

# **CHAPTER 2. MONITORING AND DIAGNOSIS OF MODERN PROBLEMS OF INNOVATIVE DEVELOPMENT OF BUSINESS ENTITIES**

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## **INNOVATION AS A TOOL FOR RESTAURANT BUSINESS ADAPTATION IN THE CONDITIONS OF DIGITAL TRANSFORMATION ECONOMY IN THE POST-PANDEMIC PERIOD**

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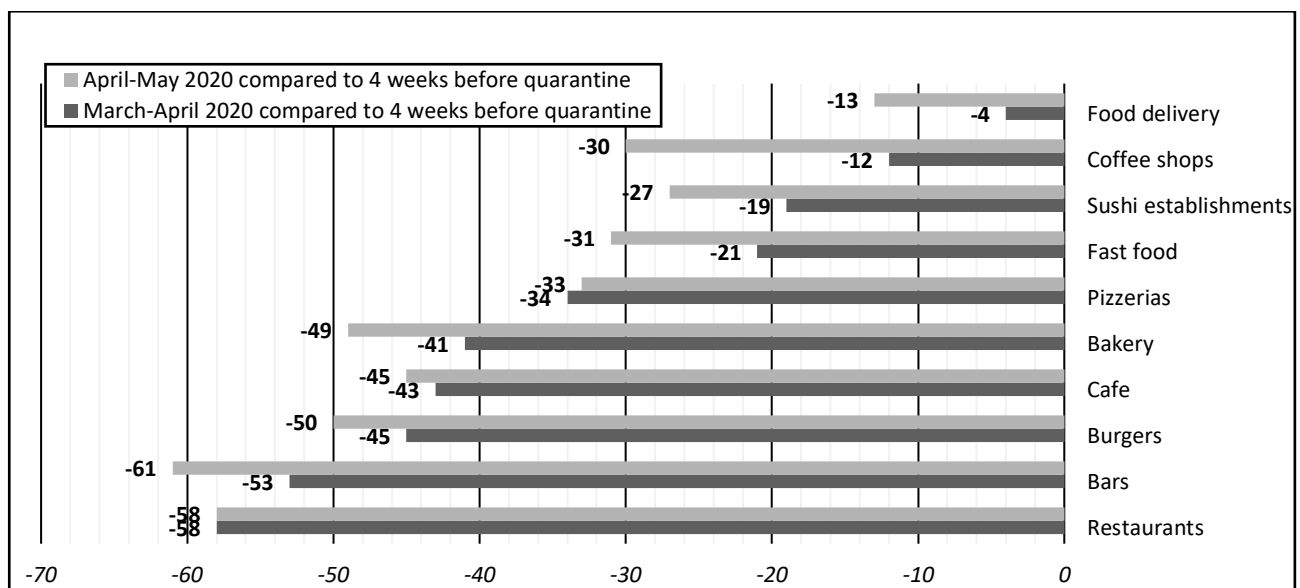
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The COVID-19 pandemic caused significant changes in the way of life in many countries of the world, including in Ukraine. A state of emergency was introduced in some countries, sanitary-epidemiological measures were introduced in almost all countries (quarantine zones, restrictions on work activities, cancellation of mass events, closure of educational and cultural and entertainment institutions), migration restrictions were established, etc. A large-scale pandemic led to the establishment of a number of quarantine restrictions of varying degrees of severity, which caused significant disproportions in economic relations, disruption of production chains, and significantly affected almost all areas of business both in Ukraine and in the world.

According to the World Bank, the drop in the level of the global economy in 2020 amounted to 4.3% [1]. According to the results of the 1st quarter, the GDP of the Eurozone countries fell by 3.6% due to the crisis (seasonally adjusted for the 4th quarter of 2019), instead of the previously forecasted 3.8%. The fall in GDP also occurred in

comparison with the 1st quarter of 2019. In particular, such a drop in the GDP of Austria was 2.6%, Spain – 5.2%, France – 5.3%, Italy – 5.3% [2]. According to the Ministry of Finance, the real GDP of Ukraine decreased by 9.0% in 2020, and by 20.1% in 2021 [3]. At the same time, the analysts' optimistic scenarios predicted the growth of the real GDP of Ukraine in 2021 at the level of 4.1% due to the acceleration of the pace of vaccination and curbing the coronavirus. Representatives of the hotel and restaurant business, tourism and transport were the most affected, while at the same time the volumes of retail trade and construction increased.

After two weeks of strict quarantine, 63% of restaurant establishments stopped working. In total, during the period of strict quarantine around 12 thousand institutions of this group were liquidated as economic entities (Fig. 1).

