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# OPTIMIZING GASTRONOMY SERVICES FOR ENHANCED GUEST EXPERIENCE AND SATISFACTION: A QUALITY MANAGEMENT ANALYSIS IN SERBIAN HOTELS USING THE APUCI MODEL

Optimizacija gastronomskih usluga za bolje iskustvo i zadovoljstvo gostiju - Analiza upravljanja kvalitetom u hotelima u Srbiji korišćenjem APUCI modela

### Abstract

This study investigates the quality of gastronomy services in hotels with higher category in Serbia, focusing on factors that influence quest experience satisfaction. Conducted from May to June 2024, the study utilized a systematic approach based on the APUCI model, which encompasses Ambience, Product, Unique Service, Cost of Product, and Innovation. A total of 521 surveys were distributed to various hotels, with 417 completed responses included in the final dataset. Data analysis was performed using Excel 365 to derive meaningful insights. Key findings revealed that 43.63% of respondents identified multiple factors contributing to their quality experience, with a significant emphasis on the quality of food and drinks, ambience, and service professionalism. The mean rating for food quality was notably high at 4.683, indicating strong guest satisfaction. This research provides valuable insights for the hospitality industry, highlighting the importance of enhancing gastronomic offerings and overall guest experience to meet and exceed expectations. By understanding the critical elements that contribute to guest satisfaction, hotel operators can implement targeted improvements, ultimately leading to increased customer loyalty and competitive advantage in the market.

**Keywords:** *Quality management, gastronomy services, APUCI model, guest experience and satisfaction, hotels, Serbia.* 

## Sažetak

Ova studija istražuje kvalitet gastronomskih usluga u hotelima više kategorije u Srbiji, fokusirajući se na faktore koji utiču na zadovoljstvo gostiju. Sprovedena od maja do juna 2024. godine, studija je koristila sistematski pristup zasnovan na APUCI modelu, koji obuhvata ambijent, proizvod, jedinstvenu uslugu, cenu proizvoda i inovaciju. Ukupno 521 anketa je distribuirana različitim hotelima, sa 417 popunjenih odgovora uključenih u konačni skup podataka. Analiza podataka je izvršena korišćenjem programa Ekcel 365 da bi se izvukli smisleni uvidi. Ključni nalazi su otkrili da je 43,63% ispitanika identifikovalo više faktora koji doprinose njihovom kvalitetnom iskustvu, sa značajnim naglaskom na kvalitetu hrane i pića, ambijentu i profesionalnosti usluge. Prosečna ocena kvaliteta hrane bila je izrazito visoka i iznosi 4.683, što ukazuje na veliko zadovoljstvo gostiju. Ovo istraživanje pruža dragocene uvide za ugostiteljsku industriju, naglašavajuć i važnost poboljšanja gastronomske ponude i ukupnog iskustva gostiju kako bi se ispunila i nadmašila očekivanja. Razumevanjem kritičnih elemenata koji doprinose zadovoljstvu gostiju, hotelski operateri mogu primeniti ciljana poboljšanja, koja na kraju dovode do povećane lojalnosti kupaca i konkurentske prednosti na tržištu.

Ključne reči: Menadžment kvaliteta, gastronomske usluge, APUCI model, iskustvo gostiju i zadovoljstvo, hoteli, Srbija.

#### Tourism

#### Introduction

Over the years, the evolving societal landscape and advancements in knowledge and information technologies have contributed to a shifting concept of quality [16]. Derived from the Latin term "qualitas," quality encompasses notions of value, significance, and potential [18]. Its multifaceted nature allows for diverse interpretations, including excellence, perfection, fitness for purpose, value for money, and transformative aspects [23] [36] [6] [25]. Some studies underscore the significance of small details often overlooked in assessing quality [36] [42] [4]. Numerous authors highlight the intrinsic link between quality and user satisfaction, emphasizing the adaptation to user requirements [2] [46]. Authors [28] emphasize quality as surpassing user expectations and recognize its role in economic, social, managerial, and educational spheres Establishing and preserving product and service quality, particularly in organizational infrastructure, is a challenging endeavor, with [9] advocating quality work, learning, and exceeding guest expectations for optimal service value. In essence, quality is synonymous with meeting guest wishes and expectations. Hospitality establishments aiming to surpass guest expectations must comprehend all service attributes contributing to guest values, fostering satisfaction and loyalty [10]. The International Organization for Standardization (ISO) initially defined quality in 2000 as the totality of product or service characteristics meeting predetermined user needs and expectations. In subsequent years, ISO refined this definition, presenting quality as the level to which inherent characteristics meet guest requirements [17]. The global significance of quality is evident in ISO's extensive standards covering diverse industries, providing a foundation for innovation and progress, including within the tourism sector. Quality remains an inexhaustible field of research, with producers emphasizing the relationship between quality, guest satisfaction, and the monitoring of production processes to meet client expectations. From the guest's perspective, quality involves the perception of product/service value and often centers on the price/quality ratio. While absolute quality may be elusive, continuous and revolutionary improvement stand as pivotal concepts

