

Transformation of customer experience management in the restaurant business in the context of digitalization

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Abstract. The catering sector in Russia today is being significantly transformed under the influence of two modern factors: the transition to a digital model of orders and a decrease in the purchasing power of the population in general. In the context of digitalization and increased competition, restaurant business enterprises are faced with the need to improve the efficiency of customer experience management. Customer experience is a set of impressions, emotions, knowledge that the customer receives at all stages of interaction with the PSR. The purpose of the study is to determine the direction of transformation of customer experience management in the restaurant business in the context of digitalization. Methodology and organization of the study. In this work, a complex was used, consisting of econometric methods, methods of comparative and system analysis, and generalization. Special literature on the chosen research topic was also analyzed. In particular, sources on the problem of customer experience management, digitalization of structures included in the public catering system became the basis for the literature review. Some of the materials were taken from the RSCI and Scopus websites. business.

1 Introduction

The relevance of customer experience management has grown in connection with the transformation of the catering market (as well as many other service markets) from a state in which conditions are dictated mainly by manufacturers and suppliers (“supplier market”) to a state of consumer dominance (“consumer market”). Currently, in the restaurant business, it is the client who determines all the main parameters of services and largely influences the various characteristics of the elements of the marketing mix of companies. The quality of the relationship between catering enterprises and consumers came to the fore. Continuous improvement of guest service processes, that is, work to improve customer experience, is one of the basic factors that determine the level of competitiveness of restaurants. At the same time, it is important to take into account the constant change in visitors' requests, conduct regular monitoring of their behavior at various points of contact with the PRB, and make timely decisions to adjust the competition strategy and tactics. This makes it possible to

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increase competitiveness, and, as a result, improve the financial condition of the enterprise in the short and long term.

2 Literature review

The development of digital technologies used in modern sectors of the economy is the subject of many scientific studies described in specialized literature (Abramov; Apatova; Ganchenko; Mustafina; Morozov; Stepanova; Isupov; Nikonov, Stelmashonok; Kotlyarov; Pirogova; Lubochkin; Kravchenko; Ovsyannikova; Lukina, Kurochkina, Karmanova). [1]

The digitalization of the modern model of functioning of enterprises and organizations has led to changes that have come to be called digital transformation. This trend was described in his scientific works by Plotnikov; Korolev; Suvorov; Kulikov; Katalevsky; Stelmashonok; and others.

The term "digital transformation" is widely used in science. But at the same time, it should be noted that his interpretation has not yet become generally accepted. An attempt to classify this term is most fully, in our opinion, contained in the work of Verhoef and others, published in 2021. Digital transformation, according to this source, is: [2]

- digitization of information of various business processes of organizations using the main directions of digitalization;
- the use of modern digital technologies in the business processes of organizations that allow optimizing economic activity;

Thus, digital transformation is the process of a serious revision of the business model of an enterprise, organization in order to find a new way to obtain its value, based on modern digital technologies and methods.

Such a classification does not create strict restrictions separating the levels of digital transformation, which can change under the influence of the conditions for doing business in a particular enterprise and depend on the degree of implementation of digital technologies in a particular business area. The results of such a classification are comparable with the results of research works that consider digital transformation technologies in combination with organizational, managerial, and marketing aspects of companies' activities (Kotlyarov).

The processes in the economy that began after the coronavirus pandemic had a great impact on doing business. There is a steady trend of transition of public catering enterprises, trade to digital technologies. This direction of doing business was studied by Dovganeva, Alekseeva; Pleshchenko; Kurbanov, Plotnikov; Koenig, Plotnikov; Kurochkina; Semenova; Barabova and others [3]

The communication between the seller and the buyer has changed due to restrictions introduced after the start of the pandemic. The business needed to reorganize and choose a digital environment for further work. The format of digital communication has become an important element in the activities of restaurant business enterprises, which have integrated digital technologies into traditional tools. This process is studied in more detail in the works of Kulikov, Suvorova; Eremin, Suvorova; Ganchenko; Korchagin, Evsyukov, Mikhailov, etc.