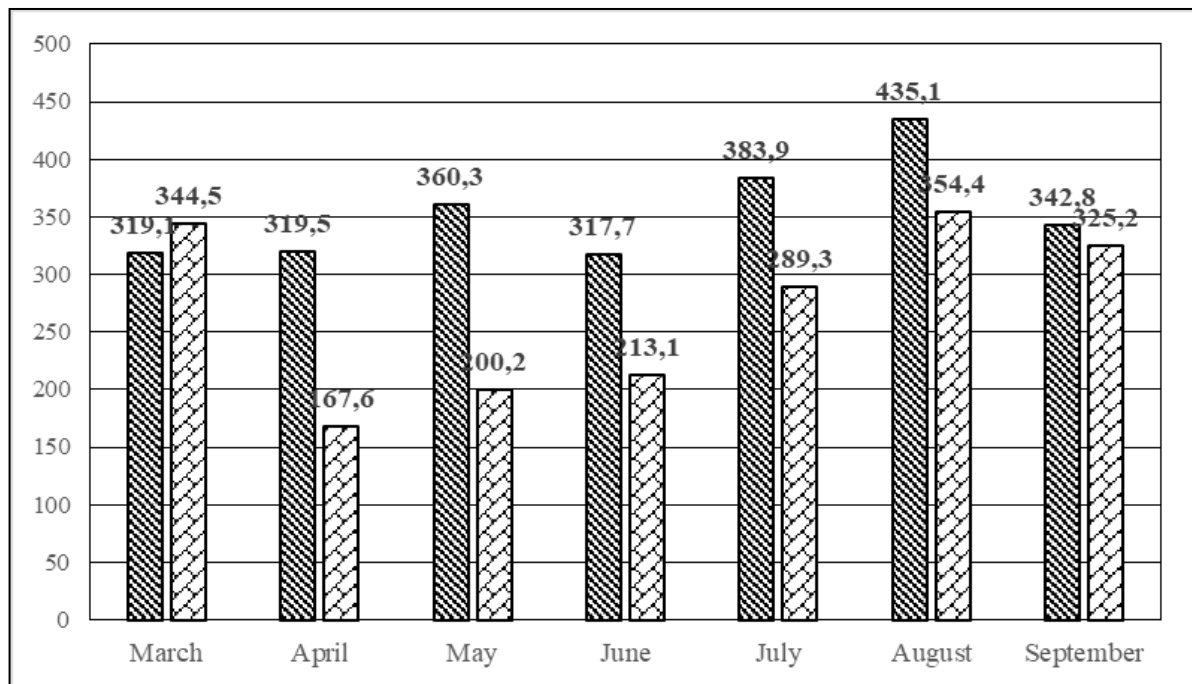


**Fig. 1. Dynamics of reduction of the number of restaurant establishments during the period of strict quarantine restrictions**

*According to [4-6].*

During the period of quarantine restrictions, restaurants and other catering establishments suffered significant losses, which led to a reduction in budget allocations by 23% or UAH 535.5 million. The most difficult for the restaurant business was April, after which a gradual recovery began, and in September, these

companies almost reached the 2019 figures. The related business – “beverage service” (bars, taverns, snack bars, etc.) - reduced deductions by almost 30%. During the most difficult periods, April-May, the state received UAH 10 million a month from bars, taverns, snack bars, pubs and cafes – 50% of the 2019 amounts (Fig. 2).



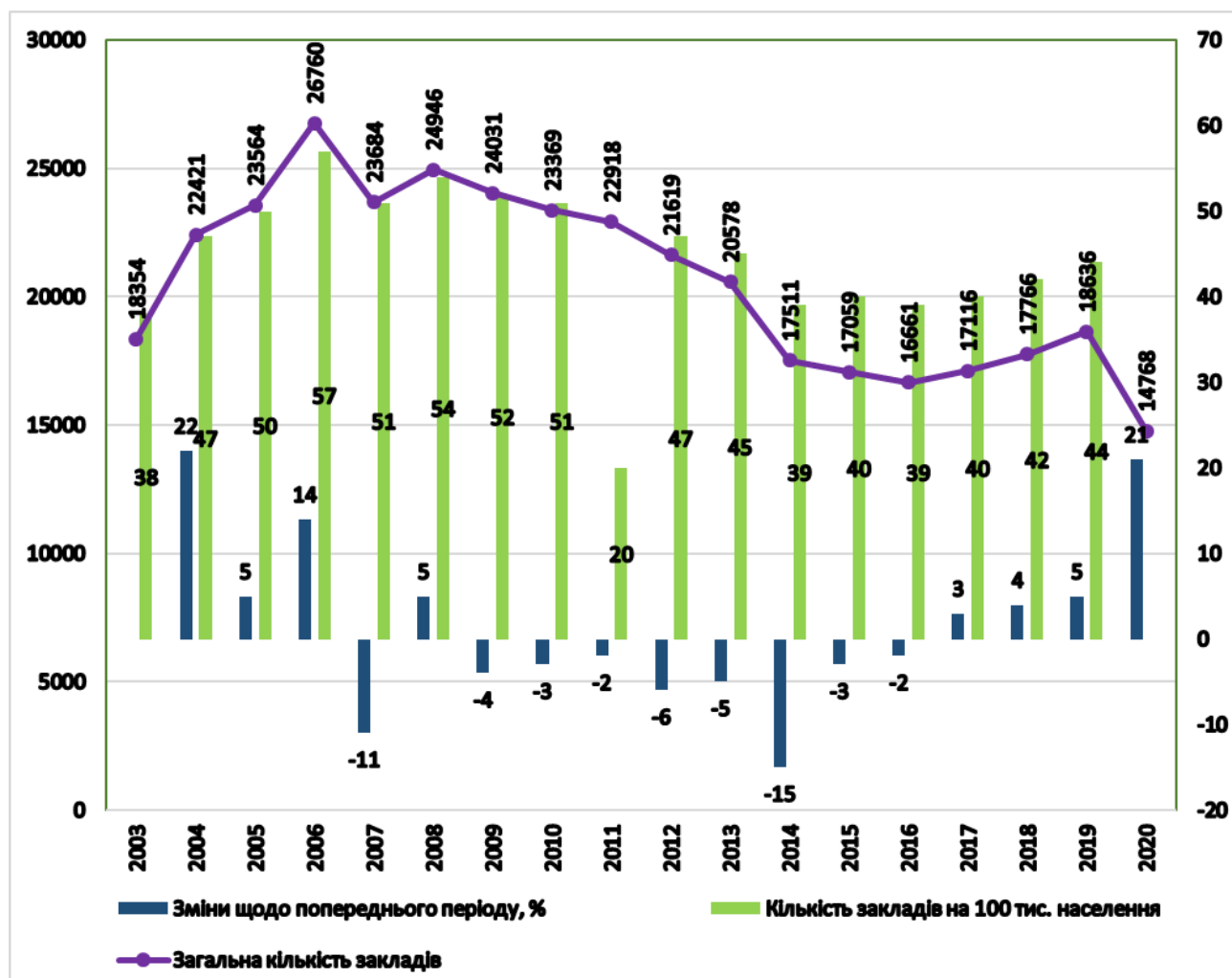
**Fig. 2. Volumes of payment of tax payments by restaurants, catering establishments and beverage service in March-September 2019 and 2020, UAH million**

