

## “CREATOR ECONOMY”: THEORY AND ITS USE

Iryna Radionova<sup>1</sup>, Iryna Trots<sup>2</sup>

<sup>1</sup>Doctor of Economic Sciences, Professor Habil., Kyiv National Economic University named after Vadym Hetman; Head of Theoretical and Applied Economics Department, KROK University, Kyiv, Ukraine, e-mail: irina.radionova@gmail.com; IrinaR@krok.edu.ua, ORCID: <https://orcid.org/0000-0002-0941-2867>

<sup>2</sup>Doctor of Philosophy (Economics), Associate Professor of Theoretical and Applied Economics Department, KROK University, Kyiv, Ukraine, e-mail: IrynaTV@krok.edu.ua, ORCID: <https://orcid.org/0000-0001-9608-0591>

### Citation:

Radionova, I., & Trots, I. (2021). "Creator economy": theory and its use. *Economics, Finance and Management Review*, (3), 48–58. <https://doi.org/10.36690/2674-5208-2021-3-48>

Received: September 04, 2021

Approved: September 27, 2021

Published: September 30, 2021



This article is an open access article distributed under the terms and conditions of the [Creative Commons Attribution \(CC BY-NC 4.0\) license](https://creativecommons.org/licenses/by/4.0/)



**Abstract.** The article delves into a modern phenomenon known as "The Creator Economy." The authors attempted to examine the existing knowledge regarding the "creator economy" in terms of developing a "theory of the creator economy." The researchers concentrated on the effects of the new phenomenon, which are embodied in modern economies design modifications, rather than the technological foundations of the new phenomenon. The key aspect (core) of the creator economy is the IT companies' platforms activity, which is examined in this article. For the purpose of delineating the creator economy borders, the economic circular flow diagrams toolkit is used. There are four groups of creator economic entities: 1) actual creators of new information products, 2) platforms of IT companies, 3) consumers of information products who become co-creators of content, and 4) representatives of advertising and innovation businesses and non-profit organizations who are interested in the creator economy's existence. The "creator economy" as a segment of modern economies is described in terms of its products, resources, expenses, and revenues. Given the distinctiveness of the information product, it is proven that the "creator economy" could be identified as the "creator economy of new meanings." After all, a unique information product developed in this sector of the economy allows us to forecast the future and set the groundwork for it today. The concept of "endogeneity of the creator economy" is defined as a phenomenon unique to a certain economy. There are several connections between the "creator economy" and other areas of national economies. Theoretical assumptions concerning possible directions for further development of the "creator economy" idea are formulated.

**Keywords:** creator economy, economic circular flow diagram, platforms of IT companies, entities, products, resources, expenses and revenues of the "creator economy", benefits of society.

**JEL Classification:** E62, G28, I22

**Formulas:** 0; **fig.:** 1; **tabl.:** 2; **bibl.:** 12

**Introduction.** In the 2010s, scholars began to use the Creator Economy concept. Its introduction into scientific discourse is analogous to what happened previously with the ideas of "innovative economy," "knowledge economy," and to what is happening now with "digital economy", among others. It's an issue of rethinking the economy in light of new situations, new trends, and repercussions that haven't been seen before. Numerous attempts to identify the phenomenon of the "creator economy" and fill it with the content of the relevant category are an undeniable achievement in this area. The acknowledgement of the crucial influence of information technology and information transformations of societies on the examined phenomenon was an important aspect of this identification. Despite their evident semantic resemblance, the terms "creator economy" and "digital economy" are not interchangeable in our perspective. Clarifying the relationship between the meanings of these ideas is an essential step in the development of the "creator economy" theory.

The scientific problem of the research presented in this article is to delineate the boundaries of the "creator economy" and its formalization as a segment of the

modern national economy. It is likely that this segment is in a special way "embedded" in the economy, becoming part of the overall economic cycle. The solution to this scientific problem will indirectly contribute to the reform of the Ukrainian economy. After all, the entities of the Ukrainian economy, despite the "under-reform" of the latter, show a significant tendency to creativity and a high ability to adapt to modern digital technologies.

**Literature review.** The analysis of the content of different interpretations of the phenomenon and the "creator economy" concept allows us to distinguish between the general (established, something about which there is no doubt) and specific (unique) in approaches.

