative analysis of the innovation management can be carried outevaluating the rank of the innovation management. Thus, there is a report named the Global Innovation Index (GII), published annually by Cornell University, INSEAD and the World Intellectual Property Organization. It evaluates and ranks countries based on their innovation capabilities and performance. Their report 2022 "What is the future of innovative growth?" ranks 132 countries according to the level of their innovative performance. Switzerland, USA, Sweden, Great Britain and the Netherlands lead the GII 2022 rating. In 2022, Ukraine took 57th place among 132 countries and 34th place among 39 countries in Europe, and 4th place in the group of countries with a level of income below the average (see Table 1.1).

Table 1.1

Top 5 innovative economies by country group by per capita income level in 2022

High-income group (total 48)	Income above average (total 36)	Income below average (total 36)	Low-income group (total 12)
1. Switzerland (1)	1. China (11)	1. India (40)	1. Rwanda (105)
2. USA (2)	2. Bulgaria (35)	2. Vietnam (48)	2. Madagascar (106)
3. Sweden (3)	3. Thailand (43)	3. Iran (53)	3. Mozambique (123)
4. Great Britain (4)	4. Brazil (54)	4. Ukraine (57)	4. Burundi (130)
5. Netherlands (5)	5. Moldova (56)	5. Philippines (59)	5. Ethiopia (117)

Source: Pysarenko & Kuranda & Havrys & Shved & Osadcha & Titaevska & Kovalenko (2023).

In 2022, 26 economies showed better innovation results (knowledge and technological results, creative results) compared to their innovation resources (infrastructure, institutions, market and business complexity, human capital and research) - these are the so-called countries of innovation achievements (Pysarenko & Kuranda & Havrys & Shved & Osadcha & Titaevska & Kovalenko, 2023). This group also includes Ukraine (Pysarenko & Kuranda & Havrys & Shved & Osadcha & Titaevska & Kovalenko, 2023). Ratings of Ukraine by these GII blocks are shown in Fig. 1.1.

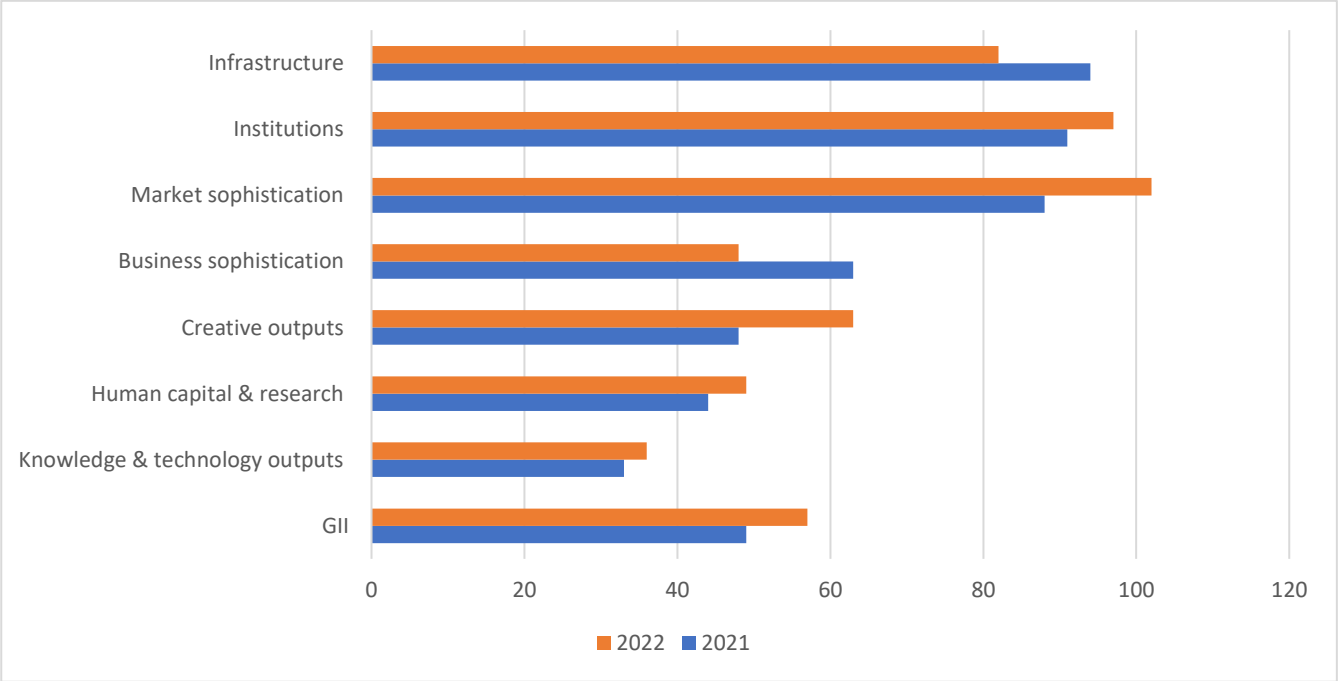


Fig. 1.1. Ratings of Ukraine by 7 blocks of GII pillars in 2021 and 2022.

Source: Pysarenko & Kuranda & Havrys & Shved & Osadcha & Titaevska & Kovalenko (2023).

Innovation management is traditionally considered an area of support and active government policy. State scientific and technical policy expresses the state's attitude to science and scientific and technical activities, determines the goals, directions, forms of activity of the country's government authorities in different fields.

The state scientific and technical policy of the country is carried out today based on the following basic principles: recognition of science as a socially significant industry; publicity, examination, competition; guarantee of priority development of fundamental research; integration of various forms of activity and structures; stimulation; development of science, scientific, technical and innovative activities; development of international cooperation.

The main forms of state support for scientific and innovative activities include: direct budget financing; preferential taxation of profits from the implementation of scientific developments; exemption from taxes on property and land related to scientific organizations; exemption from import customs tariffs on imported property for scientific organizations; direct financing; provision of interest-free bank loans to individual inventors and small innovative enterprises; creation of venture innovation funds that enjoy significant tax benefits; reduction of state patent fees for individual inventors; deferment of payment of patent fees for resource-saving inventions, etc (Ben, 2022).

Some countries also provide a number of tax benefits for subjects of scientific, technical and innovative activities:

1. Investment tax credit – providing a deferment of tax payments with subsequent stage-by-stage payment of the loan amount and accrued interest. Investment tax credit can be provided for corporate income tax if the following grounds exist:
    a) carrying out research and development work or technical re-equipment of production, including to create jobs for people with disabilities and protect the environment from pollution by industrial waste;

b) implementation of implementation and innovation activities, including the creation of new or improvement of used technologies, the creation of new types of raw materials;

c) fulfillment of a particularly important order for the socio-economic development of the region or the provision of particularly important services to the population.

2. Value added tax (VAT) benefits – the following are exempt from VAT: carrying out R&D at the expense of the budget, as well as the state fund for basic research, the state fund for technological development and extra-budgetary funds formed for these purposes; carrying out R&D by educational and scientific institutions on the basis of business contracts.
3. Land tax benefits are provided for research institutions.
4. Reducing the tax base by the amount of costs associated with invention and innovation.

Thus, the role of the state in innovation management is manifested in its functions aimed at regulating all processes taking place in the innovation sphere. The most important government functions in the field of innovation are reviewed below.

Distribution function. This is achieved through the distribution of financial resources for scientific research and innovation, firstly, through the budget, and secondly, through the formation of special funds. The state accumulates and distributes not only funds, but also material, technical, and intellectual resources.

Stimulating function. The stimulating influence of the state on innovation management is manifested through the encouragement of competition, financial subsidies, and benefits for participants in innovation. The state can provide partial or full insurance of innovation risks. The state is also capable of punishing business entities by introducing sanctions for the production of outdated products and the use of outdated technologies.

Coordination of innovation activities. The state forms a single technological space, which ensures the compatibility of innovations. Coordination of work over time, synchronicity across technological stages, stages of the scientific and innovation cycle.

Organizational coordination of scientific research and development financed from the federal budget, as well as from joint stock companies, the controlling stake of which is state-owned.

Legal support for innovative activities. Here must be highlighted such points as formation of the legislative framework; creation of a functioning legal mechanism and legal compliance systems.

Staffing for innovation. It begins during vocational training. The content of professional training programs at any level (university, post-university) should be built on a combination and balance of fundamental, universal and specialized knowledge.

Information support. The state should promote the dissemination of innovations through scientific and innovation infrastructure. It can act as an intermediary between innovative entities, assist in finding partners, and concluding transactions under government guarantees. Government agencies should provide legal, business, consulting services, etc. to innovators.

Taking into account regional characteristics and regulating innovation activities in the regions as well as regulation of international aspects of innovation management are the final governmental steps to support innovation management.

Moving to the specific types of innovations, ecological innovations are of great importance in today's world of high consumption habits. The depletion of exhaustible resources and the environmental challenges they pose necessitate a transition towards sustainable and eco-friendly alternatives. The Earth starves various ecological innovations that can help humanity become independent from exhaustible resources, fostering a more sustainable and resilient future. Transitioning to a circular economy is pivotal in reducing resource dependence. Recycling, upcycling and waste-to-energy technologies help extend the lifespan of resources and materials, minimizing the need for continuous extraction and production.

The world faces a critical juncture in which the finite nature of exhaustible resources, such as fossil fuels and minerals, poses a significant threat to our environment and economic

stability. To ensure a prosperous and sustainable future, we must explore and implement ecological innovations that reduce our dependence on these finite resources.

Renewable energy sources stand at the forefront of ecological innovation for resource independence. Solar, wind, hydro, geothermal and tidal energy have made remarkable progress in recent years, providing clean and sustainable alternatives to fossil fuels. These technologies are rapidly advancing, becoming more efficient and cost-effective and can significantly reduce our reliance on exhaustible resources.

An essential aspect of becoming independent from exhaustible resources is efficient energy storage. Innovations in energy storage technologies, including advanced batteries, compressed air energy storage and power-to-gas systems, are critical for maintaining a stable and uninterrupted energy supply from renewable sources. At the same level stay sustainable agriculture and food production. Agriculture is a resource-intensive industry, heavily reliant on fossil fuels, water and synthetic chemicals. Ecological innovations in sustainable agriculture, such as precision farming, vertical farming and aquaponics, enable efficient resource use, reducing our dependence on exhaustible resources while producing healthier and more environmentally friendly food.

Becoming independent from exhaustible resources is a complex but essential endeavor. Ecological innovations in renewable energy, agriculture, water management, transportation and other sectors offer promising solutions to reduce our dependence on finite resources. Collaboration among governments, industries and individuals is paramount in driving these innovations forward, ensuring a sustainable and resilient future for generations to come.

The next significant innovations must be developed in the military sphere which has always played a pivotal role in shaping the landscape of global security and defense. As technology continues to evolve at an unprecedented rate, so too does the nature of warfare, making it essential for military forces worldwide to adapt and embrace new capabilities. For instance, the development of advanced weaponry, such as hypersonic missiles, electromagnetic railguns and directed energy weapons, is reshaping the dynamics of

warfare. These weapons offer unparalleled speed, precision and destructive power, which could tip the balance of power in future conflicts.

Military innovation, particularly in the realm of technology, has seen significant advancements in recent years. From the integration of artificial intelligence (AI) and machine learning to the development of autonomous systems and cybersecurity measures, the military has been actively leveraging technological advancements to enhance its capabilities. In terms of IT companies' involvement in military innovation, several tech giants have been collaborating with defense agencies. Companies like Microsoft, Amazon and Google have been involved in providing cloud services, developing AI-driven solutions and supporting defense-related projects. Their technologies have been instrumental in bolstering military capabilities, offering enhanced data analytics, secure communication channels and improved logistical systems. Smaller businesses also cooperate with military organizations or perform projects aimed on military objectives.

As an example, after the Russian Federation attacked Ukraine and launched a full-scale war in 2022, business was seriously affected: many companies stopped production, moved offices to safer cities and cut staff. Today the main task of the Ukrainian business is to restore its capacities as soon as possible, provide Ukrainians with the necessary products and create new jobs. In the first month of the war, the number of vacancies decreased significantly, later it has started to recover (see Fig. 1.2).

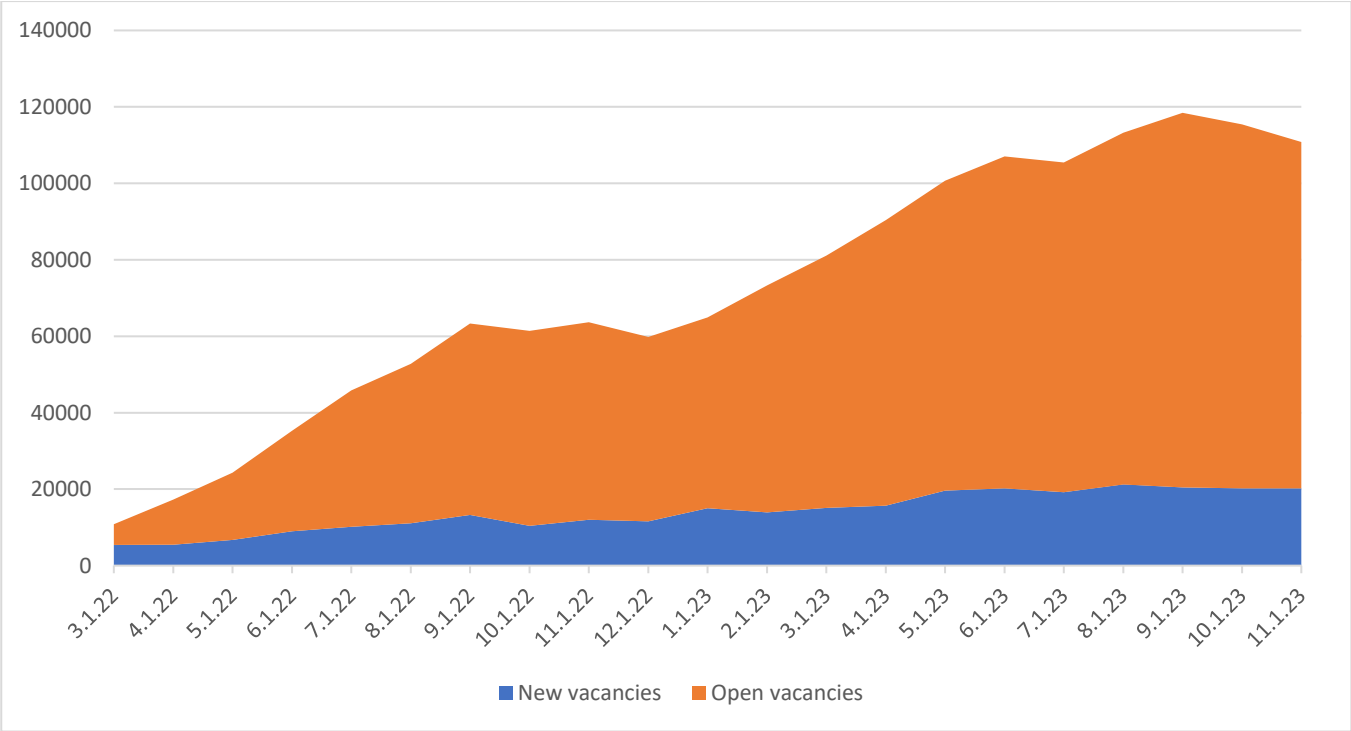


Fig. 1.2. Work.ua vacancies during the Russian-Ukrainian war.

Source: Opendatabot (2023).

However, the innovations in the sphere of business and staff management have the real weight for this paper. The basics of staff qualifications in innovation management are not so complex, but their danger is that any fluctuation can lead to fatal outcomes. Taking the current situation with the war in Ukraine as an example, we clearly see how badly the current circumstances undermined the stability of the economy and lowered it by several levels. Difficult current business conditions should in no case be a reason to refuse further development of the enterprise, in particular in terms of introducing innovations. The only remark is that in conditions of limited resources, there is a clearer concentration, first of all, on those innovations that give the highest effect with the consumption of the smallest resource, that is, there has to be chosen and determined priorities, because some innovative projects can be abandoned for the time being in favor of the further development of others. Based on this, in order to highlight the innovations that must come to the fore during the war, Ukraine needs qualified people in the field of innovation who can successfully manage innovations.

One of the conditions for the effective operation of firms engaged in innovative activities is personnel policy, since the specialization of such companies determines the need to form teams of highly qualified specialists.

The difference between an innovative organization is its positioning in the labor market. If the majority of private companies poach employees from organizations that have the same profile, then innovative business as an employer competes mainly with academic and applied science. The experience of working in budgetary scientific organizations forms special professional attitudes and values in people, they are characterized by high motivation to work, only partly supported by financial incentives. To understand the global picture of talent competitiveness, Fig. 1.3 shows the top countries that develop, attract and retain talent.

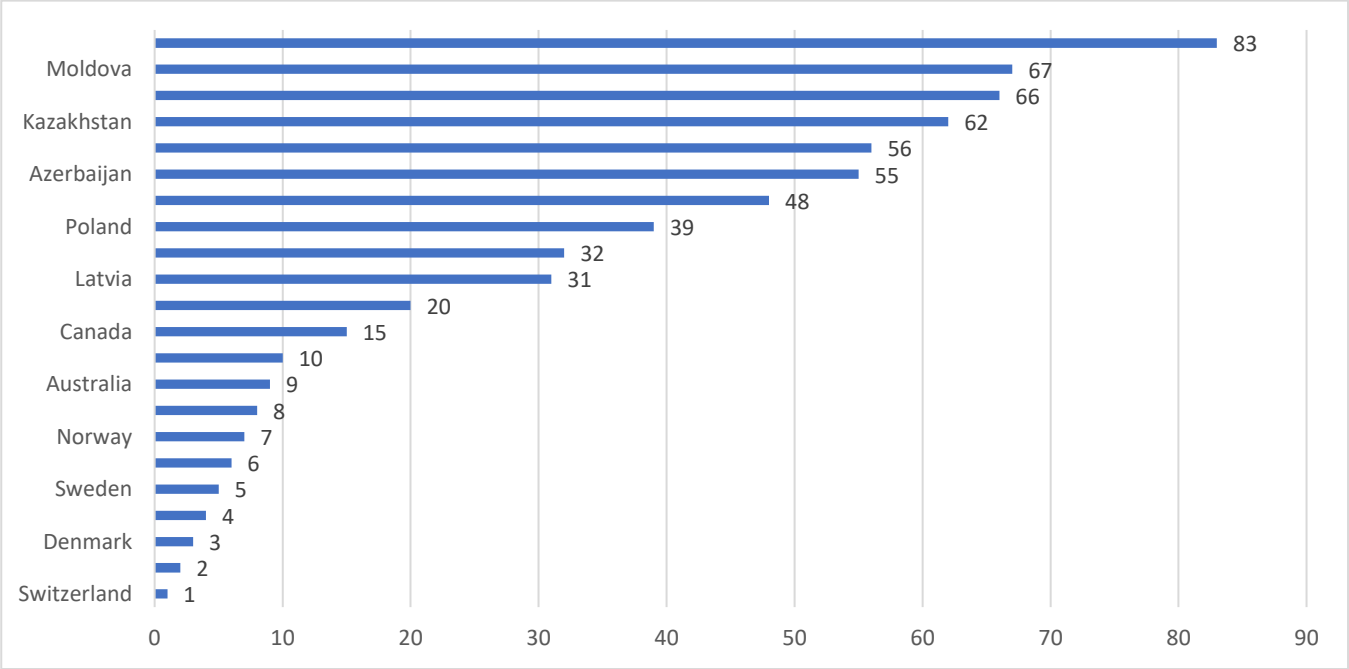


Fig. 1.3. Country rankings according to the Global Talent Competitiveness Index.
Source: Pysarenko & Kuranda & Havrys & Shved & Osadcha & Titaevska & Kovalenko (2023).

The experience of advanced enterprises has shown the importance of improving the skills of personnel working with innovations. To this end, there was developed a list of measures to improve the quality of personnel, as well as their characteristics (see Annex C) (Nadreeva & Melnitchnov & Abramov, 2020).

Today, in the age of dynamic development of technology, technology top managers of companies are increasingly talking about the need and importance of personnel development (see Annex D). After all, the innovative development of the microeconomic system of the organization, in turn, depends entirely on the effectiveness of the functioning of the staff, each subject of innovation management individually and in interconnection with each other. It is qualified personnel for any organization that is the key to success, a powerful resource for improving business efficiency. The personal potential of an employee must be constantly developed in order to meet the criteria and conditions that the external environment dictates to business today. Scientists have found that every person is talented in one area or another, in other words, has the inclinations, but to reveal and develop this potential is not an easy task. In modern conditions, there is such a thing as innovative potential and innovative development of personnel.