It should be noted that the development of digital technologies in public catering and trade enterprises is not an exclusive way of their evolution in modern conditions (Polyushkevich 2022.; Gusev, Korshikova 2021; Simachev 2021; Nikolaeva, Fadeeva 2007; Kapustina 2020. and etc.). In this area of business today there is an oversaturation of the market. At the same time, shoppers have a wider choice of stores to shop from. Therefore, non-traditional business models designed for the target audience began to be created. This direction is explored in the work of Mityashin, 2020.

For the most part, this type of model is designed to meet the needs of a person with a long-term perspective, that is, customers are served on the territory of retail outlets offline (Mityashin 2020.). [4]

New business models, unlike traditional trading schemes, are in a difficult position. In their activities, they need to constantly adjust the business model in order to keep up with the requirements of an evolving market. Using the digital format for the provision of goods and services, non-traditional business models must build on the level of traditional companies and develop digital services in such a way as to successfully compete with them. [5]

In the current economic conditions, enterprises are required to have online divisions, and the digitalization of business processes should favorably emphasize their features and be presented to customers as an important value.

Note that the processes of adapting business models used in public catering enterprises are described in detail in the specialized literature. However, these publications do not contain practical recommendations for solving the problems facing the digitalization of the restaurant business (Kotlyarov, 2022.; Mytyashin2022.).

3 Research results and discussion

Many factors influence the formation of the customer experience of the PRB: the effectiveness of the enterprise in creating the brand image, the format of service promotion, the location of the restaurant, the exterior and interior of the establishment, the courtesy of the service staff, the speed of service, the taste of the dishes, the availability of additional services, communications after visiting the restaurant, work with claims, etc.

The following main stages of the formation of customer experience can be distinguished:

1. Creation and maintenance of the image of the services provided by the restaurant to customers, which should form a positive consumer perception of the restaurant's offers even before the purchase is made.

2. Motivating the client to make a purchase. When a buyer can refuse to purchase a product or service, he must be motivated to make a deal by correctly building a relationship. The seller must work with the customer's objections in such a way as to eliminate possible obstacles and refusal to purchase.

3. Stable impressions. The restaurant has a customer base. At this stage of the formation of customer experience, it is necessary to provide high-quality services so that the consumer returns to this outlet again.

4. Feedback. In marketing relations, this element plays an important role. A variety of tools, including digital technologies, will help to form a stable connection.

An analysis of many special industry publications made it possible to identify some trends in the development of the restaurant business related to the transformation of customer experience and strategic management in the context of the digitalization of the economy (figure 1) [6]

Customer experience is becoming the main arena of rivalry between restaurant businesses. Success in such a situation can only be achieved if the client strategy is fundamental, and does not act as an appendage to the production and financial strategy. We will develop practical recommendations - this is not you, but you must use it correctly. According to the author, the following factors influence the business that determine the experience of PRB clients. [7]

At the initial stage, it is necessary to investigate the current situation in the field of customer experience management. In the course of the study, a number of key points reflected in figure 3.

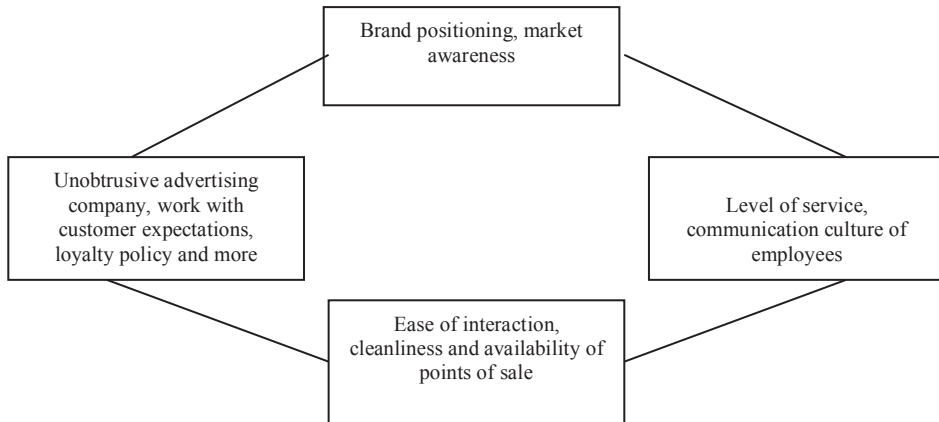


Fig. 1. Key trends in the transformation of customer experience and strategic management in the restaurant business in the context of digitalization

