

UDC 330.341.1:[338.467:656.8]

DOI <https://doi.org/10.26661/2414-0287-2024-2-62-04>**FORMATION AND REALIZATION
OF THE INNOVATIVE POTENTIAL OF LLC “NOVA POSHTA”****Cherep A.V., Karmazina V.S.***Zaporizhzhia National University**Ukraine, 69600, Zaporizhzhia, Zhukovsky str., 66**viktorija240401@gmail.com*

ORCID: 0000-0001-5253-7481, 0000-0002-2176-4080

Key words:investment, innovation,
innovation terminal, scientific and
technological progress, enterprise.

The article considers the essence of innovation activity and analyzes the need for entrepreneurship to focus on intensifying development within the framework of scientific and technological progress and digitalization of services. The main aspects of management that can lead to the successful implementation of innovations in companies are identified. The current state of development of LLC «Nova Poshta» as a leader in the field of logistics and freight transportation in the domestic market is analyzed. The innovative terminals of the company, which are already operating or under construction, as well as the latest solutions, such as the Kyiv Innovation Terminal, are studied. The author assesses the dynamics of current and non-current assets of LLC «Nova Poshta», the sufficiency of retained earnings to cover its own needs and allocate funds for development in the context of a full-scale Russian-Ukrainian war, and describes the property status of the company. The open innovation platform «NovaTech», which began operating in the current year 2023, is studied, including the companies that are partners (trademarks) in the innovation industry. The author's own calculations of liquidity and solvency provided an assessment of the financial stability of LLC «Nova Poshta», and the assessment of the probability of bankruptcy using the models of E. Alman, O. Tereshchenko, and R. Lis recorded a low level of risk for the period of 2019-2022. The author proposes a novel solution for forming a new type of communication with technology parks of Ukraine, which nowadays have state financial support and are a magnet for investment, able to quickly generate innovations that will increase the competitiveness of an enterprise involved in potential cooperation with a technology park.

ФОРМУВАННЯ ТА РЕАЛІЗАЦІЯ ІННОВАЦІЙНОГО ПОТЕНЦІАЛУ ТОВ «НОВА ПОШТА»**Череп А.В., Кармазіна В.С.***Запорізький національний університет**Україна, 69600, м. Запоріжжя, вул. Жуковського, 66***Ключові слова:** інвестиції,
інновації, інноваційний
термінал, науково-технічний
прогрес, підприємство.

У статті розглянуто сутність інноваційної діяльності та проаналізовано необхідність акцентованості підприємництва на активізації розвитку в межах науково-технічного прогресу та цифровізації послуг. Виявлено основні аспекти управління, здатні призвести до успішної реалізації інновацій в компаніях. Проаналізовано актуальний стан розвитку ТОВ «Нова Пошта» як лідера сфери логістики та вантажних перевезень на вітчизняному ринку. Досліджено інноваційні термінали компанії, котрі вже функціонують або перебувають на стадії будівництва, а також новітні рішення, наприклад Київського інноваційного терміналу. Проведено оцінку динаміки оборотних і необоротних коштів ТОВ «Нова Пошта», достатності нерозподіленого прибутку для покриття власних потреб та направлення коштів на розвиток в умовах повномасштабної російсько-української війни, а також описано майновий стан компанії. Досліджено платформу відкритих інновацій «NovaTech», яка почала функціонування у поточному 2023 році, в тому числі описано компанії, які є партнерами (торгові марки) з інноваційної галузі. Власні розрахунки ліквідності та платоспроможності надали оцінку

фінансової стійкості ТОВ «Нова Пошта», а оцінка імовірності банкрутства за допомогою моделей Е. Альмана, О. Терещенка, Р. Ліса зафіксувала низький рівень ризику та періоду 2019-2022 рр. Наостанок, сформульовано антикризові заходи, які суб'єкт господарювання може взяти до уваги у першу чергу. Запропоновано новітнє рішення формування нового виду комунікації із технологічними парками України, які у наш час мають державну фінансову підтримку та є магнітом для інвестицій, здатні швидко згенерувати інновації, які підвищують конкурентоспроможність підприємства, включеного у потенційну співпрацю із технопарком.

