“Assessing the efficiency of investment in personnel development in the telecommunications sector of Ukraine”

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ARTICLE INFO	Alla Stepanova (2026). Assessing the efficiency of investment in personnel development in the telecommunications sector of Ukraine. *Social and labour relations: theory and practice*, *16*(1), 1-10. doi:10.21511/slrtp.16(1).2026.01
DOI	http://dx.doi.org/10.21511/slrtp.16(1).2026.01
RELEASED ON	Tuesday, 07 April 2026
RECEIVED ON	Tuesday, 10 March 2026
ACCEPTED ON	Wednesday, 01 April 2026

JOURNAL	"Social and labour relations: theory and practice"
ISSN PRINT	2410-4752
ISSN ONLINE	2415-3389
PUBLISHER	LLC “Consulting Publishing Company “Business Perspectives”
FOUNDER	State Higher Educational Establishment "Kyiv National Economic University named after Vadym Hetman", Social and Labour Relations Institute

NUMBER OF REFERENCES	NUMBER OF FIGURES	NUMBER OF TABLES
12	0	6

BUSINESS PERSPECTIVES

Publisher

LLC "CPC "Business Perspectives"
Hryhorii Skovoroda lane, 10, Sumy, 40022, Ukraine

www.businessperspectives.org

V. HETMAN KNEU

Founder

State Higher Educational Establishment "Kyiv National Economic University named after Vadym Hetman", Prospect Peremogy, 54/1, Kyiv, 03057, Ukraine

https://kneu.edu.ua/

ISSN 2410-4752 (print)
2415-3389 (online)

Type of the article: Research Article

Received on: 10th of March, 2026
Accepted on: 1st of April, 2026
Published on: 7th of April, 2026

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Conflict of interest statement:
Author(s) reported no conflict of interest

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ASSESSING THE EFFICIENCY OF INVESTMENT IN PERSONNEL DEVELOPMENT IN THE TELECOMMUNICATIONS SECTOR OF UKRAINE

Abstract

The relevance of the study is due to the growing role of human capital development in various sectors of the country's economy, where special attention is paid to the role of investment in human capital as a strategic resource for the development of telecommunications companies in the context of digitalization of the economy and rapid technological changes. The purpose is to establish a theoretical basis and practical tools for assessing the effectiveness of personnel development investments at enterprises in the communications sector to increase their competitiveness, innovation, and the efficiency of their activities. The theoretical basis provides for the substantiation of the theoretical foundations of the formation of a system of investments in professional training, advanced training, and the development of digital competencies of employees, as well as the creation of a favorable organizational environment for their professional growth. The practical toolkit includes the use of modern educational and digital tools to build an effective personnel development system. The result is the formation of competitive advantages for enterprises in the communications industry in the domestic telecommunications market through the use of strategic analysis tools and the transition to systematic personnel development. Problem positions for investing in the development of enterprise personnel have been outlined, which has led to the identification of areas for improvement, one of which is implementing the Kirkpatrick model to eliminate ineffective programs and reallocate the budget to more effective ones. Development strategies for Vodafone Ukraine have been formulated, aimed at updating the motivation system, increasing staff loyalty, and strengthening retention measures for key employees. It is argued that systematic investments in training, competence development, and knowledge management contribute to increasing labor productivity, introducing innovations, and strengthening the market positions of enterprises in the communications sector.

Keywords investment, personnel, development, efficiency, competitiveness

JEL Classification E22, J24

Алла Степанова (Україна)

ОЦІНЮВАННЯ ЕФЕКТИВНОСТІ ІНВЕСТИЦІЙ У РОЗВИТОК ПЕРСОНАЛУ ТЕЛЕКОМУНІКАЦІЙНОГО СЕКТОРУ УКРАЇНИ

Анотація

Актуальність дослідження зумовлена наростальною роллю розвитку людського капіталу в різних секторах економіки країни, де особлива увага приділяється ролі інвестицій в людський капітал як стратегічного ресурсу розвитку телекомунікаційних компаній в умовах цифровізації економіки й стрімких технологічних змін. Мета – створити теоретичну базу і практичні інструменти для оцінювання ефективності інвестицій в розвиток персоналу на підприємствах сектору комунікацій задля підвищення їхньої конкурентоспроможності, інновацій та ефективності діяльності. Теоретична база передбачає обґрунтування теоретичних основ формування системи інвестицій у професійну підготовку, підвищення кваліфікації та розвиток цифрових компетенцій співробітників, а також створення сприятливого організаційного середовища для професійного зростання. Практичний інструментарій охоплює використання сучасних освітніх і цифрових інструментів для побудови

