

# Post-Industrial Nature and Trends of the Restaurant Service: Case Study of Samarkand

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**Abstract:** The article highlights the post-industrial nature of the development of the service sector, the characteristic trends of restaurant services for a post-industrial society such as the service landscape, improving menus, improving recipes, scientifically justified acceleration and further expansion of the concept of “molecular cuisine”, green economy and catering business in the field of restaurant services.

**Keywords:** post-industrial society, green economy, restaurant services, consumer value, consumer behavior, consumption acculturation, recipe of dishes, menu, molecular cuisine



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## 1. Introduction

At the current stage of socio-economic development, the importance of the service sector in Samarkand region is steadily increasing year by year and is becoming one of the key factors in shaping a post-industrial society. Significant structural changes have taken place in the global economy across various sectors. For instance, the share of services in the gross domestic product (GDP) was 20% in 1950, 34.1% in 1990, 59.6% in 2010, and by 2024, it has reached 65.1% (Jalava, 2015). These developments are explained by the simultaneous advancement of information technologies and the transition from the industrial development phase to a “service economy.” In recent years, increasing attention has been paid to the rapid development of restaurant services as a promising branch of the service sector. Researchers in our country are widely studying the restaurant service industry as an important object of research, which highlights the significant role and importance of restaurant services in achieving the goals outlined in the national development strategy “Strategy Uzbekistan-2030.”

## 2. Literature Review

The reasons for the rapid development of the service sector and the resulting structural changes in the economy have been extensively discussed in the scientific works of foreign scholars such as J. Fourastié, A. Fisher, and C. Clark. These authors proposed the concept of dividing economic sectors into “primary (agriculture, livestock, fishing, forestry, hunting, and mining), secondary (manufacturing industries, construction, and material production), and tertiary (transportation, communication, trade, and service provision)” (Belyakova, 2012). Their studies explain the rapid growth of the service sector in relation to rising income levels, noting that “as household incomes increase, the main part of demand shifts from the primary sector to the secondary

and tertiary sectors regardless of the proportion of labor resources and employment levels in each sector.”

According to K. Haksever, B. Render, R. Russell, and R. Murdick, the main reasons behind the development of the service sector include: “the rise in productivity in agriculture and industrial production releasing part of the workforce to move into the service sector, the efficient use of comparative advantages in international trade, an increase in per capita income, and the growth in number, volume, and share of services accompanying and related to production” (Haksever, 2002). Among Uzbek scholars, A.A. Vakhobov explains the transition of socio-economic relations to the post-industrial stage as “the reorganization of production into new qualitative and technologically effective forms, accompanied by the emergence of entirely new branches and types of activities” (Vahobov, 2002). In his view, “the current digital economy, the information-based society, and the developments we are witnessing in the information sphere are essentially elements of a post-industrial society. This society requires not only the refinement of professions typical of the industrial age—such as farmers, engineers, fishermen, herders, treasurers, and tax collectors—but also their replacement with highly skilled intellectual professionals.” Our own research also highlights the characteristics of service sector development typical of a post-industrial society. It argues that with increasing real incomes, the service sector expands rapidly, leading to a growing share of services in the consumption structure. As real incomes rise, individuals increasingly aim to improve their consumption baskets, seeking more modern and higher-quality goods and services. In particular, M.M. Mukhammadov asserts that “creating a socio-cultural and economic environment aimed at increasing the purchasing power of incomes and further enhancing the service sector is characteristic of the next stage of societal development—namely, the post-industrial society” (Mukhammadov, 2012).

### 3. Materials and Methods

During the research, methods such as induction and deduction, classification, and logical analysis were used. To present the research results comprehensively and cohesively, tables and figures were employed. The scientific assumptions of the study were articulated through hypotheses H1, H2, H3, and H4.