*According to [7].*

In order to determine the balance between the effective impact on the level of the incidence of COVID-19 and their consequences for business, since March 2020, the Ukrainian authorities have repeatedly changed the strictness of quarantine restrictions. This forced entrepreneurs to constantly look for new strategies of behavior - some reduced the number of employees or sent them on vacation, others moved to work online. In the end, not everyone was able to adapt to the new realities. In some places, businesspersons organized protests demanding the lifting of restrictions. According to the Opendatabot research conducted in the first month of quarantine, 29% of Ukrainian companies suspended their work during the period of quarantine

restrictions, and 6% completely closed their business. Business owners who decided to continue their activities reported a significant drop in profits - up to 90% [5].

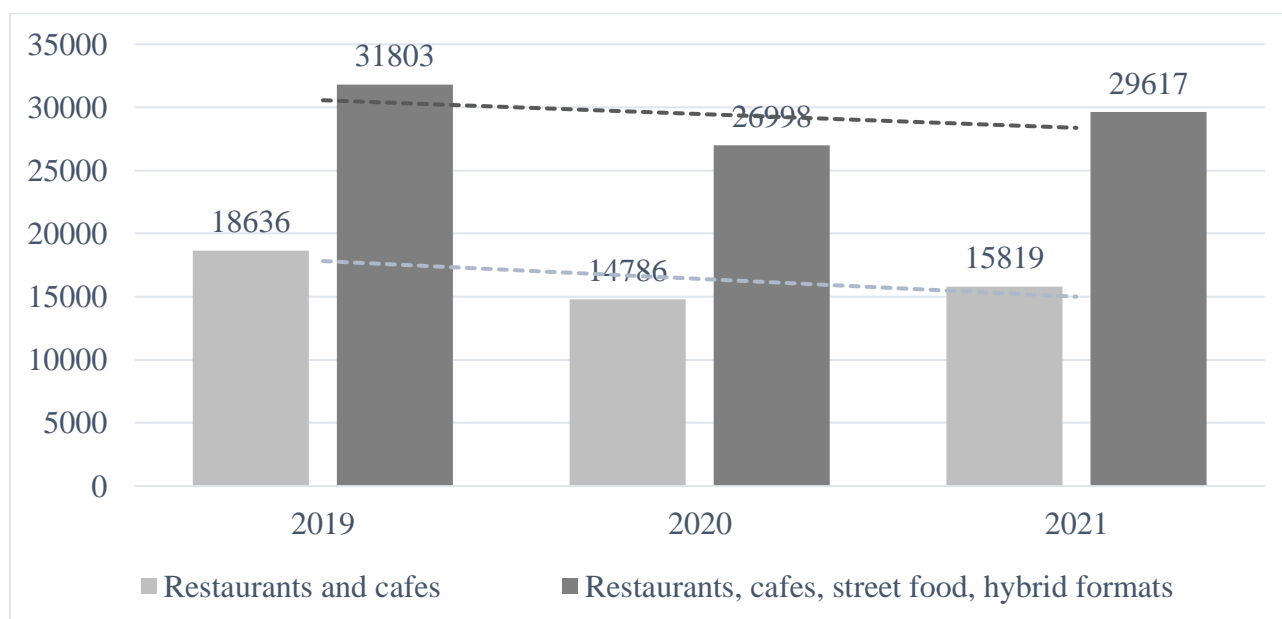
As already mentioned, the restaurant business suffered the most from the lockdown. According to the analytical center "Restaurants of Ukraine", during 2020 the number of restaurants and cafes in Ukraine decreased by almost 4 thousand establishments. "At the beginning of 2021, 14,700 restaurants, cafes and bars were operating, compared to the beginning of 2020, when 18,600 establishments were operating in Ukraine. Accordingly, the volume of the restaurant market decreased by almost 30% in 2020 and amounted to 14.1 billion hryvnias in 2020. In 2020, the restaurant market lost almost 6 billion hryvnias," the authors of the study note [8].