in quality assurance. Authors Mmutle and Shonhe [26] categorized service quality factors into two primary dimensions: human and mechanical aspects. The human factor, as defined by these authors, encompasses attributes such as professionalism, kindness, care, efficiency, and enthusiasm exhibited by service providers [5]. On the other hand, mechanical aspects pertain to environmental factors like facility design, equipment, display furniture, colors, textures, sounds, and lighting [13]. Likewise, Bekele [5] suggests that the quality of employee service has a positive impact on guests' perceptions of service quality and influences their intentions to revisit the restaurant. Additionally, Alhelalat et al. [1] identified service quality as one of the three key components in restaurant selection criteria. Furthermore, the friendliness exhibited by all staff emerges as the foremost indicator of guest satisfaction and repeat visits [41]. Evaluating restaurant service quality becomes challenging for guests before experiencing the restaurant, leading to some indecision when deciding on a restaurant and hotel.

Quality within the realms of tourism, hospitality, and gastronomy assumes the responsibility of ensuring guest experiences, satisfaction, adherence to defined price value for services and products, and alignment with the preferences of end users, i.e., guests. Moreover, quality serves as the cornerstone of tourist services in achieving guest satisfaction [35].

#### Literature review

Andaleeb and Conway (2006) [3] highlight the insufficient research on food quality in the food service industry, as no prior studies were identified in this domain. Quality food is succinctly described as well-presented, fresh, and tasty [33]. Recognizing food as a vital element for a quality life, the quality of food and beverages serves as primary indicators of guest loyalty and is pivotal in determining the overall quality of a catering facility [21]. Namkung and Yang (2008) [32] identified presentation and taste as the most influential factors of food quality in their study, while [30] recognized food variety as the most significant contributor to meal quality. In contrast, Namkung and Jang [31] assert that food quality is the paramount element in the consumer experience. Blanchard and Matthews [7] define quality food as meals with consistent taste and standardization. Food quality consistently emerges as a primary consideration for guests when selecting a restaurant [24].

Furthermore, Andaleeb & Conway (2006) [3] emphasize that food quality significantly enhances guest satisfaction in restaurants [44]. Ryu [40] outlines the various elements covered by food quality, including the method and place of food preparation, traceability of raw materials, security, nutrition, sensual attributes, and functional and biological elements. According to Namkung and Yang [31], although food forms a fundamental component of the service experience, research on food quality itself is relatively limited, and most studies dealing with food service quality often focus solely on atmosphere and general service quality. Hart and Casserli [15] identified a lack of quality training as a key factor leading to uneven food quality. For a successful and profitable food and beverage sector, management must pay more attention to guests, identify their needs and expectations regarding food quality. The first step in ensuring quality in hotel production is food procurement [19]. According to the same authors, it is crucial to buy the right products from the right suppliers at the right time and at the right prices [43]. Debata et al. [11] point out that choosing the right supplier is a key condition for maintaining consistent food quality, and special attention must be paid to the accuracy and timeliness of delivery.