### 4. Results and Discussion

Technically advanced societies, upon reaching a certain stage of industrial development, begin to redirect their resources from goods production toward the service sector. As incomes increase, consumers pay less attention to prices and instead demand higher quality. As Toffler (2004) notes, “...once the basic material needs of the consumer are met, more and more economic power is spent to satisfy their finer, more diverse, and highly personal needs.” In meeting such needs, the role of the service sector is unparalleled. The satisfaction of secondary needs indicates that people are increasingly feeling the necessity to fulfill an unlimited number of intangible needs. Thus, when society seeks to meet secondary needs—such as prestige, education, status, faith, culture, love, belonging and participation in communities, educational services, healthcare, cultural-educational activities, tourism, and wellness-sports—it inevitably stimulates the development of the service sector.

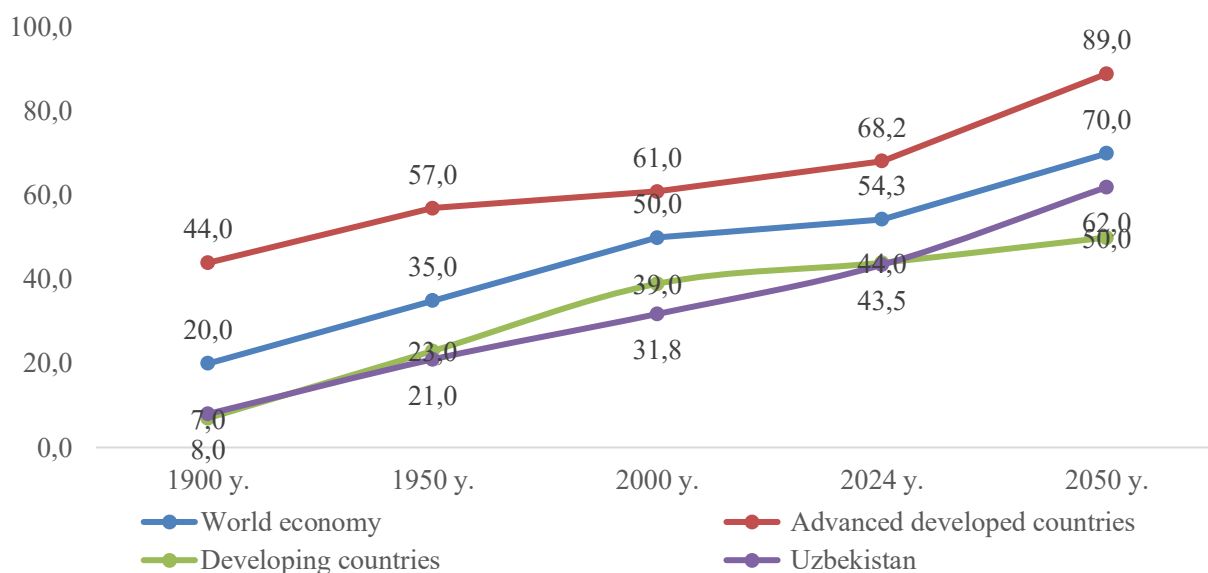
H1 – The transition of economic development to a post-industrial stage leads to a significant dominance of the service sector in the national economy.

In the world's advanced economies, the rapid development of modern equipment and technology, along with increased labor productivity, has consistently enabled the service sector to occupy a leading share in the national economy. Consequently, a portion of the economically active population moves from agriculture, industry, and other sectors into services. In developed countries, “...more than 70% of the workforce is employed in the service sector, with the ratio of service-related to goods-related labor at 2.41, whereas in developing countries it stands at 0.76” (Babayev, 2017).

According to analysis, “...globally, the service sector has grown by an average of 14.3% over

the past 50 years, 13.8% in developed countries, and by an average of 15.75% or more in developing countries" (Ibodov, 2016).

From 2012 to 2024, public and private services accounted for 60–80% of GDP in the United States, Canada, parts of Europe, and certain Asian countries. In these countries, the number of people employed in the service sector exceeds that of all other sectors combined. The service sector is also rapidly developing in the Samarkand region (see Figure 1). "...In 2024, the share of the service sector increased from 31.8% in 2000 to 43.4%" (Ibodov, 2024).