**Fig. 3. Dynamics of restaurant business development in 2008-2020**  
According to [8-10].

The professional labor market, which has been forming for years, has become aware of serious disproportions. In the first half of 2021, more than 150,000 workers in the restaurant business and the hospitality industry lost their jobs due to lockdowns and quarantine restrictions in Ukraine, which forced many of them to change their field of professional activity altogether. By the beginning of 2020, about 550 thousand people worked in the restaurant sector, at the end of 2021 there were almost a third less [5]. This has created a big problem for this area of business, as many establishments are currently unable to find workers of a high professional level in sufficient numbers.

According to the results of 2021, the restaurant business began to grow in various segments, albeit at a slow pace, which indicated the presence of a more effective adaptation mechanism than in other sectors of the economy.

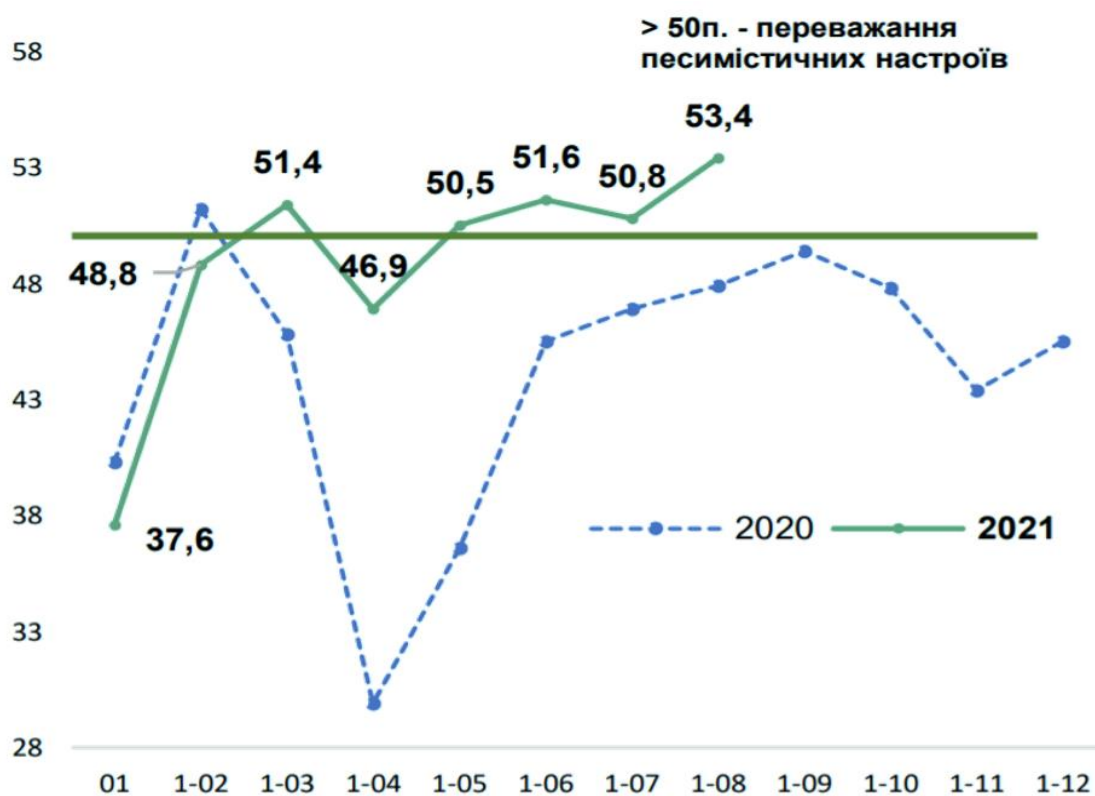


**Fig. 4. Development of the restaurant business by the number of establishments in 2019-2021**

*According to [8].*

Despite the turbulent business conditions, many entrepreneurs took the risk of starting their own business in 2020. According to Opendatabot, in 2020, during the spring quarantine, twice as few new entrepreneurs were registered every week than usual, but since the beginning of June, their number has leveled off [11].

According to the monitoring service YouControl, almost 54,000 new legal entities were opened in Ukraine in 2020, which is 20% less than in 2019, when more than 67,500 companies started operating. At the same time, in 2020, only slightly more than 10,000 legal entities closed, which is a third less than in 2019. As for individual entrepreneurs, a slightly different picture is observed here. During 2020, more than 247,500 individual entrepreneurs were registered in Ukraine. Compared to 2019, the difference is less than 5%, when almost 261.7 thousand entrepreneurs started their own business [9].



