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**DIGITAL INCLUSION: FINANCIAL AND MARKETING ASPECTS**

*In the presented work, the main aspects of the formation of digital inclusion are considered and the main influencing factors, such as financial and marketing factors, are determined. It is these factors that have a significant impact on the inclusiveness of economic processes and the establishment of digital inclusion in society. The purpose of the presented work is to determine the main elements of the formation of digital inclusion, to study the factors influencing the inclusiveness of economic processes, to determine the main essential factors that have an impact on the formation of digital inclusion. Also definition of financial and marketing component in digital inclusion. The main methods of research in the presented concern were: methods of analysis and synthesis to determine the main components of digital inclusion, methods of deduction and induction to determine the factors influencing the formation of digital inclusion, a graphic method for visual display of the presented research results. Financial and marketing aspects are an integral part of digital inclusion and have an important impact on its success and effectiveness. Digital technologies provide new opportunities for promoting products and services, attracting target audiences and increasing sales. Digital marketing allows businesses to increase their visibility online, use social media, content marketing and other tools to communicate with customers. The use of digital marketing tools allows you to collect and analyze data on customer behavior, their interest in products and advertising campaigns. Digital inclusion requires investment in modern technologies, software, equipment and infrastructure. This allows businesses to improve productivity, efficiency and competitiveness. Financial aspects of digital inclusion include various financial aspects that help ensure the availability and use of digital technologies and Internet resources for all segments of the population. To ensure digital inclusion, it is necessary to provide funding for the development and modernization of communication infrastructure and access to the Internet. This includes the development of networks and high-speed Internet in rural areas, compliance with the principle of "non-shadow" zones, as well as reducing the cost of Internet access. The implementation of digital inclusion projects requires funding from the state, international organizations, the private sector, and charitable organizations. This will help support the creation and development of digital infrastructures, digital education projects and other initiatives promoting digital inclusion.*

**Keywords:** *inclusive economy; digitalization; business processes; impact factor; economic development; economic inclusion.*

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**ЦИФРОВА ІНКЛЮЗІЯ: ФІНАНСОВИЙ ТА МАРКЕТИНГОВИЙ АСПЕКТИ**

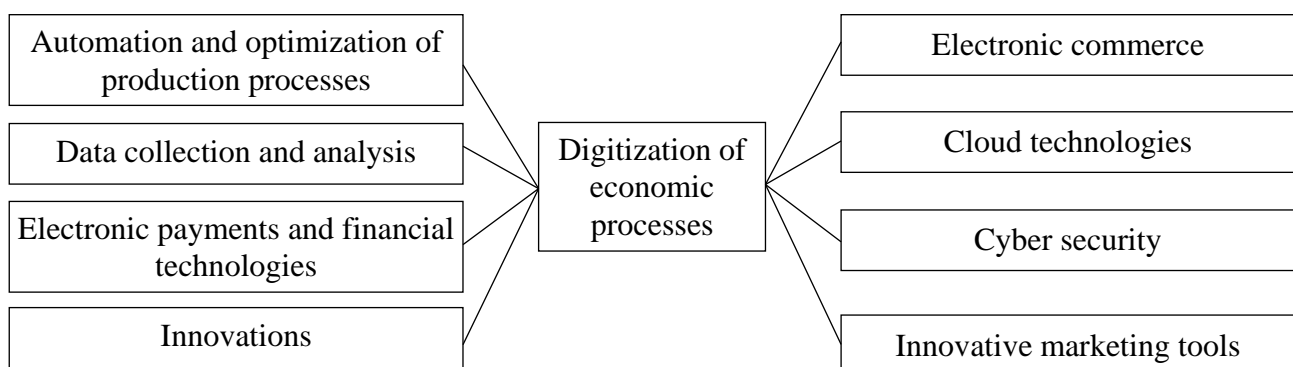
*В представленій роботі розглянуті основні аспекти формування цифрової інклюзії та визначено основні фактори впливу такі як фінансовий фактор та маркетинговий. Саме ці фактори мають суттєвий вплив на інклюзивність економічних процесів та становлення цифрової інклюзії в суспільстві. Метою представленої роботи є визначення основних елементів становлення цифрової інклюзії, дослідження факторів впливу на інклюзивність економічних процесів, визначення основних суттєвих факторів, які мають вплив на становлення цифрової інклюзії. Також визначення фінансової та маркетингової складової в цифровій інклюзії. Основними методами дослідження в представленій заботі стали: методи аналізу та синтезу для визначення основних складових цифрової інклюзії, методи*