Statement of the problem

In today's world, innovation has become a key factor in the development and competitiveness of enterprises in various industries. This is especially true for companies operating in the logistics and postal services sector. This industry is developing dynamically, changing traditional approaches to the organization and provision of services, and one of the leading companies in this segment is LLC «Nova Poshta». The analysis of investment support for innovative development is a particularly important task that will determine how effective the company's strategic decisions are and will help to formulate prospects for further active implementation of the latest solutions at the studied business entity.

Analysis of recent studies and publications

The essence of the concept of innovation is interpreted differently by scientists and researchers, and is important in the context of analyzing the realization of the innovative potential of enterprises. The term «innovation» as an economic category was introduced by the world-famous Austrian scientist J. Schumpeter in 1911 in his work «The Theory of Economic Development». The term began to be used more actively in society in the 1930's and explained change with the main purpose of introducing and actively using new types of consumer goods, production or transport vehicles, markets, and forms of organization in the industrial sector. According to this definition, it was innovation that was considered the main source of profit, which allowed enterprises to develop further and further increase their financial base [1]. Ignatova E.M. [4], Lavrova Y.V. [2], Lapko O.O. [3], Lepykhin O.V. [5], Lyschenko O.G. [5], Oleynikova L.G. [5], Sumets O.M. [4], Cherep O.G. [5, 6], Khutorna K. [7] also actively studied the importance of innovation development and its financial support. These works substantiate the expediency of intensifying innovation and development. Therefore, scientific research, especially during the Russian-Ukrainian war, is relevant and timely.

Objectives of the article

The article is aimed at analyzing the current innovative development of LLC «Nova Poshta»; studying the financial security of the company within the framework of innovative development through the prism of the study of innovative terminals and the «NovaTech» innovation platform; assessing the possibility of bankruptcy and developing anti-crisis measures; analyzing the prospects for realization of the innovative potential in the coming years.

The main material of the research

The development and implementation of innovations and cutting-edge solutions at business entities in all industries demonstrates their ability to move into a progressive future, while improving the quality of life of the country's citizens.

Firstly, it is worth noting that according to the Law of Ukraine «On Innovative Activities» No. 40-IV of 04.07.2002 (as amended on 31.03.2023), innovations are newly created (i.e., applied) and (or) improved competitive technologies, products, services, as well as organizational and technical solutions of a production, administrative, commercial nature that significantly improve the structure and quality of production or the social sphere [8].

Innovation should be the foundation for the modernization and post-war development of Ukraine's business sector. According to the latest surveys conducted in 2023 by the Institute for Economic Research and Policy Consulting at the request of the Ukrainian Cluster Alliance, 18% of the surveyed enterprises did not have any innovative activities before the full-scale war, which began with the military invasion of the Russian Federation into the independent borders of Ukraine on February 24, 2022, and still do not conduct them. According to the survey, the largest numbers of innovation-oriented businesses were international companies and large Ukrainian companies, including of LLC «Nova Poshta».

Moreover, according to the study, crisis situations have always reduced attention to innovation (77% of respondents reduced the pace of innovation development, 23% supported it (large companies and exporters); only 19% increased investment in innovation to achieve their goals). Among the measures that the surveyed Ukrainian enterprises consider stimulating are long-term sectoral development programs, fiscal incentives, and improved formats of communication with innovators [9].

It is worth noting that for the successful implementation of innovations, we can distinguish a number of management aspects such as:

- a) a preliminary assessment of the real potential demand for innovations provided by a particular innovation and the advantages it will provide compared to its current analogues or competitors, or the enterprise itself;
- b) analysis of all the necessary resources for the implementation of innovations and the possibility of their application in the company's activities;
- c) identification of all possible obstacles that may arise in the process of implementing innovations and the possibility of preventing them;

d) assessment of own financial capabilities necessary for the implementation of the innovation, if necessary, search for reliable investors;

e) development of a business plan before the start of innovation [2].