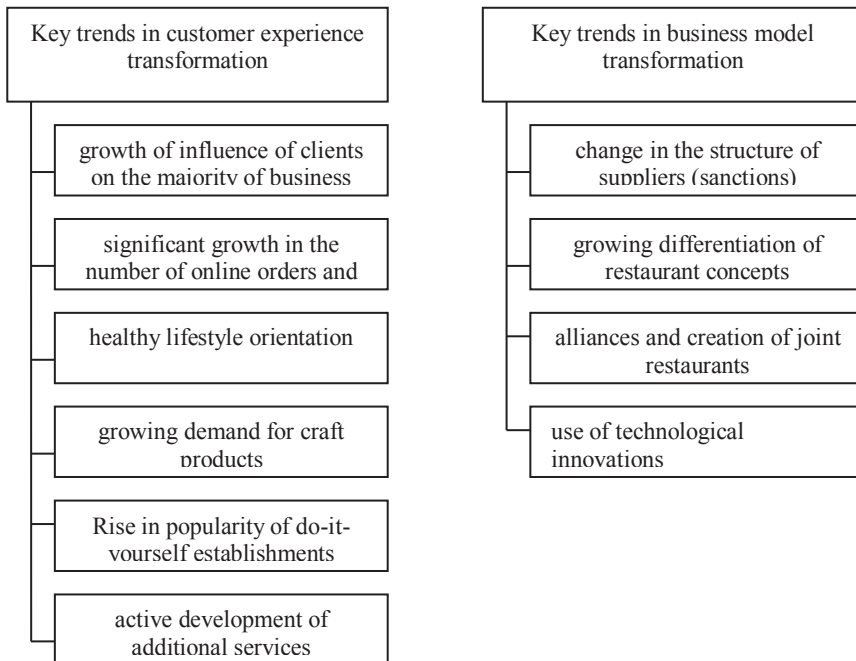


Fig. 2. Key factors that determine the customer experience in the restaurant business

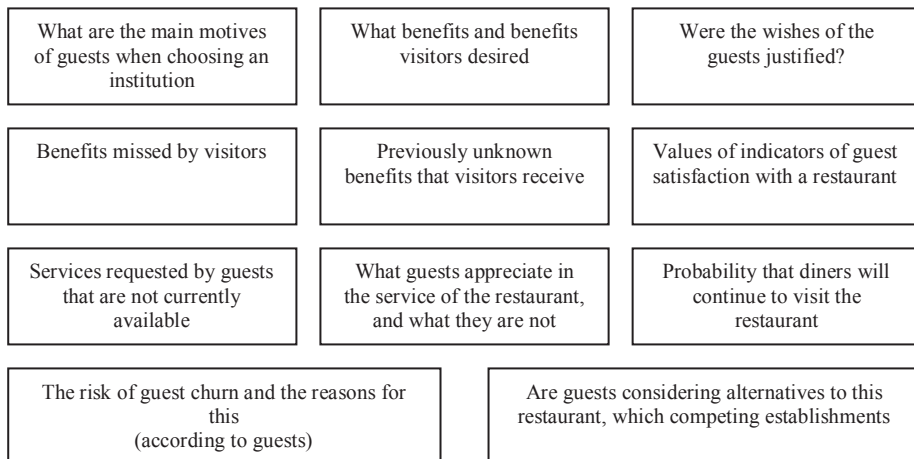


Fig. 3. The main aspects that are analyzed during the study of customer experience

Key aspects to pay attention to in the first place: [8]

Reasons for consumer dissatisfaction.

Possible ways to increase loyalty.

Possible methods by which you can make a positive impression on customers.