Grimm et al. [14] emphasizes four critical considerations for management when sourcing food. These include aligning with the financial goals of the hotel company, determining the appropriate amount of food needed to prevent both surpluses and shortages, ensuring effective food preparation and presentation, and meeting guest expectations regarding food service processes [22]. When purchasing food products, it is crucial to use standard specifications to detail the key characteristics of each food type. These purchase specifications should correspond to the items listed on the menu. Riley [38] outlines several fundamental purposes and benefits of these specifications. They serve as quality and cost control standards, help prevent misunderstandings between suppliers, customers, and users, act as valuable training tools, and are essential for identifying all relevant aspects of the product or service. To maintain a consistent level of food quality, uphold guest satisfaction, and manage food costs, it is crucial to adhere to portion size standards. These standards involve specifying the amount of each menu item served for a given price, quantified by number or weight, and should be aligned with standard recipes. In essence, management must clearly define quality standards. Utilizing portioning tools, scales, and utensils becomes imperative to ensure precise ingredient measurements, thereby ensuring consistency in the quality of food and beverages. Additionally, the proper utilization of food testing and measuring equipment is essential to meet required specifications and regulate critical processes in food preparation. As asserted by Ruffin [39], the control of all equipment used for measuring and checking the quality of food, such as temperature probes and timers, is necessary. Guests are inclined to favor establishments with good food quality, emphasizing the concept of "value for money". Regardless of how quickly food is delivered, its quality is paramount in attracting guests. In the hotel industry, food and beverage quality stands as a key determinant of guest satisfaction. Namkung and Yang [31] identify factors constituting food quality, including presentation, health options, taste, freshness, variety, and temperature. They emphasize that food presentation influences guests' appetite and perception of food and beverage quality. Similarly, Zrnić, Brdar & Kilibarda [47] underscore the importance of food and beverage quality in the restaurant industry, categorizing five dimensions or attributes: food freshness, taste, nutritional value, menu variety, and aroma. Providing quality food proves instrumental in enhancing guest loyalty and retention and maximizing restaurant revenue, as repeat guests tend to spend more on food than new guests on various hotel services, products, and beverages. Generally, food quality encompasses six key components: (1) presentation, (2) variety, (3) healthy options, (4) taste, (5) freshness and (6) temperature, as outlined by Namkung and Yang (2007). The control and monitoring of food quality align with the overarching goal of enhancing guest satisfaction. Nam et al. [30] introduced two distinct dimensions in food and

beverage service activities. The first dimension, technical standards, focuses on product quality, which includes aspects such as the quality of food products, portion size, cooking method, presentation, aroma, and taste. The second dimension, service standards, emphasizes the quality of service, covering service delivery procedures such as greeting, order taking, payment, and the execution of these procedures, with attention to aspects like body language and tone of voice. In contrast, Hart and Casserly [15] identified several factors contributing to a lack of quality in the hospitality sector. These factors include insufficient commitment to quality from management, limited direct communication between management and employees, inadequate involvement of all employees in the quality management strategy, a high percentage of parttime employees leading to inconsistent quality, and a lack of training related to the quality of services and products.

Mmutle & Shonhe [26] express a similar viewpoint, highlighting that inconsistency poses a significant challenge to quality in organizations providing food and beverage services. Consequently, the cost of poor quality becomes a critical concern as it can surpass the expenses of developing gastronomic quality. In this context, it is imperative for catering companies to ensure and balance the quality of their gastronomic offerings to achieve guest satisfaction. Creating a high-quality gastronomic product involves procuring good ingredients, proper storage, adherence to standard recipes, and cost control. Ryu et al. [40] explain that establishing clear standards for all activities and processes in food production is necessary to achieve a consistent level of food quality, and these standards should be easily accessible to all staff [37]. Mohammad [27] asserts that well-prepared quality food in a hotel and restaurant, irrespective of size, leads to profit and an overall increase in the establishment's income. The same author dispels the misconception that hiring a good chef and leaving operations solely to them ensures quality food, emphasizing the importance of a team approach in hotel service operations for maintaining consistent food quality. Edoun et al. [12] stress the short operating cycle of food preparation, leaving little time for error correction, making it crucial to achieve quality food on the initial attempt. Munoz et al. [29] share a similar perspective,

