UDC 004.8 doi: 10.26906/SUNZ.2021.2.067

G. Golovko, M. Borozdin, Y. Tokar

National University «Yuri Kondratyuk Poltava Polytechnic», Poltavam Ukraine

THE NEED TO IMPLEMENT AUTOMATION AND INFORMATION SYSTEM IN THE MANAGEMENT OF THE RESTAURANT BUSINESS

Abstract. This article highlights the need and importance of using an information system in the modern restaurant business. The nature of information systems and the tasks they can perform are presented. The direction of introduction of information and communication technologies and automation in management activity of restaurants is considered. The dependence of the efficiency of the food establishment on the correctly automated work process is determined. It has been proven that the use of information systems is a necessary condition for modern restaurants and contributes to the adoption of strategic management decisions to increase competitiveness and create an appropriate and efficient infrastructure.

Keywords: system, information system, information technologies, management, restaurant business.

Introduction

Today, the management of the restaurant business is a rapidly evolving trend, and information technology has become an integral part of it. They directly affect the progress and success of the institution. Execution of transactions, control and training of personnel, risk forecasting, work analysis, menu formation and production of own products - all these processes already need automation, because in this area reporting is needed. From the client's point of view automation of calculations, accessing the menu, list of promotions, writing complaints and suggestions is convenient and profitable, as it saves time.

The research purpose. Analyze the role of the information system for the restaurant network. Identify the features of the use of information systems in this area. Record potential improvements in the restaurant network after the development of an information system (increase the efficiency of food business management, accelerate the speed and quality of customer service).

Literature review. Every day in the subject of restaurant business the concept of expression "information system" is used more and more often. However, based on the thorough study, it was exactly determined that there is no generally accepted definition of an information system for the restaurant business. In addition, this issue is covered in the scientific works of such researchers as M. Bilukha [3], F. Butynets [4], A. Zagorodny [5], M. Korobov [6], A. Tsyutsyak [7] and others. After analyzing their publications, we can conclude that the problem of implementing automation and information technology in the process of restaurant business should be disclosed more widely, because it is still insufficiently covered.

Analysis of existing information systems. Let's consider the information systems of the restaurant business in Poltava on the Internet and identify the shortcomings that need to be addressed or improved.

- 1. "Viva olive" a restaurant. After reviewing the site of this institution, it is determined that there is no possibility to place an order online and there are no images of the dishes offered by the institution.
- 2. "Peperonchino" a cafe. The analysis was carried out and it was concluded that there is no own site of the institution, it is possible to place an order

only through other delivery services, and navigation is not user-friendly.

3. "Montana pizza" – a pizzeria. There are similar problems: the lack of its own website and the ability to place orders through other delivery services.

These restaurants clearly need to address problems and shortcomings. In turn, this will lead to a more successful business.

Research results

Why do you really need a modern information system and automation of restaurant processes? Of course, in order to manage institutions more effectively, to get rid of possible abuses that cause losses, and to speed up customer service, thereby increasing the number of visitors. Automation provides a solid foundation for perfect, high quality and fast service, which will inevitably lead to the success of any restaurant [2]. After the introduction of the information system in the process of operation of the food establishment, the following advantages can be distinguished: acceptance of the order without errors because of the human factor's disappearence; transfer of the order in an automatic mode; increasing the quality of service; significantly higher speed of customer service; the ability to view the results of work at any time; probability of abuse of employees goes to zero.

The range of aspects of restaurant business management significantly expands with the introduction of equipment and software. The most important of them: analysis of the restaurant and risk forecasting in the process of its activities become more accurate and detailed; it becomes possible to continuously monitor all operations and access it at any time; the chances for the fastest introduction of the latest marketing methods and the latest service trends increase; the time for the most voluminous and time-consuming operations is reduced, table reservations can be tracked by customers, and the management system of promotions, bonuses and discounts becomes more flexible in daily use: the human factor in customer service is reduced to zero, so the service becomes better: the assessment of the work of the staff of the institution becomes more objective, as the process of providing services by each employee of the restaurant is monitored [1]. The issue of effective staff work is complex and requires careful monitoring of each order and work of the staff of the institution. Inefficient management of the company's cash flows leads to its downfall, and in the long run - and a complete collapse. Therefore, in order for the company to remain profitable, there is an urgent need for automated systems that will allow you to track cash flows. By the way, it also makes it impossible to steal property by the company's staff.