*Paul Saffo* [1-3], one of the world's most well-known researchers on the "creator economy", interprets this phenomenon in terms of interconnected stages of social development. The shift from the "producer economy" ("industrial economy") of the first half of the twentieth century to the "consumer economy" of the second half of the twentieth century and to the "creator economy" of the early twenty-first century is being discussed. The presence of "information surplus" against the backdrop of "attention deficit" was observed at the end of the "consumer economy" period. The hunt for instruments for optimal allocation of a restricted resource - "attention" - has been updated by "information surplus". Digitalization tools and IT platforms, according to the inventor of the concept, have begun to be used as "attention dispersal" techniques. The groundwork for the shift to a "creator economy" was established here. The usage of these technologies - digitalization and IT platforms - represented a revolution in the economy and social interactions, given the depth (importance) of the changes. This revolution, according to P. Saffo, will have both positive and harmful implications. It is necessary not only to be aware of the latter, but also to be prepared to limit them.

The "creator economy," according to *Werner Geyser*, is the product of "media decentralization" in the sense of "blurring" its (information) affiliation. The latter means that the content of media companies - texts, videos, photos, etc. - ceases to be their property in the traditional sense. This creates new non-traditional forms of payment for the activities of persons involved in the production of this content [4].

There are both complicated and simple interpretations of the "creator economy". In particular, such a simple interpretation is offered by *Ollie Forsyth*. The "creator economy" is presented as a "digital version of the world". Moreover, in this version, according to the author of the idea, there is a direct (not mediated by complex actions) support and recognition of digital information professionals [5].

Some "creator economy" researchers, such as *Clara Lindh Bergendorff*, emphasize the benefits and opportunities it provides for creators. The "creator economy," according to the researcher, is a set of platforms, marketplaces, and tools that alter creative activity and business. This shift is owing to the fact that options for efficient employment are becoming more plentiful. It's all about being preoccupied with what a person *excels at* and *enjoys* the most. Furthermore, such an economy provides new options for producers to earn a sufficient income [6].

V.I. Liashenko and O.S. Vyshnevskiy [7], I.B. Kateryniak [8], O. Pryshchulina [9], K.V. Shymanska and V.V. Bondarchuk [10] form the environment of domestic analysts of the "creator economy" phenomenon. These scholars look at the new opportunities that digitalization has created for economic entities, such as the creators of new information products and those who consume them.

The acknowledgement of the "creator economy" relationship to the "digital economy" unites all of the above sources and approaches to defining the content of the "creator economy." They (approaches) differ in how they explain this connection. Furthermore, the uniqueness of the methods may be seen in the emphasis on distinct origins and implications of the "creator economy" emergence as a modern phenomenon.

**Aims.** Given the dilemma, the goal of this paper is to first define the bounds of the creator economy as a section of national economies. To achieve so, we used the theoretical tools of general economic circular flow diagrams. The study's operational (subordinate to the main goal) objectives are determined through the use of these tools:

- identification of the "creator economy" entities, in the relations between which the economic cycle occurs;
- determination of the special content of resources, products, revenues and expenditures, the movement of which forms the flows of the cycle within the segment of the "creator economy";
- outlining the main lines of communication between the "creator economy" and other segments of the national economy.

It is obvious that the stated objectives can only be met by the application of generalizations in the examination of facts that demonstrate the existence of the "creator economy." As a result, analyzing these facts is a crucial aspect of the research.

**Methods.** The methods of terminological analysis, comparative factual analysis, and classification according to a certain criterion were applied throughout the investigation. The research uses a methodical approach to analysis based on tools from general economic circular flow diagrams. The system's use of these methods allowed it to document the achievements of the "creator economy theory" and demonstrate the importance of putting the theory provisions into practice.

**Results.** The "creator economy theory" phrase used in the title of this article gives a sufficient level of excellence (perfection) of ideas concerning the topic under investigation. After all, it is well recognized that when a body of knowledge becomes a system of interconnected and consistent statements, it is referred to as a theory. Furthermore, the latter must be founded on appropriate assumptions (hypotheses). The "creator economy" as a theory is still in its infancy, which is understandable. After all, the phenomenon - the "creator economy" - is still relatively young.