advocating for producing a quality product the first time to save time and costs, avoiding the need for corrections and repairs. Poor quality costs approximately 20% of gross profit in the manufacturing industry and around 30% in the service industry. The cost of attracting new guests is three to five times higher than retaining existing guests, underscoring the imperative of impeccable gastronomic quality. Parsa et al., [34] investigated reasons for hotel/ restaurant failure, identifying issues such as a lack of a documented strategy, absence of a written mission and vision, and failure to establish, document, and maintain operating standards. They also highlighted frequent changes in management and staff, lack of integration of mission and vision in work, lack of management commitment and employee involvement, and poor-quality products. A recent study suggests that the introduction of a quality management system and hotel certification has no direct relationship with business performance but shows a significant correlation with operational performance. In a study on luxury hotels in New York and California, Majid et al. [24] found that food quality and service quality significantly impact guest loyalty. Another study in the Republic of Serbia by Borovčanin and Kilibarda [8] highlights the dependence of food and beverage quality on employee satisfaction. Empirical research indicates that the quality and safety of food in the hospitality sector primarily hinge on management's will. The same authors emphasizes the responsibility of food producers (hotels, motels, restaurants, etc.) to provide high-quality, safe, hygienically prepared meals and drinks, meeting guests' expectations, and ensuring the health of those who consume the prepared food. Previous studies have identified food quality, service quality, and ambiance as the main factors determining restaurant service quality. Kondo (2000) [20] underscores the importance of consistent product quality by documenting workflow and issuing certificates as evidence of compliance with standards. A gastronomic product must consistently deliver quality at an appropriate price to meet guest expectations. Empirical findings from a study show that by carefully evaluating, preventing, and reducing errors in the food and beverage sector, a hotel can significantly improve its financial performance. All entities involved in food production are obligated to establish a food

safety system in accordance with the principles of good hygiene practice, good production practice, and HACCP, ensuring food safety and the enjoyment of quality food and drinks. In this research, in addition to the research questions, two hypotheses were set:

- Hypothesis 1: Guest satisfaction is influenced by the quality of food and beverages offered in hotel catering establishments such as restaurants, cafe bars, and lounge bars. This influence is contingent upon factors like the ambiance, taste, and presentation of the food and beverages, the quality of services provided, the pricing of gastronomic products, and the integration of innovative culinary elements.
- Hypothesis 2: The contentment of guests with the culinary offerings in 4\* and 5\* establishments is intricately linked to their prior experiences in hospitality facilities of the same caliber, encompassing restaurants, cafe bars, and lounge bars. This connection significantly shapes the overall gastronomic experience.

### Methodology

The research was conducted from May to June 2024, focusing on the hospitality industry in Serbia. Surveys were distributed via email to hotels across the country. Out of 521 responses received, 417 were correctly completed and included in the final dataset. Data analysis was performed using Excel 365 to derive the results. Due to its ease of use and familiarity with researchers, Excel 365 was selected for the study's data analysis and manipulation. Because of its adaptability, it may be used for a variety of studies without the requirement for specialized tools, such as pivot tables and descriptive statistics. Since sophisticated statistical methods were not required for the study's analysis requirements, Excel was adequate for obtaining insightful information.

The aim of the research relates to the development of a food and beverage quality management model, in order to achieve the gastronomic experience and satisfaction oftoof gastronomic services. The research includes a systematic approach, using the APUCI model (Ambience, Product, Uniqe service, Cost of product and Innovation). The APUCI model was developed specifically for the purposes of this research to comprehensively examine all above mentioned elements. During the research process, the author observed that existing research models often focus on one or a few aspects of quality, service, and guest satisfaction. Accordingly, a comprehensive model was created to investigate multiple dimensions of quality and guest satisfaction. This approach provides a broader perspective, leading to more robust research findings and, consequently, better practical solutions and recommendations for improving service quality.

Guest satisfaction pertains to the degree of contentment experienced by guests at 4\* and 5\* hotel facilities, across various individual aspects that are the focus of this research. Ambience refers to the overall atmosphere and environment of the hotel, including factors such as music, color, furniture, pictures, interior design, lighting. Guests expect to be in a clean, well-maintained and visually pleasing environment. Products and uniqe services refer to the benefits and offers that the hotel provides to guests. This includes elements such as food and beverage quality and options and guest services such as restaurant service and more. Guests expect to have access to high-quality products and services that meet their needs and exceed their expectations. Cost refers to the amount of money for hotel products and services.

Guests expect to get value for their money and to be charged fair prices that are in line with the market and the quality of products and services provided. Innovation refers to a hotel's ability to think outside the box and come up with new and unique ideas to improve the guest experience. This can include things like incorporating new technologies, offering unique amenities, or implementing sustainable practices [43]. Guests appreciate hotels that are always looking for ways to improve and stay ahead of the competition. Total guest satisfaction means satisfaction with all aspects of the user experience that are the subject of this research (ambience, product, service, price and innovation), that is, it includes all factors that contribute to guest satisfaction as a whole.