By "successful restaurant" we mean an institution that not only offers a high level of service to its customers, but also organizes the coordinated work of staff [2]. The peculiarity of the main task solved by the restaurant business is that the visitor's order must be fulfilled as quickly as possible and at the same time with the highest quality. This, like nothing else, distinguishes the management of food establishments among other areas of business. Automation can help solve this problem. With its introduction into the work process, all operations are controlled at all times and performed with higher accuracy, as well as reduced customer service time and increased profits of the institution. The obvious advantages that can be distinguished in the automation of the restaurant over other similar competitors: the possibility of payment cards; the contactless payment's introduction; work with discount cards; reliable keeping management records, accounting for purchased products and meals consumed for different periods, which helps to create an optimal menu for visitors and for the management of the institution; accurate tracking of shelf life of various products; practical dialogue with partners and suppliers; operational planning of production; convenient reporting on all necessary issues; protection against financial crimes or abuses that cause material damage. Thanks to automation, the restaurant reaches a new level, and service is provided:

- increasing the speed of customer service;
- possibility of rapid and effective implementation in the process of modern management methods and operational centralized control of the restaurant business;
- reliable support of the base of regular visitors and registration of restaurant cards;
- flexibility of bonus and discount systems, and hence further expansion of the client base of the institution [8].

Modern enterprises need the latest management methods. Management decisions in a constantly changing dynamic environment require analysis, evaluation and forecasting of the internal development of the enterprise, as well as, of course, ensuring compliance of the external microenvironment, external macroenvironment and the results of corporate financial and economic activities. In turn, there are high demands on information and other types of business management. This is necessary for the operation and management of the restaurant, as well as for financial accounting. In order to determine the profitability of the enterprise and find the shortcomings of the financial management system, you need to consider the cost of production, part of which are the cost of purchasing goods and other costs of the organization [2]. Prevention of personnel abuse in the organization should begin with the creation of an accounting system under which all money paid by customers will go to the owner of the organization. To organize such an accounting system, it is necessary to use personalized access to the system. For example, each waiter must have a unique identifier (plastic card, electronic key, fingerprint, etc.), which allows you to uniquely identify the user, thereby distinguishing access to information in the system (perform certain operations, change accounts). The facts of all canceled orders must be recorded in the log of suspicious transactions and monitored by the system administrator in the future. Only after the order information has been entered into the database, all invoices sent to the customer are printed and regular employees should be prohibited from making further changes [8].

Accounting for food companies is very specific, because it combines production and retail trade. The following types of product aspects should be considered and controlled in the production process: purchase of goods for sale. They are sometimes the raw material for production. For example, alcoholic beverages can be sold in their pure form or included in cocktails; use of semi-finished products. They are the result of production that is part of the food being sold, but is not a full-fledged object of sale. For example, minced meat is part of lasagna, cutlets and more.

Components of the institution in which the flow of goods and cash must be carefully monitored: a warehouse, where the responsible person is the secretary of the warehouse, who is responsible for receiving goods from external suppliers and distributing them to the kitchen and bar; own production, where the responsible person is the chef; bar, where the responsible bartender; the place of sale of finished products, where the process of settlement with the customer is controlled. The above covers both the cooking technique and the guidelines for marking raw materials. Any improvements in the technical specifications of the bookmarks as well as the cost of raw materials should be reflected in the measurement card.

Automation also allows you to track the movement goods between different departments of the restaurant. The system enters vouchers related to the internal flow of goods, which rotate into the original unit and arrive at the recipient. An electronic copy of the cost card and the history of its changes can be stored in the database. So, you can track the change in the dynamics of raw materials, their cost and get a complete picture of the work process. An automated catering management system can not only solve the problem of efficient turnover and money accounts, but also organize specific means to attract customers. An example is the organization of the club system. The existence of an organized club system allows owners and visitors to provide many useful opportunities: to identify visitors and enter the club area; to create the system of the discounts and bonuses for regular customers; to attract new customers; to conduct market research; to create additional advertising space; to improve the image of the organization in the eyes of customers and competitors.

A typical organization has different levels of systems: operations, management, knowledge, and ach

functional area is of strategic importance. For example, the business function has a business function system, which logs daily business data and processes at the operational level of the team. The knowledge level system creates appropriate displays to demonstrate the company's products. The management-level system tracks monthly business data across all business lines, and report areas where sales exceed or lower expectations. The forecasting system forecasts business trends for five years of services of strategic level.