Scientist Ph. Toner gives the following definition of the term personnel development - this is a term to describe an integrated and holistic, conscious and active approach to improving work-related knowledge and behavior using a wide range of training methods and strategies. These strategies and methods are generally designed to help individuals, groups and companies realize their full potential by unlocking individual capabilities and improving performance in specific conditions. Thus, there is a need for innovative development of employees.

Ph. Toner divided all employees into four categories: “innovators”, “early implementers”, “preliminary majority” and “late majority”, i.e. in the organization there are people who are completely absorbed in innovations and those who follow innovators with different engagement speeds.

It is worth to note that all the processes of innovation, including the innovative development of personnel, oblige the management of the organization to satisfy all sorts of factors, the conditions necessary for the disclosure of innovative potential.

Corporate culture is the foundation of innovative development of personnel, its main goal is to help employees work effectively, get satisfaction from learning, keep pace with innovative development, both in the organization and in the industry as a whole.

A significant element is the driving force of any organization - innovation-oriented management personnel who are ready to invest in the development of their own team, through scientific research, training, managerial innovations, etc. to develop the very potential of employees.

Up-to-date innovation trends include the introduction of a 4-day working week as a managerial innovation in the field of personnel management and highlight its potential benefits for both employees and the environment. The 4-day working week represents a shift away from the traditional 5-day workweek, with employees working fewer hours while maintaining their current salary and productivity levels. The 4-day working week is an emerging trend in personnel management, aiming to enhance work-life balance, job satisfaction and environmental sustainability. It is seen as a transformative approach to improve the lives of employees while contributing positively to the environment.

The advantages for employees, probably, are obvious with such managerial innovation. These are improved work-life balance, enhanced job satisfaction as well as health and well-being. On the other side, employers can benefit from increased productivity, reduced absenteesm and high retention ability. As studies have shown that shorter workweeks can lead to improved employee focus and productivity during working hours. Employees are less likely to take sick days or mental health days when they are well-rested and satisfied with their work. Moreover, offering a 4-day workweek can make companies more attractive to top talent and help retain experienced employees.

The introduction of a 4-day working week offers also some environmental benefits, such as energy savings, reduced commuting and positive impact on carbon footprint. Fewer working days lead to lower energy consumption in offices, reducing carbon emissions and

energy costs. As a result, a 4-day workweek contributes to lowering an organization's overall carbon footprint. In addition, with fewer workdays, employees spend less time commuting, leading to decreased traffic congestion and emissions.

Thus, the innovative development in personnel management is one of the most urgent problems of personnel management as the main resource of the organization. In the course of writing the article, we found out that for the innovative development of personnel, the action of three forces is necessary: the culture of the organization, managerial personnel and the personnel development system.

1.3. Business development and competitiveness in the scope of innovative activities and staff qualifications

Business development and competitiveness in the scope of innovative activities and staff qualifications are crucial factors for the long-term success of any organization. In today's rapidly changing business environment, staying competitive requires a proactive approach to innovation and a highly skilled workforce. Business development and competitiveness are intrinsically linked to innovation and the capabilities of a company's staff. Innovation enables organizations to create unique value propositions, while a skilled workforce is essential for translating innovative ideas into reality.

At the heart of business development lies a well-conceived innovation strategy. This strategy must be intricately woven into the fabric of the organization, aligning with its overarching objectives. It encompasses innovation in products, processes and business models. Investment in Research and Development stands as a cornerstone of innovation. Furthermore, open innovation practices, fostering collaborations with external partners, augment an organization's ability to infuse fresh perspectives and seize new opportunities. Recognizing the need to safeguard intellectual property, organizations must proactively pursue protection through patents, copyrights and trademarks, thereby fortifying their competitive edge.

The increase in the role of innovation in modern conditions predetermines the intensification of innovation management of enterprises based on increasing the efficiency of production, carrying out promising research and development and implementing innovative programs. Steady growth and improvement of the management of innovative development of the primary links in all spheres and branches of the national economy correspond to this.

It should be noted that innovations are not only the use of high technologies, but also innovations in the field of management decisions. To implement the innovative tasks that arise before the enterprise, it is necessary to reorganize the enterprise management system based on new management technologies - innovative approaches to enterprise management.

The caliber of an organization's workforce is a linchpin of competitiveness. Talent acquisition and retention take center stage in this regard. The ability to attract and retain individuals with the requisite qualifications, as well as nurturing a culture of continuous learning and development, is paramount. Cross-functional teams, hailing from diverse backgrounds and possessing varied skill sets, catalyze creativity and innovation. Incentive programs and recognition schemes further propel employees to ideate, innovate and take ownership of their contributions.

The extended concept of evolutionary transformations in the process of innovative development of an enterprise includes structural and personnel aspects. Within the framework of the structural approach, innovative activities are implemented through changes in the organization of management and the creation of favorable conditions for achieving development goals (Jing & Wang & Yang & Ding, 2022). The personnel approach provides for the development of personnel on the basis of improving their qualifications, stimulating them to be ready to implement an innovative development strategy. To effectively solve the market and innovation challenges facing the enterprise, it is necessary to develop an innovation management system, the basis of which is the division of a complex process into simple components and building a kind of management business process (Alzoubi & Alzoubi, 2023). This gives a number of effects: work turns from a process into a purposeful movement, requirements for personnel qualification are reduced, labor productivity increases sharply, and the number of errors decreases. To implement this

approach, it is necessary to develop an effective organizational structure, a financial management system, form a marketing service, and ensure document management (Alzoubi & Alzoubi, 2023). Managers of an innovative company will be immersed in a ready-made environment that will force them to work according to uniform rules and ensure the manageability of the company (Alzoubi & Alzoubi, 2023).

Thus, the requirements for qualifications in non-core areas of managerial personnel are reduced, where the requirement to increase efficiency excludes the possibility of reducing the requirements for qualifications. This has been made possible by breaking down the complex assembly process into simple pieces that can be accessed by personnel of all skill levels.

While the path to innovation and enhanced staff qualifications is promising, challenges do exist. Resistance to change among employees, often stemming from concerns about job security or shifts in roles, requires adept change management and transparent communication strategies. Accordingly to statistics, people are tend to apply at companies which have higher level of innovation. Besides the fact that such companies stay ahead in the market and have an excellent reputation for creativity and forward-thinking, they also understand the value of skilled, motivated employees, adapt their workforce continually upskilling current employees and, as a result, reward them with higher salaries. In Fig. 1.4 is shown the tendence of attracting more talents by innovative companies.

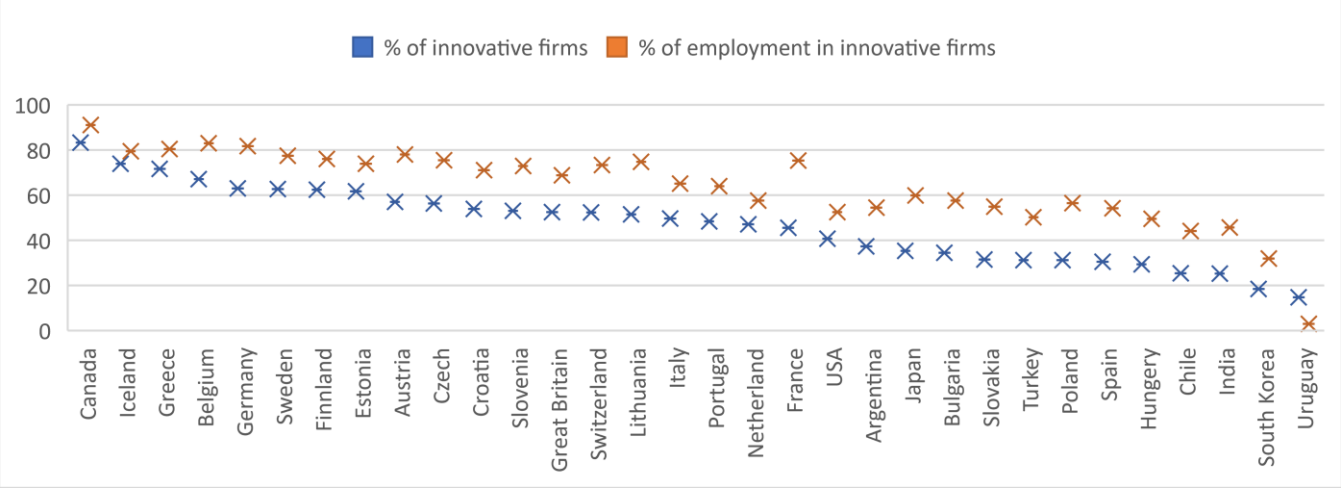


Fig. 1.4. Innovative firms and employment in innovative firms.

Source: OECD (2023).

But motivation at work is not just about salaries, prestige or corporate benefits. While competitive pay and performance-based rewards can be motivating, they're not the only factors. Clear communication, goals and recognition also play crucial roles (see Fig. 1.5).

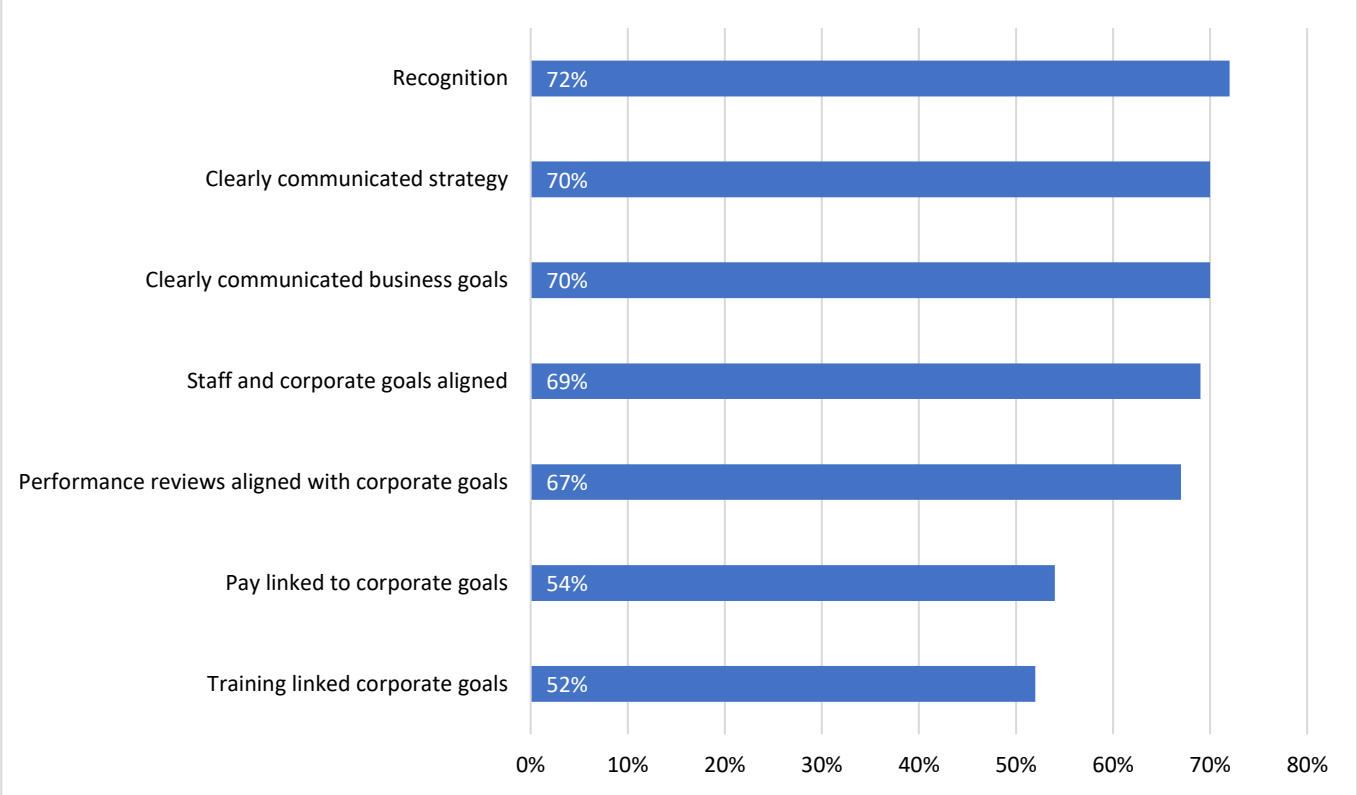


Fig. 1.5. Level of impact of motivational factors on employee engagement.
Source: General News (2023).

Salaries that motivate are competitive and linked to performance. However, when pay feels unequal or stagnant, it can demotivate employees. Benefits like health insurance and retirement plans are also important for motivation. Older motivation methods often relied heavily on monetary rewards or generic recognition programs, but these approaches might not resonate with everyone. Modern strategies focus more on purpose, impact and individualized recognition. Newer approaches prioritize connecting employees' work to a greater purpose, offering flexible work arrangements, emphasizing career development, and promoting well-being at work. These methods recognize that a one-size-fits-all approach isn't as effective as understanding and catering to diverse individual motivations (Karim & Choudhury & Latif, 2019).

Critical to this journey is the establishment of Key Performance Indicators that meticulously gauge the effectiveness of innovation initiatives and their impact on competitiveness. These metrics should align seamlessly with both immediate objectives and long-term visions.

The EU Social Dialogue Resource Centre identified innovative transformations in all spheres of economic and social development as the main factor in the progressive development of the countries' economies in the near future. An innovative culture reflects a holistic orientation of a person, fixed in motives, knowledge, skills, as well as in images and norms of behavior. The formation of an innovative culture is a complex multi-layered process that requires organizational, social and psychological approaches that affect both the sphere of personal and professional development and the corporate culture as a whole.

The key personal qualities for innovative development are mobility, the desire to learn throughout life, the propensity for entrepreneurship and risk taking. However, these qualities are not yet characteristic features of at least a significant part of the world's population. According to statistics, in Ukraine in 2008 the participation of the population in continuing education (in the age group of 25-64 years) was 24.8%, while in countries with high innovative activity this figure is significantly higher: Great Britain - 37.6%, Germany - 41.9%, Finland - 77.3%. The objective need for innovative development, the formation of an innovative economy requires the development of a new concept of training (Herrity, 2023). According to some experts, the following principles are used:

- Point on the personality of employees, constant focus on the generation of promising innovations, their practical implementation in innovation;
- trainings of qualified and intelligent specialists, system managers of innovation management;
- approach to the personnel development which are an integral part of the production process;
- the costs of training and advanced training of personnel should be considered not as costs for employees, but as long-term investments necessary for the successful development of enterprises, organizations and the economy as a whole;

- effective use of the creative potential of the team for the introduction of innovative developments into practice;
- continuous and advanced training system which the system of production of innovative products must include;
- cooperation of universities and other universities with advanced enterprises implementing innovative projects, their joint participation in the training of highly qualified specialists in new professions and innovative areas.

Thus, a new approach is also needed to the development of innovative personnel potential of enterprises, which should touch on several areas:

- formation of a competency model of specialists providing an innovative approach to the performance of functions;
- creation of a system for training specialists focused on innovation, capable of not only creating innovations in scientific, technological, organizational areas, but also introducing them into practice;
- creation of a system that provides conditions and motivation for personnel to develop and apply innovative competencies;
- formation of personal attitudes of specialists regarding the nature and results of labor activity: an innovative approach to the fulfillment of a functional role;
- development of personnel services providing the enterprise with innovative personnel;

At each of these levels, their own tasks arise, the solution of which should be focused on achieving a common goal: providing enterprises with innovative personnel. The transition to new educational standards is at an early stage, and ensuring the required level of professional development of personnel is decided mainly by the company itself, so it is very important to organize personnel work in such a way as to ensure sustainable innovative development of enterprises. Consequently, the problem of forming innovative personnel for an innovative economy should be solved at several levels in the relationship between an enterprise that uses and develops personnel to achieve strategic goals and the external environment that supplies specialists (see Annex E).

Innovation and staff qualifications are not mere facets but the lifeblood of business development and competitiveness. Organizations embracing these principles stand poised to adapt to market vicissitudes, nurture cultures of continuous enhancement and remain agile in the face of intensifying competition.

CHAPTER II. STUDY OF BENEFIT ROSE OÜ, ITS INNOVATION MANAGEMENT AND COMPETITIVENESS ON THE MARKET

2.1. General familiarization with Benefit Rose OÜ

Benefit Rose OÜ was founded in 2006 in Estonia and operates in the field of information technology services. At the moment, the company has the main and single office in the city Sillamäe, Estonia and is titled as the prominent IT-involved multi-culture. Although the company has Estonian origin, the majority of its client database are German people. Moreover, the whole team of managers, designers and programmers are from Ukraine and promote the Ukrainian IT market through the provision of their services.

Benefit Rose OÜ is a private organization established by two people, whose authorized capital was 5,112 euros and is divided into shares of certain sizes (2,556 euros from each one). The size of the share of each participant is fixed in the constituent documents. The participants are not liable for the obligations of the company and bear the risk of losses within the value of their investments Benefit Rose OÜ (2006). For now, the company is operated by one of the owners, who has managed to enhance the turnover to 37,980 euros in the first quarter of 2023.

At Benefit Rose OÜ, the organizational basis for legal registration is made up of two main documents:

- the Statute, which is signed by all founders;
- the organization chart, which is approved by the founders.

The supreme governing body is the Board of Directors. The executive body of management is the Chief Executive Officer.

Benefit Rose OÜ is the legal name of the company, but it has two own websites, and so two other names, which offer different categories of services: Agenturro and Soobold.

Agenturro (agenturro.co) offers the services for development websites, online shops and other platforms, and orients on the German market. Its slogan is *"White Label WordPress – Development for Agencies"* (Benefit Rose OÜ, 2006). In original German language it states *"White Label WordPress – Entwicklung für Agenturen"*, where the word "Agenturen" plays out in the company's logo, which was developed by professionals and includes basically the name of the website (see Fig. 2.1).

Fig. 2.1. Agenturro logo.
Source: Benefit Rose OÜ (2006).

The mission of Agenturro is "We value our customers and their time. We improve the agency's image through quality and rapid development". The values are:

- Show statistics.
- Clean code.
- Long-term pleasant user experience even after 3-5 years.
- Efficient pagespeed.
- Ease of use.
- SEO-friendly.
- Reduction of plugins.

Soobold (soobold.com) also offers the services for development websites, but orients to the global market and suggests not standard, but creative and innovative ways to produce products. Its slogan is *"Soobold is emotional, innovation, remote, experimental solutions, proactivity studio"*. The company also has the mission: *"Remote studio creating bold experiences around your design & business"*, and the vision: *"We are remote digital studio shaping brands characters, creating innovative and exciting products for customers from all around the globe. Our work is done to transform the fortunes of brands. We build*

products close to our hearts, and put everything we've got into them, so the final products we deliver speak for themselves. We aren't scared to be bold and trying out experimental solutions. Our goal is to attract people's attention, arouse strong emotions and to stay as an outstanding, trustful product in their mind" (Benefit Rose OÜ, 2006). Here is clearly seen the the word "bold" plays on the deep sense of the company and means, that the team is brave and able to create audacious products. Moreover, this word intersects with a design term that means bold font. The company's logo includes the company's name and emphasizes the lingering sound "o" in the word "bo-o-old" (see Fig. 2.2).

Fig. 2.2. Soobold logo.
Source: Benefit Rose OÜ (2006).

Notwithstanding, Benefit Rose OÜ is is a small IT company with a number of personnel 30 people, it is also a stable, dynamically developing organization. It is headed by professional founder & CEO and the staff are high-motivated employees. The company specializes in providing comprehensive services in website design, development, search engine optimization (SEO) and ongoing maintenance. With a team of skilled young people, the company caters to clients from various industries, ensuring their online presence is engaging, functional and optimized for maximum visibility.

First of all, Benefit Rose OÜ offers creative and customized website design solutions tailored to meet the unique needs and branding of each client. The project managers team works closely with clients to understand their objectives, target audience and aesthetic preferences, resulting in visually appealing and user-friendly websites created by designers.

As the next step, the company excels in website development, employing cutting-edge technologies and industry best practices. Whether it's a simple informational website or a complex e-commerce platform, the development team at Benefit Rose OÜ leverages their expertise to build websites that are responsive, scalable and optimized for performance.

Recognizing the importance of visibility in the digital landscape, Benefit Rose OÜ offers SEO services to enhance clients' online presence. The SEO team conducts comprehensive keyword research, on-page optimization and off-page strategies to improve search engine rankings and drive organic traffic to the clients' websites.