ефективної системи розвитку персоналу. Результатом є формування конкурентних переваг підприємств галузі зв'язку на вітчизняному телекомунікаційному ринку внаслідок використання інструментів стратегічного аналізу та переходу до системного розвитку персоналу. Окреслено проблемні аспекти для інвестування в розвиток персоналу підприємства, що призвело до визначення сфер для поліпшення, однією з яких є впровадження моделі Кіркпатріка для усунення неефективних програм і перерозподілу бюджету на більш ефективні. Розроблено стратегії розвитку Vodafone Україна, спрямовані на оновлення системи мотивації, підвищення лояльності персоналу та посилення заходів з утримання ключових працівників. Стверджується, що систематичні інвестиції в навчання, розвиток компетенцій і управління знаннями сприяють підвищенню продуктивності праці, впровадженню інновацій і зміцненню ринкових позицій підприємств сектору комунікацій.

Ключові слова інвестиції, персонал, розвиток, ефективність, конкурентоспроможність

Класифікація JEL E22, J24

INTRODUCTION

The importance and purpose, place and role of man in the economy are difficult to underestimate. However, it is human capital, which is a strategic resource for the economic growth of any element of management, that to this day does not have an effective measurement method, does not have the appropriate tools for its preservation, use, and development. It is such human factors as education, creativity, and intellectual abilities that are considered the basis of human capital.

People occupies a central place in modern concepts of world development. The world community has reached a compromise in that human capital is a basic factor in the prosperity of both states as a whole and individual enterprises. The formation of the theory of human capital and the effectiveness of investments in the development of the enterprise's personnel began in the 60s-80s of the 20th century and is associated with the works of foreign economists (Becker, 1962; Schultz, 1961). Around the same period, the discussion about human capital received wide resonance in domestic science, especially at the end of the 20th century. A significant contribution to its solution was made by Aleksieiev et al. (2024), Balabanova and Sardak 2006, Bilorus and Filina (2018), Dziamulych and Kopera (2019), and Sytnyk et al. (2023).

In our opinion, further development is required for theoretical and applied aspects of determining the effectiveness of investments in personnel development at the microeconomic level.

1. THEORETICAL BASIS

The concept of human capital received international recognition after the awarding of two Nobel Prizes in Economics for their contribution to the development of the theory of human capital – to T. Schultz in 1979 and to G. Becker in 1992. Despite the fact that the main contribution to the popularization of the idea of human capital was made by T. Schultz (Schultz, 1971), the treatise by G. Becker (Becker, 1962) became a classic of modern economic thought. He based his analysis on the idea of human behavior as rational and expedient, applying such concepts as price, opportunity costs to a wide variety of aspects of human life, also using those that were traditionally in the purview of other social disciplines. The concept he formulated became the basis for all further research in this area.

Human capital, according to G. Becker, is the stock of knowledge, skills, abilities and motivations available to everyone. Investments in it can be education, accumulation of professional experience, geographical mobility, search for information.

Every enterprise that actively invests in human capital feels the need to choose a method for assessing the economic efficiency of investments made in order to make informed decisions regarding the efficiency of both already invested funds and the feasibility of further investment in human capital. Determining the efficiency of investment can be carried out using one or more methods for assessing efficiency, which have been developed in sufficient quantities by Western theory and practice of investing in human capital. However, each of the existing methods for assessing the effective-

http://dx.doi.org/10.21511/slrtp.16(1).2026.01

ness of various types of investment in human capital has a certain scope and specificity of use, which significantly narrows their application in practice. In addition, Western methods are not always adapted to Ukrainian conditions, so an analysis of their applicability is needed.