Evaluating the current state of development of LLC «Nova Poshta» in accordance with the key points of scientific and technological progress in the domestic cargo transportation and logistics industry, we can confirm that the company regularly improves its processes, including e-commerce, automated systems and mobile applications. For example, in order to provide customers with fast and high-quality service in the face of constant growth in shipment volumes, LLC «Nova Poshta» is actively developing its own logistics infrastructure. It already has 110 sorting terminals and depots in every regional center of the country, where it continues to automate sorting processes. First of all, the 6 largest innovative terminals are located in Khmelnytskyi (HIT), Kyiv (KIT), Kharkiv (HAI), Lviv (LEO), Dnipro (DAO), and Zaporizhzhia (ZIT) (to be built in 2022). These terminals are capable of handling 20 thousand to 50 thousand parcels per hour. Construction of innovative terminals in Odesa and Boryspil is currently underway in 2023 [10].

We can see how the development of terminals and their modernization affected the company’s leadership position from the statistics. The volume of shipments in 2022, despite the full-scale war, amounted to 315 million parcels and cargo. And on December 30, 2022, LLC «Nova Poshta» sent 1.9 million parcels, which is considered a company record among all postal enterprises in the country.

Thus, there is indeed a demand for innovation, as improving the quality of the company’s services focuses customer confidence. To further support it, it is necessary to implement and finance existing innovative solutions.

The dynamics of the company’s current and non-current assets indicates its ability to meet current financial needs. Current assets have recorded a gradual increase from 22287962 thousand UAH to 3448838 thousand UAH over four years, showing a 50.74% increase. In

the last year (2022), compared to 2021, current assets increased by 33.58%. A similar situation was with non-current assets, they increased to UAH 12306082 thousand in 2022, which indicates an increase of 48.17% compared to the preceding year 2021. At the same time, for the period 2019-2022, the company increased its non-current assets by +327.28%, which indicates an increase in the volume and value of real estate, equipment, vehicles (for example, a car fleet) and other assets used for the production activities of the company for a long time. The growth of non-current assets indicates an increase in investment in the expansion of production capacity, modernization of technologies and the purchase of new equipment by 2023 (Fig. 1).

It is also important to ensure the efficient use of non-current and current assets to ensure the optimal level of production processes and reduce unnecessary asset maintenance costs. The saved financial resources can then be used for innovative activities.

Retained earnings (which the management of LLC «Nova Poshta» subsequently invests in the development of its activities, and especially in recent years, funds have been allocated for the construction of innovative terminals) have been growing, and demonstrated approximately 421.38% growth in 2019-2022 [10].

The property status of the subject of the study indicates the sufficiency of the invested funds, as the project of the open innovation platform «NovaTech» has been actively operating since 2023, with the mission to create solutions that will change logistics and improve customer experience; develop startups in Ukraine and promote their scaling, as well as unite and support innovators throughout the country. Examples of partner companies, namely brands that actively cooperate with this platform are: «SB Robotics» (robotic warehouse processes); «Konsort» (warehouse modernization systems, equipment for production automation); «URRAS» (Association of Robotics and Automated Systems Market Participants); «UIS» (Ukrainian Intelligent Systems), etc. [10; 11].

The latest solutions that were invented in communication between LLC «Nova Poshta» and the organizations

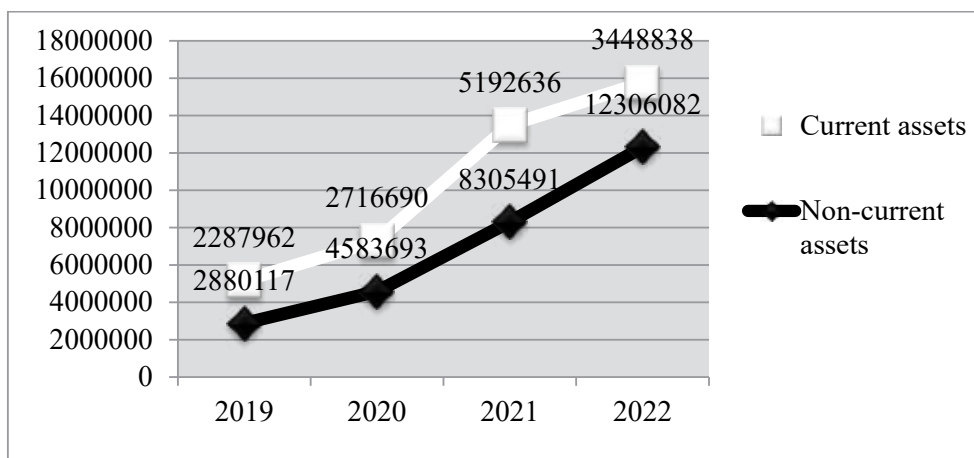


Figure 1 – Dynamics of current and non-current assets of LLC «Nova Poshta» for the period 2019-2022, UAH thousand
Source: compiled on the basis of [10].