Finally, to ensure the seamless functioning and optimal performance of websites, Benefit Rose OÜ provides ongoing maintenance services. The dedicated team monitors website health, performs regular updates and implements security measures to protect against vulnerabilities, ensuring a smooth user experience for visitors.

In addition to these core services, Benefit Rose OÜ places a strong emphasis on customer satisfaction and aims to establish long-term relationships with clients. The company's collaborative approach involves engaging clients throughout the process, incorporating their feedback and suggestions to deliver exceptional results.

By combining their expertise in website design, development, SEO and maintenance, Benefit Rose OÜ helps clients achieve their online goals and stay ahead in the competitive digital landscape. The company's commitment to quality, innovation and customer satisfaction sets them apart as a reliable partner for businesses seeking comprehensive IT solutions.

2.2. Analysis of the state and overall activity of Benefit Rose OÜ

As mentioned, Benefit Rose OÜ operates in the field of web design and development, so it covers a variety of economic indicators combined with this professional area, which directly influence the economy of a country. In our case, the main country of influence is Estonia as the company is registered by Estonian government and pays taxes to it.

Estonia has a strong influence on IT service activities through various factors and initiatives that foster an environment conducive to the growth and success of the information technology sector. As the base, the country has developed a robust digital infrastructure, including a secure and efficient e-governance system, digital identity solutions and advanced internet connectivity. This infrastructure provides a solid foundation for IT service activities, enabling seamless online transactions, data security and easy access to digital services. The digitalization of public services, such as online tax filing, business registration and electronic signatures, reduces administrative burdens for IT service providers and enables efficient interactions with government agencies. Furthermore, Estonia has implemented favorable regulations for IT service providers. It has streamlined bureaucratic procedures, simplified company registration processes and enacted progressive laws related to data protection and cybersecurity. These measures create a supportive regulatory environment that encourages the growth of IT service activities.

The IT services sphere, including web development companies, has had a significant influence on EU's economy. It has contributed to GDP growth, employment generation, digitalization and innovation. The reputation of Estonian IT companies has attracted international clients and investments, while their commitment to skills development has ensured a skilled workforce. The IT services sphere continues to drive economic growth and position Estonia as a digital leader in Europe.

Estonian web development companies' activities, including ones of Benefit Rose OÜ, have a positive impact on Ukraine, creating several benefits for the country. Here are some ways in which Estonian IT industry is reflected in Ukraine and the benefits it generates. The presence of Estonian web development companies in Ukrainian economy contributes to economic growth and attracts foreign direct investment. The establishment of partnerships with Ukrainian talent and most likely with companies brings financial resources and investments into the country. This investment not only boosts the IT sector but also has a positive ripple effect on other sectors, such as real estate, hospitality and services. In general, collaboration between Estonian and Ukrainian web development industries fosters synergies and mutual growth. Estonian companies often seek partnerships with Ukrainian firms to leverage the local talent pool and cost-effective resources. This collaboration helps both

parties expand their market reach, share expertise and deliver innovative solutions to clients. It also contributes to the exchange of business practices and promotes cross-cultural understanding.

Benefit Rose OÜ consists of basic departments, which are small, but various: operational, financial, marketing and HR departments. On the Fig. 2.3 is shown the complete organizational structure of the company as for July 2023.

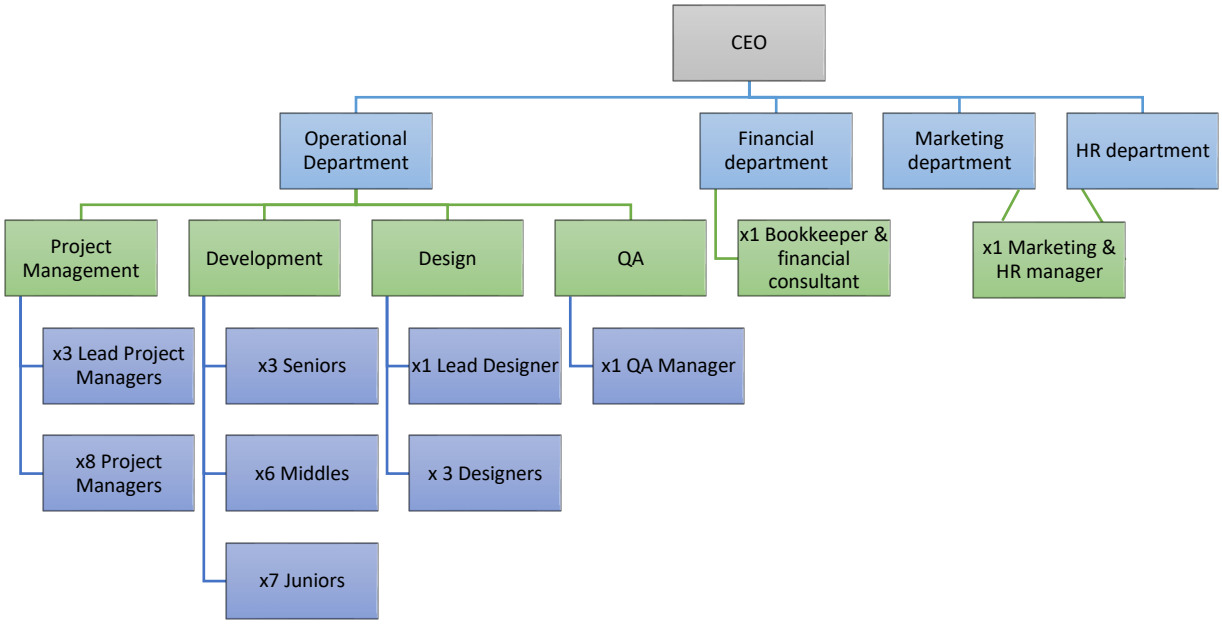


Fig. 2.3. Organizational structure of Benefit Rose OÜ.

Source: compiled by the author based on the Benefit Rose OÜ organizational chart.

The organization includes 35 employees in total together with CEO. CEO plays significant role in the company's operation because he takes part in activities of every department and his decisions are key in each sphere. The organizational structure of Benefit Rose OÜ includes internal cores and activities that are essential for its overall functioning and success These internal cores and activities can be categorized into the following areas:

1. Business development and marketing
2. Project management
3. Web development and design
4. Quality assurance and testing

5. Client support and maintenance
6. Team collaboration and management
7. Financial management

One of the founders of the company and its current CEO together with HR department, which includes only 1 manager, is responsible for identifying and pursuing business opportunities, including lead generation and client acquisition. They also drive the marketing department and develop marketing strategies to promote the company's services and attract potential clients, as well as conduct market research and competitive analysis to stay updated on industry trends and customer demands.

11 project managers in the company are part of building and maintaining relationships with clients, partners and industry stakeholders. They also plan and together with their teams of designers and developers execute web development projects, ensuring adherence to timelines, budgets and quality standards. At the very beginning of a project, project managers define project scopes, objectives and deliverables in collaboration with clients, after that they assigning tasks to team members, managing resources and monitoring project progress. Conducting regular project meetings, providing updates to clients and addressing any project-related issues or changes is also included to the daily working routing of a project manager at Benefit Rose OÜ.

The main crucial force of the company, - 4 designers and 16 developers, - create website architectures, wireframes and design concepts based on client requirements, as well as develop front-end and back-end functionalities using appropriate programming languages and frameworks. Implementing responsive design principles and optimizing websites for various devices and browsers they make the companies services professional and of high-quality.

Till the year 2023 quality assurance processes were driven also by project managers. But as soon as the company has started to obtain more clients and work, working hours of project managers did not allowed them to pay much attention to testing, so the team entered a new team member – a QA manager. For now, he conducts thorough testing and debugging to ensure functionality, usability and performance; and through comprehensive testing, including functional testing, usability testing and cross-browser testing. He identifies issues,

bugs and compatibility problems which are transferred to developers for resolving by project managers.

Finally, the organization owns only 1 financial manager who performs the responsibilities of a bookkeeper and financial consultant for the employees.

The strategic management of Benefit Rose OÜ does not exclude an increase in profits today and in the future (Benefit Rose OÜ, 2006). After all, making a profit is the main goal of any organization. Development is impossible without increasing profits (Benefit Rose OÜ, 2006).

Thus, the main motives of the strategic management of the company Benefit Rose OÜ, according to the Benefit Rose OÜ, 2006, are:

- satisfying partners, customers and society as a whole;
- satisfying its own employees;
- taking the company to a new level.

The company's management system is a complex mechanism, and the Finance department is one of its most essential components (Benefit Rose OÜ, 2006). The essence and organizational tasks of the Finance department are the most important information blocks, where all data on the activities of the enterprise are concentrated (Benefit Rose OÜ, 2006). The Finance department plans the budget. In addition, it carries out analytical and operational activities (Benefit Rose OÜ, 2006).

The Finance department of the company Benefit Rose OÜ is small enough and includes only one person - an accountant who performs all the functions of the Finance department, monitors the economic state of the organization, as well as keeps financial records of private entrepreneurs of the company (Benefit Rose OÜ, 2006).

Some quarterly financial statistics of Benefit Rose OÜ, which is illustrated in the Annex F, shows the tendence of the salaries' development during the last 3 years. It can be noticed that the rapid growth of the staff started in 2022 together with the average salary. It the table is also shown quarterly taxation by Estonian policy, which states 33% of national tax and 20% of personal tax. It must be also highlighted that the average salary indicator is quite low for the IT company. The explanation to this fact is the specific of company's

operation (study-oriented) as well as orientation of the founders to the cheap labor force. Both factors easily attract required employees even for understated salaries which results into the high employees' turnover rate. The nature of such strategic points is described in the next chapters.

The full financial report of Benefit Rose OÜ for the last 3 years is illustrated in the Annex G.

The general goals of the company Benefit Rose OÜ are the development of the organization on the basis of ensuring its stable position on the market and the implementation of high-quality IT services by unexperienced, but highly motivated employees, leading to the high profits (Benefit Rose OÜ, 2006). The objectives of the marketing department are aimed at achieving the general goals of the company (Benefit Rose OÜ, 2006).

The main goal of the Marketing department is to develop recommendations for the formation and implementation of the operation and sales policy of the company, as well as to coordinate the activities in this area of all divisions of the organization (Benefit Rose OÜ, 2006). Decisions affecting the company's market orientation are made by all departments of the organization on the basis of recommendations and in agreement with the Marketing department (Benefit Rose OÜ, 2006).

All departments of the enterprise are obliged to provide the Marketing department with any information about the nature and results of their activities in order it could create the appropriate and effective advertisement for the language school. In turn, the Marketing department is obliged to provide all other departments of the company with the information necessary for the market orientation of their activities (Benefit Rose OÜ, 2006). The Marketing department orientates the activities of other departments to the market and correlates their work with the goals of market activity common for the entire organization (Benefit Rose OÜ, 2006).

Benefit Rose OÜ is an independent entity that produces and sells its services. Managing cross-border activities in Benefit Rose OÜ requires careful planning, coordination and understanding of international business practices. Some key considerations for effectively managing cross-border activities include market research and analysis,

international team management, legal and compliance considerations, project management and communication, financial management, international payments and client relationship management.

German customers are well-known by Benefit Rose OÜ because the company has been working with the German market since the very beginning and has completely adopted to it. But obtaining a client from the foreign culture, the CEO of the organization together with the HR and project managers conduct thorough market research to identify features of a target market and assess its potential. They analyze the local competition, customer preferences and cultural nuances, as well as take into attention legal and regulatory requirements specific to a particular target market.

The CEO of Benefit Rose OÜ has also managed to build a diverse and culturally sensitive team that can effectively manage cross-border projects and foster effective communication and collaboration across geographically dispersed teams. There are some clients who have the same web development teams as Benefit Rose OÜ. It means the company is working with some clients as a partner and has to perform the work successfully with many different teams, so understand and respect cultural differences within the team and provide necessary support.

Personnel management is an area of knowledge and practice aimed at providing an organization with quality personnel capable of performing the assigned labor functions and its optimal use (Benefit Rose OÜ, 2006). The HR management system of any company consists of many elements. One of the most significant is staff motivation. Motivation can be external and internal, material and non-material (development, loyalty to the company, recognition, involvement, respect, confidence in the future, pride of the company, etc.).

Referring to the Annex F, over the past three years, Benefit Rose OÜ has witnessed fluctuations in team size, evolving roles and employee dynamics. In 2021, there was a team of only 6 professionals, which grew to 16 in 2022, and then sharply grew to 34 in 2023. This change in team size can be attributed to the company’s rapid development and gaining new clients which required more workload.

In the Annex H is demonstrated the development of the HR department of Benefit Rose OÜ including such indicators as number of employees, positions, average wages and

turnover rates. The indicators were summarized, analyzed and calculated based on the final data at the end of June of each year.

The team of the organization comprises various professionals, each contributing to success in distinct ways. In all three years, the core positions remained consistent: project managers, designers, developers and an HR manager, who was the first employee in the company it is now. With the company's progress, some new positions were added, such as QA and financial manager, as well as the existing one started to be divided into the levels, such as senior, middle and junior for developer, or lead for PMs and designers. However, on practice the positions levels do not play great role because there is no salaries system in the company which states salaries for each level, es well as there is no criteria which defines when a person should move to the next level. Such division is used rather for internal understanding and orientation among employees. Such nescience is also one of the reasons why Benefit Rose OÜ has such high employees' turnover rate, and is described precisely in the next paragraphs.

One more reason for high turnover rate is salary level. Each employee in the organization has its stated wage which does not highly depend on the position level, but rather on the experience and personal intuitive senses of the CEO. Experience allows employees to request a wage review and, as a result, its increase. In most cases, such requests are approved, but, as a rule, the wage increases by no more than 1,5 euros per hour. Over time, employees realize that they have reached their limit in this company and leave for more interesting and paid work. This experience, in turn, makes Benefit Rose OÜ an educational company, which is also described in the next paragraphs. Under the personal intuitive senses of the CEO it is meant that, when hiring employees, the CEO carefully asks about their life and professional experience, skills and asks general questions, which helps him form an impression of the candidate. Based on this, he determines how suitable for the IT industry and how valuable a person can become to the company. If a person meets the minimum requirements and expectations, the salary will correspond to this. But if the company's management wants to retain an employee, then the salary will be higher than standard one. In fact, this often leads to conflicts within the team and a feeling of being undervalued.

The sphere of competence of Benefit Rose OÜ is mainly self-development motivation. It is very important to know how and to be able to build a company HR management system by introducing progressive, working and most importantly mutually beneficial systems of motivation of personnel (Benefit Rose OÜ, 2006). For example, the company suggests lots of possibilities for studying including paid courses or paid job hours form studying a process or tool – the organization gives each employee the full freedom of choice. Unfortunately, the company does not have any planning strategy specially for the staff, system of bonuses and, furthermore, it does not have a well-developed system of salaries and position levels which often causes a feeling of injustice among employees and, as a result, demotivation.

When a company lacks a good system of salaries and position levels, it can lead to demotivation among employees, particularly when there is a lack of differentiation in compensation for different levels of experience and expertise. This situation can have several negative consequences, such as employee disengagement, talent retention challenges, negative work environment or recruitment difficulties. In this situation, the HR department plays a crucial role in addressing and mitigating these issues.

By implementing these measures, HR department can play a vital role in improving the company's salary structure, promoting fairness and addressing employee demotivation. Creating a transparent, equitable and performance-based compensation system helps boost employee morale, engagement, and overall organizational success.

Any organization does not function in isolation, but in close interaction with the subjects around it. Thus, any internal processes occurring in the company are directly or indirectly the result of a more global change in the external environment (Benefit Rose OÜ, 2006).

In Benefit Rose OÜ, the result of its innovative activities are new ideas of employees, which are loyally accepted by the CEO of the company, new and improved tools for delivering services, and new forms of management of its various structures which appear over time (Benefit Rose OÜ, 2006). Together they lead both strategic management and innovation management, which is expressed in the form of innovative tools and methods both for external and internal activities (clients vs. employees management).

Web development is a dynamic field that continually evolves to meet the changing demands of the digital landscape. The most important and needed type of innovation management for Benefit Rose OÜ is the one in the field of employees' motivation and performance monitoring. During the past 4 years there were explored in the organizations some innovative strategies and technologies; some of them were also implemented and helped enhance employee motivation and improve performance monitoring for a minimum rate.

First of all, it is important to review the implemented innovations in order to understand the current state of the company and its perspectives. There are three types of innovations which have been affecting the organization effectively till the present:

1. Flexible work arrangements. Benefit Rose OÜ had the strict work schedule until it started to have troubles with maintenance of employees' occupation. The company did not have regular development orders so there were many hours when employees were waiting for work doing nothing. The decision to it was offering flexible hours which provided employees with greater work-life balance and autonomy. As a result, such innovation increased job satisfaction and workers with flexible hours have become, on average, 5% more productive. Average project revenue per employee per year is about €8,000. Increased revenue per employee can be calculated as follows:

   $R\ per\ employee_{inc} = €8{,}000 * 0.05 = €400$

   Thus, the revenue per employee per year has increased for €400 and now equals approximately €8,400.

   Offering flexible work hours has also saved "costs for waiting" reducing overall expenditures of the company. There was 20% reduction in salaries costs, while monthly salary per employee was €900:

   $Cost\ savings\ per\ employee = €900 * 0.2 = €180$

Now, the reduced monthly salary per employee equals €720. As for costs, there were no additional expenditures as this innovation has not changed anything in the working process.

2. Continuous learning and development. Encouraging employees to pursue continuous learning through online courses, workshops or certifications has enhanced their skills and job satisfaction. Skilled employees started to take on more challenging projects, deliver higher-quality work and contribute to client satisfaction, potentially leading to increased revenue and employees' productivity for approximately 10%. But this innovation included the costs of training materials, course fees, training platforms and tools. The actual costs vary widely depending on the type of training offered. Each course suits the needs of each employee separately. For example, developers have the opportunity to study a technology they do not know yet, and managers can take language or management courses. Such training are not regular, but there is a plan where Benefit Rose OÜ invests in CL&D program €25,000 per year. Actually, the CEO offers courses which do not exceed the investment and employees have the opportunity to take courses on their wish. In the table 2.1 is presented the average CL&D statistic for the last 3 years.

Table 2.1

Benefit Rose ÖU CL&D statistic for the last 3 years

Date&Year	**№ of employees**	**Positions**	**Types of trainings**
31st June, 2021	5	x1 Lead Project Manager	German, Management
		x1 Project Manager	German, Management
		x1 Designer	UI/UX
		x1 Middle Developer	Gutenberg, Elementor, WooCommerce

		x1 Junior Developer	ACF, Gutenberg, Elementor
31st June, 2022	10	x2 Project Managers	German, Management
		x1 Senior Developer	Angular
		x1 Middle Developer	Shopify, Beaver Builder
		x6 Junior Developer	ACF, Gutenberg, Elementor, WooCommerce
31st June, 2023	10	x6 Project Managers	German, Management
		x1 Designer	UI/UX
		x1 Senior Developer	DeployHQ, Beaver Builder, Lando
		x2 Middle Developer	Shopify, Generate Blocks

Source: compiled by the author based on the Benefit Rose OÜ organizational chart.

Taking the data for 2022 we can calculate the annual effect of the innovation on the company's profit:

Annual revenue 2022 – €366,000

Billing rate – 2%

$Productivity_{inc}$ – 10%

CL&D cost – €25,000

*Total Profit Increase = (€366,000 * 0.1) + (€366,000 * 0.02) = €43,920*

Net Profit = €43,920 - €25,000 = €18,920

3. Continuous feedback system. Implementing continuous feedback mechanisms, such as regular one-on-one meetings and 360-degree feedback sheets, have fostered communication and personal growth. Improved employee development lead to more skilled and motivated team, resulting in better project outcomes. There were used minimal costs associated with additional working hours for creating tools for

feedback systems. This innovation has just become the first step in the performance monitoring system development and does not have any statistical observations yet.

Innovation in employee motivation and performance monitoring is essential for Benefit Rose OÜ because these spheres suffer in the organization the most. The company urgently needs to adapt to evolving workplace dynamics and drive employee engagement and productivity. First of all, the CEO of Rose OÜ should work on improving the system of motivation and performance control, since he is the main leader and an example of efficiency for his employees. In addition, improving the morale of the team is one of his most important work interests, as it directly affects his income. There are many different methods to improve company performance by motivating employees, but they all depend on the root causes of the demotivation problem. Possible methods and recommendations for improving the system of motivation and performance control are described in the next paragraphs, and are developed on the base of the current company's external and internal operation activities.