One of the most common methods for qualitatively assessing the effectiveness of investment in human capital is the model for determining the effectiveness of training of enterprise employees developed by D. Kirkpatrick in the late 50s of the twentieth century, which consists in assessing and comparing the knowledge, skills and behavior of employees before training, during training, immediately after the training process and after a certain period of time required to master the material taught (La Duke, 2017).

The model has four consecutive levels of assessing the effectiveness of employee training:

1. Reaction – determining the degree of satisfaction of students with the training process, which includes establishing, using a questionnaire, the importance of training goals for the employee's personal and professional growth, assessing the degree of intensity and saturation of classes with practical exercises, determining the level of accessibility and simplicity of presenting the material.

2. Assimilation – determining, using test and situational tasks, changes in the attitudes, knowledge and skills of employees that occurred as a result of training as their direct result. The expected change is determined by comparing the answers that employees gave to the tasks before and after training.

3. Behavior – determining the change in the employee's professional behavior that occurred as a result of professional training. The assess-

Table 1. Methods for assessing the effectiveness of investments in human development

Source: Developed by the author.

Cost-Benefit Analysis (CBA)	A method of economic analysis that involves a quantitative comparison of all costs and benefits of an investment project, including both direct and indirect effects. It allows you to determine the net present value (NPV), internal rate of return (IRR), and benefit-cost ratio (BCR)
	It is used to assess the feasibility of investments in education, medicine, and the social sphere, as well as to compare alternative options for human capital development
Cost-Effectiveness Analysis (CEA)	A comparative assessment method that determines which investment option provides the most significant effect for the exact cost, or which program achieves the desired result at the least cost. The benefits are expressed not in monetary terms, but in kind or social indicators (education level, life expectancy, success)
	Used in situations where human development outcomes cannot be adequately monetized, but can be quantitatively compared
Social Return on Investment (SROI)	A social performance measurement tool that assesses the social, economic, and societal impact generated by each invested unit of resource. It converts social outcomes into a monetary equivalent by determining the social value of the changes created
	It is used to analyze the effectiveness of social programs, community initiatives, youth and educational projects, where it is essential to consider not only economic but also social consequences
Kirkpatrick model	A four-level conceptual model for evaluating the effectiveness of training and personnel development. The evaluation is carried out at the levels: participant response, acquisition of knowledge and skills, change in employee behavior in the workplace, and organizational results
	It is used for a comprehensive analysis of the effectiveness of educational programs, training, professional development, and advanced training
Phillips ROI Model	An extension of the Kirkpatrick model that adds a fifth level - calculating the financial return on training and staff development (Return on Investment). Allows you to compare training costs with the financial results obtained
	Used in HR and personnel management to justify the economic feasibility of investments in human capital
Impact Evaluation (RCT and quasi-experiments)	A set of methods aimed at establishing the causal impact of an investment or program. These include randomized controlled trials (RCTs), quasi-experimental methods, regression approaches, and difference-in-differences methods
	Used to assess whether a project has led to fundamental changes in the level of human development - for example, improvements in student achievement, health, or employment
Human capital indices (HCI, HDI)	A set of integrated indicators that synthesize data on educational outcomes, health status, life expectancy, labor productivity, and other parameters of human capital. They allow for comparisons at the macro level
	Used for strategic assessment of human potential, international comparisons, and determining socio-economic policy priorities

ment of the change in the employee's behavior is carried out by directly observing his actions at the workplace in the process of work before and after training with further comparison of the obtained number of correct production actions and work techniques.

4. Result – determination of the economic result that the enterprise received as a result of training employees in the form of an increase in their labor productivity and improvement of the quality of work.

During the development of the model, the main attention was focused exclusively on assessing the effectiveness of training activities, but over time it was adapted to determine the overall level of effectiveness of other types of investment in human capital. The model is designed in such a way that the assessment at each subsequent stage is more complex and requires more time than at the previous level. That is why, in order to prevent cases of excess of the costs required for the assessment over the economic effect obtained as a result of training, it is necessary to justify the feasibility of its implementation each time the assessment is carried out.