дедукції і індукції для визначення факторів впливу на становлення цифрової інклюзії, графічний метод для наочного відображення представлених результатів дослідження. Фінансові та маркетингові аспекти є невід'ємною частиною цифрової інклюзії і мають важливий вплив на її успішність та результативність. Цифрові технології надають нові можливості для просування продуктів та послуг, залучення цільової аудиторії та збільшення продажів. Цифровий маркетинг дозволяє підприємствам збільшити свою видимість у Інтернеті, використовувати соціальні мережі, контент-маркетинг та інші інструменти для комунікації з клієнтами. Застосування цифрових маркетингових інструментів дозволяє збирати та аналізувати дані про поведінку клієнтів, їхній інтерес до продуктів та рекламних кампаній. Цифрова інклюзія вимагає інвестицій у сучасні технології, програмне забезпечення, обладнання та інфраструктуру. Це дозволяє підприємствам покращити продуктивність, ефективність та конкурентоспроможність. Фінансові аспекти цифрової інклюзії включають різні фінансові аспекти, які допомагають забезпечити доступність та використання цифрових технологій та інтернет-ресурсів для всіх верств населення. Для забезпечення цифрової інклюзії необхідно забезпечити фінансування на розвиток та модернізацію інфраструктури зв'язку та доступу до Інтернету. Це охоплює розбудову мереж та високошвидкісного інтернету в сільських районах, дотримання принципу "нетіншових" зон, а також зниження вартості доступу до Інтернету. Для реалізації проектів з цифрової інклюзії необхідне фінансування з боку держави, міжнародних організацій, приватного сектору та благодійних організацій. Це допоможе підтримати створення та розвиток цифрових інфраструктур, проектів з цифрової освіти та інших ініціатив, що сприяють цифровій інклюзії.

**Ключові слова:** інклюзивна економіка; цифровізація; бізнес-процеси; фактор впливу; економічний розвиток; економічна інклюзія.

**Introduction.** Digitalization of economic processes reflects the process of transition from traditional methods of management, production and communication to the use of digital technologies and information systems. Informatization applies both to individual enterprises and organizations, and to the entire economy as a whole. Digitization requires the use of modern information technologies and digital tools to optimize processes, improve efficiency, increase productivity and increase competitiveness.

The process of digitalization of economic processes is complex and multifaceted, which causes the complexity of its management and administration, as well as implementation. In fig. 1. the main components of this process are presented.



Source: systematized by the authors based on sources [1–6].

Fig. 1. Components of digitalization of economic processes

It should also be noted that the features of digitalization of economic processes are:

- digital technologies allow enterprises to operate on the international market, attract customers from different countries and export their goods and services;
- digital technologies stimulate the development of innovations in business. Enterprises that introduce new technologies and innovative solutions are able to occupy leading positions in the market and gain competitive advantages;
- digital technologies make it possible to improve interaction with consumers, provide them with more convenient and faster access to goods and services, as well as a personalized approach;
- digital technologies allow more effective and accurate targeting of marketing actions and advertising to the target audience. The use of digital media channels, social networks and analytical tools allows you to achieve better results in attracting new customers and maintaining the loyalty of current ones;
- digital technologies make it possible to make non-cash payments, use electronic wallets and other financial instruments, which simplifies financial transactions and provides convenience for customers.

In general, the digitalization of economic processes has great potential for improving the efficiency and competitiveness of enterprises, accelerating innovative development, attracting new customers and ensuring stable growth. However, for the successful implementation of digital strategies, enterprises must consider the need to ensure cyber security, train personnel to use new technologies and actively adapt to changes in the market and society.

Under such conditions, a separate point of the digitalization of economic processes is the formation of an inclusive space, which determines the accessibility and comprehensibility of economic processes. Digital inclusion plays an important role in ensuring equal opportunities and access to digital technologies and information resources for all people, regardless of their status, origin or geographical location. That is why the topic of the current research is relevant and timely.

**Analysis of literary sources.** Many works of famous scientists and economists are devoted to the development of economic processes. So M. Rubmann in his work "Industry 4.0: The Future of Productivity and Growth in Manufacturing Industries" [1] considers economic processes from the point of view of their global transformation and digitalization. Questions related to the transformation of both economic and financial processes, their accessibility and inclusiveness were reflected in the works M.-J. Gallego-Losada, A. Montero-Navarro, E. García-Abajo, R. Gallego-Losada [2].

J. Gupta, V. Cornelissen, M. Ros-Tonen [3] in the study of economic processes emphasize sustainable development and ensuring the availability of all economic processes, such as marketing, management, and finance.

Marketing researcher F. Kotler in the digitalization of modern economic processes draws attention to the emergence and modernization of marketing tools, the development of innovations that ensure the process of accessibility and the formation of an information society [4].

Among the domestic researchers dealing with the development of the digitalization of economic processes and the formation of an inclusive economy, it is possible to single out the works of A. Bazylyuk [5], A. Krysovaty [6], M. Oklander [7], O. Sokhatska [6] and others.

At the same time, due to the dynamic development of today's economic processes, globalization and research integration, the issues of digitalization and inclusiveness are of an urgent nature and require more thorough research on a separate issue.