**Figure 1. Growth of the Service Sector in the Global Economy**

In modern highly developed industrial, post-industrial, and information-oriented societies, the current stage of development is characterized by an integrated approach where the level of completed technological and structural transformation of the economy and the formation of new economic, social, and political mechanisms—adapted to a mixed-type society—are becoming increasingly important, harmonizing and complementing each other.

H2 – The transition of economic development to the post-industrial stage leads to the transformation of the public catering sector into the restaurant service sector.

Restaurant services are an inseparable part of the tourism and hospitality industry and represent one of the promising directions of the national economy. This sector includes not only the organization of food consumption but also a complex of services associated with leisure and recreation. Its main task is to ensure the quality nutrition of people while offering additional services based on various consumption habits, increasing consumer utility through additional orders. Restaurant services also face socio-psychological challenges in attracting customers, which are more subtle than simply expanding the menu or creating new dishes. The post-industrial character of restaurant services involves "...creating unique 'shows' for customers, organizing services based on individual consumption patterns, and encouraging additional orders through a willingness to spend more" (Ibodov, 2024). To achieve maximum utility, it is essential to support these trends, as customers are increasingly ready to return and pay extra for such personalized experiences.

In recent years, we have witnessed the rapid growth of the restaurant business in our country. This is closely linked to the improvement in the quality of food and services, the wide application of innovative processes in service delivery, and the development of a more economically rational consumer behavior model among the population.

The transformation factors characteristic of a post-industrial society in the restaurant service sector can be observed in the following:

Growing demand for a healthy lifestyle and nutrition – This trend reflects the increasing importance of quickly satisfying food needs with minimal harm to health and using products with low negative impact on the body.

Consumer acculturation – Today, national restaurant concepts and “...the broad diffusion of food preparation and consumption traditions have led to the popularity of Latin American, European, and Asian cuisines” (Polushkina, 2015). As a result, there is a growing need to organize the dining process using highly efficient organizational-technological formats. Interest in Japanese and Korean cuisine is rising in our country, particularly in mid-price segments, where restaurants and bars are increasingly being integrated. Interest in Greek cuisine is also growing. In practice, public catering services have increasingly specialized in organizing meals for foreign tourists and regional guests, often limiting local consumers’ options. This issue can best be addressed through the restaurant format of public catering.

Formation of organic consumption culture – Today, the global market for “...biodynamic food products reaches 25–30 billion USD annually” (Polushkina, 2015). The biodynamic and organic food market is growing much faster than the traditional food market, with an annual growth rate averaging 12.2%, and “...growth rates exceeding those of other product categories by more than five times” (Polushkina, 2015). This underlines the significant role and importance of the restaurant sector in developing an “organic consumption culture” in Uzbekistan.

H3 – The transition to a post-industrial stage of economic development accelerates the spread of the ‘Molecular Gastronomy’ concept.

Acceleration of the ‘Molecular Gastronomy’ concept – Today, the restaurant business is emerging as a cultural and philosophical activity that involves engaging designers, culinary technologists, and professionals in the process of preparing and presenting food. Economic activity aimed at responding to the consumer's preferences, tastes, and spending patterns is becoming an increasingly important source of income (see Table 1).

**Table 1**

**Directions for applying gastronomic innovations in the process of preparing or serving food in Samarkand restaurants**

Direction	Characteristic
<b>Molecular Gastronomy</b>	Aimed at presenting an attractive gastronomic experience by taking into account the physical and chemical properties of the food preparation process. The focus is on preserving the external appearance without reducing the nutritional value due to chemical processes such as liquid nitrogen, high temperatures, or oxygen-rich environments.
<b>Food Pairing</b>	The process of combining or preparing food ingredients to create new flavors, aromas, and nutritional value. It involves harmonizing complementary ingredients to enhance the taste and aroma of the main dish.
<b>Fermentation</b>	Due to consumer acculturation, national culinary practices are becoming more popular. Fermentation using nutritional bacteria or fungi is used to enhance the value of organic ingredients. Techniques like kimchi and katsuobushi-style cooking for vegetables and meat are becoming trendy.
<b>Cryoconcentration</b>	A method of preparing food by freezing, valued for preserving nutritional content. The process involves cooling with air flow and separating water content using a centrifuge to retain natural proteins. It has become a key income source for healthy-food-style restaurants.
<b>Texturization</b>	Natural additives are increasingly replacing traditional emulsifiers and stabilizers (e.g., agarose, sodium alginate, gellan, xanthan) in food production. Examples include olive oil powder, Jerusalem artichoke puree, yogurt crystals, and celery gel that provide unique design, flavor, and texture to dishes.