We assume that the "creator economy" should be explained as a special segment, intrinsic (immanent) to modern economies. It is likely that this segment, under certain conditions, can change the nature of the whole economy. The idea of such an approach in the interpretation of the "creator economy" is a scientific

hypothesis that needs further understanding. In our opinion, finding an answer to such a question becomes an important point of such comprehension. Can using the capabilities of the platforms of a few IT companies established in other countries ensure the immanence (internal compliance) of the segment of the "creator economy" to the entire national economy? After all, as you know, it is the platforms of high-tech companies that become the core of the "creator economy". In another way, this question can be formulated as follows: can what is exogenous (external) for the national economy become an internal factor in its development? In fact, this question raises the issue of "endogenous changes" caused by the "creator economy".

The intention to use the theoretical tools of "the economic circular flow diagrams" proved in this article needs to be explained. The use of these tools in the analysis of economy has a long history. If we recognize that the circular flow diagram was the "Quesnay Table", then this toolkit is approximately 250 years old [11, p.337]. In the form familiar to modern economists, the circular flow diagram was presented in the "Economics" famous first textbook (1948) by P. Samuelson [12, p.622]. It has been reproduced and modified many times with the aim to "expand the content", i.e., to cover new entities and economic flows. Every modern basic textbook on economics contains a similar diagram. This fact can be interpreted as an argument in favor of the expediency of using such tools in explaining the economy in general and the "creator economy" in particular. The following ideas are the most important for us when using the tools of circular flow diagrams:

- the economy is interpreted as an interconnected movement (flow) of resources, products, revenues and expenditures;

- this movement (flow) is two-way (direct and reverse, at the same time) and occurs between groups of economic entities, separated by common essential features.

We believe that the findings of a research of entity features, as well as the unique content of resources, products, revenues, and expenditures, can be used to identify the "creator economy" phenomenon. As a result, it can be filled with a sufficient definition of the concept (category) of "creator economy."

Platforms built by IT corporations during the 2000s and 2020s enable the activities of "creator economy" entities. Actual data on platforms is supplied in two analytical tables below, organized by year of inception (from the oldest to the most recent). In a variety of fields, IT company platforms have evolved. As a consequence, we used the criterion of area division to split them and reported the findings in tables 1 and 2.

The first table (Table 1) provides information on platforms related mainly to the functioning of science, politics, journalism and education.

The second table (Table 2) provides information on those platforms that are more related to the field of entertainment and media. Since platforms often become "multi-sphere" (multifunctional), their division into spheres is quite conditional. However, it becomes necessary to streamline perceptions of the "creator economy" in general, and the platforms of IT companies in particular.

**Table 1. Some characteristics of IT companies' platforms, which are mainly related to the functioning of science, politics, journalism, and education**

Platform identifiers	Platform purpose	Areas of service	Special products	Sources of funding and income	Other
Seti@home, 1999, University of California, Berkeley San Francisco, United States, <a href="https://setiathome.berkeley.edu">https://setiathome.berkeley.edu</a>	Scientific non-profit project of calculations using BOINC resources and computers of volunteer researchers	Science	Increasing the resources of scientific research (calculations), participation of stakeholders in basic research	Funds of non-profit organizations, in particular, – Planetary Society	The purpose of the project is to search for radio signals of extraterrestrial civilizations.
Folding@home, 2000, Stanford University, <a href="https://foldingathome.org/?lng=uk-UA">https://foldingathome.org/?lng=uk-UA</a>	Calculations for computer simulation of protein coagulation	Science, medicine.	Participation of interested scientists in research, - promoting the creation of new scientific papers, - development of new methods of treatment	Sponsorship funds of companies: AMD, Avast, Business and emotions, Cisco, Intel, Nvidia, ORACLE, PureStorage, Microsoft	The project promotes the treatment of the following diseases: Alzheimer's, Parkinson's, diabetes, multiple sclerosis, various forms of cancer
Facebook, 2004, Mark Zuckerberg, Menlo Park, California, United States, <a href="https://www.facebook.com">https://www.facebook.com</a>	Network of communication and prompt placement of information by individuals (almost 3 billion participants)	Policy, science, media, entertainment	Selection of content based on preferences and inclinations, by personal profiles, - formation of communities of interest; - publicity of political and public figures	Revenue from advertising	The popularity and the greatest coverage is achieved due to the free use and promotion of the platform for participants
YouTube, 2005, Steve Chen, Jawed Karim, Chad Hurley, San Bruno, USA, <a href="https://www.youtube.com">https://www.youtube.com</a>	Video hosting services	Politics, education, science, film art, journalism (video blogs)	Selection of content taking into account consumer preferences - participation in the creation of materials through comments.	- Revenues from advertising; - funds (donations) for live broadcasts and re-views (SuperChat function).	Popularity is achieved due to the ease of placing video files and ease of viewing.