**Fig. 5. Dynamics of the index of expectations of business activity in 2020-2021**  
*According to [9, 12].*

At the same time, the National Bank reported that in May 2021, Ukrainian businesses improved their assessments of the economic condition of their enterprises and prospects, as evidenced by the dynamics of the business activity expectations index. In May 2021, it was 50.5 points against 46.9 in April and exceeded the equilibrium value of 50 points for the second time since the beginning of the year. At

the same time, the greatest improvement in sentiment was observed in the services sector (50.7 in May versus 48.8 in April). In trade, the index increased from 48.9 in April to 49.9 in May, and in industry there was an increase from 49.8 to 50.8 during the month. Such data indicate that Ukrainian business looks to the future, at least, with cautious optimism.

It is worth emphasizing that in the restaurant business, those establishments that were able to withstand the conditions of strict quarantine were mainly those that carried out address delivery of food or worked "to take away". Most of these institutions have already implemented or are in the process of implementing certain marketing and organizational innovations, the effectiveness of which is complemented by the support of appropriate digital applications and platforms. This example of operational adaptation proves the expediency of digitalization research as a component tool of innovative development of the restaurant business in modern business conditions.

Taking into account the relevance of the problems of restoring the restaurant business in the post-pandemic period, ensuring its sustainable development, sustainable competitiveness and financial stability in the difficult conditions of today, we consider it expedient to determine the vectors of its innovative development in the context of digitalization of business process management.

Innovative actions in the field of service are primarily aimed at increasing attractiveness for customers and stimulating the growth of the company's sales volumes. The introduction of innovative forms and tools in the restaurant business is a condition of adaptation aimed at increasing the volume of sales of goods and profitability and, as a result, ensuring sustainable economic development and competitiveness of enterprises.

In the economic literature, a significant number of types of innovations are considered depending on the parameters based on the classification. According to the classification, innovations in the restaurant business can be characterized as: medium; based on a combination of different types of knowledge; innovations that are replaced; related to the calculation and optimization of parameters; centralized; with a useful life of at least five years. When researching the innovations of trade enterprises by I.

Kolodyazhna the following types were distinguished: product innovations, organizational and economic innovations, financial innovations, information technology innovations [13, p. 54]. Krysanov D. offers the following classification of types of innovations: according to the type of enterprise, innovations are divided into innovations in wholesale and retail trade; according to the technology of implementation, innovations are divided into product and process innovations; by funding sources: innovations due to direct sources, innovations due to indirect sources; by type of novelty: innovations for the industry and innovations for the enterprise [14, p. 86-87]. The most famous is the classification of innovations proposed by E. Blondeau, in which he singles out seven types of innovations in trade enterprises: radical, step-by-step, social, technical, revolutionary, local, architectural [15].

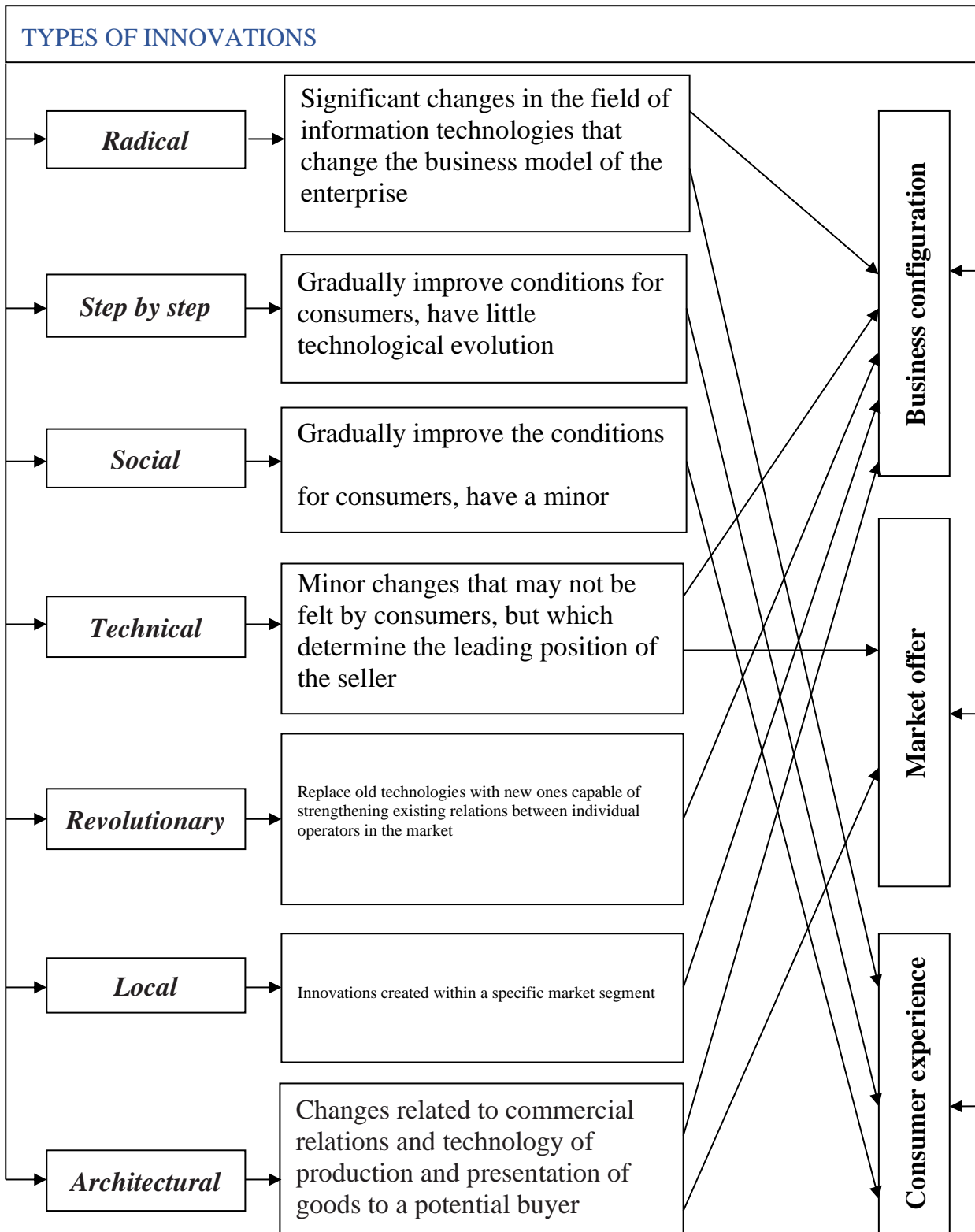
Research of the opinions of leading scientists made it possible to form a generalized classification of types of innovations of enterprises (Fig. 6).