**Aims.** The purpose of the presented work is to determine the main components of digital inclusion and to study the process of its formation. Determination of the most influential factors and forecasting the further development of the inclusiveness of economic processes.

**Research results.** Digitization is the process of introducing digital technologies and innovations into various spheres of life, including economy, industry, education, medicine, communications and other fields. It involves the transition from traditional analog methods to digital ones, which include the use of information technologies, artificial intelligence, the Internet of Things, data analytics, and other innovative solutions [4].

The main goal of digitization is to increase the efficiency, convenience and speed of various processes, improve the quality of services and goods, as well as ensure access to information and technologies for all segments of the population. Digitalization also helps to create new opportunities for business, research and innovation, which contributes to the development of the economy and society as a whole.

Digitization includes such aspects as automation of processes, implementation of electronic management systems, digital platforms and services, use of cloud technologies, development of e-commerce, e-government, development of mobile applications, augmented reality and much more.

Digitization is a key factor in the modern development of society, it changes approaches to solving problems, improves people's quality of life and opens up new opportunities for innovation and growth. However, it also requires the development of cyber security, the protection of personal data and the balanced use of technology to ensure the sustainability and security of the development of the digital society.

Successful digitalization requires not only the implementation of advanced technologies, but also the consideration of economic, social, legal and ethical aspects. This is a challenge for governments, businesses and the public to work together to develop a sustainable digital society.

That is why the digitalization of economic processes is becoming an urgent and important issue today to ensure sustainable development and optimization of existing business processes in the field of entrepreneurship. One of the most important aspects of digitalization is social inclusion, which forms the very process of digital inclusion. Social inclusion consists in expanding access to the Internet and digital technologies, providing access to education and work opportunities for all segments of the population.

Digital inclusion is a concept that means ensuring equal opportunities for all people and population groups to access, use and benefit from digital technologies and online resources. This includes not only physical access to computers and mobile devices, but also digital skills and access to a quality internet connection.

The main principles of digital inclusion are presented in fig. 2.

Digital inclusion is an important tool for ensuring social justice and equal opportunities for all, as well as for creating a modern, innovative and competitive society. Considering the digital aspects of inclusion is becoming increasingly important in today's world, especially given the rapid development of digital technologies and Internet infrastructure [8].

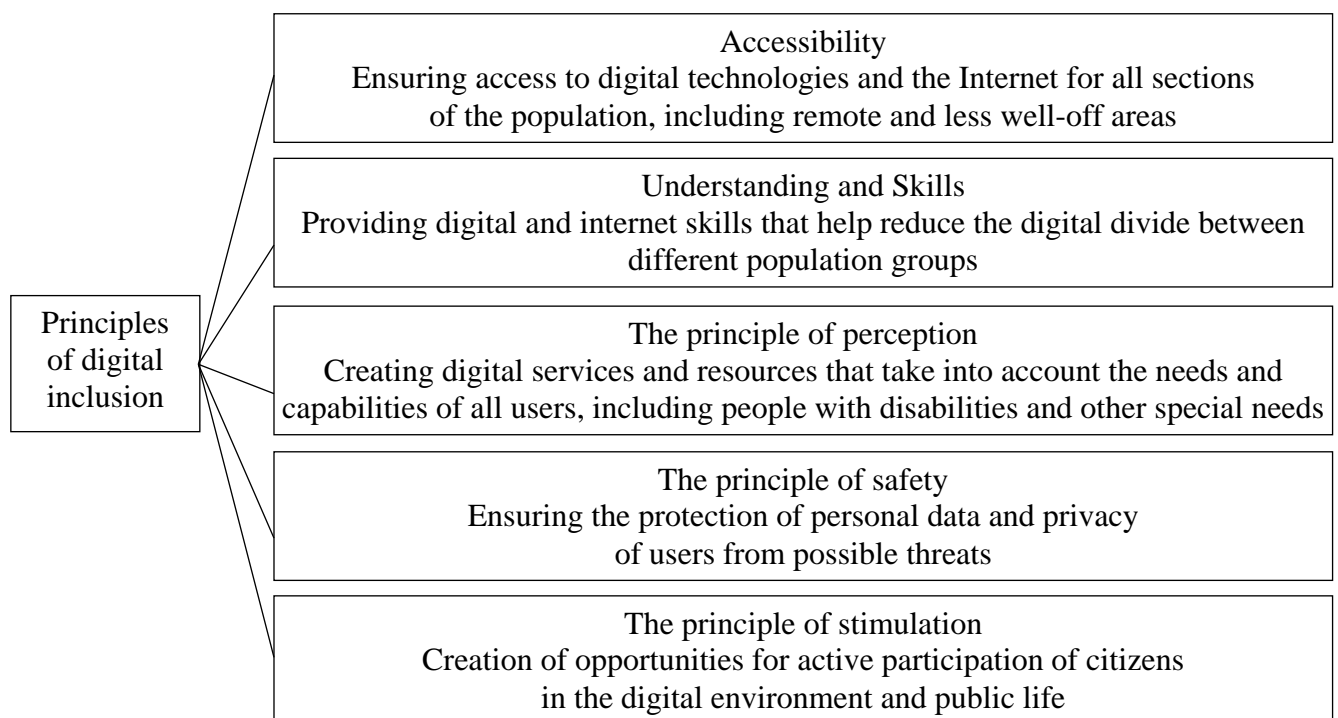
So, when forming digital inclusion, it is necessary to highlight the following influencing factors:

- the availability of infrastructure, such as computers, smartphones, tablets, internet connections, free Wi-Fi points and telecommunications infrastructure, determine the level of physical access to digital technologies;

- the cost of digital devices and services is an important factor in digital inclusion. The cost of equipment and Internet services can be a barrier to access for people with low incomes or from less developed regions;

- the level of skills in using digital technologies, the Internet and computers determines the success of using digital resources. Learning and Internet skills are becoming essential for users in today's digital world:

- the availability of digital content in languages that users speak and the availability of content that meets their interests and needs influence the degree of activity in the digital environment;
- trust in digital technologies and services, as well as protection of privacy and personal data, are key factors influencing the adoption of digital technologies by users;
- cultural beliefs, stereotypes and social connections also influence people's participation in the digital world;
- progressive public policy and effective regulation can contribute to ensuring equal opportunities and ensure the successful implementation of digital inclusion at the level of the state and society;
- the development of new technologies and innovative solutions can help reduce barriers and provide better access to digital resources.



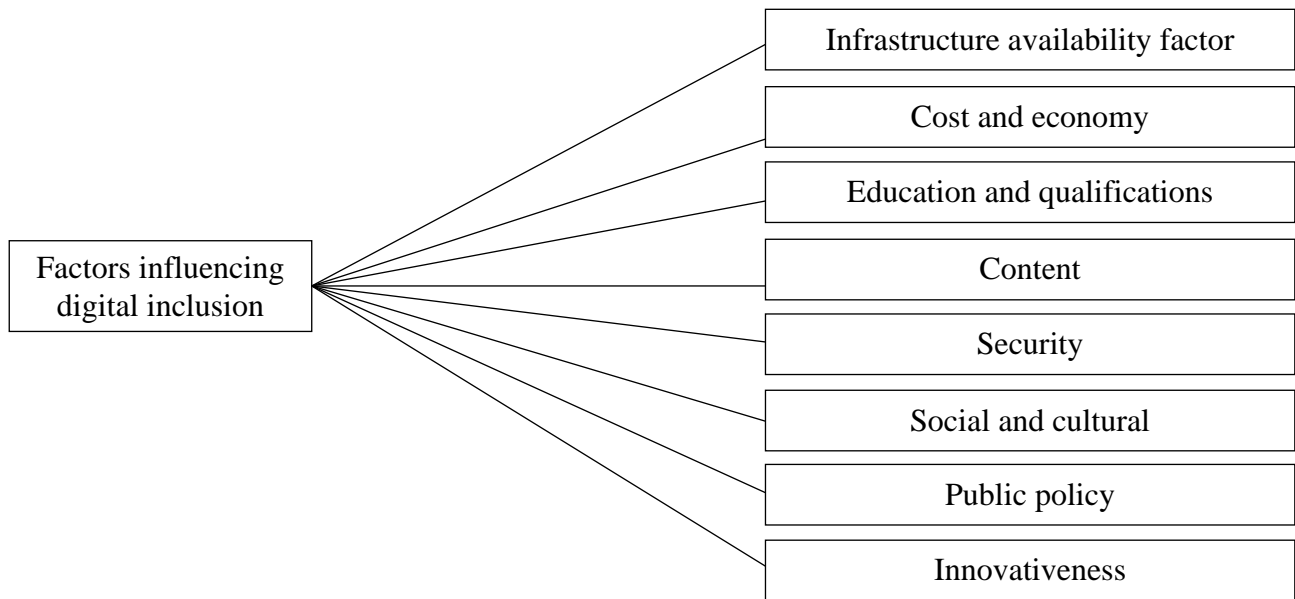
Source: presented by the authors based on sources [2, 4–7].

**Fig. 2. Principles of digital inclusion**

Summarizing the above, presented in fig. 3 main factors influencing digital inclusion.