Platform identifiers	Platform purpose	Areas of service	Special products	Sources of funding and income	Other
Twitch, 2011, Justin Kan and Emmett Shear San Francisco, USA <a href="https://www.twitch.tv">https://www.twitch.tv</a>	Providing online video broadcasts	Video games, cyber and other intellectual competitions, scientific discoveries, music	Communication with content creators, achievement of the "presence effect" and complicity of creation	Paid subscription, which becomes the income of the creators and the company itself	
Medium, 2012, Evan Williams, San Francisco, USA <a href="https://medium.com">https://medium.com</a>	Fast and technically perfect placement of electronic publications	Journalism, science	Publication of the latest publications that meet the interests of consumers.	- Paid access to the site for readers (by subscription), - fees to creators, taking into account the "uniqueness of the content" for readers	Free access to some texts is partially open on the platform
Patreon, 2013, Jack Conte and Sam Yam, San Francisco, California <a href="https://www.patreon.com/uk-UA">https://www.patreon.com/uk-UA</a>	Symmetrical benefit and combination of interests of creators and users of the selected content.	Science, education, politics, art, literature, journalism, entertainment	Identification of intelligent products that consumer prefer	Constant and one-time receipts from users with further distribution between the creators and the company	Rapid growth of users during a pandemic
Substack, 2017, Chris Best, Gajraj Hathi, Hamish McKenzie, San Francisco, California <a href="https://substack.com">https://substack.com</a>	Comfortable conditions (technical support) for journalists, political analysts, writers, and other creators	Media, journalism, politics, science	High quality analytical materials in various fields	- Payment for one-time targeted mailings; - subscription to information - funds, for example, Andreessen Horowitz	The platform served as a lifeline for journalists who lost their jobs due to the Covid-19 pandemic

*Source: suggested by the authors based on sources [1-11]*

**Table 2. Some characteristics of IT companies' platforms, which are mainly related to the entertainment industry and media resources**

Platform identifiers	Platform purpose	Areas of service	Special products	Sources of funding and income	Other
Twitter, 2006, Jack Dorsey, San Francisco, United States, <a href="https://twitter.com">https://twitter.com</a>	Social network of microbloggers	Developed literary and news segments, policy	Exchange of information within the target groups to determine the preferences of content consumers	Revenue from the sale of online advertising	The platform contributed to the emergence of a literary form - "Twitterature" - texts from 280 to 140 characters
Instagram, 2010, Kevin Systrom and Mike Krieger, San Francisco, USA, <a href="https://www.instagram.com">https://www.instagram.com</a>	Social network for sharing visualized materials (photos, videos)	Art, entertainment industry, organization of life, tourism	Determining the preferences and interests of participants using filters, - formation of target groups of participants, -connections to other networks.	Funds from private investors and funds, such as Benchmark Capital, LOWERCASE Capital, etc.	The most popular service in the art of iphonography;
Sapchat, 2011, Evan Spiegel, Bobby Murphy, Frank Brown, Stanford, California, USA. <a href="https://www.snapchat.com">https://www.snapchat.com</a>	Multimedia mobile application for sharing photos and video files	Media, entertainment content	Formation of target groups and guarantee of secure transfer of information.	Funds from advertising, company revenue (for example, from Time Warner) for hosting entertainment shows.	The market value of Snapchat is more than 16 billion dollars
TikTok, 2016, ByteDance, China, <a href="https://www.tiktok.com">https://www.tiktok.com</a>	Creating and distributing video files and online broadcasts.	Music, sports, art, and entertainment	Realization of creative needs of certain target groups, acquisition of communication skills, formation of communities	Subscriptions, money transfers (donations) for creators of popular video files	TikTok stars become millionaires, in particular, the highest income in 2020 reached 5 million dollars
OnlyFans, 2016 Tim Stokely, London, <a href="https://onlyfans.com">https://onlyfans.com</a>	Meeting the needs of consumers of the "entertainment industry"	Sports, music, art, and cooking	Fans' access to personal materials of creators: photos, videos, articles, respectively, finding out consumer preferences	- Monthly membership fees of fans, which are distributed between the creators and the company; - paid one-time views	The number of users during the pandemic increased by 75%
Clubhouse, 2020, Paul Davison, Rohan Seth, <a href="https://www.clubhouse.com">https://www.clubhouse.com</a>	Social network using voice communication	Club activity, show business discussion platforms, policy.	Meeting the needs of target groups in the voice perception of information, -formation of communities and research of their preferences	A combination of different forms: ticket payment (via eBay) for participation in clubs, discussion platforms, Subscriptions, donations	Rapid growth in the value of the platform as an asset: from \$ 100 million in 2020 to \$ 1 billion in 2021

Source: suggested by the authors based on sources [1-11]

The study of the data in both tables allows for broad generalizations about the "creator economy" distinguishing characteristics, such as the entities of relations, the created product, and the expenditures and revenues of entities in this sector of the economy.