2.3. Benefit Rose OÜ staff qualifications and their influence on innovative activity management

The use of cheap labor force refers to the practice of hiring employees or outsourcing services from countries where labor costs are relatively low compared to more developed regions. In the case of Benefit Rose OÜ the work with Ukrainian creates not only the benefit of working with professionals, who the CEO experienced having been in Kyiv, but at the same time Ukraine has the great advantage of law salaries.

The primary stereotype associated with cheap labor is ensuring that the quality of work meets the required standards. Lower costs may sometimes be associated with less experienced or less qualified talent. Experienced the team and working process of the company, I can conclude that there are people of different levels of knowledge and skills. While some guys are absolutely professional in their field of activity, responsible and diligent, others for the same salary can be the absolute opposite. At any level of salary, it is

necessary to carefully select staff, conduct interviews, give test tasks and choose the best. It's just that in the case of low wages, it is much more difficult to find experts who will agree to a low wage knowing their worth.

In spite of this, such approach can offer the real challenges as well. For example, some may view the use of cheap labor as exploitative, especially if the wages offered are significantly lower than what would be considered fair in the company's home country. This is a big problem within Benefit Rose OÜ, because many employees sooner or later realize their value and often leave the company, which provokes a large flow of personnel.

To address the challenges using cheap labor, there should be followed several strict principles which ethically interfere the business policy. First of all, potential remote employees or outsourcing partners must be thoroughly vet to ensure their qualifications and capabilities, and clear communication channels should be established to facilitate effective collaboration despite time zone differences. It influences not only the internal environment, but also the company image on the operating market. Secondly, it is important to maintain ethical employment practices and ensure fair compensation for all employees, regardless of their location. Equality values very high in today’s fast-moving world, so people must feel they are valued because of their knowledge and skills. Finally, on the legal side it is necessary to implement robust data security measures to protect intellectual property and sensitive information. There are advantages both for employees because they feel protected and secured, and for employers because they follow the global humanity trends which put their brand on the higher stage in the international competition.

From all the above, Benefit Rose OÜ barely adheres to all points. This leads to recurring problems with staff due to their dissatisfaction with working conditions or difficulties in finding professionals. For example, if the most important thing for a manager is to speak German, which simplifies the search for new project managers, in the technical field often top-level developers – seniors – are needed to solve complicated bugs, including problems with the security of client websites. Nevertheless, the organization has one significant advantage of providing training and resources to bridge professional and language gaps. Thus, the CEO offers different language courses, as well as development tools studies in order to educate his employees to professional levels. This makes the great

advantage to the company and creates its image of educational web development organization.

On the other hand, it is the well-known fact that staff plays a significant role in influencing the innovation management of any company. The skills, expertise and diversity of the staff can have a direct impact on the company's ability to innovate and stay competitive in the dynamic field. In Benefit Rose OÜ the technical skills and expertise of the staff, including web developers, designers, project and QA managers, are essential for driving innovation. A team with a strong foundation in coding, programming languages and emerging technologies can develop cutting-edge solutions and implement innovative features in web projects. Staff members with creative thinking and problem-solving abilities can contribute fresh ideas and solutions to overcome challenges. Creativity is crucial for designing user-friendly interfaces, implementing unique features and finding innovative ways to address client needs. Diversity in staff qualifications and backgrounds can foster cross-disciplinary collaboration. When developers, designers and project managers work together, they can generate innovative ideas that consider both technical feasibility and user experience.

Ultimately, the decision to use cheap labor force in Benefit Rose OÜ was made after careful consideration of the pros and cons, while ensuring that quality, ethics and client satisfaction remain at the forefront of the company's priorities. By this time, the CEO of the company stays satisfied with his choice and keep on improving the strategy of Ukrainian partnerships.

2.4. Benefit Rose OÜ competition on the international market

Competition, as a phenomenon, is actual for every organization or personality who operates in the world of trade by all means (Ben, 2022). This term is interpreted differently in many areas, but, actually, all the definitions have the same sense (Ben, 2022).

Competition, in the general sense, is competition for the right to obtain most of a certain type of limited resource (Kahn, 2018). Competition between producers is competition between firms for more favorable conditions for the production and sale of goods or services (Kahn, 2018). According to the economist Kenneth Kahn, competition is a mechanism that, in conditions of free market relations, provides such important functions (Kahn, 2018):

- the price-quality ratio regulation;
- manufacturers are focused on customers need;
- manufacturers create new products or services.

Kenneth Kahn said that the market leader is the company that captures most of it. Due to this, it can influence the following parameters (Kahn, 2018):

- change prices;
- raise the bar for quality;
- increase the amount of spending on product or service advertising.

Changes in these parameters have to adapt first of all to a contender for leadership – a company that ranks second in the industry and is struggling to increase its market share (Kahn, 2018).

Kenneth Kahn reviewed several classifications of competition. Depending on the characteristics of goods, services, works, that competitors change, it can be price or non-price. In this case, the cost remains the same (Kahn, 2018).

Depending on the market situation perfect or imperfect (Kahn, 2018).

In turn, imperfect competition is as follows: monopolistic, monopoly, oligopolistic, monopsony, oligopsony (Kahn, 2018).

Modern experience shows that all the most dynamic countries have achieved a high level of competitiveness of their national economies on the basis of the formation of an innovative type of social development (Kahn, 2018).

Up to 80-90% of the annual GDP growth is achieved here at the expense of the innovation sector. Thus, the most important factor in increasing the competitiveness of the national economy is now becoming the stimulation of the innovative development of

countries (Kahn, 2018). In this regard, the issue of assessing the impact of innovations on the competitiveness of the national economy becomes relevant.

The index of global competitiveness was taken as the resulting indicator, which gives the most generalized assessment of the competitiveness of the world economy. It is also important to take into account the indicator that would most fully and adequately characterize the level of innovative development of the national economies of countries (Kahn, 2018).

The assessment of innovative development was carried out from the point of view of both the resource component, which characterizes the innovative potential, and the resultant component, which reflects the effectiveness of the innovation management of the economy. In this regard, our own calculated composite index of innovative development was used as an influencing indicator in the assessment model. It includes 32 private indicators calculated by various international economic and statistical organizations, grouped into two structural blocks: indicators of innovative potential and indicators of innovative activity (European Union, 2023).

The arithmetic mean of the group of indicators of innovative potential and innovative activity in the aggregate is a composite index of the country's innovative development. The calculation includes the development indicators of 79 countries of the world and is summarized (see Tab. 2.2 and Tab. 2.3).

Table 2.2

Regression statistics

R	R^2	Adjusted R^2	Standard deviation
0.949	0.900	0.899	0.21037

Source: compiled by the author based on the European Union Report (2023).

Table 2.3

Regression coefficient

Model	Non-standardized coefficients	Standardized coefficients	t-statistic	Significance

	B	Standard deviation	Beta		
Constant	2.908	0.063		45.912	0.000
Composite index of innovative development	4.074	0.155	0.949	26.304	0.000

Source: compiled by the author based on the European Union Report (2023).

According to Table 2.3, the value of the correlation coefficient for the entire model R=0.949, which is greater than 0.7, indicates the presence of a direct and significantly close relationship between the dependent and independent variables. The coefficient of determination R2 = 0.900 (adjusted R2 = 0.899) indicates that the variation of the human development index by 90% depends on the change in the influencing factor - the composite index of innovative development, and the share of other factors not taken into account in the model accounts for only 10% result factor variations.

As a result, the regression equation has been calculated, which has the following form:

$$I_{comp.} = 2.908 + 4.074 * I_{innov.}$$

Where $I_{comp.}$ is the model value of the country's global competitiveness index; $I_{innov.}$ is the value of the composite index of innovative development of the state. With an increase in the value of the composite index of innovative development of the country by 0.1 points, the value of the global competitiveness index should increase by 0.407 points (0.1 × 4.074), i.e. there is a positive relationship between the variables. At the same time, the equation constant, which acts as an autonomous indicator, within the framework of this model can be considered as a contribution to the value of the global competitiveness index of a set of other indicators that are not included in the model.

The results of the assessment of the level of innovative activities' influence on the competitiveness on the international market is shown in the Fig. 2.4 and Fig. 2.5.

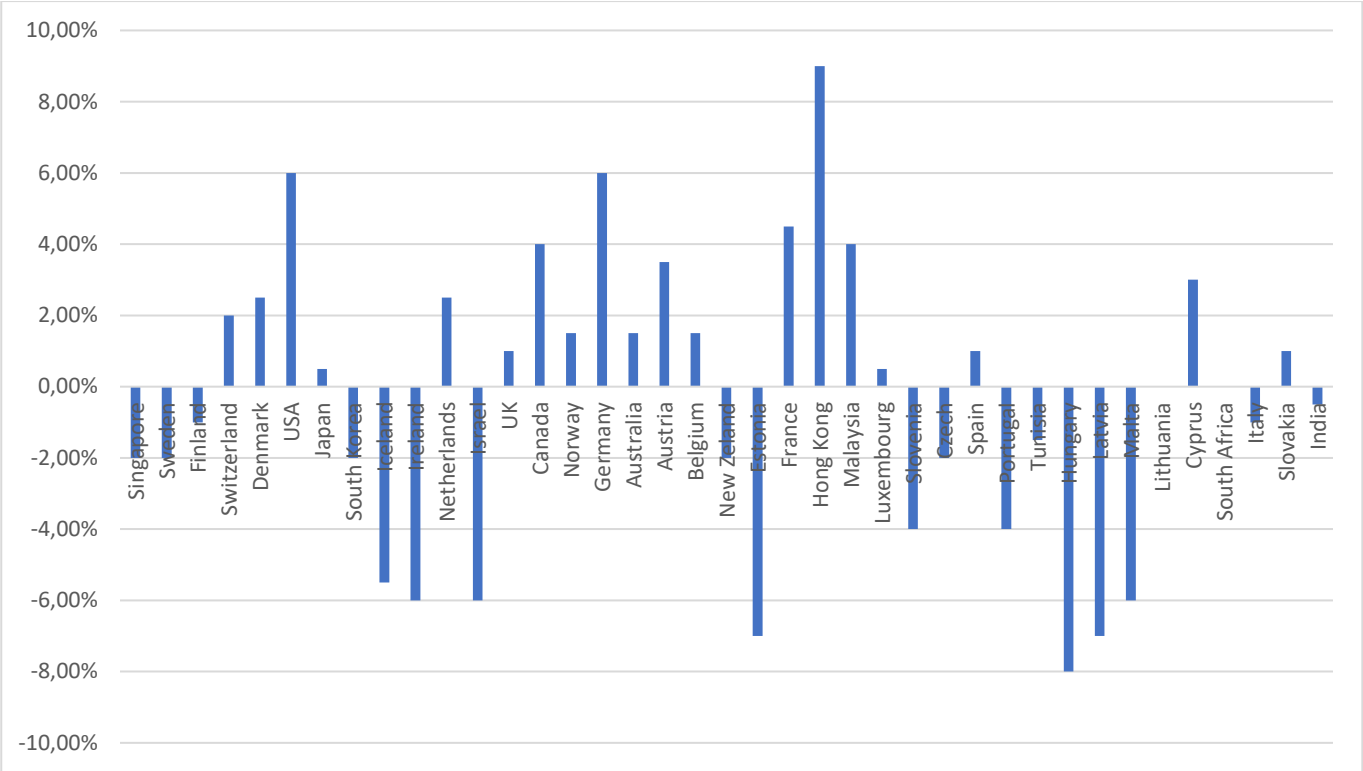


Fig. 2.4. Diagram of deviations of actual values of the Global Competitiveness Index.

Source: compiled by the author based on the European Union Report (2023).

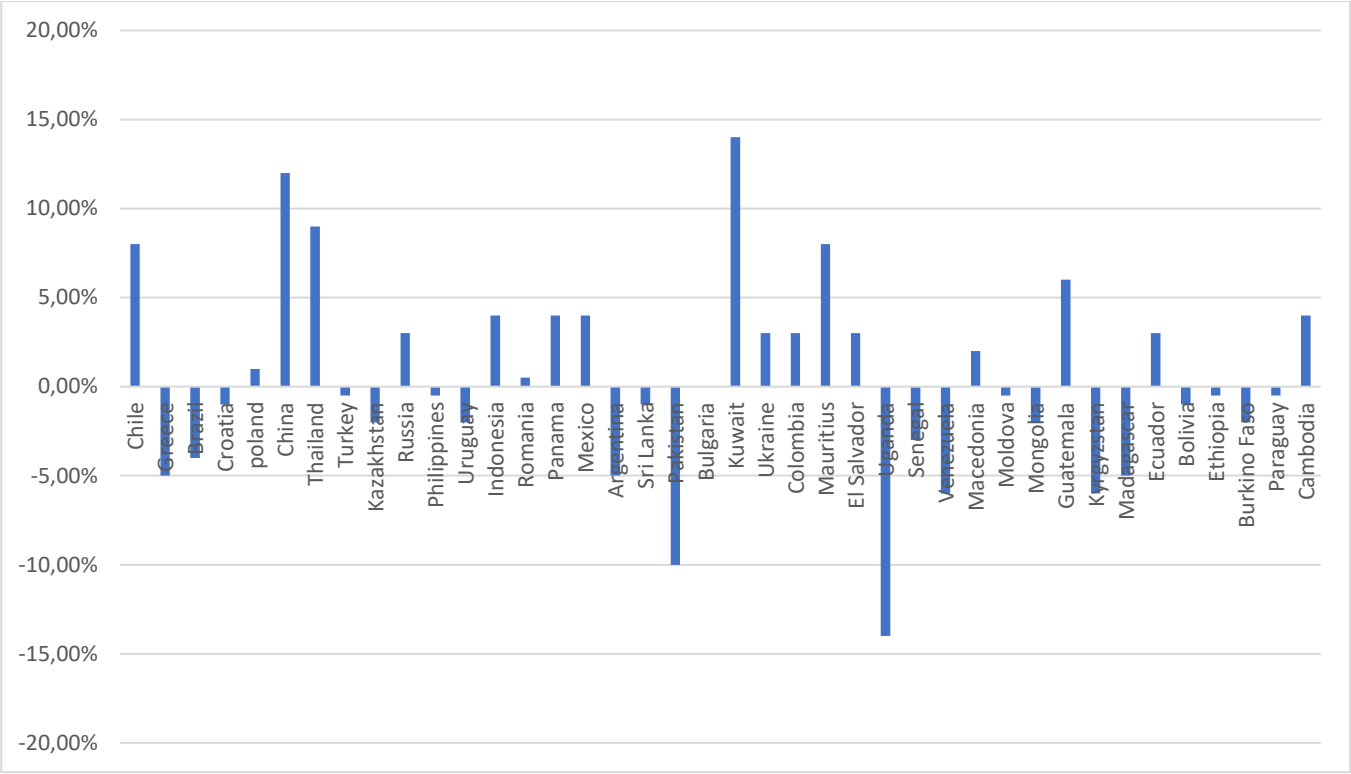


Fig. 2.5. Diagram of deviations of actual values of the Global Competitiveness Index (continue).

Source: compiled by the author based on the European Union Report (2023).

The interpretation does not in any way mean that, for example, the level of competitiveness of Singapore, Sweden, Finland, Japan or Israel turned out to be lower than in Chile, China, Thailand, Kuwait or Mauritius, but only indicates the relative effectiveness of the policy pursued in this area. In our opinion, this is a completely natural pattern, since in order to quickly reduce the gap from the leaders in the global competitiveness index, these countries need to pursue a more active state innovation policy.

Thus, the results of the assessment of the impact of innovations on the competitiveness in the world economy based on the calculation of the composite index of innovative development, the construction of a correlation-regression model showed that the factor of innovative development has a positive and significant impact on the competitiveness of countries in the world economy (Chursin, & Abueva, 2023). At the same time, it should be noted that this is especially true for countries with a low level of

competitiveness due to the existing potential to increase the latter by increasing the level of innovative development (Chursin, & Abueva, 2023).

Competition in web development – the relationship of competition between the subjects of web development, including between IT organizations as the main providers of IT services and products. Such a competition is the most important driving force behind the quality assurance of products and services (Chursin, & Abueva, 2023).

Competition in web development has its own significant differences from competition in business: an extremely high scale of competition in web development, its price-depended nature.

The instruments of competition in web development are the high quality of final products ordered by individuals and businesses, rich technical base, availability of competent specialists, original IT tools and technologies, convincing projects and development programs, the ability to work with different types of customers, the quality of elaboration of project ideas and applications, vibrant and energetic initiatives, effective work with the media, etc (Chursin, & Abueva, 2023).

Paying significant attention to the issues of competition in web development, it is important to keep in mind that competition in this field is not the only way of interaction between the organizations. There are also cooperation, joint projects and partnerships, which are competently organized by companies and play an equally important role.

Effective competition in web development assumes that a company has a good idea of its competitors. For example, web development organizations, that provide IT services similar to the institution in question, are objectively and/or consciously in competition with it in the market for these services, as well as other organizations (Chursin, & Abueva, 2023).

For the development of IT sphere, like any industry, healthy and fair competition is a very strong incentive factor. Therefore, sometimes companies that do not yet see competitors or do not have them are recommended to “invent them for themselves” in order to take better care of their own competitive advantages and better satisfy their customers (Chursin, & Abueva, 2023).

It is all the more important to know the experience of competitors for those organizations that are really in a competitive situation (Chursin, & Abueva, 2023). Indifference

to competition in web development and competitors in modern conditions leads companies to stagnation and loss of previously won positions (Chursin, & Abueva, 2023).

When building their relationships with real or potential competitors, it is important for the subjects of intra-school management to strive not for confrontation with them, but for cooperation, compromise and partnership within wider web development systems, naturally, not forgetting about the interests of their own philosophy and its customers (Chursin, & Abueva, 2023).

Among the main competitors of Benefit Rose OÜ, 3 great organizations can be highlighted: The First The Last, Phil Poosch Consulting GmbH and RaapSteinert Kommunikation GmbH. Each of these companies operate in the same field, but in the different way. Each has its own advantages which distinguish them among others. An important thing is to be aware of the competitors not only for controlling the position on the competing arena, but also for having the opportunity to adopt some ideas from the competitors (Chursin, & Abueva, 2023).

The description of the main competitors of Benefit Rose OÜ is presented below.

eCommercely is a leading e-commerce company that specializes in developing shopping platforms for providing a diverse range of products to customers worldwide. With a commitment to exceptional customer service, innovative technology and a seamless shopping experience, eCommercely stands out as a preferred destination for shop owners.

eCommercely places a strong emphasis on user experience. They are doing websites designed with a user-centric approach, ensuring intuitive navigation, easy search options and a visually appealing interface. This enhances customer engagement and encourages longer browsing sessions.

The company employs advanced data analytics and machine learning algorithms to offer personalized product recommendations to customers. By understanding individual preferences and purchase history, eCommercely delivers relevant suggestions, leading to higher conversion rates. It has also strategically partnered with a network of reliable logistics providers to ensure swift and secure delivery of orders. Customers can choose from various shipping options, including expedited delivery, enhancing their shopping experience. The company offers services to shops with vast and diverse product catalogs, ranging from

electronics and fashion to home goods and specialty items. This variety caters to a broad customer base and positions eCommercely as a one-stop web development company for various needs.

By capitalizing on these competitive advantages, eCommercely has established itself as a top player in the e-commerce industry, attracting and retaining a loyal customer base and consistently outperforming competitors. Benefit Rose OÜ, on its turn, is doing small Shopify or WooCommerce orders which does not really stay for the company's features. Benefit Rose OÜ works rather with WordPress development, so that eCommercely is an outstanding competitor for the organization and can be considered as a new projects source and the company to learn from.

Phil Poosch Consulting GmbH is a SEO company which helps businesses improve their online visibility and search engine rankings, ultimately driving organic traffic and potential customers to their websites. There are such potential competitive advantages, that this company can offer, as proven track record, local SEO expertise, content marketing creation and data-driven approach.

Phil Poosch Consulting GmbH has a team of skilled professionals who understand the intricacies of search engine algorithms, website optimization and technical SEO can deliver more effective strategies and solutions. It offers a wide range of SEO services, including on-page optimization, off-page link building, content creation, technical SEO audits and local SEO, provides clients with a one-stop solution for their SEO needs.

Staying current with the latest search engine algorithm updates, SEO trends and best practices ensures that the company's strategies remain effective and adaptive to changes in the digital landscape. Providing clients with regular and transparent reports on key performance metrics, such as keyword rankings, organic traffic growth and conversion rates, fosters trust and accountability, as well as offering excellent customer support and prompt communication set the company apart in terms of client satisfaction.