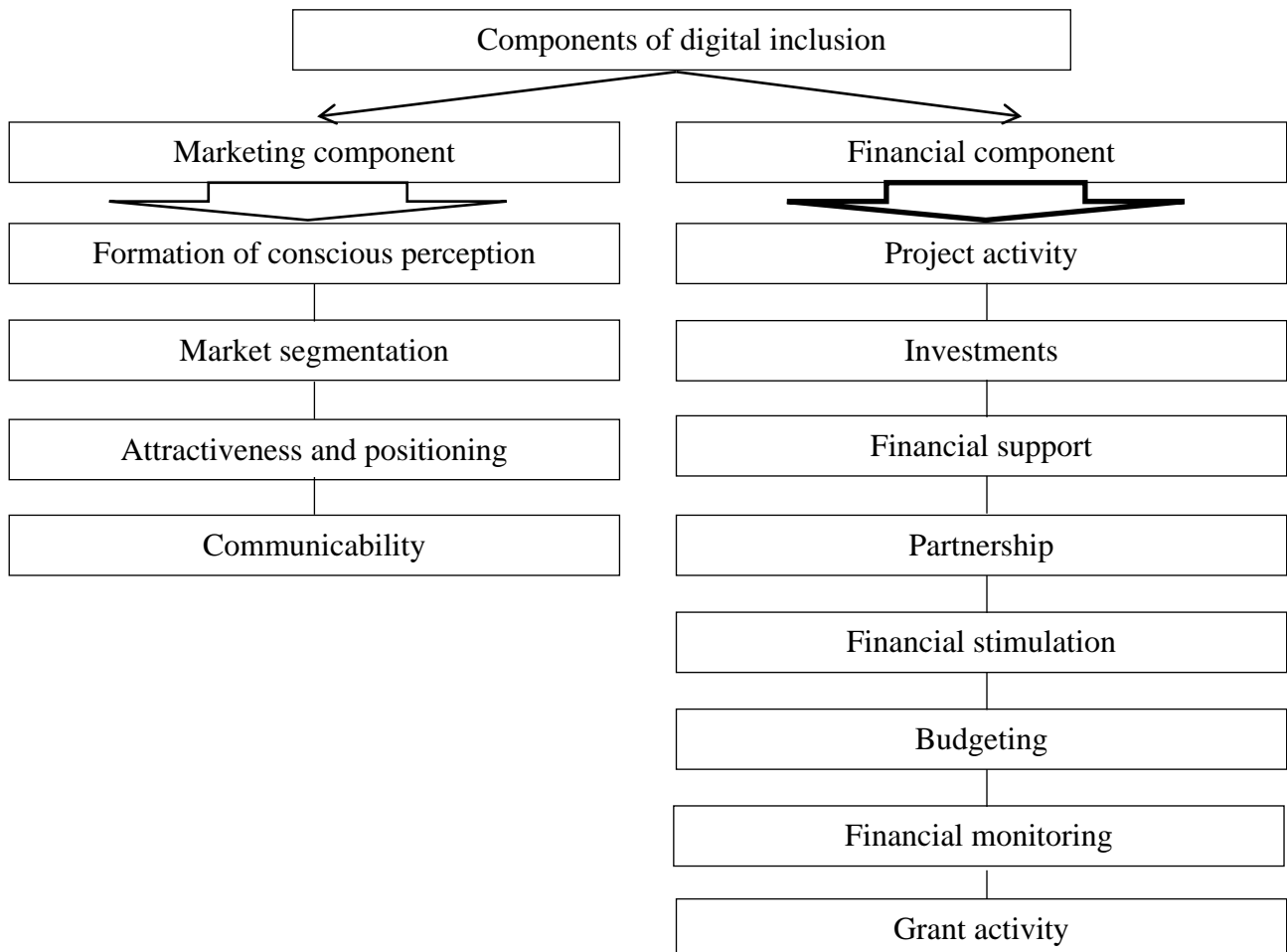
So, the factors of digital inclusion determine the level of accessibility and success of people's integration into the digital environment. That is why in the future we will consider the financial and marketing component of digital inclusion, since the factors presented above can be grouped into such components as finance and marketing. Marketing and financial aspects play a key role in ensuring the success of digital inclusion. Therefore, in fig. 4 presents the main components of the marketing and financial aspect of digital inclusion.

It should be noted that the presented components of digital inclusion in the interpretation of its marketing and financial aspects allow to attract attention and attract target audiences, ensure the implementation of initiatives and ensure the sustainable development of digital inclusion projects. Addressing both aspects is critical to the success of digital inclusion, which helps ensure affordability and access to digital technologies and services for all segments of the population.



Source: created by the authors based on sources [3, 5–7, 9].

**Fig. 3. Factors influencing digital inclusion**



Source: compiled by the authors.

**Fig. 4. Marketing and financial components of digital inclusion**

Thus, the marketing aspect is as follows [4, 6, 10]:

- marketing campaigns can be used to create awareness of the existence and benefits of digital services among the public, especially among those who do not have experience using technology;
- marketing strategies allow you to identify target audiences and develop a personalized approach to their needs and requirements in the digital environment;
- marketing can help make digital services and products attractive and accessible to different social and economic groups;
- marketing can help explain the benefits of digital services and explain their capabilities, which will help attract more users to use them.