Innovation in the restaurant business is understood to mean a creative entrepreneurial process of creating and/or improving and commercializing a new product, service or technology with the appropriate transformation of management methods that increase the efficiency of business processes while bifurcating quality management parameters and form the basis for further development in general.

Modern restaurant businesses have the opportunity to implement innovative technologies in every business process. Innovations in the restaurant industry, on the one hand, can be described as production (food production), and on the other - non-production (provision of catering services and non-related services) [18]. At the same time, all types of innovations in the restaurant business provide certain advantages to both producers of products and services, and consumers.

Modern economic conditions have led to a certain transformation of the combinatorial clustering of innovations. In our opinion, in the restaurant business combinations of innovations can be classified according to the following criteria: marketing; product (assortment); economic; social; organizational; managerial; resource; technological; information technologies (digital) (Table 1).





**Fig. 6. Classification of types of enterprise innovations**

According to [14-17].

Table 1 – Modern types of innovative combinations in the restaurant business [4]

Types of innovations	The main content
Marketing	Consumer loyalty and product promotion programs – outdoor advertising; advertising printing products; creation and promotion of own site; souvenir products with a trademark; SMM; Email marketing; “New media” and work with opinion leaders; affiliate programs and cooperation of various industries – event marketing, presentations, printed advertising products in other areas of business; neuromarketing, etc.
Food (assortment)	Based on the concept of “customer emotion and impression management” (Customer experience management) – conceptual menu; National cuisine; healthy food; eco-menu; patenting of new dishes and their design, etc.
Economic	Innovations in the financial and accounting areas of activity, motivation and remuneration, evaluation of performance.
Social	New forms of activation of the human factor, including the process of changing working conditions, cultural, environmental and political aspects; introduction of the nomenclature of additional services.
Organizational	Provide new forms of staff functioning; opening of innovative formats of restaurant business establishments: Street Food, Fast Food, Quick Service, Fast Casual, “family”, “gastronomic restaurant”, Party, Free-Flow, Euro-dining room, self-service restaurant, expo-kitchen, etc.
Resource	Aimed at finding new resources for enterprise development – financial, raw materials, etc.
Technological	Introduction of new techniques and technologies of cooking; equipment improvement, etc.
Management	Aimed at the introduction of modern innovative technologies of business management; creating adaptive business models.
Information Technology (digital)	Digitization of all business processes with the help of modern software and hardware and information technologies; implementation of web and telecommunication solutions for interaction with partners, consumers and other stakeholders.

It should be noted that the digital component of the innovative development of the restaurant business causes the acceleration of the implementation of all other components, forming a full-fledged innovation cluster. Back in 1972, K. Lancaster noted that innovative development is “a continuous process of implemented innovations based on new information technologies” [20]. In other words, digitalization creates the basis for innovative business process management formats of restaurants, which allow to form their own ecosystem of information and communication interaction with consumers and other stakeholders, based on customer orientation, innovation, partnership and synergies.