Phil Poosch Consulting GmbH partners with other digital agencies or complementary businesses that broadens the company's service offerings and create opportunities for cross-promotion. Thus, Phil Poosch Consulting GmbH and Benefit Rose OÜ are close partners in the field of web development and support. While Benefit Rose OÜ performs technical tasks

in design and development of websites, Phil Poosch Consulting GmbH takes care of content and SEO set ups. For several years these companies are collaborating effectively on the German market and serve as an example of a successful partnership in the web development industry.

RaapSteinert Kommunikation GmbH offers both web development and filming services and provides a unique blend of creative and technical solutions to its clients. Offering both types of services under one roof allows clients to seamlessly create and showcase their content online. This integration can lead to cohesive branding and a unified digital presence. Such expertise combination can result in innovative projects that leverage both visual storytelling and interactive digital experiences.

RaapSteinert Kommunikation GmbH's strategy of combining services can lead to cost savings for clients who would otherwise need to work with separate providers for filming and web development. Having one company handle both aspects can streamline project management and reduce coordination time. Clients appreciate the convenience of getting multiple services from a single provider, simplifying the process of bringing their vision to life.

The competitive advantages of RaapSteinert Kommunikation GmbH emphasize the synergy between web development and filming services and set the company apart and provide clients with a holistic approach to their digital content needs. This company handles diverse projects, from creating promotional videos for websites to developing WordPress websites with integrated videos. In the second case, Benefit Rose OÜ is also determined as a partner of RaapSteinert Kommunikation GmbH because it performs development projects for its future promotion by RaapSteinert Kommunikation GmbH.

Thus, Benefit Rose OÜ transforms the most of the competitors in its customers creating partnerships which allows to perform what the company specializes in. It makes the greatest advantage among others as, actually, the company is able to gain benefits from any competitor available.

CHAPTER III. THE WAYS OF INNOVATIVE ACTIVITIES MANAGEMENT INVOLVING STAFF QUALIFICATIONS

3.1. Research of public opinion on staff qualifications in the scope of innovative activities management and its basics for improvement of business development

Researching public opinion on staff qualifications within the realm of innovative activities serves as a crucial endeavor for advancing business development. In today's rapidly changing global business landscape, innovation is often touted as the key driver of success and growth for organizations. However, successful innovation is not solely dependent on cutting-edge technology or visionary leadership; it hinges significantly on the qualifications and competencies of the staff responsible for bringing creative ideas to fruition. Understanding and addressing the public's opinion on staff qualifications in the realm of innovation is crucial for shaping a strong foundation to improve business development. This article explores the importance of public opinion research in this context and how it can drive innovation and enhance business growth.

Innovation and business development are inextricably linked. Innovation encompasses the creation and application of new ideas, processes, products, or services that can lead to improved efficiency, differentiation, or value creation. Business development, on the other hand, encompasses activities designed to expand a company's reach, profitability, and overall success. Innovations can serve as catalysts for business development by opening new markets, reducing costs, or increasing revenues. To foster innovation, an organization must first focus on its most valuable asset: its people.

The age of high-speed technologies and increasing competition is leading companies to understand the presence of hidden unrealized opportunities and the need to form dynamic capabilities of the company, allowing them to ensure a stable position in a competitive market. The process of developing dynamic competencies in the face of constant

technological change becomes complex. The resource aspect for the process of forming dynamic capabilities is the development of the innovative potential of personnel, which allows them to flexibly respond to market demands, create innovations and make an important contribution to the development of the organization. Innovation is at the core of an organization's success because it allows them to improve product quality, increase efficiency, reduce costs by meeting changing customer needs, increase sales and profits, gain greater market share, and differentiate themselves from competitors.

Formation of innovative potential, its implementation and expansion is the key task of personnel management (development) specialists. Personnel development in an innovation-oriented organization is a topic that requires detailed consideration and development of specialized approaches.

The traditional personnel development system - more often positioned and understood as a system of personnel training and development - is more focused on the formation of professional competencies consisting in the acquisition of knowledge, skills and abilities. The main objective of the traditional personnel development system is the formation of professional competencies necessary to solve professional problems. It is quite rare to find an organization that has built a system of advanced training that allows it to prepare personnel to solve the problems of the future. This task is extremely difficult due to the fairly high degree of uncertainty in which most organizations operate. The formation of professional competencies occurs through the formation of a model of competencies required by a specialist, diagnostics of existing competencies, construction of a system for transferring (receiving) new knowledge, acquiring skills and practicing skills required in the workplace. As a rule, this is followed by an assessment, and the process of obtaining new knowledge is resumed, but only when the need for new knowledge arises.

The traditional personnel development system is characterized by the following characteristics:

- frequency (most often, certain categories of personnel are subject to training and development, as a rule, either key employees or low-skilled employees; sometimes the training process is carried out during certain periods of the training cycle);

- cyclicality (there are certain cycles of resumption of learning, but often new knowledge does not differ in its qualitative composition and differs little from previously formed knowledge);
- static (as a rule, programs and courses do not differ significantly from each other);
- directiveness (specialists are asked to take certain courses, often repeated every year);
- systematic (building a system is possible with minimal effort, but with minimized individualization).

Traditional systems of training and personnel development, as a rule, have the possibility of typology, are most often compensatory in nature and can be effective with a low degree of uncertainty in the operating environment of the enterprise. The basic methods of training and development are group format events: seminars, trainings, advanced training courses.

The personnel development system can be presented in cycles:

1. competency model – diagnostics of existing competencies – training (development) – diagnostics of acquired competencies – formation of a personnel reserve – training (development) – personnel rotation – (then the cycle is repeated and, unfortunately, most often at the same quality level) ;
2. competency model – diagnostics of existing competencies – training (development) – diagnostics of acquired competencies and after a certain period of time repeating the cycle or moving to a new stage of training (development)

Most often, the traditional personnel development system is an integral element of personnel policy, which includes the processes of search and selection of personnel, adaptation, motivation, corporate culture, etc. The process of personnel training and development is coordinated by personnel management specialists or personnel training specialists, also known as Most often they are the initiators of collecting training needs from heads of structural units.

The personnel development system of an innovation-oriented organization differs significantly from the traditional system of personnel training and development. When determining the criteria for developing the innovative potential of the personnel of a

knowledge-intensive enterprise, a number of specific characteristics of a particular enterprise should be taken into account.

In accordance with this, competencies that allow one to function effectively in conditions of uncertainty with a certain degree of risk, with intensive updating of given conditions, with constant changes, in situations of increasing processed information and improving its qualitative composition, in conditions of , when it is necessary to create innovations and, introducing them, further improve what has been created, bringing innovations to a new level of their development. The sufficiency and effectiveness of the acquired key competencies of employees in the form of acquired knowledge, skills and abilities in an innovative environment is controversial. Key professional competencies can be an excellent basis for the formation of dynamic abilities, but not a self-sufficient substance for the effective functioning of an employee in the conditions of innovative development of the company.

The innovation management of a company, as a rule, is manifested in innovative activity, and personnel must be receptive to innovation and take an active position in innovation management. In Japanese organizations, there are usually 2 levels of formation and implementation of a model of innovative development of human resources: the organizational level and the individual level. Thus, there is no doubt about the need for an integrated approach to the formation of competencies necessary for the personnel of an innovation-oriented enterprise. To form the image of an employee of an innovation-oriented enterprise, a set of conditions and the functioning of a personnel development system that goes beyond the scope of traditional training is necessary. And it is important, first of all, in our opinion, to recognize the presence of innovative potential of personnel, certain hidden implicit opportunities that can be realized under certain conditions and recognition of this fact will form the basis for the process of transforming the personnel development system into an innovative one. -oriented company.

The object of development in innovation-oriented companies is the innovative potential of each individual employee included in the process of innovative development of the organization, and the formation of key competencies and abilities to build them and implement them in conditions of change, which will allow the formation of dynamic ways

– details of the organization. For the disclosure and subsequent implementation and development of potential, it is necessary to understand the presence and level of innovative abilities of each individual employee involved in the process of innovative development of the organization. It is important to note that in addition to activities aimed at identifying and developing abilities, an important element of the system is the presence of an innovation climate and an innovation leader ready to provide support in development. An important element is the formation of an environment that develops and stimulates innovation management, creating conditions that provide the opportunity for self-realization and self-development. The next element of the system is the formation of a motivational mechanism that ensures employees' readiness for innovation, their self-involvement and innovation management. An important element of the personnel development system is providing the opportunity for innovation management or, if it slows down, stimulating it.

The last element will create the prerequisites for the creation of a self-developing and self-regulating system. The role position of a personnel management (development) specialist is changing. It is increasingly moving into the category of methodological and organizational support, business partnership, since the process of innovative development itself is the path of organizational leaders and heads of structural divisions, who, in turn, must not only be able to include staff in innovative activities and manage them , but they themselves are in a state of innovative development and improvement. Consequently, the personnel development system in an innovation-oriented organization must have openness, business orientation and dynamism, continuity, division into phases, complexity and orientation towards the presence of components as a whole and their self-development

Managing the system for developing innovative potential requires certain skills, since it must contain elements of chaos (freedom) and order in certain proportions. Personnel development in an innovation-oriented company represents the basic essence of personnel policy and is much broader than the understanding of personnel development as its component element used in the traditional personnel management model, because it includes both the formation of an atmosphere and the improvement management competencies, and leadership development. The system being created for developing the innovative potential of personnel (IPI) of an individual company is unique; it cannot be created as a carbon copy.

Due to the dynamism of development, the environment in which the IPP development system is created has a certain degree of uncertainty, and therefore must itself have a high degree of flexibility and its own potential (certain existing opportunities that have not yet been realized).

The system for developing the innovative potential of personnel should use methods of individual, group and team development, since in a situation of uncertainty that requires a quick response, and in a situation where it is necessary to create something new, innovative, a combination of these three components will be required. Professional individualism and emphasis on building individual competencies fade into the background, since an organization in which innovation management depends on the individual characteristics of some of its employees cannot be sure of long-term innovative development. The processes of creating a system of innovative development become important, in which the implementation and enhancement of the innovative potential of employees, as well as the achievement of a state of synergy in their development, become an important component of the innovative development of the organization.

Any innovative development is not only the main innovation process, but also the development of a system of factors and conditions necessary for its implementation, i.e. innovative potential (Ben, 2022). And only under the conditions of a systematic approach, supported by a change in the company’s operating philosophy, is it possible to achieve results in the development of the innovative potential of personnel, forming dynamic abilities and ensuring long-term successful operation. In a situation where one of the elements is not functioning, the overall effectiveness of the innovation process in the company may be at risk, since the personnel development system of an innovation-oriented organization is a complex, dynamically developing substance that has an object of management - innovation potential and achieves its results only in situations of competent system construction.

Innovation also encompasses creative problem-solving, product development, and process improvements. To achieve these goals, an organization must have a workforce with the right mix of skills, knowledge, and experience. The staff's qualifications, including education, training, and expertise, play a pivotal role in driving innovation. When employees

possess the necessary qualifications, they can better contribute to the generation and implementation of novel ideas, ultimately leading to a competitive advantage in the marketplace.

One of the foundational aspects of staff qualifications is expertise. Employees who possess specialized knowledge and skills in their respective fields can drive innovative activities. Whether it's a software engineer creating cutting-edge technology or a marketing professional who understands the nuances of consumer behavior, qualifications provide the foundation upon which innovation can thrive. Moreover, innovative activities often involve overcoming challenges and solving complex problems. Employees with strong qualifications are better equipped to tackle these issues. They possess the analytical skills, critical thinking abilities, and domain knowledge necessary to develop creative solutions.

In today's fast-paced business environment, the ability to learn and adapt is paramount. Qualified staff members tend to be more adaptable and receptive to change. They are more likely to embrace new ideas and technologies, making them essential drivers of innovation. Also the ability to communicate ideas and collaborate effectively is crucial for innovative activities. Qualified employees are typically better communicators, enabling them to share their insights, cooperate with team members, and drive projects forward.

The presence of qualified staff creates a solid foundation for business development in several ways. Firstly, innovation often leads to the development of unique products, services, or processes that can set a company apart from its competitors. This competitive advantage can lead to an increase in market share and revenue. Secondly, innovation can streamline internal processes, reduce operational costs, and enhance overall efficiency. Employees with the right qualifications can identify areas for improvement and implement changes effectively. Also, innovative solutions can address customers' needs more effectively, leading to higher levels of customer satisfaction and loyalty. Staff qualifications are crucial in understanding and catering to customer demands. What is more, innovations can open up new markets and revenue streams. Qualified employees are more likely to identify and capitalize on these opportunities, leading to business growth. Finally, a company with a reputation for fostering innovation and employing highly qualified staff can

attract top talent. This influx of skilled individuals can further accelerate the development of the business.

Staff qualifications play a central role in driving innovative activities, which, in turn, serve as the bedrock for business development. In the ever-evolving business landscape, companies that prioritize the development and retention of a highly qualified workforce are better positioned to adapt, innovate, and thrive. The synthesis of staff qualifications, innovation, and business development forms a virtuous cycle, propelling companies to success in a dynamic and competitive marketplace. As businesses continue to navigate the challenges of the modern era, recognizing and nurturing the connection between staff qualifications, innovation, and business development is essential for long-term growth and success.

The productivity of an employee is directly proportional to the success of any organization. Therefore, managers and recruiters often use non-material motivation.

When choosing a method of influencing his subordinates, a manager must ask himself: how will employees react to certain measures? The answer to this question can be given by the science of socionics, according to which people are divided into groups in accordance with the ways in which they prefer to receive and give out information. At the same time, it is known what motivation methods can be applied to each type. This will be the targeted motivation that the employee really needs in order to stimulate him to effectively perform a particular job.

Socionics introduces the concept of “stimulus groups”. There are only four of them: “Prestige”, “Uniqueness”, “Interest” and “Welfare”:

1. “Mood for status, prestige” - such people love recognition and influence. They love honor and attention to their personality. They can be motivated by career advancement, be it vertical career growth or horizontal. The basis here is a sense of self-worth.
2. “Mood for uniqueness” - here the staff is focused on activities in completely new and interesting projects. People in this group love progress. The main thing they need is a free schedule and the latest technology, and that’s it! They are ready to work day and

night, you don’t even have to motivate them. And if you give them the opportunity for personal growth through self-education, they will remain in your company forever.

3. “Mood for personal interest” - always focus on their needs and desires at a particular moment. The main thing here is to let them understand why they personally should work in the company, personal benefits, so to speak. It is also important for such people to self-learn in the process of work, because they want to learn always and everywhere. They always deeply and comprehensively study the issue that interests them, and are also happy to advise everyone. They make excellent consultants.
4. “Mood for well-being” – such employees place convenience and comfort above all else. And they even need to receive a salary in accordance with their physical and mental activity in order to have a good rest and replenish their strength. Their motivation is to increase the level of comfort in the workplace, as well as social. package aimed at improving health.

Thus, to summarize, we can draw the following conclusion: the motivation of innovation management should be a continuous process, conditioned by a single set of interconnected elements (Chursin, & Abueva, 2023).

Today, many employees of organizations actually have invaluable experience, skills, knowledge and abilities, but do not fully reveal their potential at their enterprises (Chursin, & Abueva, 2023). The reasons for such behavior can be different, but mainly they include the lack of personal benefit (and not necessarily in material terms), meaning, and sometimes even considerations of one’s own safety, since the assertion that initiative is punishable is firmly entrenched in people’s minds.

The main idea of the motivational mechanism should not be to force subjects to make any changes, but to awaken interest in the very content of innovation management (Chursin, & Abueva, 2023). Of course, it is impossible to say exactly how detailed the motivation mechanism works, what strength the motivational impact should be and what result all this will lead to, because all this is very individual (Nagy, & Pelser, & Vaiman, 2023). But by learning to understand the structure and sequence of action of the motivational mechanism

of innovation, you can significantly increase its effectiveness (Nagy, & Pelser, & Vaiman, 2023).

The experience of developed industrial countries shows that for the long-term sustainable growth of the economy, it is necessary to transfer it to an innovative development path. This requires qualified specialists in the field of innovation, who could create an innovation chain: market analysis – scientific research – experimental design – technological design – development of an industrial design – product promotion to the market.

World experience shows that the training of personnel for innovation has two directions. The first is the training of managers capable of managing innovation processes at various levels. The second is the training of innovation managers, marketers, analysts, etc. In order to solve this problem, a multi-level system for staffing the sphere of innovation should be created.

In accordance with the concept of the innovation system, in order to implement the task of training personnel for innovation activities, it is necessary to carry out the following priority measures:

- develop a methodology for predictive characteristics of the prospective need for scientific personnel and specialists involved in the implementation of priority areas for the creation and development of new and high technologies;
- accelerate the creation of state intersectoral research and educational centers in priority areas of science and technology; the main tasks of these centers should be: development of relevant scientific and technical areas, development of new technologies, retraining and advanced training of leading scientific personnel and heads of industrial enterprises in innovation management, assistance to sectoral ministries and departments in the introduction of new and high technologies;
- improve the system of training, retraining and advanced training of scientific personnel and innovation management specialists by creating state and non-state educational centers and departments for training and retraining specialists in the field

of innovation management and commercialization of the results of intellectual activity in the field of science;

- to provide for the organization in universities of an extensive system of training specialists in the field of innovation, innovation management, transfer and commercialization of technologies, theory and practice of legal protection and use of intellectual property, management of innovative projects, their promotion to the market, for which purpose to provide an appropriate course in the curricula of higher education establishments.

To train specialists in the field of innovation, the following should be involved:

- higher education system: training of specialists with higher education in new specialties in the field of innovation, including training of highly qualified scientists, innovation management specialists on the basis of a state order, as well as on the initiative of business entities;
- system of postgraduate education: retraining and advanced training of managers and specialists in the field of public administration; retraining and advanced training of specialists in priority areas of scientific, technical and innovation activities;
- system of postgraduate education: training of highly qualified personnel, taking into account the needs of the development of science and sectors of the economy;
- a system of short-term courses, seminars and conferences to improve the skills of specialists in the field of innovation.

All the policies and regulators mentioned above have a high impact on how Benefit Rose OÜ promotes its web services, no matter which culture of the target audience for. But the great accent should be given to the fact that the company, in addition to IT services, is focused on training activities and educates specialists without work experience to professionals in their field. This is facilitated by the fact that Estonia places a strong emphasis on education and skills development in the IT sector. The country has a well-developed education system that produces a highly skilled workforce in areas like software development, web design, cybersecurity and data science. The availability of a skilled workforce is crucial for the success and growth of IT service activities. But also the professional workforce is quite expensive in terms of European salaries for such a small

company as Benefit Rose OÜ. For this reason, the owners of the company did a little research and decided to train young people to work from scratch or with minimal knowledge, which, in their opinion, would be much cheaper than hiring professionals.

As time has shown, the founders were right. At the moment, the company uses a training system close to Estonian education within the organization. The current CEO, together with the HR department, are looking for young people from Ukraine, mostly without work experience and an established field of activity. This is due to the fact that people are easier to teach than to retrain. The Board of Directors prefers the Ukrainian workforce for the reason that one of the owners of the company was in Ukraine several times as a tourist and he managed to get a good experience in Kyiv with professionals in his field. Later, he visited the capital of Ukraine for various business reasons, which made him interested in Ukrainian ambitious youth.

At the moment, Benefit Rose OÜ has 80% of employees who came to the company without any work experience. Most of them have already managed to grow to middle levels, and some have even become lead designers, programmers or project managers. But another feature of the company's operational activity emerged from here is that it has a large personnel turnover. The organization has a poorly developed career ladder system, so as soon as an employee grows to the maximum professional level, he or she leaves the company to realize him- or herself in a more potential organization. What surprised me was the fact that, according to the CEO words, the training system implies a large turnover, as in any educational institution. As soon as a person acquires all the available knowledge and skills in the company, he or she "graduates" from it.

Despite the fact that retraining and advanced training do not sufficiently provide the economy with highly qualified personnel, nevertheless, thanks to these forms of training, specialists with a certain amount of knowledge in the field of innovation will appear in the countries in the near future. In addition, heads of enterprises and organizations will have the opportunity to improve their skills in certain areas of innovation in order to ensure effective management of innovation processes in the enterprise.

In connection with the foregoing, the adoption of urgent measures to create a multi-level system of continuous training, retraining and advanced training in new specialties in the field of innovation is of particular relevance. The strategic goal of this system should be the creation of state and non-state educational institutions, centers and departments for training specialists in the field of innovation, the development of educational and professional standards for innovative specialties in accordance with the goals and objectives of the innovative development program.