The financial aspect consists of:

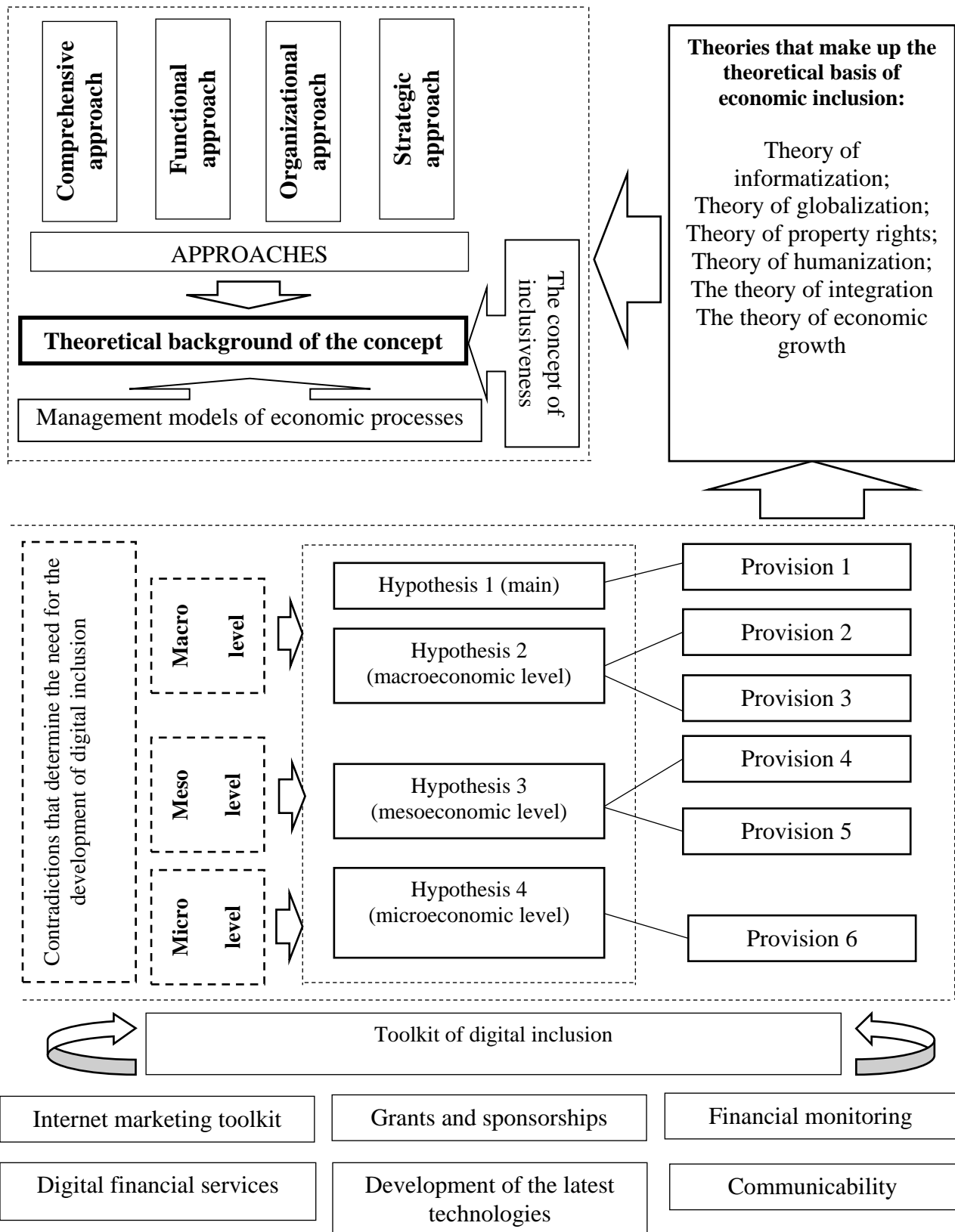
- providing financial support for national and regional digital inclusion projects helps to ensure the development and accessibility of digital services for all citizens;
- attraction of investments in the development of infrastructure and new technologies helps to improve the availability and quality of digital services;
- financial provision of service availability. For those who cannot afford equipment or access to the Internet, providing financial assistance can encourage their involvement in digital inclusion;
- governments and financial institutions can partner with banks, finance companies and other institutions to provide financial services and resources for digital inclusion;
- the development of special financial mechanisms, such as subsidies, grants or loans, can make digital services more accessible to low-income citizens;
- effective allocation of financial resources for the development and support of digital inclusion projects can help ensure the achievement of maximum results and the implementation of initiatives taking into account financial sustainability;
- establishing a system of financial monitoring and evaluation of results allows to determine the effectiveness of costs and the impact of digital inclusion projects, as well as to adjust the development strategy in a timely manner;
- cooperation with companies and investors from the private sector can help attract additional financial resources for the implementation of digital inclusion initiatives;
- the search for sources of funding from international organizations, charitable foundations and grant programs can become an important tool in the development of digital inclusion projects.