described above were included in the company's tangible or intellectual property and are especially used in innovative terminals. An example of an innovative solution aimed at attracting the attention and trust of customers to the reality of the company's development is the development of a 3D tour of the Kyiv Innovation Terminal, which is one of the largest [12].

Today, the company has a type of absolute liquidity and is fully solvent, despite some deviations from the normative values related to the impact of the Russian-Ukrainian war. The analyzed solvency ratio of the company complied with the standard during 2019-2022, namely, it exceeded 0.1, amounting to 0.12 according to the latest data of 2022, which was slightly lower than in 2021 by 0.04 units. This indicates the ability of LLC «Nova Poshta» to continue to develop with a financial cushion.

However, there may be certain obstacles to the realization of innovative potential. Analysis of bankruptcy according to the models of E. Altman, O. Tereshchenko, and R. Lis will help to clearly neutralize existing risks or focus on the need to make urgent decisions on anti-crisis measures.

According to the calculations of E. Altman's model, as of 2019-2020, the probability of bankruptcy of the object of study was the least likely. The integral threat level indicator was more than 3.0 units, which is higher than the established optimal values. In 2021, the situation worsened due to the side effects of the coronavirus pandemic, and therefore the probability of bankruptcy of LLC «Nova Poshta» remained low (2.8 units, which is close to a very low integral indicator). According to the results of 2022,

the degree of risk of insufficient financial resources to cover its needs and ensure stable innovative development in line with the company's strategic goals increased by about 12%, amounting to an integral indicator value of 2.48 units according to the chosen model (Table 1). Thus, 2022 was the most crisis year with a high probability of bankruptcy, which was influenced primarily by external factors of the economic and political situation in the country.

In order to refute or confirm the increased riskiness of the efficiency of LLC «Nova Poshta» in Ukraine, we will analyze O. Tereshchenko's model, which is more attuned to the domestic realities of the business climate. Thus, for the period of 2019-2022, the company is not at risk of bankruptcy, as the integral indicator is sufficiently higher than the optimal value and is more than 2 units. For example, according to the latest reported data at the end of 2022, the calculated value exceeds the norm by more than 4 times or 6.7 units (Table 2).

According to R. Lis's model, LLC «Nova Poshta» also has a low probability of bankruptcy, as all calculated values exceed the norm of 0.037 units. Of the analyzed period, the most risky was 2022 (0.053 units), compared to the stability of 2019-2020, when the integral indicator recorded 0.060 units (Table 3).

Thus, the proposal of anti-crisis measures is necessary for a company in the logistics and cargo transportation sector. To realize the full innovative potential, it is worth paying attention to key management aspects, such as:

a) rationalization of costs (introduction of regular audits and optimization of excessive costs, limitation of non-strategic expenses);

Table 1 – Estimation of the bankruptcy of LLC «Nova Poshta» according to the Altman model, 2019-2022

Indicators	2019	2020	2021	2022
X1	-0,10	-0,10	0,01	-0,13
X2	0,15	0,14	0,19	0,14
X3	0,17	0,15	0,21	0,15
X4	0,33	0,43	0,50	0,71
X5	2,60	2,32	1,54	1,50
Z (integral indicator of the level of bankruptcy threat)	3,44	3,13	2,80	2,46
Probability of bankruptcy	very low	very low	low	low
Level of financial potential	high	high	average	average
Financial sustainability	The business is profitable, the financial position is stable, and the company is financially sound.		The business is profitable, but financial stability largely depends on changes in the internal and external environment.	