At the research stage, it is necessary to identify the main problems in the field of customer experience formation and measure them using special criteria. Quantitative measurements carried out on a regular basis make it possible to evaluate the effectiveness of marketing and production costs in dynamics, to determine the directions for their optimization. To carry out such measurements in world practice, a number of evaluation criteria are used that characterize the effectiveness of customer relationship management and the formation of consumer experience: [9]

Index for determining consumer loyalty to a particular institution;

Profit from the attracted client for all the time while he remains a client of the institution;

The total amount of expenses for attracting one client;

A coefficient that characterizes the ability of a business to maintain relationships with a client (keep a client);

The period of time for which the income from the client will cover the costs of attracting him;

Indicator characterizing the financial profitability of the client.

The most important evaluation criterion is the “customer quality” indicator, which is calculated as the ratio of the lifetime value of a customer to the cost of attracting him. The values of this indicator are interpreted on the basis of the following scale: [10]

1 or less - the business is in an area of high risk, it is necessary to take urgent measures in the field of customer relationship management;

2 - the cost of attracting consumers is not actually paid off;

3 - the PWB will introduce effective activities in the field of customer relations;

4 - the effectiveness of customer relations is extremely effective.

The definition of the indicators considered allows not only to analyze the characteristics of consumer behavior, but also to identify areas of strategic discrepancy between the restaurant's business processes and customer expectations and take timely measures to solve existing problems. At the same time, the use of digital technologies makes it possible to

analyze incoming information and adjust the main parameters of doing business online. [eleven]

1. Well-established in practice, such an analytical tool as a customer journey map (CPC). It is a step-by-step visualization of the behavior of a restaurant visitor from the initial point of contact to the final one. The construction of the CPC must be carried out by modeling using real empirical material (the results of observation, questioning of guests, analysis of digital traces, etc.). It is advisable to pay special attention to the PDA for the so-called "extreme" consumers: restaurant visitors with small children, customers who pay close attention to a healthy lifestyle, extremely busy business people, etc.

2. Face-to-face communications with restaurant visitors play a special role in customer experience research. Although such communications do not provide a large sample, they can be used to obtain very valuable information and generate new ideas to improve business performance. For example, in one of the Moscow restaurants, based on the results of communication with guests, they equipped a room for mother and child. Practice has shown that this room is in demand not only among parents with small children, but also among visitors who need a quiet room for telephone conversations.

3. Communication with visitors in the hall should be taught to administrators, managers, waiters. They should constantly ask guests how satisfied they are with the quality of service. It is necessary to introduce special electronic journals, with the help of which the collected information is brought to marketing specialists and to senior management.

4. The collection of primary information about customers plays a paramount role in improving the quality of service management processes. It is important that the PWB staff not only collect and analyze visitor feedback on a regular basis, but also promptly transmit information to the upper levels of management for tactical and strategic decision making. To collect feedback, special mobile applications can be used, the functionality of which includes the transfer of information using QR codes. Printouts of codes are placed in prominent places: on bar counters, on tables, in the menu. The visitor reads the code using a mobile phone and enters a special web page where he can leave his feedback, complaint or suggestion in a free form.

5. Getting feedback from visitors using QR codes is undoubtedly a very useful innovation. However, it should be borne in mind that people are more inclined to live communication and often prefer to share their impressions directly with waiters and administrators. Therefore, it is necessary to encourage the staff working in the hall to communicate with visitors and to ensure that employees behave politely, show interest and participation.

6. It should be noted that business owners and marketers should not rely solely on waiters and other employees of the hall who report directly to the chef or restaurant administrator when collecting information on customer satisfaction. This is due to the presence of a conflict of interest and possible misrepresentation of information. Therefore, in parallel, you should involve in-house marketing specialists or outside specialists in communicating with visitors. The maximum effect can be achieved when communicating with the guests of the director of the institution or his deputy (trustee).

You can bring the following example of a fairly successful communication with consumers. In the restaurants of the White Rabbit Family group, waiters offer visitors to install a mobile application that gives them the opportunity to use various discounts and bonuses. When registering in the application, the client can leave his contact details. Using this data, quality service managers conduct telephone surveys, during which they find out how satisfied customers are with the service and what improvements they would like to see in the restaurant. [12]

7. Phone surveys provide a more objective picture of the customer experience than online reviews. However, face-to-face communications in the hall should be recognized as the most effective way to collect primary information.