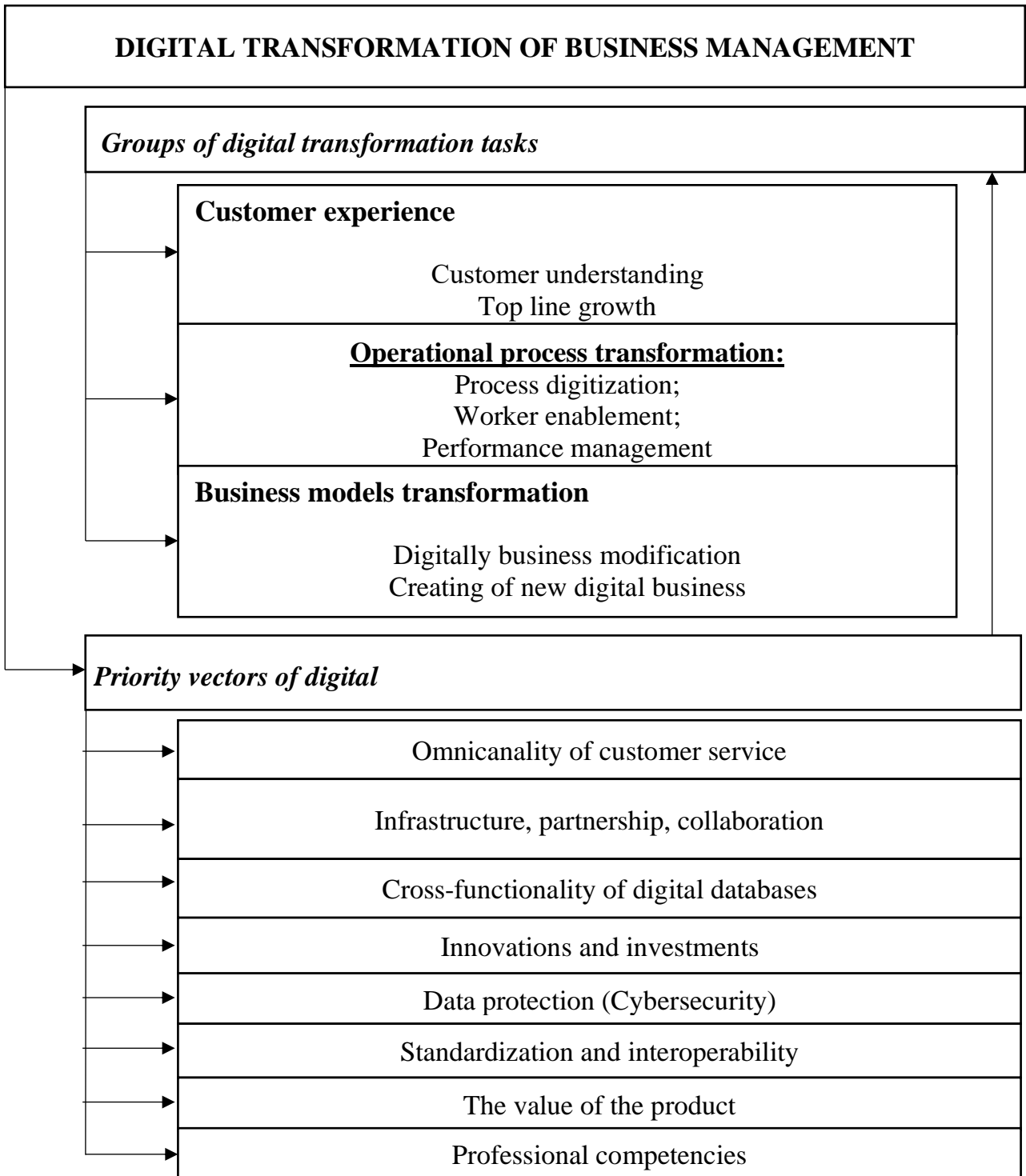
The digital transformation of innovation development management is based on the concept of digital space, which is based on several factors [20]:

1. Communication with the consumer.
2. Competitive environment.
3. Working with big data (application of Application Programming Interface, Software Development Kit and other integration tools).
4. Introduction of innovations.
5. Value management.

These factors affect the strategy of effective development of modern business society, in which digital transformation is one of the most important areas capable of making a new technological breakthrough in the national economy [21].

The study of the concept of digital space [20], the conceptual framework of digital transformation of business management of large corporations [22] and the vision of the digital agenda of Ukraine [23] allowed to identify the main vectors and objectives of digital transformation of business management (Fig. 7).