The main advantages of the model proposed by D. Kirkpatrick are the simplicity of its practical use and the adoption of the assessment process as one of the components of the general process of professional training of employees instead of the status of a separate tool for controlling and determining the effectiveness of invested funds. The model can be used both to assess the effectiveness of professional training of ordinary employees of the enterprise, and to ensure monitoring of the effectiveness of advanced training of managers.

Along with the use of employee knowledge testing methods, D. Kirkpatrick's model assumes conducting a questionnaire survey of students immediately after training, which allows to identify the actual reaction of the employee to the training process and obtain an initial subjective assessment of the level of its effectiveness. According to the model, the main factor in the effectiveness of a particular training or type of professional training is considered to be the change in the professional behavior of employees as a direct result of the training carried out (Deloitte, 2024]. Further study of behavioral changes allows to determine the impact of the knowledge and skills acquired by the employee on the general performance indicators of the enterprise, which can be evaluated by economic indicators characteristic of the enterprise (for example, reducing the material intensity of products, increasing labor productivity, reducing unproductive working time costs, increasing competitiveness, etc.). However, determining the available economic indicators without a comprehensive analysis of changes in employee behavior is biased and does not allow to clearly distinguish the effectiveness of the type of professional training carried out (La Duke, 2017).

Determining the effect of training using the D. Kirkpatrick model in terms of cost is quite difficult and time-consuming, and, therefore, it requires additional funds and significant time spent on research. Given this, D. Kirkpatrick suggests that it is not always advisable to conduct a final economic assessment of the effectiveness of training. Thus, if the assessment of the first level of the model should be carried out for 80-100% of projects, the second – for 40-60%, the third – 20-30%, the fourth – 10%, then the assessment of the fifth level should be carried out for no more than 5% of all investment programs (La Duke, 2017). First of all, this applies to large enterprises, where investment in human capital covers the vast majority of employees and the programs are long-term. This circumstance significantly narrows the scope of use of the model and reduces the objectivity of the assessment of the effectiveness of investment in human capital carried out using it.

In addition, the model of D. Kirkpatrick does not allow comparing the amount of invested funds with the effect that the enterprise will receive as a result of professional training of employees. The presence of limitations creates obstacles to using the model as a universal and perfect method for assessing the effectiveness of investing in the professional and personal development of employees of the enterprise. At the same time, the model of D. Kirkpatrick can be used as an alternative assessment method for establishing the psychological level of feasibility and effectiveness of investment from the point of view of employees who have undergone training. The results of such a study

http://dx.doi.org/10.21511/slrtp.16(1).2026.01

should be taken into account in further substantiation of the type, program and duration of professional training, which will allow to increase the overall effectiveness of investment.

The goal is to establish a theoretical basis and practical tools for assessing the effectiveness of personnel development investments at enterprises in the communications sector to increase their competitiveness, innovation, and the efficiency of their activities.

2. RESULTS AND DISCUSSION

The telecommunications sector in Ukraine is well developed. It includes entities that provide mobile and fixed communication services and Internet access, as well as telecommunications operators and regulatory institutions. The telecommunications services market is an essential factor in social development and is an integral element of the activities of both the population and businesses. Ensuring stable, high-quality, and uninterrupted mobile communications and Internet access is of strategic importance for Ukraine, especially in conditions of martial law. Citizens must be able to communicate with each other quickly, receive reliable, up-to-date information, and, if necessary, quickly seek help. In addition, telecommunications infrastructure is critical for coordinating the actions of military units and state administration bodies. During wartime, the continuity and efficiency of communications directly affect the level of security of the population and the effectiveness of defense measures, thereby increasing the requirements for mobile operators' activities to ensure full-fledged communications. Let's use Vodafone as a basis for our analysis and consider the specifics of personnel development investments. To do this, it is worth considering the company's market position.

Based on this and the analysis of competitors, we can highlight Vodafone's main competitive advantages:

1. Strong investments in infrastructure, even during the war:

- Vodafone invested 6.2 billion UAH in 2024 in the development of telecom infrastructure.
- Over the 3 years of full-scale war, the company invested ~ 15.5 billion UAH. Most of the investments are aimed at increasing the energy stability of base stations: this is critical during frequent power outages.
- Vodafone is also developing fixed Internet (GPON): by the end of 2024, "home Internet" will be available to 1.2 million households.