3.2. International innovation activity management and staff qualifications differences of developed countries, CIS countries and Ukraine

The state innovation activity management is directed towards the future, it needs flexibility, dynamism in a single system of scientific, technological, infrastructural, regional and educational policies (Ben, 2022). In each country, innovation management is carried out in its own way, taking into account the possibilities for the development of the economy, natural and intellectual resources (see Annex I) (Ben, 2022). By the nature of the state's innovation activity (Ben, 2022), it can be subdivided into the following categories:

- countries focused on the diffusion of innovations, in which the main focus is on education, product standardization and joint programs of the state and the private sector;
- countries striving to achieve world leadership in certain areas with the help of large-scale programs;
- countries that carry out continuous structural and technological modernization on the basis of the state innovation strategy and developed infrastructure.

Innovation has become a cornerstone of economic growth and competitiveness in the 21st century. It's a driving force behind productivity improvements, technological advancements, and the creation of new industries. While innovation is a global phenomenon, it is not evenly distributed. Developed countries, CIS (Commonwealth of Independent

States) countries and Ukraine exhibit distinct disparities in their approaches to innovation and the qualifications of their workforces.

Developed nations, often referred to as high-income or advanced economies, have consistently excelled in innovation. This success can be attributed to such factors as investment in Research and Development, strong intellectual property protection, high-quality education systems, access to capital and supportive business ecosystems.

Developed countries allocate significant resources to R&D, whether through public funding, private investments, or collaborations between academia and industry. This commitment to R&D fosters a culture of innovation. Robust legal frameworks for protecting intellectual property rights encourage companies to invest in research and development without fearing imitations or counterfeiting. Developed countries prioritize education, resulting in highly skilled workforces. Their universities and research institutions are renowned for producing cutting-edge knowledge. Easy access to venture capital and financial resources facilitates the growth of startups and innovation-driven enterprises. Developed countries have created an environment conducive to entrepreneurship and innovation, with incubators, accelerators, and a culture of risk-taking.

In foreign countries, much attention is paid to motivating employees; there are even competitions between employees and enterprises on the quality of products sold. Of course, there is an award ceremony in the future. Undoubtedly, this helps to adapt domestic products to competitive conditions, both in the domestic and global markets.

Innovation management can also be increased by increasing advance payments to staff. It is believed that then the staff will be more responsible and more enthusiastic about the quality and innovative component of their work, which will ultimately improve the quality of the product. In another way, this approach can be said this way: the higher the expected cost, the higher the quality of the product and the activation of labor.

It is impossible not to agree that in most cases motivation is a well-constructed remuneration system. However, this method is not as effective. Employees often talk about it as saving money on their work (did not fulfill the plan, made a mistake - received less money).

In the United States of America, a characteristic feature of the US innovation policy is the development of small innovative businesses. Small firms were specially created to implement the ideas of a particular scientist or inventor; the use of scientific by-products; maintenance of the creative process; industrial development of innovations and their entry into the market (Ben, 2022).

In addition to all of the above, the state contributes to the formation of the innovation force which is highly-qualified staff; there is a practice of free issuance of licenses for the commercial use of inventions patented in the course of budget research and which are the property of the federal government (Ben, 2022). The state programs provide for the state's share participation in institutions that make direct investments in innovative companies and allows its employees to use it for educational purposes (Ben, 2022).

Japan's success in the development of innovation processes is due to close cooperation between government departments and private corporate structures based on the consensus of the parties involved (Ben, 2022). The methods of innovation management and its scientific and technological development in Japan do not fundamentally differ from those used in other developed countries (Ben, 2022), however, there are characteristic features characteristic only of this country:

- targeted distribution of financial resources provided by private banks and their concentration in priority sectors;
- assistance to enterprises in the acquisition of advanced foreign technology;
- control over scientific and technical exchange with foreign countries.

The most important directions of the state scientific and technical maintenance of Japan are formulated in the "Basic plans for the development of science and technology," which are adopted every five years (Ben, 2022). The priority areas of the "Second Basic Plan" are four: life sciences, informatics, nanotechnology and the production of new materials (Ben, 2022). Training people to act professionally in these areas is the basis of the country's innovation policy (Ben, 2022).

Support for strategic industries in the countries of the European Union is carried out both at the state and interstate levels (Ben, 2022). Countries, in order to resist the heightened

competition from firms from the USA and Japan, are joining their efforts to raise the scientific, technical and technological level of national companies (Ben, 2022).

Research funds are allocated on the basis of the quality of projects, regardless of the degree of participation of the country in the project or national quotas (Ben, 2022). Information and research results are available to all project participants, regardless of their financial contribution, each participant is provided with a free license (Ben, 2022).

The main operating principle of the EU is the complementarity principle, i.e. The EU takes action only when the member states cannot achieve certain goals on their own, or when these goals, due to their importance and scale, can only be solved jointly (Ben, 2022).

The CIS, comprising former Soviet republics, faces unique challenges in fostering innovation. Despite shared historical ties, each CIS country has its approach to innovation. Many CIS countries inherited centralized economic systems from the Soviet Union, making the transition to a market-oriented economy challenging. Access to venture capital and private investment remains limited in many CIS countries, hindering the growth of innovative startups. A substantial challenge faced by CIS nations is the emigration of talented individuals to developed countries in search of better opportunities, leaving a deficit of skilled professionals. Protection of intellectual property varies across the CIS, making it essential to address legal inconsistencies to encourage innovation. Government initiatives in the CIS can play a significant role in driving innovation, but they need to evolve to support a more dynamic and competitive market.

Integration in the field of innovations is observed within the CIS countries. In 2001, the CIS Economic Council approved the Concept of Interstate Innovation Policy of the Member States of the Commonwealth of Independent States (Ben, 2022). The same decision provided for scientific support for the implementation of the Concept through annual sociological measurements of the main indicators characterizing the innovative potential (Ben, 2022). For these purposes, a research program of scientific research was developed, providing for the study of the innovative potential of staff of both industrial enterprises and scientific and technical organizations (Ben, 2022).

In accordance with the terms of reference approved by the CIS Economic Council, the task was set to comprehensively approach the study of innovation potential as a socio-economic and technological phenomenon, to give its theoretical and empirical interpretation, to determine and measure the most important indicators characterizing the potential (Ben, 2022).

Ukraine, as a CIS country, exhibits a unique set of circumstances and challenges related to innovation and workforce qualifications. Ukraine has a well-educated workforce with a strong emphasis on STEM (Science, Technology, Engineering, and Mathematics) disciplines. The country is renowned for its IT professionals and software development expertise. Ukraine has emerged as an outsourcing hub for software development and IT services. This sector contributes significantly to the country's economy and innovation landscape. Political and economic instability has hindered Ukraine's innovation potential. Entrepreneurs often face difficulties due to regulatory uncertainties and corruption. The country, like other CIS nations, has experienced a brain drain. However, it has also seen a "brain gain" as emigrant professionals return to participate in the country's innovation ecosystem. Ukraine is gradually building a supportive environment for startups and innovative enterprises, with accelerators and incubators fostering entrepreneurship.

Innovation activity in Ukraine is carried out in accordance with the Law of Ukraine "On Innovation Activity" (see Annex J) (Ben, 2022). The main goal of the state innovation policy in Ukraine is the creation of socio-economic, organizational and legal conditions for effective reproduction, staff qualifications development and use of the country's scientific and technological potential, ensuring the introduction of modern environmentally friendly, safe, energy and resource-saving technologies, production and implementation of new types of competitive products and education of young perspective innovative professionals (Ben, 2022).

The main issue of state innovation activity is the determination of priority areas and investment education in the area of innovations that must meet both the long-term national interests of the state and the urgent task arising from the current state and structure of the Ukrainian economy (Ben, 2022).

Both the EU and Ukraine demonstrate strengths in IT innovation and a skilled workforce. The EU leverages its established infrastructure and investment while Ukraine showcases rapid growth and agility in adopting emerging technologies. Collaboration and knowledge exchange between these regions could further enrich both in terms of technological advancements and human resources development in the IT sector.

In conclusion, the differences in international innovation activity and staff qualifications among developed countries, CIS countries, and Ukraine are influenced by various historical, economic, and political factors. While developed countries enjoy well-established ecosystems for innovation, CIS countries and Ukraine face unique challenges, such as limited access to capital, political instability, and emigration of skilled workers. Nonetheless, these challenges have not prevented these regions from making significant contributions to the global innovation landscape, demonstrating the resilience and adaptability of their entrepreneurial and innovative spirit. To bridge these gaps, increased investment in education, research, and business support, as well as regulatory improvements, can help foster innovation and qualifications on an international scale.

3.3. Establishment of ways for improving business development in the framework of management of innovative activities and improvement of staff qualifications

In today's fast-paced and ever-evolving business landscape, staying competitive and thriving necessitates a proactive approach to innovation and continuous development. Businesses are constantly seeking ways to improve their processes, products, and services to meet the changing demands of the market. A crucial aspect of this endeavor lies in nurturing a workforce with the right qualifications and fostering a culture of innovation. This text delves into the importance of establishing ways and opportunities for improving business development through innovative activities and staff qualifications.

Innovation is the driving force behind business development in the modern era. It is the cornerstone of a company's ability to adapt to change, gain a competitive edge, and

sustain growth. By fostering a culture of innovation, businesses create an environment where new ideas, processes, and products can flourish. This not only helps in staying ahead of the competition but also opens up new opportunities for revenue and market expansion.

Innovative development of an organization, allowing to ensure its long-term and successful functioning in a competitive environment, requires a revision of personnel development processes and approaches to this process. Considering the fact that personnel have the ability to build up competencies formed in the conditions of an innovative organization, it should be noted that they also have hidden unrealized abilities that can be realized in specially created conditions in the short and long term and serve as an important asset for the innovative development of the organization. The article reveals the author's approach to the formation of a personnel development system for an innovation-oriented organization, which makes it possible to reveal the innovative potential of personnel and form the dynamic capabilities of the organization. The formation of dynamic capabilities will allow us to strengthen and form new key competencies that can be used in the conditions of the organization’s innovation management. The article determines the relevance of using an integrated approach to the formation of a personnel development system, which allows building the competencies necessary for an innovation-oriented enterprise. A model of the personnel development system for an innovation-oriented enterprise is presented, which includes a set of elements important for the innovative development of the organization and the formation of the readiness and ability of personnel for innovative activities. The issue of determining the object of the development process in the conditions of an innovative enterprise has been updated. The characteristics of the system for developing the innovative potential of personnel and its difference from the traditional system of personnel development are formulated. At the same time, a statement is formulated about the uniqueness of the personnel development system of a single innovative enterprise, within the framework of which the existing innovative potential of employees is developed.

Practice shows that a high level of innovative culture of an enterprise is one of the main success factors of its innovation management. A favorable innovation culture allows overcoming barriers on the way to intensifying the creative activity of the team of the innovative enterprise (innovation project team), as well as its individual employees. Its

formation and development requires, among other things, the creation of an appropriate system of personnel motivation, which is one of the components of innovative culture, along with organizational and intellectual-creative components. However, domestic realities testify to the underdevelopment of the innovative culture of most Ukrainian enterprises and institutions, as well as the insufficient effectiveness of the motivation system of their personnel, as prerequisites for ensuring a high level of innovation-friendly environment for their activities. In this way, the problem of ensuring the appropriate level (necessary and sufficient) of the motivation subsystem of the innovative culture of domestic enterprises and institutions is actualized.

The innovative culture of the enterprise is defined as the accumulated knowledge, experience, beliefs, peculiarities of behavior and relationships of personnel (managers, engineering and technical workers, workers), their motivation system, orders in the organization, etc., which characterize the degree of favorability of individual employees, groups of employees (divisions) and the organization as a whole to innovations, readiness to translate them into new products, technologies, management solutions, etc (Alzoubi & Alzoubi, 2023).

The influence of the personnel motivation system on the development of the enterprise's innovative culture is expedient to be analyzed separately by its component subsystems: organizational, motivational, intellectual and creative. The ratio of these components is shown in the Fig. 3.1.

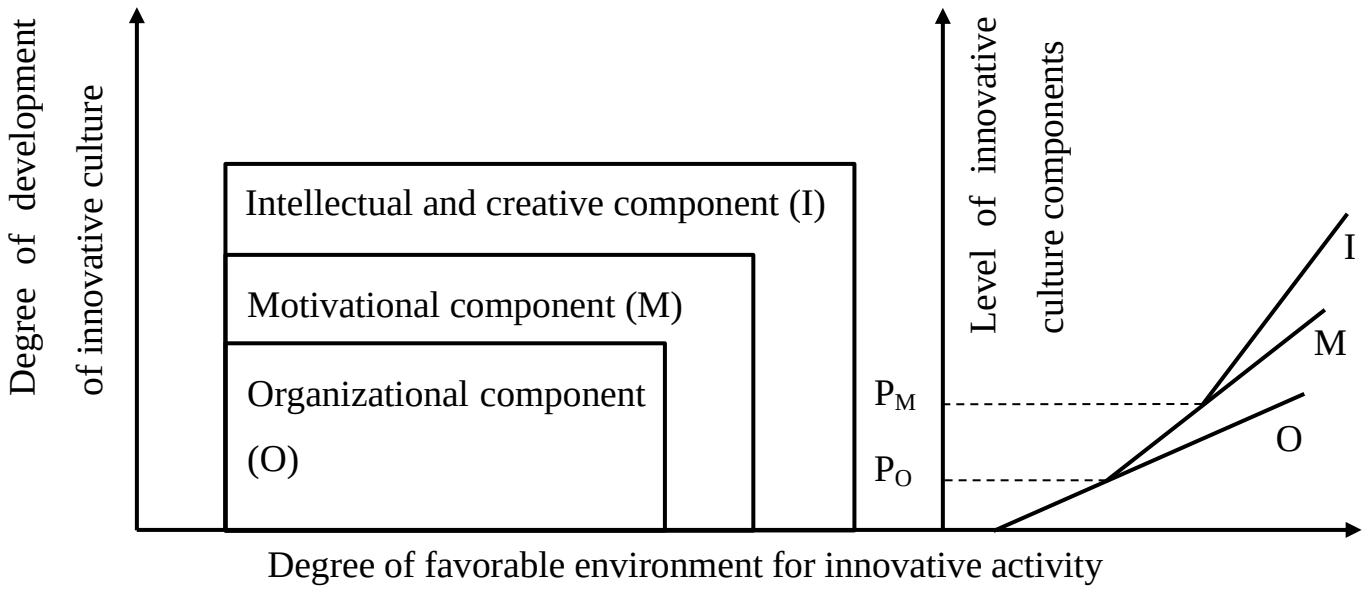


Fig. 3.1. Scheme of interaction of component in the process of formation of innovative culture of an organization.

Source: compiled by the author based on Alzoubi & Alzoubi (2023).

As follows from the Fig. 3.1, the formation of the innovative culture of the enterprise is based on its organizational subsystem, the motivation subsystem is formed on its basis, and the intellectual and creative subsystem is formed on their basis. In parallel with this, an innovation-friendly environment of the enterprise is formed.

At the same time, the formation of the next component of the innovative culture subsystem begins before the formation of the previous one is complete. That is, upon reaching a certain level of the organizational subsystem (RO), the parallel formation of the motivation subsystem begins, and then, upon reaching a sufficient level of it (RM), the intellectual-creative subsystem begins. It follows that upon reaching the minimum necessary level of the previous component (sufficient for the implementation of innovation management), the parallel formation of the next component becomes possible. In the first approximation, the recommendations outlined in the author's work can be used as a basis for determining the minimum required level of the components of innovative culture.

Critical analysis and generalization of literary sources and practices of innovation management made it possible to identify the main measures of motivation for the formation of subsystems of innovative culture of the enterprise.

The systematization of measures of motivation of processes of formation of an organizational subsystem is presented in the Table 3.1. Each of the selected groups of measures is aimed at increasing the level of the subsystem of the organization according to a certain criterion.

Table 3.1

Measures for the formation of an effective subsystem organization of the innovative culture of an organization

Criteria for assessing the state of the subsystem of the organization	**Measures to ensure compliance of the state of the subsystem of the organization with the specified criteria**
Taking into account the interests of employees	compliance with the principle: the interest of the organization is a co-acting interest of the staff and owners, for example, as it is done in Germany
Susceptibility of the organization to unexpected, non-trivial decisions	adaptive system of management, forecasting and programming of changes; monitoring changes in the business environment and bringing internal development opportunities into line with external ones; implementation of concepts of reengineering, change management
Flexible work schedule	flexible cycle, flexible schedule, variable duration of each working day, highly flexible work schedule, flexible choice of workplace, etc.
Favorable working conditions and recreation	compliance with sanitary and hygienic standards, ergonomic requirements, environmental standards, etc.
Practical orientation of personnel activities	focus on the result, reward (payment) for the results, not for the process
Flexibility of organizational management structures	project-matrix, functional-matrix, pulsating, self-managed teams, self-generating team, etc. adaptive flexible organizational structures; delegation of authority
Mobility of vertical and horizontal connections and personnel movements	promotion of contacts and cooperation, functions and responsibilities are quickly changed as necessary, communications are open and saturated, information is distributed openly
Freedom of communication and transfer of information	allocation of communication lines (local computer networks, Internet) for free exchange of information, bringing your thoughts to managers of all levels
Democratic management style	democratic, dialogic forms of management, joint-interactive, joint-individual, joint-creative types of activity
Maintaining a balance between the preservation of traditions and their modification	corporate culture of the "task culture" type, which changes in accordance with changes in external and internal conditions and tasks that the enterprise solves

Source: compiled by the author based on Alzoubi & Alzoubi (2023).

The generalization of literary sources and the practice of motivating the innovation management of personnel of enterprises and institutions made it possible to identify and systematize the main motives that affect the state of the motivation subsystem (see Table 3.2).

Table 3.2

Motivational factors of different types of innovators

The main interests of innovators of various types	**The main motives corresponding to the interests of innovators**
Recognition and career: a sense of demand for knowledge, experience, etc.	work that forces you to develop your abilities; chances for promotion; high degree of responsibility; work that allows you to work independently; the possibility of training and self-study; participation in decision-making and management; the opportunity to transfer experience and knowledge
Creativity and initiative: demand for innovations and innovators	work that requires a creative approach; interesting job; difficult and difficult work; work according to abilities; opportunity to show initiative; the innovator's participation in setting goals, analyzing the conditions for their achievement; intellectual work
Freedom of work and creativity: freedom of creativity from political, religious, bureaucratic, other restrictions	lack of pressure; convenient mode of operation; the ability to manage one's own time; free access to information, the possibility of information exchange; the right of self-control;
Image of the pioneer: legal protection of copyright	the author's right to legal protection of developments
Material benefits: high payment for labor results	high earnings; payment that corresponds to work results
Innovative business: participation of innovators in profit	profit sharing; participation in capital

Psychological comfort: tolerant attitude of colleagues and management, guarantees of employment	good relations with colleagues; partnership relations in the team; reliable place of work
Recognition and fame: recognition and gratitude from colleagues, management, and the general public	recognition and approval of a job well done; utility for society; long vacation; informing about the merits of the innovator in the social environment; paternalism

Source: compiled by the author based on Alzoubi & Alzoubi (2023).

Grouping of motifs in the Table 3.2 is performed in accordance with the main interests of innovators. This makes it possible to select the most effective motives for each member of the innovation project team.

However, the practice of innovation management shows that usually each member of the innovation project team has several interests at the same time. That is, in their pure form, the selected types of innovators are almost not found. In this case, it is possible to form the necessary set of motivating measures, having previously identified (for example, with the help of tests) the main interests of specific members of the innovation project team. To identify the interests and capabilities of individual team members, it is advisable to apply any methods, which provide an opportunity to optimize the composition of the team from the standpoint of compatibility and the ability to jointly solve the tasks, as well as rationally distribute responsibilities.

In the Table 3.3 systematization of measures to motivate the creative activity of the innovation project team was carried out. These measures are grouped according to certain aspects of the intellectual and creative subsystem of the enterprise's innovative culture, which can be evaluated according to the Table 3.3 criteria.