Based on the above, it is possible to propose a methodological approach to ensure the development of digital inclusion (Fig. 5).

The methodological approach of ensuring the development of digital inclusion, taking into account marketing and financial aspects, is based on a comprehensive approach to the planning, implementation and monitoring of digital inclusion initiatives. This approach helps to effectively implement projects aimed at ensuring access to digital technologies and services for all segments of the population, including vulnerable groups.

The main principles of the methodological approach to the development of digital inclusion, taking into account marketing and financial aspects, include: analysis of needs and opportunities, strategy formation, financial support, marketing communications, monitoring and evaluation, partnership and cooperation, educational programs.

**Conclusions** regarding the development of digital inclusion show that the success of this process depends on an integrated approach and consideration of financial and marketing aspects. Creating access to digital technologies and services for all segments of the population can improve the quality of life, contribute to the development of the economy and the social sphere, and also provide wider opportunities for the development of society as a whole.



Source: author's development.

**Fig. 5. Methodological approach to ensure the development of digital inclusion, taking into account marketing and financial aspects**



In general, the development of digital inclusion requires an integrated approach in which financial and marketing aspects interact to stimulate demand for digital products and services, ensure their availability and increase the level of awareness and literacy among users. Optimization of resources, involvement of partners and implementation of innovative solutions can contribute to the successful development of digital inclusion and ensuring the sustainable development of society.

It is also important to note that the development of digital inclusion is a key aspect of modern society, as digital technologies affect all areas of people's lives and business:

- the importance of access to digital technologies: Digital inclusion ensures accessibility and access to digital technologies for all segments of the population. This contributes to the expansion of opportunities for education, career development, entrepreneurship and interaction with the world;
- ensuring social justice: The development of digital inclusion helps reduce the digital divide and promotes social justice by providing equal opportunities for all population groups;
- the importance of marketing and communications: Effective use of marketing strategies and communication channels helps to attract attention and engage target audiences in digital inclusion initiatives;
- financial stability: Ensuring financial stability and access to additional resources helps to ensure the implementation and sustainability of digital inclusion projects;
- management and monitoring: Effective management and monitoring of initiatives on digital inclusion allows to ensure the achievement of maximum results and adjust the development strategy;
- impact on the economy: Digital inclusion contributes to the development of the economy by stimulating innovation and supporting entrepreneurship.

#### References

#### Література

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| <p>1. Rubmann, M. (2015). Industry 4.0: The Future of Productivity and Growth in Manufacturing Industries. The Boston Consulting Group. Inc. URL: <a href="https://www.bcg.com/publications/2015/engineered_products_project_business_industry_4_future_productivity_growth_manufacturing_industries.aspx">https://www.bcg.com/publications/2015/engineered_products_project_business_industry_4_future_productivity_growth_manufacturing_industries.aspx</a>.</p> <p>2. Gallego-Losada, M.-J., Montero-Navarro, A., García-Abajo, E., Gallego-Losada, R. (2023). Digital financial inclusion. Visualizing the academic literature. <i>Research in International Business and Finance</i>, Vol. 64. January, 2023. URL: <a href="https://doi.org/10.1016/j.ribaf.2022.101862">https://doi.org/10.1016/j.ribaf.2022.101862</a>.</p> <p>3. Gupta, J., Cornelissen, V., Ros-Tonen, M. (2015). Inclusive development. <i>Encyclopedia of Global Environmental Governance and Politics</i>. Cheltenham. P. 35–44.</p> <p>4. Kotler, Ph., Kartajaya, H., Setiawan, I. (2016). <i>Marketing 4.0: Moving from Traditional to Digital</i>. Somerset: Wiley. 208 p.</p> | <p>1. Rubmann M. Industry 4.0: The Future of Productivity and Growth in Manufacturing Industries. The Boston Consulting Group. Inc. 2015. URL: <a href="https://www.bcg.com/publications/2015/engineered_products_project_business_industry_4_future_productivity_growth_manufacturing_industries.aspx">https://www.bcg.com/publications/2015/engineered_products_project_business_industry_4_future_productivity_growth_manufacturing_industries.aspx</a>.</p> <p>2. Gallego-Losada M.-J., Montero-Navarro A., García-Abajo E., Gallego-Losada R. Digital financial inclusion. Visualizing the academic literature. <i>Research in International Business and Finance</i>. January, 2023. Vol. 64. URL: <a href="https://doi.org/10.1016/j.ribaf.2022.101862">https://doi.org/10.1016/j.ribaf.2022.101862</a>.</p> <p>3. Gupta J., Cornelissen V., Ros-Tonen M. Inclusive development. <i>Encyclopedia of Global Environmental Governance and Politics</i>. Cheltenham, 2015. P. 35–44.</p> <p>4. Kotler Ph., Kartajaya H., Setiawan I. <i>Marketing 4.0: Moving from Traditional to Digital</i>. Somerset: Wiley, 2016. 208 p.</p> |
|---|--|