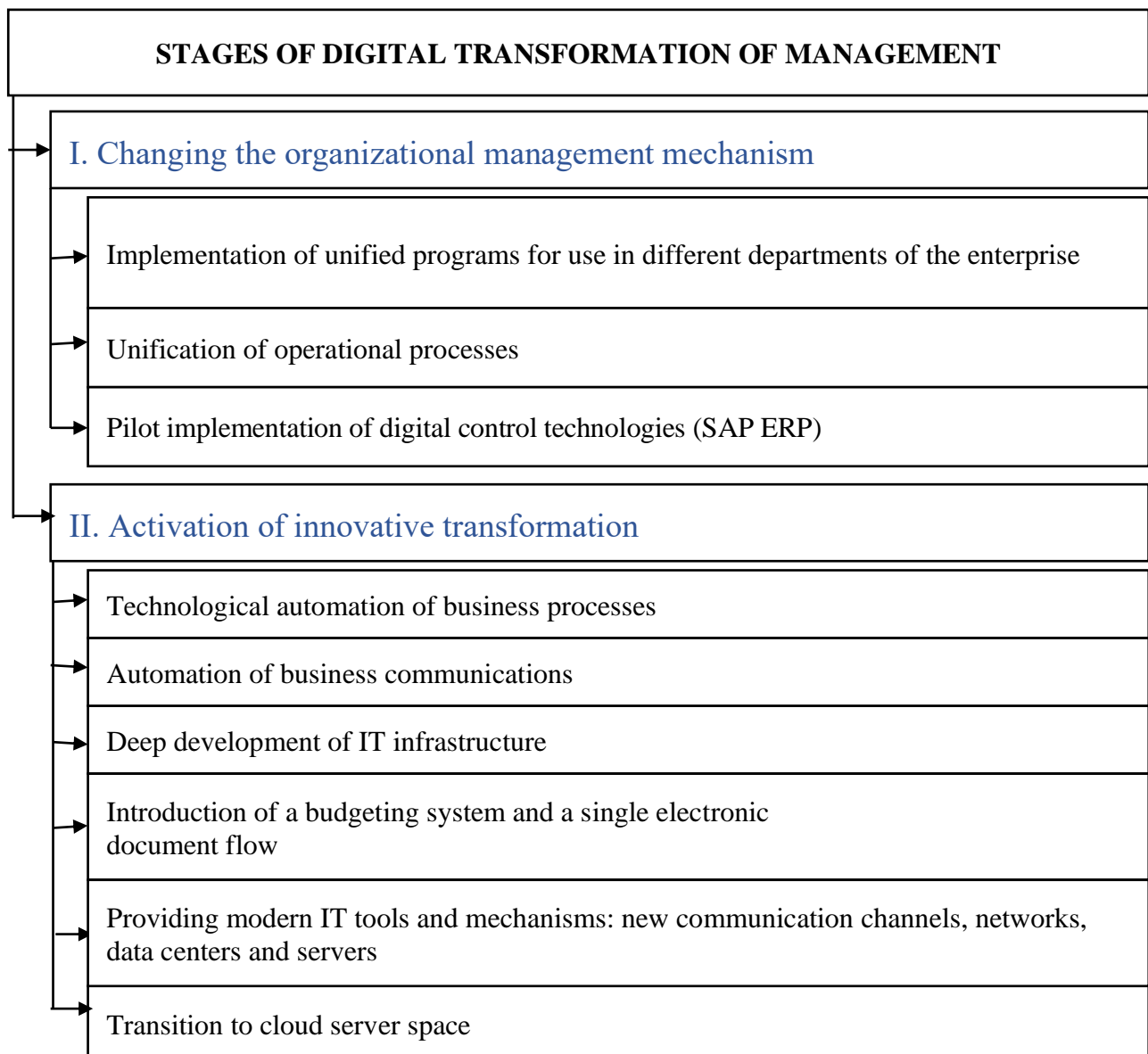
In addition to the digital transformation of general business management models, in recent years in the restaurant business of Ukraine there is a trend of digitalization of all its processes and innovations – FoodTech [25], which includes online marketing, advertising, production process, food production and delivery, including outsourcing services, etc.



**Fig. 7. The main tasks and vectors of digital transformation of business management**

As the culture of ordering through websites and mobile applications develops in Ukraine, as well as around the world, many restaurateurs are already implementing or

planning to go online to increase sales or to strengthen the loyalty of their customers. As already mentioned, the effectiveness of digitalization of the restaurant business has been proven, in particular, due to strict quarantine restrictions – capable of full operation were mostly restaurants that already worked on certain digital platforms or digital combinatorial innovation clusters, which expanded their capabilities and formed their own ecosystem with contact audiences.



**Fig. 8. Stages of digital transformation of the mechanism of management of innovative development of the enterprise**

Digital transformation of innovation development management mechanisms involves the restructuring, above all, the organizational component of management, which involves the intensification of innovation development and the transition of the usual work processes to a qualitatively new level [25]. Stages of digital transformation of management mechanisms of innovative development are presented in fig. 8.

The restaurant business in Ukraine is gradually joining the global digitalization. The study of trends in the external environment of operation has identified factors of gradual and rapid digitalization of the restaurant business.

Factors of gradual digitalization include:

- implementation of sustainable development goals in the life of modern society;
- globalization processes and their consequences;
- changing market conditions, increasing competition and the need to find new competitive advantages;
- development of innovative technologies in all business segments;
- development of digital technologies, emergence and distribution of digital platforms and other products of the IT market;
- turbulence of the external environment (as an incentive to implement adaptive modeling of business processes);
- transformation of consumer behavior under the influence of general digitalization of society;
- desire for self-development and self-improvement, etc.

Factors of rapid digitalization include rapid breakthroughs in technology and force majeure, including the COVID19 pandemic.

The combination of these and other factors necessitates the introduction of restaurant business owners adaptive models of innovative digital management, able to respond quickly to changes in the environment and ensure sustainable development both in the current period and in the strategic perspective.

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