



МІНІСТЕРСТВО МОЛОДІ ТА СПОРТУ

ЛЬВІВСЬКИЙ ДЕРЖАВНИЙ УНІВЕРСИТЕТ ФІЗИЧНОЇ КУЛЬТУРИ
ІМЕНІ ІВАНА БОБЕРСЬКОГО

VI ВСЕУКРАЇНСЬКА НАУКОВО-ПРАКТИЧНА КОНФЕРЕНЦІЯ

МОЛОДИХ УЧЕНИХ З МІЖНАРОДНОЮ УЧАСТЮ
ПРИСВЯЧЕНА 80-РІЧЧЮ ЛДУФК ІМЕНІ ІВАНА БОБЕРСЬКОГО

ІННОВАЦІЇ, ГОСТИННІСТЬ, ТУРИЗМ:
НАУКА, ОСВІТА, ПРАКТИКА

ЗБІРНИК



21.05.2026

Viktoriia Yevsevska

Student majoring in Hotel and Restaurant Business,
National University of Food Technologies, Kyiv

Academic supervisors: Oleksandr Liulka

Candidate of Technical Sciences (Ph. D.)

Associate Professor at the Department of Hotel and Restaurant
Business,

National University of Food Technologies, Kyiv

Viacheslav Hubenia

Candidate of Technical Sciences (Ph. D.)

Associate Professor at the Department of Hotel and Restaurant
Business,

National University of Food Technologies, Kyiv

IMPROVEMENT OF THE MATERIAL AND TECHNICAL SUPPORT OF AN URBAN FAMILY RESTAURANT

Material and technical support and digital transformation are important factors in the effective operation of a restaurant establishment. They affect the speed of dish preparation, service stability, product safety, and the ability of the establishment to operate under crisis-related restrictions [1].

The aim of the study is to substantiate directions for improving the material and technical support of a restaurant establishment in order to increase the efficiency of its operation and the quality of service. The object of the study is the material and technical support of a family restaurant in the Obolonskyi district of Kyiv.

The results of the analysis showed that on the days and during the hours of highest demand for the restaurant's services, the main problem is not the absence of equipment as such, but its uneven technical condition and insufficient resilience to crisis conditions. The existing material and technical base generally corresponds to the format of the establishment; however, it has several critical weaknesses. These include insufficient capacity of the autonomous power supply system, worn refrigeration equipment, unstable operation of dishwashing and bar equipment, and increased physical and psychological workload on staff during periods of

peak demand. Under such conditions, order waiting time increases, the rhythm of production deteriorates, and service resilience decreases.

Studies of restaurant operations confirm that the level of resource provision strongly affects different stages of guest waiting time, while the interaction of resources has a synergistic effect in reducing delays [2].

The paper substantiates that the modernisation of the material and technical base should be carried out in stages. The first direction is to increase energy autonomy by replacing or strengthening the autonomous power source, stabilising the load, and ensuring the operation of critical areas during power outages. The second direction is the renewal of refrigerated worktables, refrigerated cabinets, and related equipment, which affects compliance with temperature regimes and supports the implementation of Good Hygienic Practices (GHP) and HACCP principles. The third direction is the modernisation of dishwashing and bar equipment, which makes it possible to reduce downtime, speed up service, and decrease the workload on employees. The fourth direction is the technical optimisation of the production space, including the selection of energy-efficient equipment capable of stable operation under autonomous power supply conditions.

Digital and technological modernisation in the restaurant sector has a positive effect on productivity in both front-of-house and back-of-house processes [1].

The changes should be implemented in stages according to a pre-developed plan. Modernisation should be carried out without interrupting the main activity of the establishment. It is advisable to use a sequential algorithm: technical diagnostics, approval of solutions, equipment selection, preparation of engineering networks, staged installation, testing, and staff briefing. This approach corresponds to the modern understanding of continuous improvement in food service management, where the increase in operational efficiency is associated with systematic problem identification, process renewal, loss reduction, and increased satisfaction of stakeholders.

Material and technical support affects both internal production efficiency and the guest's perception of the establishment. The physical environment of a restaurant influences guest satisfaction and loyalty; therefore, renewal of the technical base should also be considered as a tool of service positioning [3]. Energy-efficient solutions in the production area contribute to lower operating costs and improve working conditions and

microclimate parameters. Modern approaches to the organisation of ventilation in a restaurant production area make it possible to significantly reduce energy consumption while maintaining an appropriate level of comfort and control of the production environment [4].

Thus, improvement of the material and technical support of an urban family restaurant should be considered as one of the directions for increasing operational resilience, service quality, and competitiveness.

Keywords: material and technical support, modernisation, restaurant business, energy autonomy, service.

References

1. Lee W., Jang S. C., Kim H. S. The effect of digital transformation: Boosting productivity in the restaurant industry. *International Journal of Hospitality Management*. 2024. Vol. 123. Art. 103896. DOI: <https://doi.org/10.1016/j.ijhm.2024.103896>.

2. Hwang J., Lambert C. U. The interaction of major resources and their influence on waiting times in a multi-stage restaurant. *International Journal of Hospitality Management*. 2008. Vol. 27, No. 1. P. 7–18. DOI: [10.1016/j.ijhm.2007.08.005](https://doi.org/10.1016/j.ijhm.2007.08.005).

3. Ryu K., Han H. New or repeat customers: How does physical environment influence their restaurant experience? *International Journal of Hospitality Management*. 2011. Vol. 30, No. 3. P. 599–611. DOI: <https://doi.org/10.1016/j.ijhm.2010.11.004>.

4. Zhang C., Yang F., Liu H., Xia Y., He L., Yu Y., Zeng L., Cao C., Gao J. Energy savings of commercial kitchen ventilation and air conditioning systems based on cooking oil control and thermal comfort. *Energy and Buildings*. 2024. Vol. 325. Art. 114317. DOI: <https://doi.org/10.1016/j.enbuild.2024.114317>.