5. Bazyliuk, A. V., Zhulyn, O. V. (2015). Inklusyivne zrostantia yak osnova sotsialno-ekonomichnoho rozvytku [Inclusive growth as the basis of socio-economic development]. *Ekonomika ta upravlinnia na transporti = Economy and transport management*, Vol. 1, P. 19–29 [in Ukrainian].
6. Krysovatyi, A. I., Sokhatska, O. M., Skavronska, I. V. et al. (2018). Chetverta promyslova revoliutsiia: zmina napriamiv mizhnarodnykh investytsiinykh potokiv: monohrafiia [The fourth industrial revolution: changing directions of international investment flows: monograph]. Eds. A. I. Krysovatyi and O. M. Skavronska. Ternopil: Osadtsa Yu. V. 480 p. [in Ukrainian].
7. Oklander, M. A., Romanenko, O. O. (2015). Spetsyfichni vidminnosti tsyfrovoho marketynhu vid Internet-marketynhu [Specific differences between digital marketing and Internet marketing]. *Ekonomichnyi visnyk Natsionalnoho tekhnichnoho universytetu Ukrainy "Kyivskiy politekhnichnyi instytut" = Economic Bulletin of the National Technical University of Ukraine "Kyiv Polytechnic Institute"*, № 12, P. 362–371 [in Ukrainian].
8. Liu, J., Loan, K., Mousa, S., Ali, A., Muda, I., Cong, P. (2023). Sustainability and natural resources management in developed countries: The role of financial inclusion and human development. *Resources Policy*, January 2023, Vol. 80. URL: <https://doi.org/10.1016/j.resourpol.2022.103143>.
9. Pacetti-Garr, E. (2016). The Five Characteristics of an Inclusive Economy: Getting Beyond the EquityGrowth Dichotomy. *Rockfeller Foundation*, 2016. URL: <https://www.rockefellerfoundation.org/blog/fivecharacteristics-inclusive-economy-getting-beyond-equity-growth-dichotomy/>
10. Chernobai, L., Ptashchenko, O., Malykhina, S., Verezomska, I., Yaremchuk, S. (2022). Problemy ta perspektyvy zastosuvannya stratehii upravlinnia personalom mizhnarodnykh kompanii v ukrainskii biznes-praktytsi [Problems and prospects of applying personnel management strategies of international companies in Ukrainian business practice]. *Financial and Credit Activity Problems of Theory and Practice*, No. 1(42), P. 406–414. <https://doi.org/10.55643/fcaptp.1.42.2022.3661>. <https://fkd.net.ua/index.php/fkd/article/view/3661> [in Ukrainian].
5. Базиліюк А. В., Жулин О. В. Інклюзивне зростання як основа соціально-економічного розвитку. *Економіка та управління на транспорті*. 2015. Вип. 1. С. 19–29.
6. Крисоватий А. І., Сохацька О. М., Скавронська І. В. та ін. Четверта промислова революція: зміна напрямів міжнародних інвестиційних потоків: монографія. За наук. ред. А. І. Крисоватого та О. М. Сохацької. Тернопіль: Осадца Ю. В., 2018. 480 с.
7. Окландер М. А., Романенко О. О. Специфічні відмінності цифрового маркетингу від Інтернет-маркетингу. *Економічний вісник Національного технічного університету України "Київський політехнічний інститут"*. 2015. № 12. С. 362–371.
8. Liu J., Loan K., Mousa S., Ali A., Muda I., Cong P. Sustainability and natural resources management in developed countries: The role of financial inclusion and human development. *Resources Policy*. January 2023. Vol. 80. URL: <https://doi.org/10.1016/j.resourpol.2022.103143>.
9. Pacetti-Garr E. The Five Characteristics of an Inclusive Economy: Getting Beyond the EquityGrowth Dichotomy. *Rockfeller Foundation*, 2016. URL: <https://www.rockefellerfoundation.org/blog/fivecharacteristics-inclusive-economy-getting-beyond-equity-growth-dichotomy/>
10. Чернобай Л., Птащенко О., Малихіна С., Верезомська І., Яремчук С. Проблеми та перспективи застосування стратегій управління персоналом міжнародних компаній в українській бізнес-практиці. *Financial and Credit Activity Problems of Theory and Practice*. 2022. № 1 (42). С. 406–414. DOI: 10.55643/fcaptp.1.42.2022.3661. URL: <https://fkd.net.ua/index.php/fkd/article/view/3661>.