**The "creator economy" entities**, as evidenced by the facts, have unique **resources**. They (entities) are:

- *creators* as such, intellectual and other resources of which form the ability to create special information products;

- *consumers* of information products, which, based on the opportunities offered to them by IT platforms, become co-creators of these products. The latter is achieved through: selective attention, complicity, identified propensity to consume certain products and preferences for certain products, selective financial support for individual creators and / or individual projects, etc .;

- *IT companies* that own platforms, investing in hardware and software, as well as, in part, - in the creators of new information products;

- *advertisers, non-profit foundations, entrepreneurs* who are interested in creating special information, in particular in that related to the prediction of innovative trends.

The fact that "attention" is a special resource for this segment determines the peculiarity of the "creator economy". Studies that substantiate that the "Attention Economy" is growing into the "creator economy" have been added to the economics arsenal. This is a plausible statement. After all, the "creator economy" is defined by attention and its derivatives - the proclivity to consume certain products, loyalty to certain creators, recognition of preferences, and interest in clearly designated information resources. The same "attention accent" aids in explaining the product's fundamental features (differences).

**The product of the "creator economy"** most obviously distinguishes this segment from others. This product is not just new and interesting information for certain target groups, but information that:

- forms a vision of the future and reflects the beginning of defining processes for the future;

- relies on large databases on existing inclinations, preferences, special group interests of information consumers;

- unites consumers of information in the community, helping to increase trust and the emergence of complicity and cooperation, therefore, - the accumulation of social capital.

If the unique properties of the "creator economy" product that we have identified are justified, then another generalization may be made. The argument is that the content of the economy segment we're investigating conforms to the term **"economy of the creators of new meanings"** to a greater extent. After all, creation (creativity) can refer to tangible objects. Rather, we look at the part of the economy where unique information is generated. Furthermore, it is not about ordinary facts such as "what?" "where?" "when?" "at what price?" but rather about current trends, a new vision, and, most likely, new social and group values. We're discussing "new meanings".



**Expenditures** within the "creator economy" segment cover the following elements:

- expenditures of advertisers disseminating information about traditional and innovative products and services through IT platforms;
- expenditures of non-profit funds, entrepreneurs, individuals who support certain innovative projects on a charitable basis;
- expenditures of consumers who show their own preferences for information products - videos, scientific, journalistic, artistic texts, music, etc. - in the form of subscriptions, donations;
- expenditures of IT companies to support promising projects and individual creators.

In addition to monetary expenditures, the "creator economy" reveals the so-called "non-financial expenditures" - time, attention, intellectual capacity, and so on. These expenditures arise from voluntary activity in projects to create new socially significant information.

**Revenues** in the segment of the "creator economy" can take such forms:

- revenues of IT companies that own the platforms;
- income of creators of information products (fees), which are formed after the recognition of the importance and usefulness of these products by target groups of consumers and IT companies.