The new information system embodies best practices in technology management. They optimize business processes based on the latest developments in management theory and practice. Due to the use of such technologies, information has become an important part of the production process and has replaced traditional components: natural resources, labor and capital. Today, effective economic activity is based on the transformation of information, and the transformation of information is to ensure targeted and organized exchange of data (reception and transmission of information) with other organizations and staff. We can say that information helps the order and stability of the economic system.

Each service company has its own characteristics and differs from the industry enterprise. The main and obligatory conditions of providing services are directly related to the customer. In this regard, it is necessary to use a management system for the following: the Information technologies of business customer. management in the field of services are not so purposeful in technology, as well as in industrial communication [8]. Not as a business engage in the production of products, and its information components are concentrated in the internal need, the information system of enterprises in the service sector should be mainly focused on improving service for different customers. For these companies, the best combination information systems is system information

environment and system of interaction with clients. Data analyzed The information infrastructure of the enterprise is integrated by a system of analysts. The system improves the efficiency and capitalization of enterprises through the use of information technology There are many more installations than the first two systems, but at the same time their absence will have such an impact that this cannot be achieved.

Modern information technologies contribute to the transformation of management itself. The main content is not a set of technological innovations, but a set of world experience of management and decision-making, which is reflected in the relevant tools using modern methods of information processing and storage [9].

Conclusions

The main purpose of the information system for the catering industry is to improve the quality of customer service and optimize the work of the institution. The result of automation is to improve the quality of service and reputation of the organization; providing fast order processing and visitor service; strengthening coordination and control of staff work; explanation of changes in material value and changes in goods; reduction of time for search and analysis of information. An analytical review of the literature on this issue, assessed the impact of information technology on the restaurant, analyzed the use of information technology and automation in the field of catering, analyzed recent research and publications and substantiated the problem.

Thus, the information system of service in the restaurant business is an indispensable tool in the work of any restaurant. The actual value of the study is to determine the benefits of automation and information system, namely: saving labor and financial resources, as well as improving the efficiency, speed and quality of customer service and minimizing employee abuse.

REFERENCES

- 1. Glazunov V. N. Management of enterprise income: practical recommendations. Moscow: Economy, 2003. 137 p.
- 2. Veselova O. S. Introduction of centralized information systems as a way of reengineering BP. M.: Peter, 2007. 12 p.
- 3. Bilukha M., Mykytenko T. Methodology of accounting in the electronic environment. Accounting and audit. 2011. No. 8. P. 50-54.
- 4. Butynets F. F. Theory of Accounting [Text]: Textbook. for students. Zhytomyr, 2000. 356 p.
- 5. Zagorodniy A. G. Accounting policy and its influence on the financial results of the EP. Finance of Ukraine. 2010. No. 1. P. 54-60.
- 6. Korobov M. Y. Financial and economic analysis of enterprises [Text]: textbook. K.: TV "Knowledge", KOO, 2008. 378p.
- Tsyutsyak A. Organization of accounting and analytical process of restaurant enterprises in terms of automated information processing. Visnyk of Khmelnytsky National University. 2012. No. 1. P.60-64.
- 8. Use of information and computer technologies for automation of restaurant business, available at: https://www.logsign.com/
- 9. Goryaev Y., Karabutov N. N. A. Information technologies of management. Moscow: MIEMP, 2006. 102 p.

Received (Надійшла) 26.03.2021 Accepted for publication (Прийнята до друку) 12.05.2021

Необхідність впровадження автоматизації та інформаційної системи в процес управління ресторанним бізнесом Г. Головко, М. Бороздін, Ю. Токар

Анотація. У цій статті висвітлено необхідність і важливість використання інформаційної системи в діяльності сучасного ресторанного бізнесу. Представлено природу інформаційних систем та завдання, які вони можуть виконувати. Розглянуто напрямок впровадження інформаційно-комунікаційних технологій та автоматизації в управлінську діяльність ресторанів. Визначено залежність ефективності роботи закладу харчування від правильно автоматизованого процесу роботи. Фактично доведено, що використання інформаційних систем є необхідною умовою сучасних ресторанів і сприяє прийняттю обгрунтованих стратегічних управлінських рішень для підвищення конкурентоспроможності та створення відповідної та ефективної інфраструктури.

Ключові слова: системи, інформаційні системи, інформаційні технології, управління, ресторанний бізнес.