Table 3.3

Measures to stimulate the development of the intellectually creative component of the enterprise's innovative culture

Criteria for assessing the state of the intellectual-creative subsystem	Measures to ensure compliance of the state of the intellectual and creative subsystem with the specified criteria
The ability to go beyond existing knowledge and experience	the use of methods of generating and selecting innovative ideas that allow solving non-traditional problems: brainstorming, synectics, elimination of "dead end" situations, use of morphological maps, etc.
Willingness and ability to transfer knowledge, skills, experience, etc. students and colleagues	material and moral encouragement of mentoring, seminars on exchange of experience
The desire for self-realization and recognition	material and moral encouragement for legal protection of developments, publication of research and development results, participation in scientific and practical conferences
Focus on the result	payment by results, encouragement to implement the results of development and research; internal company rating of employees and departments, which affects career growth and salary
Work efficiency	
The ability to forecast in conditions of uncertainty	use of subjective (jury of managers, evaluation of indicators) and objective (analysis of series of dynamics and historical analogies) forecasting methods; a combination of marketing forecasts, to identify the most probable trends of changes in the market situation, with expert assessments of the state of development of science and technology, to determine the possibilities of implementing existing and promising scientific and technical developments into innovative products
Ability to long-term mobilization and concentration	careful selection of personnel, especially teams of innovative projects; staff training
Continuous self-learning and self-improvement	implementation of the concept of "lifelong learning"; implementation of the accumulative personnel evaluation system

Source: compiled by the author based on Alzoubi & Alzoubi (2023).

Listed in the Tables 3.1 - 3.3 measures motivate the activation of the processes of formation and development of the innovative culture of the enterprise, as a socio-cultural

mechanism for regulating the innovative behavior of the innovative project team or the innovative enterprise as a whole.

Highly qualified and skilled staff are indispensable in the quest for innovation. Employees with the right knowledge and expertise are better equipped to come up with creative solutions, streamline operations, and drive efficiency. Therefore, investing in the professional development and training of the workforce is an essential element in the establishment of innovative practices.

As mentioned before, the presence and subsequent development of elements of a motivating environment in an organization increases the effectiveness of its innovation activities as a whole.

The generalization of what was stated gave grounds to develop an algorithm for motivating the processes of formation and development of the innovative culture of the enterprise and measures to manage the elements of the innovation environment for their implementation, evaluation and development in the organization.

When it comes to the motives that underlie the activities of people involved in innovative activities, they mainly talk only about pragmatic interests of a material nature, and, most often, about increasing profits, which serves as the goal of the activities of many companies. But, placing the material component in the foreground, managers often forget about the intangible factors that contribute to the motivation of staff: the need for self-realization, self-affirmation, love for one's work, the desire for public recognition and others, which are an excellent motivator for any activity. the more innovative.

Each stage of the innovation process has its own structure of motives, on which depends whether favorable conditions will be created for creative activity or obstacles to its implementation (Ben, 2022).

For example, at the stage of the birth of an idea, when innovation does not yet exist in reality, a wide variety of motives (Ben, 2022) are at the heart of people's creative activity:

- the desire to solve a specific problem of a technical, technological, organizational nature;
- cognitive interest;

- the need for self-expression, self-affirmation, constant creative search;
- identification with an idol;
- material motives,
- public recognition and others.

In the current conditions, it is necessary to pay more attention to the formation of an effective motivational mechanism precisely at the stage of idea generation, since this is where innovation is generated (Ben, 2022). The main driving force at this stage is human resource with its inexhaustible intellectual potential. Therefore, in order to overcome the passivity of people in innovative activities, it is necessary to develop a competent motivational system.

Based on the analysis of the experience of the leading innovation-oriented countries, practical recommendations were developed for the implementation of innovative staff qualifications improvement techniques and the subsequent business development in the framework of innovative activities and staff qualifications. The general program of measures for managing the elements of the innovation environment for their implementation, evaluation and development is shown in Fig. 3.2:

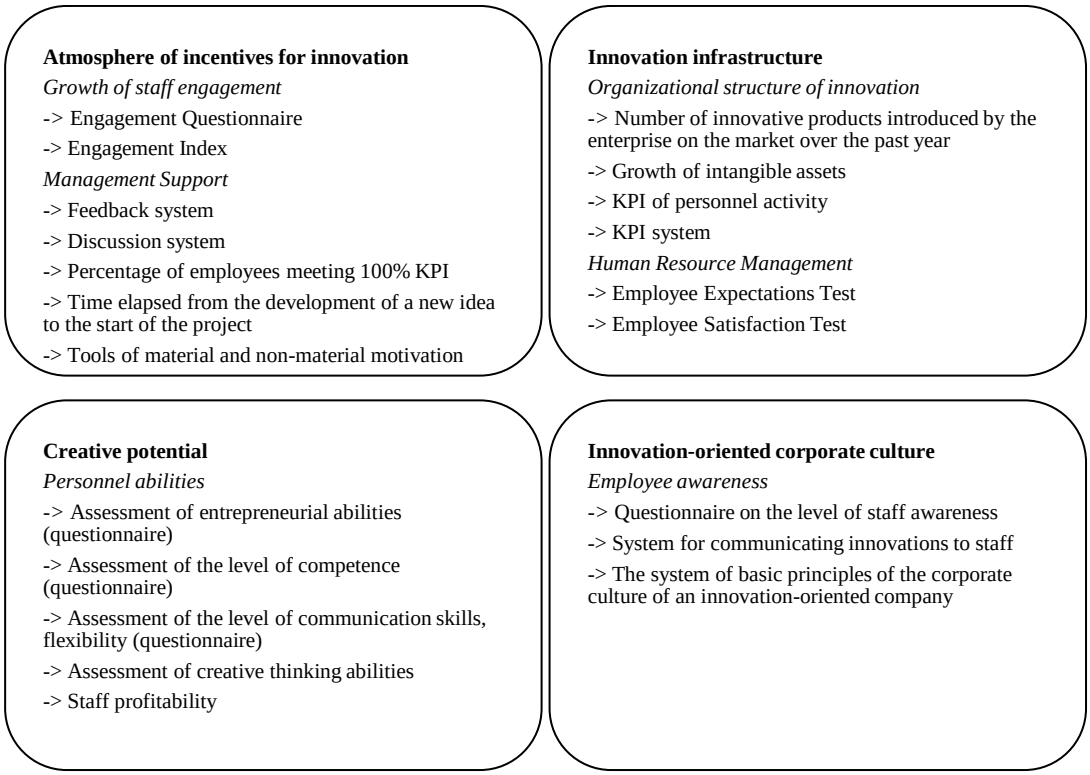


Fig. 3.2. The program of measures to manage the elements of the innovation environment for their implementation, evaluation and development in the organization.

Source: compiled by the author based on carried research.

To develop the “Atmosphere of motives and incentives for innovation” element, it is necessary to adhere to two key areas: increasing involvement and supporting management.

As part of the growth of involvement, on the basis of a questionnaire to identify the involvement of personnel, it is necessary to calculate the index of personnel involvement based on the questionnaire.

Thus, it is necessary to evaluate the integral indicator of involvement in the long-term period of the company's activity. The positive dynamics of this indicator will indicate an increase in the involvement of personnel.

As part of the "Management support" direction, it is necessary to build a feedback system based on the principle of maximum availability of both the direct superiors of employees and top managers. It is necessary that the staff be able to freely contact their superiors in various ways: by e-mail, by phone, in person when meeting at formal and informal corporate events. In this context, the system of joint discussions also plays an important role: these can be periodic strategic planning sessions (for example, weekly) for specialists from all departments involved in the work of a particular project, planned brainstorming sessions of key specialists responsible for the project, as well as informal communication and discussion during corporate events and joint recreation.

It is also necessary to take into account the period of time that has passed from the moment a new idea was developed to the start of the project, because a decrease in the value of this indicator in the long term is a sign of an increase in the efficiency of the company's activities and confirms the correctness of the direction of personnel motivation in general.

Within the atmosphere of motives and incentives, it is necessary to implement a competent system of material and non-material motivation, in accordance with the personality type of each employee and the further development of an individual system of

motives and incentives. The personality type is established on the basis of an interview with an employee, within which it is necessary to analyze his reasoning on the question “If you now received an amount of money equal to twelve times your current monthly salary, where would you spend it?”.

Thus, understanding what type representatives of the company's personnel belong to one degree or another, it is possible to build an individual motivation system and offer exactly what he needs and would like most of all as a reward. In turn, awareness of the reward will be more visualized in the employee and will be able to push him to much higher work results.

The development of the next element of the motivating environment - "Innovation infrastructure" - is based on the implementation of two areas: the organizational structure of innovation and human resource management.

For an effective organizational structure of innovation, it is necessary to monitor the following indicators:

- the number of innovative products introduced by the enterprise on the market over the past year; an increase in the value of this indicator will indicate an increase in the efficiency of the innovation management of the enterprise as a whole;
- increase in intangible assets.

As part of the organizational structure of innovation, it is also necessary to form and subsequently implement a rational system of employee performance indicators in each department of the organization.

The development of the next element of the motivating environment - "Creative potential" - must be carried out on the basis of analysis and monitoring of the abilities of the staff, including entrepreneurial abilities, competence, sociability and flexibility, and creativity.

As part of the development of the "Innovation-oriented corporate culture" element, it is necessary to focus on raising staff awareness of the company's corporate values, various innovations, problems and achievements.

Thus, the following are recommended as the main measures to achieve it: assessing the level of staff awareness, developing a system for communicating innovations to employees, as well as developing a system of basic principles of corporate culture in an innovation-oriented company.

The functioning of these areas, as well as bringing these topics to the attention of the staff, will have a positive impact on the level of involvement, loyalty, commitment of the staff to the life of the company and will directly affect its innovation management results.

It seems expedient to carry out research on clarifying the values of the indicators of the level of the components of the innovative culture of the enterprise, starting with which it is appropriate to start the parallel formation of the next component.

From the foregoing, it follows that the motivation of the processes of formation and development of innovative culture involves the formation of sets of measures that are concentrated not only in its motivation subsystem, but also in other subsystems: organizational and intellectual-creative. That is, the formation of the main aspects (main component subsystems) of the innovative culture of the enterprise is motivated:

- effective organization of innovative activities;
- highly productive, effective work of the innovation project team (innovator enterprise team);
- intellectual and creative activity of generation, verification and implementation of innovative ideas into new products, technologies, methods of organization and management, etc.

CONCLUSIONS AND PROPOSALS

Innovation is the most effective factor which ensures competitiveness and sustainable development in the whole world. This paper is the result of research in the field of international economic relations (Ben, 2022).

It is based on the concept of six waves of innovation, which has become a model of economic development since the 18th century, as well as on the basis of international frameworks of innovation management and staff qualifications (Ben, 2022).

In the course of the work, the main patterns of development of innovative waves are described, it is pointed to how and why they affect innovation management and which results we can receive in the near future (Ben, 2022).

There are also indicated main factors which influence innovation management including staff qualifications. The article defines the concept of personnel professionalism importance in innovation management, and also considers specific cases of staff influence on innovation management on the examples of countries of different levels of development.

In this paper, the concept of innovative activities and staff qualifications as a framework for economic development are investigated on the basis of an IT company, including theoretical framework of innovative activities, specifics of modern innovative activities development, importance of staff qualifications in innovative activities and analysis of business development in the scope of innovative activities and staff qualifications. The fundamental importance of the involvement of the organization's personnel is shown on the base of the Benefit Rose OÜ cases study, in particular, to ensure strategic performance and improve the efficiency of the organization's innovative activities. The study revealed that the process of introducing innovations in an organization is significantly influenced by such internal resources of the organization as organizational culture, human capital, compliance of the course of development with external market conditions.

Benefit Rose OÜ specializes in creating, maintaining and enhancing websites and web applications to meet the diverse needs of clients across various industries. The main problem in the working system of Benefit Rose OÜ is a problem of demotivation of personnel where the company does not have a well-developed system of salaries and position levels. It overgrows in the work force turnover and the absence of the loyalty among the employees which results in the bad image of the company and inconvenience withing projects leading. Without conducting special economic and empirical research, it is possible to draw some intermediate proposals and conclusions for improving the company's internal working system (Ben, 2022). The main problem is the lack of encouraging and motivational actions from the side of the owners, as well as the employees' dissatisfaction, which leads to tension among the team and the CEO, conflict situations and increased competition on the market.

Based on the analysis of existing theoretical approaches, prerequisites for international innovation activity were set, as well as the influence of innovation management on the staff qualifications trends and competitiveness on the IT market was determined. The fundamental importance of human capital for increasing the level of personnel involvement in the context of conducting innovative activities and the competitiveness of an organization is substantiated. Taking into account the key human needs, based on the analysis of the level of motives and incentives, it was revealed that the satisfaction of higher needs - respect and self-realization – plays a key role in the process of emergence of innovative ideas among employees of the enterprise.

The psychological climate of the collective, which reveals itself, first of all, in the relations of people to each other and to the common deal, is still not exhausted by this (Ben, 2022). However, it should be noted that the employees of the Benefit Rose OÜ work very well. The lack of motivation inevitably affects the attitude of employees towards the top management and the organization as a whole, as well as the work force flow and the economic condition of the company. And this, in turn, can manifest itself in the entire working system of the organization, which may one day be shaken due to the lack of competitive privileges (Ben, 2022). Thus, the company needs an urgent innovation in the internal working system, which has been developed based on the internship results and is described below.

In order to correct the existing negative effects of the problem in the IT organization, it was necessary to develop a number of measures – analyzing the current situation, identifying the problem, developing the possible solutions, formulating the proposal, introducing the innovative model, - that would contribute to improving corporate efficiency in general and increasing the level of competitiveness in particular (Ben, 2022).

In order to create among employees a positive attitude towards the work they or their colleagues perform, and, most importantly, the quality of this work, it is necessary to create working conditions where everyone would feel in demand, understand that their work is important for the enterprise and what an excellent performance of their duties he will be fairly rewarded (Ben, 2022). It is important that useful and productive labor really enrich the worker, so that the masses vividly feel the encouraging influence of private property, as well as the success and honor of labor.

Addressing the issue of demotivation among personnel in Benefit Rose OÜ due to the absence of a well-developed salary and position level system is critical for retaining talent, maintaining productivity and fostering a positive work environment. It is evident that the absence of a structured salary and position level system is negatively impacting employee motivation and morale within the company. Employees are likely to perceive inequity when they see colleagues with varying levels of experience receiving similar compensation. This leads to frustration and demotivation. What is also important for Benefit Rose OÜ, the lack of a clear career progression path and competitive compensation may result in talent attrition, which could ultimately harm the company's performance and reputation. Among the possible reasons, there seem to be communication gaps within the organization, particularly in terms of how compensation decisions are made and how career advancement is determined. These gaps have led to a lack of clarity among employees regarding their earning potential and career progression within the company.

The principles of formation of a motivating environment in an IT organization that increase the effectiveness and efficiency of innovation management have been developed. The composition and interrelation of the elements of the motivating environment, affecting various aspects of the organization's business activities and thereby effectively increasing the involvement of employees in innovation, is theoretically substantiated. It is shown that

taking into account the principles of a self-learning organization in the formation of an innovative system in a company can increase the efficiency of innovation management.

It can be pointed out the importance of introducing a motivation system into the activities of an IT business entity. The presence of a motivation system and, most importantly, its effective use in terms of the expectation of both material and non-material rewards by all participating entities, encourages them to fruitful activity (within the framework of knowledge, experience, skills). At the same time, the system should, if possible, take into account factors of the internal and external environment (the motivation system should be organically integrated into the overall enterprise management system), which will allow the enterprise to effectively realize both its existing potential and create conditions for its further development

The program of measures to manage the elements of the innovation environment for their implementation, evaluation and development in the IT organization was developed for the implementation of innovative staff qualifications improvement techniques and the subsequent business development in the framework of innovative activities and staff qualifications.

The main principles that should be followed in the formation and functioning of the motivating environment of the organization are determined: within the atmosphere of motives and incentives for innovation, the main material incentives are the bonus system, the payment of bonuses and the provision of benefits, the main non-material incentives are the increase in the level of trust through the expansion of the powers of managers. Creative potential is realized mainly on the basis of the entrepreneurial abilities of employees, initiative, focus on results, and the level of professionalism. An innovation-driven corporate culture is shaped by the active adoption of encouraging risk-responsibility and internal competition. The innovation infrastructure is built on the basis of a feedback system, as well as through an informal exchange of ideas within the staff. The revealed principles were used in the development of practical recommendations for the effective use of the elements of the motivating environment.

To rectify the issues mentioned above and improve overall employee morale and motivation, several key proposals can be considered:

- A structured and transparent salary system should be developed that includes clear salary bands for different positions or roles within the company. The system can be developed by the CEO together with managers, if needed, and with the use of feedback sheets from the employees. However, before market research must be conducted to ensure that salary ranges are competitive with industry standards and local market conditions.
- A position level framework should be created that outlines the qualifications, responsibilities and career progression expectations for each role within the company. For this, the top management must define the criteria for moving from one level to another, considering factors like experience, performance and skills.
- A performance-based compensation system should be implemented that ties salary increases and bonuses to individual and team performance, as well as regular performance evaluations and feedback to employees should be provided to ensure they understand how their work impacts their compensation
- The CEO should collaborate with employees to create individualized career development plans that outline their career goals and the steps required to achieve them within the company. As the current system of Benefit Rose OÜ offers already training and development opportunities to help employees acquire the skills needed to progress in their careers, the individualized career development plans would be great complement to it.
- The new salary and position level system should be transparently communicated to all employees, explaining how it works and which benefits it offers. The CEO's main mission here is to encourage open dialogue between management and employees to address questions, concerns and feedback related to compensation and career progression.
- The whole management of the company must ensure that the new system emphasizes fairness and equity by eliminating biases and favoritism in compensation decisions. Managers should regularly review and adjust the system to address changing market conditions and maintain fairness.

- There is also such good experience as an employee recognition system. It acknowledges and rewards outstanding contributions and achievements within the company. It would be also beneficial to implement this program.
- Finally, the CEO should continuously monitor the effectiveness of the new system through employee feedback, retention rates and overall job satisfaction, and be prepared to make adjustments as needed to address any issues or concerns that arise.

By implementing these proposals and creating a structured and fair compensation and career progression system, Benefit Rose OÜ can boost employee satisfaction, retain talent and create a more positive and productive work environment. But despite so many benefits from the proposed salary system, employee motivation is still staying a rather unstable indicator which directly influences the innovation management. On this side, the company needs special methods of improving its development in the framework of innovative activities and staff qualifications.

As mentioned before, the presence and subsequent development of elements of a motivating environment in an IT organization increases the effectiveness of its innovation activities as a whole. Thus, in any company, including IT field, there always must be determined the main principles that should be followed in the formation and functioning of the motivating environment of the organization.

In the course of writing this paper was intense analytical work on various points of the innovative activities. These areas of activity included not only the development of a new internal working system in Benefit Rose OÜ, but also economic and financial issues of the company's functioning in the market and the general system of the organization as a whole (Benefit Rose, 2006).

The main issues related to Benefit Rose OÜ working system were analyzed and investigated. As a result of the analysis, it turned out that Benefit Rose OÜ is a successfully operating company in the field of web development, which has a high level of operational effectiveness und productivity (Benefit Rose, 2006). However, against the background of extremely high client management, there is a lack of employees’ motivation and the absence of a well-developed salary and position level system in the organization. As a

recommendation, innovative salary and motivation systems were developed and introduced to the company, which with the high confidence contribute to both the internal and economic development of the company and the improvement of its competitiveness (Benefit Rose, 2006).

Methodological recommendations and measures are proposed to develop innovation management of an organization involving staff qualifications and its enhancement in the framework of global economy. Research of public opinion on staff qualifications in the scope of innovative activities and its basics foundation for improvement of business development was conducted, as well as ways and opportunities of improving business development in the framework of innovative activities and staff qualifications were developed (Benefit Rose, 2006).

The results of this study are of theoretical and practical importance. The identified problems, the main conclusions of the work make it possible to deepen the theoretical provisions of the framework of innovative activities and staff qualifications, that play significant role in its implementation, and can be used in the further theoretical study of importance of staff qualifications in innovation management.