Direction	Characteristic
<b>Anti-griddle</b>	A technique of preparing food at extremely low temperatures ( $-34.44^{\circ}\text{C}$ ), widely used for sauces, purees, minced spreads, chocolate, ice cream, and cakes, providing distinct textures and presentation.
<b>Smoking</b>	Cooking or flavoring food with wood smoke. Semi-finished or ready-made dishes acquire unique taste and aroma through smoking (using a smoking gun). Particularly common in meat and fish dishes, and gaining popularity for pickling and cooking in wooden containers.

The advanced food preparation technologies discussed above are not implemented solely by chefs. Rather, as Salomina (2019) notes, "...they require the active involvement of highly qualified professionals in physics, chemistry, biology, and information technology." This indicates that for members of a post-industrial society, food and beverages are valued not only for their utilitarian function (i.e., satisfying hunger) but also for their nutritional value, preparation technology, design, and appearance. In essence, modern kitchens can now be perceived as laboratories that create new flavors and nutritional properties, and chefs as scientific specialists who develop innovative culinary techniques and technologies.

H4 – The transition of economic development to the post-industrial stage expands the green economy and business catering systems.

In the world's leading developed countries, the advancement of the "green economy" has led to greater use of "organic," "bio-organic," "biodynamic," and "eco-products" (Kostrova, 2021), with business catering playing a key role in reducing environmental waste and food loss. For example, "...in Germany, the public catering and food industry serves 12.4 million customers annually, of whom 1.6 million are served lunches via business catering" (Speck & Wagner, 2022). Globally, food delivery channel dynamics by restaurants increased by 61% in 2023. In the Samarkand region as well, consumers are increasingly adapting to eating "outside the home" and ordering food, while simultaneously focusing on minimizing unnecessary expenses and maximizing consumer value based on individual preferences at relatively lower prices (Ibodov, 2024).

In this regard, we believe that it is necessary to transform the composition of dish recipes, serving methods, and menus in Samarkand restaurants in accordance with modern standards (see Table 2).

Direction	Practical Recommendations	Economic Effect
Improving dish recipe composition	Substitute certain ingredients in recipes considering ecological and social factors.	Replacing high-energy ingredients with lower-calorie alternatives (e.g., substituting cottonseed oil with sunflower oil, reducing lamb/beef and increasing poultry, reducing fruit consumption and enriching with vegetables) allows maintaining average cost levels.
Changing dishware and utensils	Use eco-friendly dishware and reduce volume/capacity.	Transition to high-quality, visually appealing disposable containers reduces costs for washing, cleaning, and replacement.
Creating new dish recipes	Develop recipes that include more fruits and vegetables.	Increase the proportion of frozen fruits, vegetables, and salads. Enhances dietary value and supports healthy eating.
Improving the menu	Decrease the frequency of high-calorie dishes and increase easily digestible food items.	Schedule national dishes to be prepared on specific days of the week. Promotes broader adoption of out-of-home dining.

## 5. Conclusion



In the Samarkand region, the transition of national cuisine toward principles of cost-effective yet nutritious and healthy eating has intensified the trend of “eating outside the home.”

In Samarkand city, the post-industrial nature of service sector development leads to the transformation of food-related services into the restaurant service sector.

There is a need to significantly improve the nutritional quality and menu composition in restaurant services through the adoption of a “green economy” approach, which will also enhance the economic potential of the sector.

It is advisable to develop the HoReCa segment (Hotels, Restaurants, Cafés) in cooperation with the food industry and agricultural producers, based on the principle of “from farm to table.” The HoReCa system can reduce cost prices in restaurants by up to 20%.

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