Source: compiled on the basis of [10]

Table 2 – Estimation of the bankruptcy of LLC «Nova Poshta» according to O. Tereshchenko's model, 2019-2022

Indicators	2019	2020	2021	2022
X1	4,75	4,86	4,08	4,34
X2	1,83	2,10	2,64	2,89
X3	0,15	0,14	0,19	0,14
X4	0,06	0,06	0,12	0,09
X5	0,01	0,01	0,01	0,02
X6	2,60	2,32	1,54	1,50
Z (integral indicator of the level of bankruptcy threat)	9,35	9,35	9,04	8,70
Probability of bankruptcy	low probability of bankruptcy			

Source: compiled on the basis of [10]

Table 3 – Estimation of the bankruptcy of LLC «Nova Poshta» according to the R. Lis model, 2019-2022

Indicators	2019	2020	2021	2022
X1	0,443	0,372	0,385	0,219
X2	0,198	0,211	0,119	0,160
X3	0,241	0,295	0,330	0,412
X4	0,326	0,428	0,499	0,705
Z (integral indicator of the level of bankruptcy threat)	0,060	0,060	0,055	0,053
Probability of bankruptcy	low probability of bankruptcy			

Source: compiled on the basis of [10]

b) diversification of services (expanding the range of services for customers with the introduction of new digital capabilities in the «Nova Poshta» app, which will help to depend on more sources of income, and this reduces the risks of losing stability and competitiveness in the market);

c) customer support (improving the quality and speed of customer service and communication with customers, introducing updated loyalty programs and promotional offers for regular customers of the company's services);

d) achievement of financial stability by searching for promising additional sources of financing in the event of a further increase in the probability of bankruptcy or its approach to a critical level;

f) developing its own risk management plan and adding an anti-crisis department to the organizational structure of LLC «Nova Poshta»;

g) financing staff retraining projects. Despite the fact that LLC «Nova Poshta» is one of the largest employers in Ukraine and the Group employs more than 32 thousand employees and more than 10 thousand partner employees, at the beginning of 2023 due to a sharp decline in cargo turnover as a result of the impact of the full-scale war and damage to the offices, some of the staff who did not have work had to be sent on simple leave according to the official procedure of the Law of Ukraine No. 2136-IX of 15.03.2022 «On the organization of labor relations under martial law». This led to a decrease in the number of expenses for improving working conditions in 2022-2023 (no estimates of the effectiveness of retraining are made), although UAH 64 million was invested in 2021 with a positive impact on encouraging staff to undergo training aimed at digital transformation of the enterprise [7;13;14];

h) marketing and advertising (development and implementation of effective marketing campaigns to increase sales; study of customer needs and demand in the new environment);

i) cooperation with the Government and other stakeholders (engaging in a dialogue with government agencies

through business support programs in times of crisis; searching for new opportunities for cooperation with business entities. For example, it would be an innovative decision to communicate between the technological and industrial parks of Ukraine and LLC «Nova Poshta», which can become a driver of innovative development of the entire business base in the future).

The project-based collaboration between LLC «Nova Poshta» and the technology parks can be a success for the company's technological development, as it will speed up access to advanced technologies that are not yet available to the public. Effective automation can also be an achievement, as the latest solutions within the technology park can automate many processes, which will reduce the risk of errors and facilitate fast delivery of goods to customers. Finally, technology parks are usually centers of scientific and technological progress and support for startups, and therefore communication with them can provide LLC «Nova Poshta» with access to innovative and promising ideas for developing its business. State support for technology parks has been boosted in recent years, and therefore it may be a very good step to consider the feasibility of this type of innovation potential for the company described in this article.

Conclusions

In summary, LLC «Nova Poshta» has proven to be an important player in the logistics and delivery market in Ukraine. Its interest in innovation is emphasized by its cooperation with a large number of domestic and foreign partners and its focus on regular technological development even in times of full-scale war. The prospect of integrating new technologies into more business processes will help improve logistics efficiency, customer service and market competitiveness. Cooperation with technology parks will create an opportunity to access the innovation ecosystem, which, in turn, will provide some financial stability for the company's development.