Table provides a revised distribution of the demographic and socio-economic characteristics of the 417 respondents. Regarding gender, there are 245 males, constituting 58.45% of the sample, and 172 females, making up 41.02%. For age distribution, the largest group is aged 27-41, comprising 180 respondents or 43.14% of the sample. This is followed by the 42-55 age group with 120 respondents (28.77%). The 18-26 age group includes 40 respondents (9.60%), while those aged 56-64 account for 50 respondents (11.98%). The over 65 age group comprises 27 respondents, which is 6.46% of the sample. In terms of education, 80 respondents (19.18%) have completed high school, 140 (33.57%) hold a college degree, 120 (28.77%) have a faculty degree, 70 (16.77%) have a master's degree, and 7 (1.68%) hold a PhD. Employment status reveals that 267 respondents (64.05%) are employed, 80 (19.18%) are entrepreneurs or business

Variable	Category	f	%
Gender	Male	245	58.45
Gender	Female	172	41.02
Age	18-26	40	9.60
	27-41	180	43.14
	42-55	120	28.77
	56-64	50	11.98
	Over 65	27	6.46
Education	High school	80	19.18
	College	140	33.57
	Faculty	120	28.77
	Master	70	16.77
	PhD	7	1.68
	Out of work	35	8.39
Employment Status	Student	5	1.20
	Retired	30	7.19
	Entrepreneur (business owner)	80	19.18
	Employed	267	64.05
	50.000 RSD	70	16.77
Salary Range	50.000-100.000 RSD	145	34.77
	100.000-200.000 RSD	157	37.71
	More than 200.000 RSD	45	10.81

Table 1. Socio-demographic characteristics of respondents

\*f – frequency; % - percentage The total number of respondents 417. Source: Authors research owners, 35 (8.39%) are out of work, 30 (7.19%) are retired, and 5 (1.20%) are students. Regarding salary range, 70 respondents (16.77%) earn between 0 and 50,000 RSD, 145 (34.77%) earn between 50,000 and 100,000 RSD, 157 (37.71%) earn between 100,000 and 200,000 RSD, and 45 (10.81%) earn more than 200,000 RSD.

The frequencies and percentages for each category have been recalculated to maintain the accuracy and representativeness of the data. For the variable "Previous stay in hotel with higher category," the number of respondents who have not previously stayed in such hotels is now 24, constituting 5.75% of the total sample. Conversely, those who have stayed in 4\* or 5\* hotels now number 393, accounting for 94.25% of the respondents. Regarding "Personal experience of quality," the recalculated percentages for each category are as follows: 9.83% of respondents (41 individuals) reported that the price was in line with their expectations. An innovative gastronomic offer, such as gluten-free options, was highlighted by 7.19% of the respondents (30 individuals). The category of experiences that exceeded guest expectations was reported by 9.83% of respondents (41 individuals). A pleasant atmosphere, encompassing design, ambience, and lighting, was noted by 8.87% of respondents (37 individuals). Delicious food, characterized by taste, smell, and freshness, was highlighted by 12.47% of respondents (52 individuals). The expertise and education of employees were emphasized by 8.15% of respondents (34 individuals). Lastly, 43.63% of respondents (182 individuals) reported that all the mentioned factors contributed to their personal experience of quality.

For the "Quality of food and drinks," the mean rating is 4.683 with a standard deviation of 0.275, indicating

Table 2. Results of descriptive statistical analysis are given	Table 2. Results	of c	lescriptive	statistical	analys	sis are given
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Variable	Category	N	%
Drawious starvin hotel with high or estagony	No	24	5.75
Previous stay in hotel with higher category		393	94.25
	No   Yes   Price in line with expectations   Innovative gastronomic offer (e.g. gluten-free)   Exceeded guest expectations   Pleasant atmosphere (design, ambience, lighting)   Delicious food (taste, smell, freshness)   Employees (expertise, education)	41	9.83
Personal experience of quality	Innovative gastronomic offer (e.g. gluten-free)	30	7.19
	Exceeded guest expectations		9.83
	Pleasant atmosphere (design, ambience, lighting)	37	8.87
	Delicious food (taste, smell, freshness)		12.47
	Employees (expertise, education)		8.15
	All the above mentioned	182	43.63