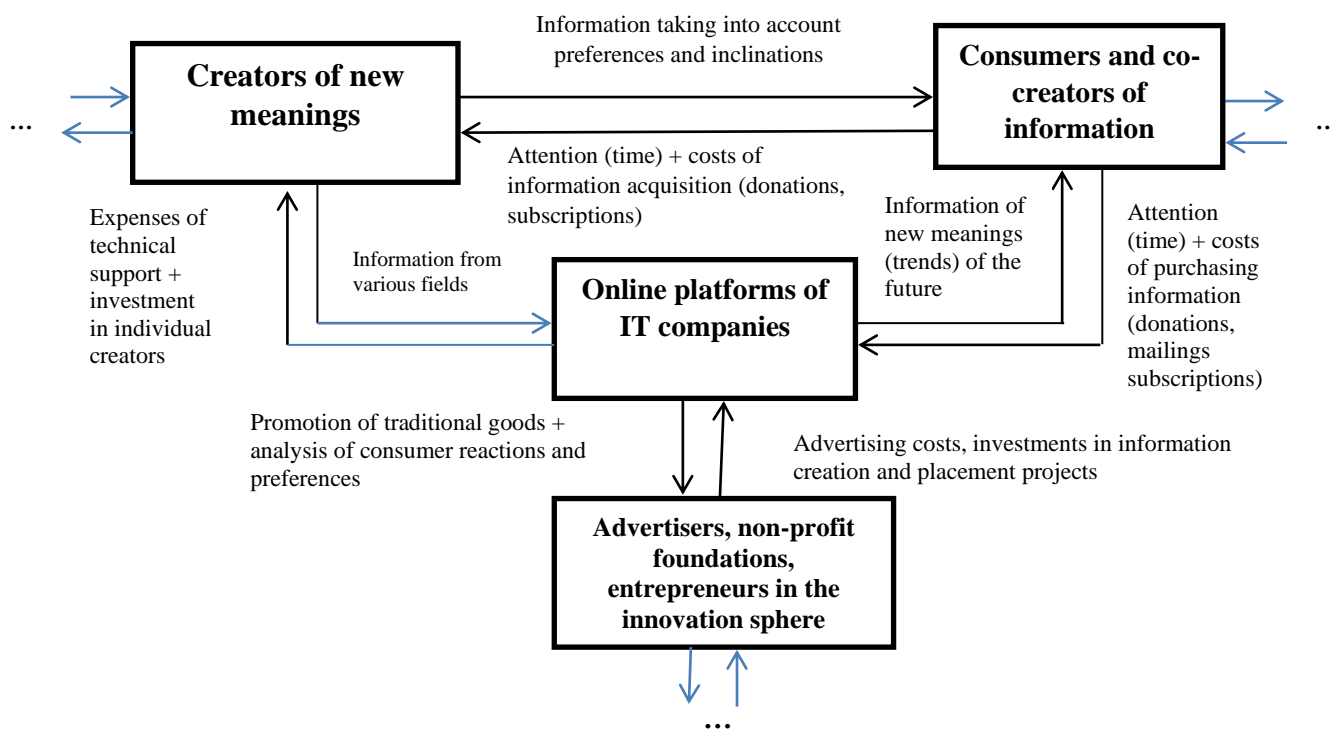
In the "creator economy", in addition to monetary revenue, distinctive **benefits (externalities) of society** are generated, in our opinion. They can be seen, for example, in appropriate responses (answers) to socially significant problems, in anticipating and preventing disputes and negative effects of emerging trends.

Our generalizations about the characteristics of entities, products, expenses, and incomes in the "creator economy" serve as the foundation for formalizing the economic circular diagram in this way (fig. 1).

The economic cycle between the four previously described entities of the "creator economy" segment is depicted in Fig. 1. To keep the diagram simple, only the flows of the product manufactured in this segment, as well as resources and costs, are shown. The income movement is not depicted in the figure because it is obvious that some companies' expenses are converted into income for others.

This diagram is not "closed" in the sense that it does not depict the flow of exchange between organizations in traditional economic sectors (segments). However, it is self-evident that other flows should be marked when expanding (detailing) the diagram. It's about the relationship between the "creator economy" and the "external environment" in the face of entities like:

- producers and consumers of traditional products, services, information about which is provided on IT platforms by advertising companies;
- producers of the "innovation sector" of the economy, who, gaining access to information of "new meanings", can use it, for example, when creating startups;
- financial intermediaries (banks, investment funds, etc.) that serve the movement of financial flows, offering their own financial products, in particular those that meet the requirements and capabilities of the digital economy.



**Figure 1. Economic cycle in the "creator economy" segment**

*Source: suggested by the authors*

**Discussion.** We can make such an assumption on the fundamentally crucial and complex issue of the conditions under which the "creator economy" becomes an internal factor for all other sectors. In the absence of significant technical and organizational differences between sectors (segments) of the economy, the transformation of the "creator economy" into an endogenous factor of economic growth is possible. Regrettably, the Ukrainian economy is made up of segments with vastly varied technological systems, ranging from pre-industrial and industrial to modern digitalized. This becomes a key impediment to the "creator economy" becoming an intrinsic (immanent) segment of the Ukrainian economy.