The main goal of collecting and analyzing information about customer experience is to continuously improve the quality of service and optimize relevant business processes. In practice, difficulties often arise in this kind of activity due to the fact that the restaurant administration and staff are confident in the initially high quality of food and service. As a result, employees resist innovation.

8. When managing customer experience, it is important to ensure a high level of involvement in this process of all employees whose work in one way or another involves communication with consumers. Employees should be focused not only on collecting information, but also on improving customer experience. You should actively work on leadership in teams. Key staff should be identified who have outstanding guest communication skills and who can motivate visitors to share their experience as candidly as possible.

According to the results of the research, the menu is being adjusted, service standards are changing, and various improvements are made to internal procedures. When developing changes, pay special attention to the results of the assessment by quantitative metrics. [13]

The most important metrics are customer lifetime value and churn rate. It is necessary to constantly monitor these indicators and take measures to optimize their values.

9. An important aspect of improving customer experience is maintaining the brand integrity of the restaurant business. It is necessary to ensure that all the main elements of the communication complex (advertising, restaurant interior and exterior design, service style, etc.) are within a single concept. People tend to have a holistic perception of catering establishments, and significant deviations from the general concept even in one of the communication elements can negatively affect the perception of a restaurant.

10. Maximum attention should be paid to building harmonious relationships with customers. For example, if a visitor had a negative experience while visiting a restaurant, then it is not enough to send him a formal apology. The specialist must personally communicate with the client, find out the essence of the problems that have arisen, apologize and make him an attractive offer (discount, bonus, tasting a new dish, etc.). This approach will allow you not to lose relations with the client and win his loyalty.

Restaurant management should strive to shape the overall experience of the customer and the establishment. This implies establishing effective feedback. You should be actively interested in the opinion of visitors, involve them in menu design, development of new services, invite customers to take part in choosing the best employee, etc. Joint experience increases consumer loyalty and allows you to get a kind of credit of trust in the restaurant.

11. Any change in the marketing complex of the restaurant business (in the menu, in the interior, in the parameters of service, in pricing, in the style of advertising, etc.) transforms the customer experience. Significantly changing the consumer experience in a direction that benefits the PWB requires a systematic approach. In addition, it is important that the administration of the enterprise is ready for experiments. At the same time, it should be taken into account that a positive result from the ongoing experiments in some cases can be achieved only in the long term.

12. Recently, in the service sector, such a concept as "extra service" has become widespread. It can be interpreted as a set of value-added services that can significantly improve customer experience and form long-term and strong relationships with consumers.

Extra service is a service of the highest quality. The focus of such a service is the consumer and his dynamically changing needs. Extra service implies the use of an integrated approach to the provision of restaurant services and the presence of developed feedback mechanisms with consumers. When using this approach, it is necessary not only to monitor consumer requests, but also to work ahead of the curve: predict changes in needs and form these needs. The restaurateur should strive to exceed the expectations of visitors, to make them want to share with other people information about the positive experience received.

The following examples of extra service in the restaurant business can be given: [14]

- offer visitors pillows, blankets;
- communication with children while ordering dishes by their parents;
- assistance to visitors near the cloakroom;
- attention to the wishes of visitors regarding the microclimate in the hall and the volume of music;
- provision of additional services, such as the purchase of flowers or medicines for visitors;
- organization of separate rooms for telephone conversations, care for small children;
- accompanying visitors to the car with an umbrella in rainy weather;
- placement of electrical outlets next to the tables - for charging mobile devices;
- delivery and handing in a convenient place to visitors of the things they forgot in the restaurant;
- loyal and calm attitude towards visitors who have allowed minor damage to the property of the restaurant through negligence;
- creative design of dishes (for example, pleasant inscriptions on desserts);
- assisting visitors in removing food (wine) stains from clothing;
- providing guests with a wide range of hygiene products for use in bathrooms (cotton buds, discs, wet wipes, creams, lotions, sticky rollers for clothes, etc.).

12. Modern digital technologies help to significantly improve the efficiency of customer experience management. They make it possible to simplify the process of collecting and analyzing information about consumers, optimize the process of communication with the client, and also provide additional services.