2. Innovations in tariffs and services:

- Vodafone introduced the "GigaCombo" tariff – a "3-in-1" package: mobile communications + fixed Internet + television.
- There is also the "Joice" tariff with the "Roaming Like at Home" principle: subscribers can use minutes and Internet in EU countries without additional activations.

Table 2. Vodafone competitors and features of their work

Source: Developed by the author based on Kyivstar (n.d.), Lifecell (n.d.), and Vodafone Ukraine (n.d.).

Operators	Services	Diversification of services	Customer segment	Features of services
Kyivstar	Mobile communications, 4G/5G, fixed internet, IPTV, cloud services	Convergent packages: mobile + fixed + television; B2B business solutions (IoT, cloud services)	Broad mass market, corporate clients	Broad coverage throughout Ukraine, including remote regions. Strong financial base, ability to scale infrastructure. Reliability and user trust
LiveCell	Mobile communications, 4G, eSIM, IoT solutions, digital services	Convergent offers after the merger with DatagroupVolia (mobile + fixed internet)	Young people, active internet users, tech-oriented users	Flexible pricing policy and rapid adaptation to digital trends. Focus on innovative services (eSIM, smart services) – active growth and marketing campaigns
MVNO	Mobile communication, sometimes SMS/internet packages, calls abroad	Minimal investment in infrastructure, focus on specific niches	Budget users, niche users (international calls, students)	Low price, flexible tariffs. Less coverage and speed, because they use the MNO network. Focus on users who value savings over communication quality

- In 2024, Vodafone began actively developing IoT services, connecting corporate customers to the NB-IoT network.

- The company is also working on AI solutions: it has its own AI model that supports contact center operators, and Vodafone plans to scale this solution as a business product.

3. Stable subscriber base + growing ARPU:

- As of the end of Q32024, Vodafone had approximately 15.9 million subscribers.

- In 2024, average revenue per subscriber (ARPU) grew by ~ 10% to 118.4 ₴.

4. Social responsibility and investment in human capital:

- In the first half of 2025, Vodafone invested 10 million ₴ in educational initiatives: Engineering School at the Kyiv School of Economics.

- The company also supports veterans: it buys veteran bonds and cooperates with social integration programs.

- Vodafone has implemented "Powerstar2.0" technology – an AI-based energy-saving technology for base stations that reduces electricity consumption.

5. Network reliability during energy crises:

- The company has significantly strengthened the network's resilience to power outages: in Q1 2025, it increased the number of base stations capable of operating during prolonged blackouts.

- Thanks to these efforts, Vodafone can provide more stable connectivity at critical moments – a strong competitive advantage in the conditions of unstable energy infrastructure in Ukraine (Vodafone Ukraine, n.d.).

So, in our opinion, Vodafone Ukraine has been demonstrating strategic courage in recent years: it not only maintains its business during wartime, but also actively invests in its network, strengthens innovation, and prepares for the future – in particular, in the context of 5G/6G. Thanks to a combination of innovative tariffs, IoT solutions, infrastructure investments, and social initiatives.

In general, the changes indicate that the company is moving into the stage of systematic personnel development, creating favorable conditions for conducting a SWOT analysis of its personnel policy. It is this stabilization that enables a deeper assessment of the HR system's strengths and weaknesses, identifies opportunities to improve personnel management efficiency, and lays the groundwork for a long-term strategy to develop Vodafone Ukraine's labor potential. The conducted SWOT analysis of Vodafone Ukraine's personnel policy shows that the company has significant strengths: a high level of personnel qualification, a strong employer brand, and a young, innovative workforce that quickly adapts to technological changes. At the same time, weaknesses were identified – an uneven workload on technical teams, a shortage of experienced employees, and a moderate level of voluntary dismissals. The company's opportunities include 5G development, university collaborations, and growing demand for digital professionals, while threats stem from competition for qualified personnel, migration risks, and rapid technological change.