New research is needed to better understand all of the different flows of the cycle through which the "creator economy" is linked to other segments. It is vital to grasp the constraints of the "creator economy" in a given national economy in order for them to be successful. There is also reason to believe that disclosing the substance of the cycle's flows, as well as the unique characteristics of the activities of entities in the "creator economy," is one of the most effective ways to reach this awareness.

**Conclusion.** We can provide the following generalization as a primary conclusion based on the results of the study of existing ideas and facts regarding the content of the "creator economy". The "creator economy" can be defined as a segment of the modern economy in which exceptional resources, products, expenditures, and revenues are circulated. This movement brings together four entities: 1) genuine creators of new information goods, ideas, and meanings, 2) IT platforms, 3) information product consumers, and 4) advertisers, non-profit foundations, and entrepreneurs interested in spreading new information.

It is likely that the further development of the theory of "creator economy" will take place in the direction of clarifying ideas about the boundaries of the creator economy and algorithms for transforming this segment into an endogenous factor of overall economic growth.

**Author contributions.** The authors contributed equally.

**Disclosure statement.** The authors do not have any conflict of interest.

### References:

1. Saffo P. (2020). The Creator Economy. Seminars About Long-term Thinking / A monthly Seminar series, hosted by Stewart Brand. Retrieved from: <https://longnow.org/seminars/02015/mar/31/creator-economy/>
2. Greenwald T. The Creator Economy: Futurist Paul Saffo On The New Business Epoch (2011). Retrieved from: <https://www.forbes.com/sites/tedgreenwald/2011/10/19/the-creator-economy-futurist-paul-saffo-on-the-new-business-epoch/?sh=6e6cd3bf61c1#:~:text=The%20Creator%20Economy%3A%20Futurist%20Paul%20Saffo%20On%20The%20New%20Business%20Epoch>
3. Saffo P. (2016). Get ready for a new economic era. Retrieved from: <http://www.saffo.com/wp-content/uploads/2016/06/McKinsey-Creator.pdf>
4. Geyser W. (2021). The State of the Creator Economy (2021) | Definition, Growth & Market Size. Retrieved from: <https://influencemarketinghub.com/state-of-the-creator-economy/>
5. Forsyth O. (2021). The Creator Economy boom: What it is, what's driving it, and trends you need to know. Retrieved from: <https://www.antler.co/blog/the-creator-economy-boom-what-it-is-whats-driving>
6. Bergendorff C.L. (2021). From The Attention Economy To The Creator Economy: A Paradigm Shift. Retrieved from: <https://www.forbes.com/sites/claralindhbergendorff/2021/03/12/from-the-attention-economy-to-the-creator-economy-a-paradigm-shift/>
7. Liashenko V.I., & Vyshnevskiy O.S. (2018). Digital modernization of Ukraine's economy as an opportunity for breakthrough development: a monograph. NAS of Ukraine, Inst. Of Industrial Economics. Kyiv, 2018. 252 p. Access mode: [https://iie.org.ua/wp-content/uploads/monografiyi/2017/Lyashenko\\_Vishnevsky\\_2018.pdf](https://iie.org.ua/wp-content/uploads/monografiyi/2017/Lyashenko_Vishnevsky_2018.pdf)
8. Kateryniak I. (2021). Innovation Spring in Tech Startup: momentum to take off = “Інноваційна весна” в технологічних стартапах: моментум для злету : textbook / Ihor Kateryniak. – Lviv: LNU named after Ivan Franko, 2021. – 172 p.
9. Pyshchulina O. (2020). Digital economy: trends, risks and social determinants. Access mode: [https://razumkov.org.ua/uploads/article/2020\\_digitalization.pdf](https://razumkov.org.ua/uploads/article/2020_digitalization.pdf)
10. Shymanska K.V. & Bondarchuk V.V. (2021). Priority directions and mechanisms of digital economy development in Ukraine. *Economics, management and administration*, №1(95), 17–22. [https://doi.org/10.26642/ema-2021-1\(95\)-17-22](https://doi.org/10.26642/ema-2021-1(95)-17-22). Режим доступу: <http://ema.ztu.edu.ua/article/view/228957>
11. Arthur Eli Monroe. (1923). *Early Economic Thought*. Cambridge. pp. 336-348.
12. Samuelson P. (1948). *Economics: The Original 1948 Edition: 1st (first) Edition* Tapa dura – 1 December 1998. *Economics, an Introductory Analysis*, Paul A. Samuelson. (New York: McGraw-Hill Company, 1948.). pp. 622.