Table 1 reflects the main directions of transformation of customer experience management in the restaurant business under the influence of digital technologies.

Table 1. Restaurant business. Transformation of customer experience management in the context of digitalization

Tool	Change
Measurement of customer loyalty index (NPS), surveys, testing customer requests, feedback	Virtual machines (chat bots), artificial intelligence, measuring the quality level and the number of contacts digitally, processing speech information, IOT devices
Direct communication (through the use of electronic communication systems, telephony, social networks, personal account, email)	Ensuring continuous communication with the client (omnichannel), using the CDP client data platform, analyzing social networks, digitizing the client profile
Modern technologies	Artificial intelligence, machine learning in the development of a digital client profile and its use for marketing purposes, collection, analysis of information, creation of individual offers
Service-center	Integration of the CDP client platform into various business management processes, omnichannel, chat bots, analysis of situations that arise at points of contact.
Customer Journey Map	Using BigData technologies to understand the elements that make up the consumer portrait, dashboards, surveys and testing through communication channels
Marketing, advertising tools	The use of artificial intelligence, machine learning in the processing of data collected in the client profile, the formation of individual offers, automatic mailings, the creation of offers for working online and offline

Search and elimination of objections	Search for information on the Internet containing customer reviews about the company, brand mentions, analytics of collected data, machine learning
Website	Analysis of the number and quality of visits, resource usability research, use of an eye-tracker.

The main advantage of using digital technologies in customer experience management is the ability to use them to build multi-channel communications with consumers. Technologies make it possible to create a single digital space in which customer profiles are located. These profiles are constantly refined and supplemented, and the information contained in them serves to organize interaction through various channels, to conduct analytics and to develop corrective management decisions. [15]

With the help of digital technologies, the restaurant business can continuously be in touch with its customers and quickly respond to changes in their needs. Many domestic restaurant enterprises have already implemented customer relationship management systems (CRM-systems), which allow storing all consumer data in a single database and effectively using them for management purposes. CRM systems automatically calculate all the main metrics that characterize the effectiveness of working with clients. They also include decision support tools.

In recent years, consumers of restaurant services in connection with digitalization have undergone a certain transformation in the perception of the basic aspects of the functioning of public catering enterprises (table 2)

Table 2. Transformation of customer experience in the restaurant services market in the context of digitalization

Basic expectations of consumers of goods and services	Economic component of services	Digital economy implemented through electronic networks
The main source of information for the consumer	Websites, search engines on the Internet	social networks, instant messengers, internet applications
Financial and intangible value of the client	Service provided by the institution	customer service personalization
Product	Typical	Tailored to consumer needs
Cost of goods, services	The price of goods, services prevails over other factors	The client is ready to pay more, provided there is a choice and saving time for searching, ordering and delivering goods, providing services
Type of communications	Strategic programs of CRM-systems	Individual communications online
Features of product sales channels	Multi-channel communications	Omnichannel
Service features	Customer service according to established standards	Individual service that matches the atmosphere of the establishment
The importance of the internal environment of the institution	Limited to certain limits	key factor
The level of online-channels of relations between the seller and the consumer	Desirable, as they help to get certain benefits	Necessary and obligatory
Modern digital platforms	Can be used within certain limits	Necessary and obligatory

According to the information placed in table 2, we concluded that for the consumer of restaurant services, the positive experience of receiving the service becomes more important. Such an experience must be made original, which would correspond only to this restaurant.

At the same time, the customer experience, unlike the catering services themselves, cannot be standardized. Therefore, the restaurant enterprise needs to develop mechanisms for building a unique positive experience for each guest, taking into account the fact that customer experience is a key factor in ensuring consumer loyalty. Diners of restaurants, as a rule, are guided by personalized services and are ready to pay extra for an individual approach. [16]

4 Conclusions

Summing up, it should be noted that in modern conditions, in order to form a relevant customer experience, restaurant enterprises need to actively use the capabilities of the most modern digital technologies: artificial intelligence, big data, machine learning, blockchain. These technologies are used both for marketing analytics and for creating unique offers for each client. It can be expected that in the coming years, these technologies will be used by the majority of restaurant businesses.