The SWOT matrix analysis (TOWS) allowed us to specify the directions for using these factors: strengths can serve as a basis for active involvement of young specialists, rapid mastery of new technologies, and expansion of professional training programs. Market opportunities can help compensate for weaknesses, in particular the shortage of highly specialized personnel, through partnerships and training programs. At the same time, the resulting strategies demonstrate that the combination of weaknesses and external threats requires updating the motivation system, increasing staff loyalty, and strengthening retention measures for key employees.

Overall, the results of the SWOT and TOWS analyses indicate that Vodafone Ukraine has significant potential to strengthen its HR policy further and build a sustainable HR management system. The use of the proposed areas of improvement will

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Table 3. SWOT analysis of Vodafone Ukraine's human resources policy

Source: Developed by the author.

S – strengths	W – weaknesses
• High proportion of employees with higher education (75%+) • Stable core of staff with 1-5 years of experience (60% of staff) • Powerful training and development programs (Vodafone Academy, technical certifications). • Strong employer brand in the telecommunications market. • Low proportion of disciplinary dismissals. • Young staff (main group: 21-40 years old).	• High workload on technical staff. • Gradual reduction of the group of employees with 5+ years of experience (risk of loss of expertise). • Moderate level of voluntary redundancy. • Outdated motivation elements in individual departments (typical for the telecom industry). • Partial shortage of highly specialized personnel in the digital direction.
O – opportunities	**T – threats**
• Development of 5G and digital infrastructure → need for new technical competencies. • Expansion of online education and learning platforms. Demand for digital marketing and product specialists. Opportunity to collaborate with universities and technical institutes. Attracting young professionals through internships and trainee programs.	• Competition for personnel from Kyivstar, Lifecell, IT companies. Migration of qualified workers abroad. High dynamics of technologies (risk of skills lag). • Nationwide risks related to the security situation. • Shortage of engineering specialists in the market.

Table 4. Matrix SWOT analysis (TOWS)

Source: Developed by the author.

Combination	Strategy	Combination	Strategy
SO strategies		**ST strategies**	
S1 + O1	Use the high level of staff education to master 5G technologies quickly	S4 + T1	Use the employer's strong reputation to reduce employee turnover to competitors
S3 + O2	Expand the internal learning platform by integrating external courses (Coursera, CISCO Academy)	S3 + T3	Conduct regular professional development to avoid loss of competence due to technological changes
S4 + O5	Create a large-scale starter trainee program to attract young people through the power of the brand	S2 + T4	A strong core of personnel will help reduce the risks posed by external instability
S6 + O3	Involve young professionals in the development of digital products and services	S1 + T5	Improve technical personnel training through collaboration with universities
WO strategies		**WO strategies**	
W2 + O4	Compensate for the shortage of experienced workers by attracting graduates of technical universities and dual education programs	W3 + T1	Implement loyalty surveys and support programs to reduce employee turnover
W3 + O2	Expand the internal learning platform by integrating external courses (Coursera, CISCO Academy)	W2 + T2	Consolidate human resources expertise to reduce the risk of losing senior professionals through migration
W5 + O3	Create a large-scale starter trainee program to attract young people through the power of the brand	W4 + T3	Update the motivation system so that employees adapt to new technologies more quickly
W1 + O1	Involve young professionals in the development of digital products and services	W5 + T5	Introduce STEM internship programs to train our own reserve of engineers

contribute to increased productivity, reduced staff turnover, and increased returns on investment in human capital.

1. Improving the employee adaptation system.

It is proposed to introduce a 90-day adaptation program, with mentors, task checklists, and regular feedback. This will reduce early dismissals, which are the most expensive for the company. Savings of 1-1.5 million UAH per year due to reduced costs for personnel replacement.

2. Optimization of training programs.

Vodafone should switch to competency-based learning – training aimed at developing specific competencies that affect productivity indicators. Expected result: twice as fast application of skills at work. Productivity increases by 8-12%.

Table 5. Problems and areas for improvement in Vodafone's personnel development investments

Source: Developed by the author.