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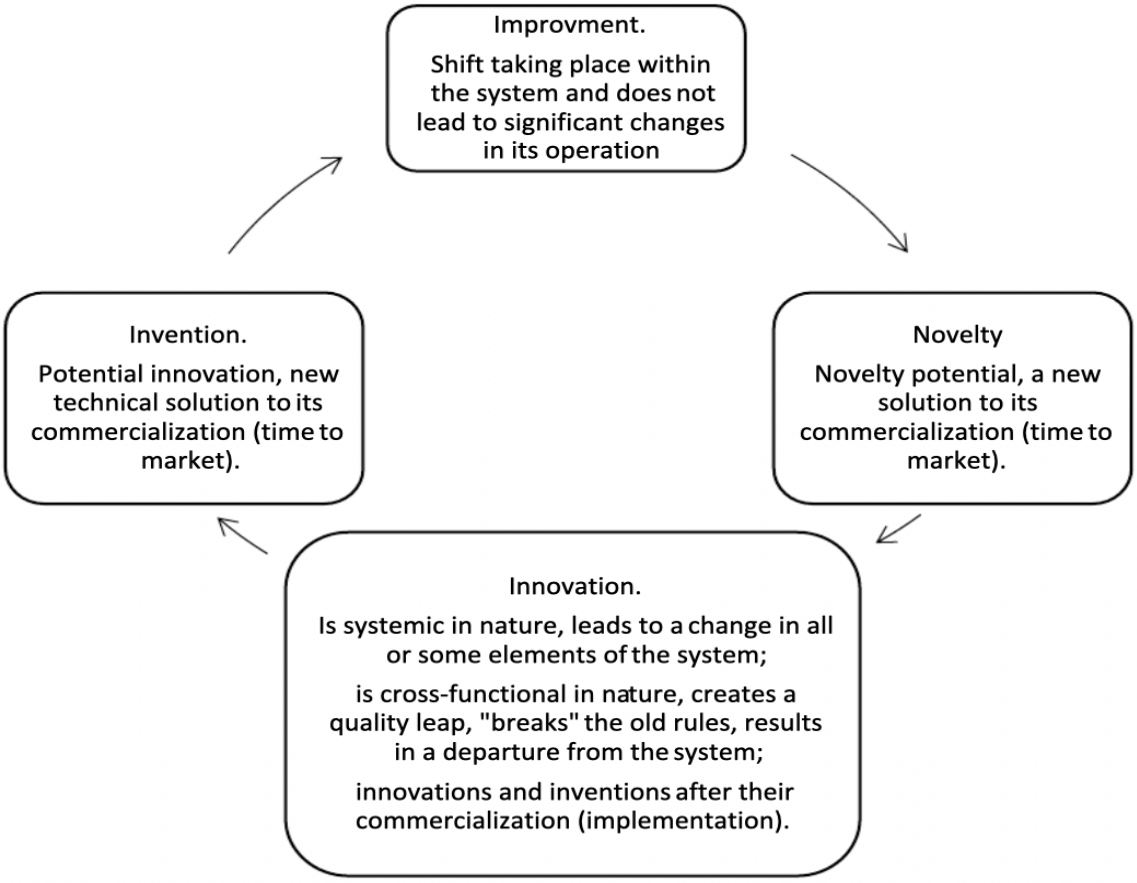
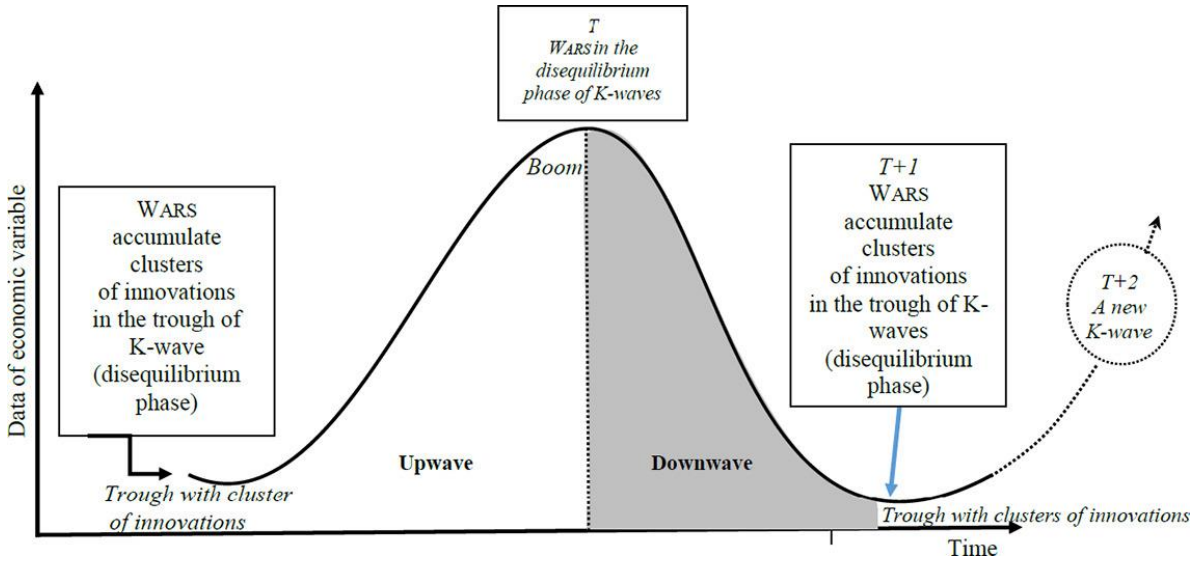
ANNEX A

The concepts of "improvement", "novelty", "invention", "innovation". Source: Kogabayev, T., & Maziliauskas, A. (2017).



ANNEX B

General causes of long waves. Source: Coccia, M. (2018).



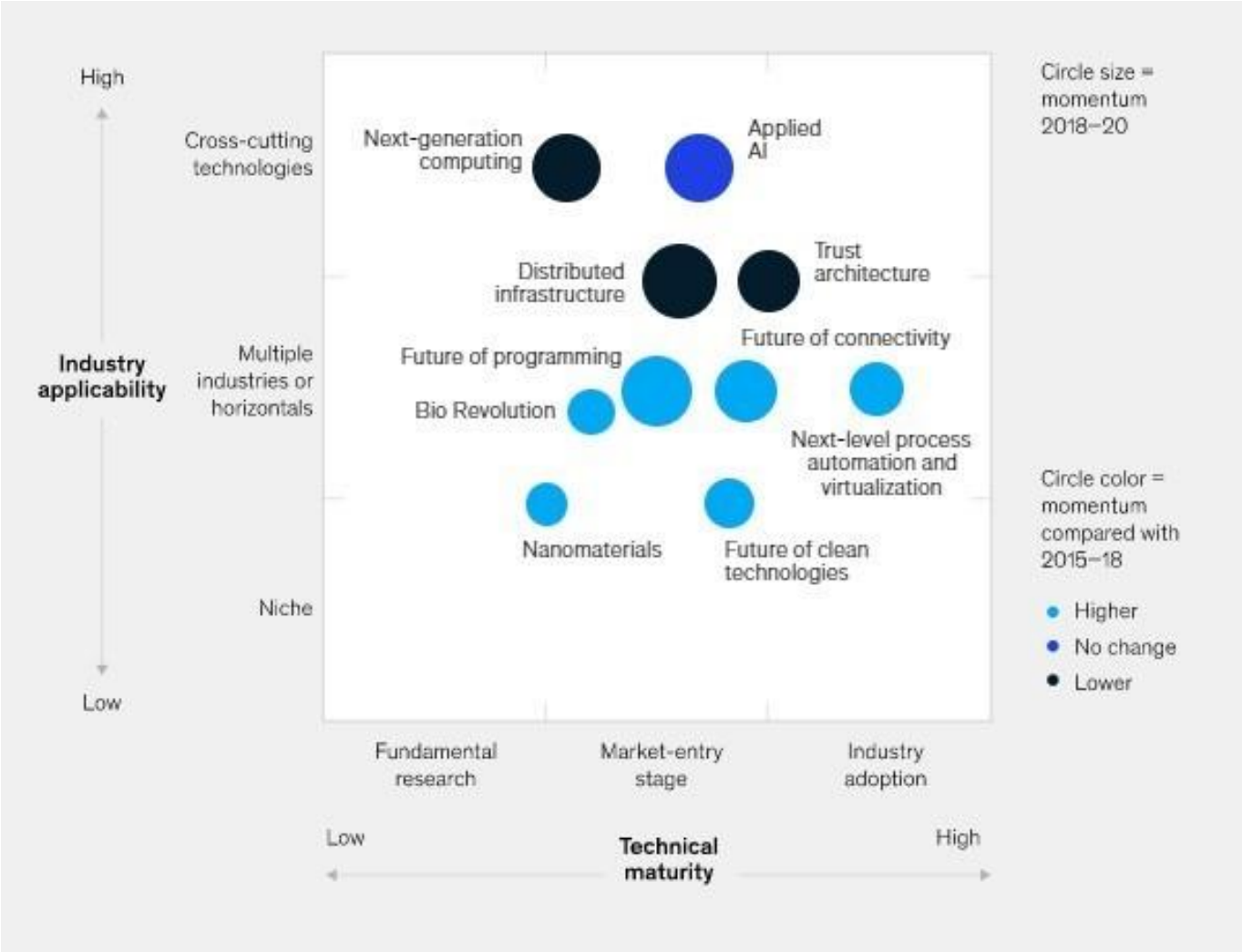
ANNEX C

Characteristics of measures to improve the skills of employees. Source: Nadreeva, L. L., & Melnitchnov, V. V., & Abramov, V. A. (2020).

Measures to improve the staff qualification	Characteristics
Diversification of personnel activities	Expanding the range of knowledge, skills, qualifications, communications
Creation of advisory groups	Voluntary associations of workers for 5 - 6 people. The activities of the groups cover different areas of the organization of the enterprise and include the identification of a problem, its analysis, the development of proposals, recommendations for solving the problem
Creation of a training center	Creation of a continuous training chain "school - institute - production"
Advanced training and retraining courses	The main forms of training: mastering functions in the workplace in the process of work, rotation, advanced training within a specific position, mastering a profession under the guidance of a mentor, courses on studying specific topics, self-education
Material incentives for staff	Creation of bonus funds for the development and release of new products, the introduction of new wage systems - "profit sharing plan", the system of "surcharges for knowledge"
Social education of personnel	Creation of socio-psychological labor motivators
Implementation of elements of personal management	Providing independent planning, organization, control and regulation of the production process

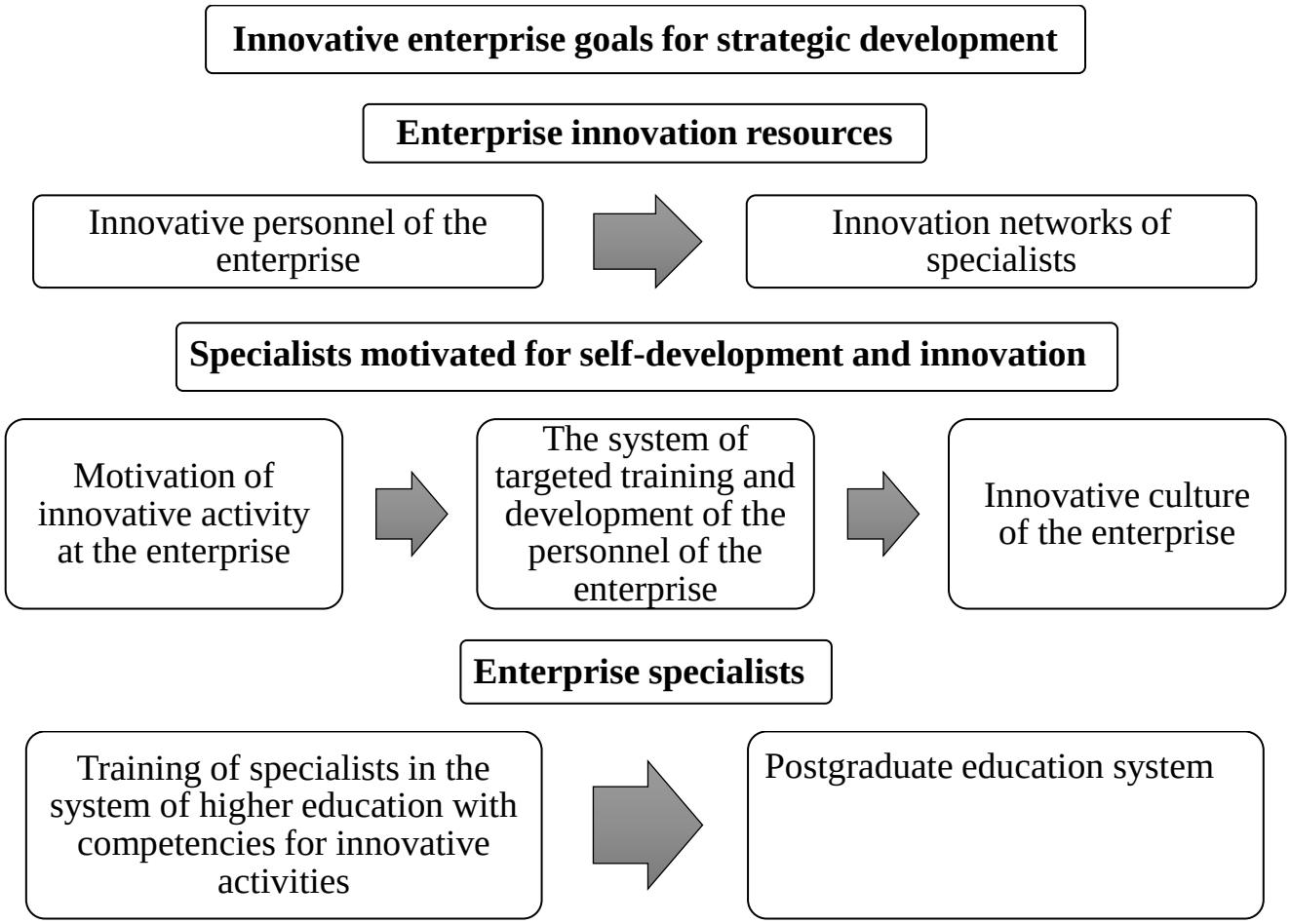
ANNEX D

10 Tech Trends. Source: Toner, Ph. (2011).



ANNEX E

A multi-level system for the formation and use of innovative personnel potential of enterprises. Source: Roiatti, M. (2021).



ANNEX F

Quarterly financial statistics of Benefit Rose OÜ 2021-2023.

	Turnover	National tax	Employee tax	Average salary
2021 I	6 773 €	423 €	471 €	465 €
2021 II	6 773 €	548 €	632 €	585 €
2021 III	6 773 €	547 €	604 €	520 €
2021 IV	6 773 €	552 €	618 €	520 €
2022 I	11 970 €	607 €	683 €	585 €
2022 II	19 077 €	972 €	1 083 €	840 €
2022 III	14 288 €	727 €	812 €	715 €
2022 IV	14 304 €	729 €	812 €	715 €
2023 I	38 032 €	753 €	812 €	715 €
2023 II	56 807 €	511 €	541 €	520 €

ANNEX G

Financial report of Benefit Rose OÜ for the last 3 years.

	2020	2021	2022
Assets			
- Current Assets	€3,500	€4,000	€45,00
- Non-Current Assets	€500	€600	€7,000
Total Assets	€4,000	€4,600	€52,000
Equity			
- Shareholders' Equity	€600	€700	€8,000
- Retained Earnings	€500	€1,000	€15,000
Total Equity	€1,100	€1,700	€23,000
Liabilities			
- Current Liabilities	€1,000	€1,200	€14,000
- Non-Current Liabilities	€1,000	€1,200	€14,000
Total Liabilities	€2,000	€2,400	€28,000
Income			
- Revenue	€22,800	€25,000	€56,600
- Expenses	€9,000	€9,000	€20,000
- Net Income	€13,800	€16,000	€36,000

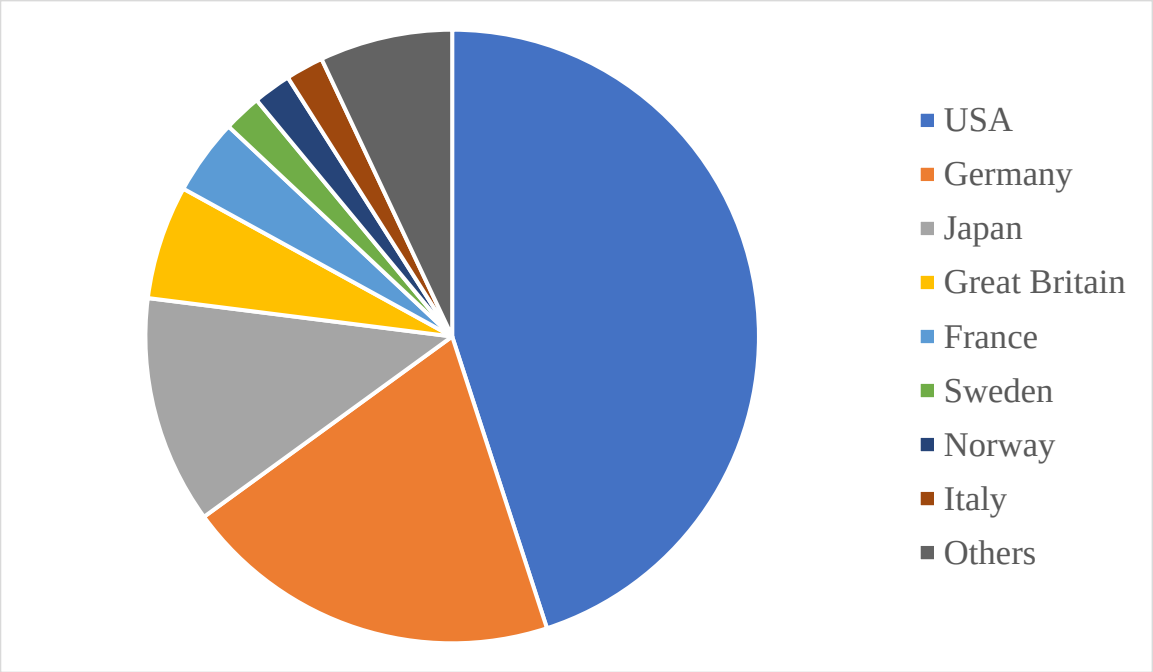
ANNEX H

HR department development of Benefit Rose OÜ during 2021-2023.

Date&Year	№ of employees	Positions	Wage	Turnover Rate
31st June, 2021	6	x1 Lead Project Manager	5 €/h	**33%**
		x1 Project Manager	3,5 €/h	
		x1 Designer	5 €/h	
		x1 Middle Developer	6 €/h	
		x1 Junior Developer	3,5 €/h	
		x1 HR Manager	3 €/h	
31st June, 2022	16	x1 Lead Project Manager	5 €/h	**37,5%**
		x2 Project Managers	3,5 €/h	
		x1 Lead Designer	5 €/h	
		x1 Designers	4 €/h	
		x1 Senior Developer	8 €/h	
		x3 Middle Developer	6 €/h	
		x6 Junior Developer	3,5 €/h	
		x1 HR Manager	3 €/h	
31st June, 2023	34	x3 Lead Project Manager	6 €/h	**41%**
		x8 Project Managers	3,5 €/h	
		x1 Lead Designer	5 €/h	
		x3 Designers	4 €/h	
		x3 Senior Developer	9 €/h	
		x6 Middle Developer	6 €/h	
		x7 Junior Developer	3,5 €/h	
		x1 QA Manager	3,5 €/h	
		x1 HR Manager	3 €/h	
		x1 Financial Manager	5 €/h	

ANNEX I

Share of developed countries in control over advanced technologies. Source: Blind, K., & Petersen, S. S., & Riillo, C. A. F. (2016).



ANNEX J

Stages of development of the Ukrainian legislation in the scientific and technical and innovative sphere. Source: Rusnak, A. V., & Karnaushenko, A. S., & Petrenko, V. S. (2018).

Stage	Period	Description
I	1991-1998	- adoption of the first framework law on scientific and technical and innovation activities (Law of Ukraine "On research and scientific and technical activities") in 1991; - introduction of tax privileges for scientific and technical activities; - set-up of activity of the State Innovation Fund of Ukraine, the structure of which and the target financing independent of the general budget expenditures, provided a model of financial support for innovations new in the world at that time, which combined support for innovative projects at the regional, central and sectoral levels.
II	1999-2007	- cancellation of tax privileges; - liquidation of the State Innovation Fund; - avoiding the orientation on the programs of structural change in industry; - overwhelming attention to foreign loans; - adoption of the Law of Ukraine "On Innovation Activity" in 2002; - adoption of the Law of Ukraine "On State Regulation in the Sphere of Technology Transfer" (the norms of these laws, which related to the financial support for innovations and technology transfer were stopped by subsequent acts) in 2006.
III	2008-present time	- adoption of a number of concepts and programs related to the development of science and innovation, at the same time: - the decisions taken are not effected in the implementation of financial, credit, tax, customs mechanisms for the development of innovation activities; - draft documents on financing, granting of tax privileges and crediting of innovations are not approved by financial authorities; - the scientific and technical and innovation spheres are not considered to be important at the level of executive authorities.