In parallel with the digitalization of customer relationship management, there is a digital transformation of the strategic management of catering enterprises. Particular attention should be paid to the advanced concept of "strategy as revolution". In this concept, the emphasis is on building innovative business models. The main theses of this concept:

- the strategy should be based on the best industry practices;
- strategic planning should be focused on the formation of "markets of the future";
- the strategy should be focused on the future needs of the clients and based on the forecasted need for resources.

Thus, the integration of revolutionary strategies focused on customer experience and modern digital technologies will be the key to the successful development of the restaurant business in the foreseeable future.

In the process of building a customer experience management system, it should be taken into account that activities in this area are not limited to monitoring the needs of consumers and the use of relevant tools to influence customers. The business must move to a new philosophy focused on dynamic customer relationships and organize business processes accordingly. Currently, in our country, there are intensive discussions in the scientific and professional community regarding the factors that determine the success of management in catering establishments, namely, in the restaurant business, customer experience. The quality of services is only one of these factors, in addition to it, it is necessary to pay close attention to the formation of fair prices for services, communications between the restaurant and customers, formation of added value of services, etc. For different catering establishments, the importance of various factors can vary significantly. Thus, customer experience management is, first of all, the philosophy and strategy of business management, and only then a set of specific tools.

References

1. Wangoo Lee, Lu Lu, *International Journal of Hospitality Management* **113**, 103503 (2023) <https://doi.org/10.1016/j.ijhm.2023.103503>
2. Nela Filimon, Francesc Fusté-Forné, Chapter six - Exploring tourists and local consumers' attitudes on service automation in restaurant industry: the Spanish fast-food experience, Editor(s): F. Xavier Medina, David Conde-Caballero, Lorenzo

- Mariano-Juárez, Academic Press **95**-115, (2023) <https://doi.org/10.1016/B978-0-323-95993-3.00013-X>
3. D.Y. Katalevsky, *Innovation and investment* **8**, 36-43 (2022)
 4. Hengyun Li, Karen L. Xie, Zili Zhang, *International Journal of Hospitality Management* **84**, 102344 (2020) <https://doi.org/10.1016/j.ijhm.2019.102344>
 5. Min Liu, Jie Xu, Shuhao Li, Min Wei, *Journal of Hospitality and Tourism Management* **56**, 124-134 (2023) <https://doi.org/10.1016/j.jhtm.2023.06.019>
 6. Wided Batat, *echnological Forecasting and Social Change* **172**, 121013 (2021) <https://doi.org/10.1016/j.techfore.2021.121013>
 7. I.D. Kotlyarov, *Technique and technology of food production* **51(1)**, 146–158 (2021)
 8. Angelo Bonfanti, Vania Vigolo, Georgia Yfantidou, Rada Gutuleac, *International Journal of Hospitality Management* **109**, 103416 (2023) <https://doi.org/10.1016/j.ijhm.2022.103416>
 9. Saeid Heshmatisafa, Marko Seppänen, *Digital Business* **3(1)**, 100055 (2023) <https://doi.org/10.1016/j.digbus.2023.100055>.
 10. Emel Memis Kocaman, *International Journal of Gastronomy and Food Science* **25**, 100408 (2021) <https://doi.org/10.1016/j.ijgfs.2021.100408>
 11. I. Kapustina, [et al.], *Infrastructure and Service (DTMIS '20)* **85** (2020) <https://doi.org/10.1145/3446434.3446519>
 12. Erkan Sezgin, *International Journal of Gastronomy and Food Science* **27**, 100458 (2022) <https://doi.org/10.1016/j.ijgfs.2021.100458>
 13. A.A. Kurochkina, et.al, *Components of Scientific and Technological Progress* **2(56)**, 10-14 (2021)
 14. O. Lukina, et.al, *Global Challenges of Digital Transformation of Markets*. New York 205-217 (2021)
 15. P. Verhoef, et.al, *Journal of Business Research* **122**, 889-900 (2021)
 16. Florence Jeannot, Maud Dampérat, Marielle Salvador, Mariem El Euch Maalej, Eline Jongmans, *Journal of Business Research* **146**, 518-539 (2022) <https://doi.org/10.1016/j.jbusres.2022.03.092>