Problem	Proposed direction	Expected result	Potential economic impact
Part of the investment does not pay off (27.5%)	Optimization of training programs	Increase the relevance of training to business goals	8-12% productivity
Employee turnover in the first 6 months	Enhanced adaptation program	Reduce early dismissals	Savings of 11.15 million UAH/ year
Uneven development of managers	Leadership and management programs	Improve the quality of management	Increased staff retention
Insufficient digitalization of HR processes	LMS, e-trainings, analytics	Reduce offline training costs	Savings of 10-15% of the budget
Low transparency of learning outcomes	Performance assessment system	Monitor results and payback	Weeding out ineffective programs
Need for culture and motivation development	Intangible motivation, flexible conditions	Increase engagement and loyalty	↓fluidity→ savings 0.8 – 1.2 million UAH

3. Development of middle managers.

It is proposed to introduce programs in people management, performance management, leadership, and coaching to reduce conflict, increase employee involvement, and strengthen teams. And by reducing turnover, savings of up to 700 thousand UAH / year are achieved.

4. Digitalization of training and HR processes.

The introduction of an LMS system will allow you to transfer part of the training online, create a course database, and track effectiveness in real time. Reducing training costs by 10-15%.

5. Non-material motivation system.

The "Recognition of Good Practices" program is offered, including internal awards, career tracks, flexible schedules, and the possibility of remote work. This will lead to increased employee engagement and satisfaction. And a reduction in turnover by 0.5-1 million UAH.

6. Training effectiveness assessment model.

Implementation of the Kirkpatrick model (4 levels: reaction → knowledge → behavior → result). This involves eliminating ineffective programs and reallocating the budget to more effective ones.

Forecast of results after the implementation of measures:

- reduction of turnover by another 0.5-0.8%;
- increase in productivity by 10-15%;
- increase in economic effect to 13.5-14 million UAH;
- increase in ROI to 85-90%;
- full return on investment within 2-3 years.

Therefore, the proposed areas of improvement will allow Vodafone Ukraine to increase the economic efficiency of investments in personnel development, optimize the use of financial resources and ensure increased employee productivity. The implementation of measures will strengthen the company's human resources potential, reduce turnover, and achieve a stable, long-term effect, which is a key factor in competitiveness in the telecommunications market.

Table 6. Vodafone's investment priorities in human resource development

Source: Developed by the author.

Priority	Importance Level	Expected Impact	Comment
Employee Adaptation	High	Reduced turnover	The fastest economic effect
Leadership Development	High	Increased team productivity	Multiplicative effect
Digitalization of Learning	Average	Reduced costs	High payback
Motivation System	Average	Increased loyalty	Needs to be maintained constantly
Evaluation of Training Programs	High	Performance control	Allows for saving budget
Soft Skills Development	Low-medium	Increased communication efficiency	Long-term effect

http://dx.doi.org/10.21511/slrtp.16(1).2026.01

CONCLUSION

The goal is to establish a theoretical basis and practical tools for assessing the effectiveness of personnel development investments at enterprises in the communications sector to increase their competitiveness, innovation, and the efficiency of their activities.

Theoretical analysis has shown that personnel development is not only a social function of the enterprise, but also an investment process capable of generating tangible economic results. The models of efficiency assessment considered in the work (ROI, Payback Ratio, Cost-Effectiveness, SROI, Kirkpatrick model) enable comprehensive measurement of both financial and non-financial effects arising from training and professional development. In modern market conditions, it is essential to assess not only direct benefits but also deferred outcomes, such as improving work quality, increasing staff involvement, and strengthening corporate culture.

Summing up the study's results, it can be stated that investments in personnel development are among the most effective mechanisms for strengthening an enterprise's competitive advantage. The example of Vodafone Ukraine shows that a systematic approach to human capital development delivers both direct financial benefits and long-term strategic advantages: the development of highly professional personnel, increased business sustainability, improved employer reputation, and enhanced management efficiency. The effectiveness of personnel investments largely depends on the choice of assessment methods, regular monitoring, program adaptation to employee needs, and the digitalization of HR processes. It is the combination of these factors that will allow companies to ensure sustainable growth and strengthen their human resources potential in a competitive environment.

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