References

1. Joseph A. Schumpeter (1934). The Theory of Economic Development. (Redvers Opie, Trans.). *Harvard Economic Studies*. Retrieved from <https://www.hup.harvard.edu/catalog.php?isbn=9780674879904>.
2. Lavrova Yu.V. (2012). *Ekonomika pidpriemstva ta marketynh: konspekt lektsii [Business Economics and Marketing: Lecture Notes]*. Kharkiv: KHNADU [in Ukrainian].
3. Lapko O.O. (1999). *Innovatsiina diialnist v systemi derzhavnoho rehuliuвання [Innovative activities in the system of state regulation]*. Kyiv: IEP NAS of Ukraine. Retrieved from <http://surl.li/ldutw> [in Ukrainian].
4. Sumets O.M., Ihnatova Ye.M. (2010). *Tovarna innovatsiini polityka [Commodity innovation policy]*. Kyiv: Hi-Tech Press. Retrieved from https://pidru4niki.com/1452010650421/marketing/traktuvannya_ponyattya_innovatsiya_osnovni_oznaki_innovatsiyyi [in Ukrainian].

5. Cherep O.G., Oleinikova L.G., Lepokhin O.V., Lyshchenko E.G. (2023). Creation of mechanism for intensification of industrial enterprises effective innovative development. *Financial strategies of innovative economic development. Proceedings Scientific publications. Publishing House "Helvetica". Issue 1 (57)*, 100-104.
6. Cherep O.H. (2018). Udoskonalennia ekonomichnoho mekhanizmu innovatsiinoi diialnosti promyslovykh pidpriemstv [Improving the economic mechanism of innovation activity of industrial enterprises]. *Bulletin of Priazovsky State Technical University. Series: Economic sciences: Collection of scientific works. – Mariupol: SHEI "Priazovsky State Technical University"*, Issue 17, 242-248 [in Ukrainian].
7. Khutorna K. (2022). «Nova poshta» i viina: yak zminylasia robota naibilshoi v Ukraini sluzhby dostavky [Nova Poshta and the War: How the Work of Ukraine's Largest Delivery Service Has Changed]. *Electronic portal "Mind"*. Retrieved from <https://mind.ua/video/20241311-nova-poshta-i-vijna-yak-zminilasya-robota-najbilshoyi-v-ukrayini-sluzhbi-dostavki> [in Ukrainian].
8. Pro innovatsiinu diialnist: Zakon Ukrainy vid 04.07.2002 r. № 40-IV. Data onovlennia: 31.03.2023 [On innovation activity: Law of Ukraine of 04.07.2002, No. 40-IV. Date of update: 31.03.2023]. Retrieved from <https://zakon.rada.gov.ua/laws/show/40-15#Text> [in Ukrainian].
9. Innovatsii pid chas viiny – chy na chasi? (2023) [Are innovations in time of war timely?] *Electronic portal «Ukrainian Cluster Alliance»*. Retrieved from <https://www.clusters.org.ua/blog-single/innovatsiyi-pid-chas-viyny/> [in Ukrainian].
10. Ofitsiinyi sait TOV «Nova Poshta» [Official website of LLC «Nova Poshta»]. *novaposhta.ua*. Retrieved from <https://novaposhta.ua> [in Ukrainian].
11. Ofitsiinyi sait proiektu platformy vidkrytykh innovatsii «Nova Tech» [Official website of the Nova Tech open innovation platform project]. *novaposhta.ua/novatech*. Retrieved from <https://novaposhta.ua/novatech/> [in Ukrainian].
12. 3Dtur po Kyivskomu innovatsiinomu terminalu TOV «Nova Poshta» [3Dtour of the Kyiv innovation terminal of LLC «Nova Poshta»]. *novaposhta.ua/3dtourkit*. Retrieved from <https://novaposhta.ua/3dtourkit/> [in Ukrainian].
13. Pro orhanizatsiiu trudovykh vidnosyn v umovakh voiennoho stanu: Zakon Ukrainy vid 15.03.2022 № 2136-IX [On the organization of labor relations under martial law: Law of Ukraine of 15.03.2022 No. 2136-IX]. Retrieved from <https://zakon.rada.gov.ua/laws/show/2136-20> [in Ukrainian].
14. Zvit pro stalyyi rozvytok TOV «Nova Poshta», 2021 [Sustainability report of Nova Poshta LLC, 2021]. Retrieved from https://novaposhta.ua/csr/zvit_zi_stalogo_rozvitku_2021/ [in Ukrainian].