\*N – number; % - percentage Source: Authors research that respondents generally perceive the quality of food and drinks to be high with minimal variability. The ratings for this category range from a minimum of 1.000 to a maximum of 4.000. The "Ambience" category has a mean rating of 3.905 and a standard deviation of 0.678, showing a moderate level of satisfaction with the hotel ambience. The ratings range from a minimum of 1.000 to a maximum of 5.000, reflecting diverse opinions among the respondents. "Innovations," which includes offerings such as gluten-free options, received a mean rating of 3.128 with a standard deviation of 0.918. This category also had a rating range from a minimum of 1.000 to a maximum of 5.000, indicating varied responses regarding the innovative aspects of the hotel services. "Guest satisfaction" has a mean rating of 4.065 with a standard deviation of 0.768. The ratings for this category range from a minimum of 1.000 to a maximum of 5.000, suggesting that most respondents are generally satisfied with their overall experience. The "Service" category was rated with a mean of 4.051 and a standard deviation of 0.579. The minimum rating for this category is 1.857, while the maximum is 5.000, indicating a high level of service quality with some variability. "Food and drink satisfaction" received a mean rating of 4.265 and a standard deviation of 0.518, with ratings ranging from a minimum of 2.167 to a maximum of 5.000. This suggests a high level of satisfaction with the food and drink offerings. The "Quality of service" category has a mean rating of 2.838 and a standard deviation of 0.579, with ratings ranging from a minimum of 0.667 to a maximum of 3.667. This indicates more moderate satisfaction with the quality of service. For "Standards," the mean rating is 2.653 with a standard deviation of 0.362, and the ratings range from a minimum of 3.000 to a maximum of 5.000.

This reflects perceptions of the standards maintained by the hotels. Lastly, "Professionalism" has a mean rating of 2.279 and a standard deviation of 0.543, with ratings ranging from a minimum of 1.500 to a maximum of 3.000, suggesting that respondents perceive the professionalism of the staff as moderate.

#### **Results and discussion**

Based on the research conducted in higher-category hotels (4\* and 5\*) in Serbia, and the results obtained through an online questionnaire, the following conclusions can be drawn regarding the quality of gastronomy in the management of gastronomic services: The quality of food and drinks is influenced by various factors including the ambience, taste, presentation, service, pricing of gastronomic products, and innovations. Although today's guests believe that not all these factors significantly impact the overall experience, it is crucial not to overlook any of these aspects to ensure potential guest satisfaction. The research findings indicate that previous experience in staying at higher-category hotels has a partial effect on guests' gastronomic satisfaction. It can be concluded from the research results that the level of knowledge, training, and specialization of hotel staff has a notable impact on guest satisfaction in hotels with higher category. The analysis of guest responses reveals that the portion size and presentation of meals and drinks, as handled by hotel staff (including cooks, waiters, and management), are influenced by the standards set by the hotel facility. These factors play a significant role in affecting guest satisfaction. The research results also show a positive guest attitude toward the expertise of the service staff in

Category	Mean (m)	Standard Deviation (sd)	Minimum	Maximum
Quality of food and drinks	4.683	0.275	1.000	4.000
Ambience	3.905	0.678	1.000	5.000
Innovations	3.128	0.918	1.000	5.000
Guest satisfaction	4.065	0.768	1.000	5.000
Service	4.051	0.579	1.857	5.000
Food and drink satisfaction	4.265	0.518	2.167	5.000
Quality of service	2.838	0.579	0.667	3.667
Standards	2.653	0.362	3.000	5.000
Professionalism	2.279	0.543	1.500	3.000

Table 3. Descriptive statistics of quality factors

Source: Authors research

terms of the gastronomic experience. Continuous training, master classes, and periodic education are recommended as effective strategies for maintaining and enhancing staff quality, which, in turn, leads to higher guest satisfaction. Furthermore, the processed responses from guests who stayed in higher-category hotels suggest that the perceived quality of food and beverages is influenced by the pricing, which in turn affects overall guest satisfaction.

Research hypotheses. Testing results

- H1: The quality of food and beverages in a hotel's catering facility—whether it be a restaurant, cafe bar, lounge bar, or similar—significantly impacts the overall satisfaction of guests. This quality is influenced by several factors including the ambiance, taste, and presentation of the food and beverages, the services provided, the prices of the gastronomic products, and innovations. This hypothesis has been confirmed.
- H2: Guest satisfaction with food and drinks in highercategory hotels is influenced by their previous experiences at similar facilities, such as those within the same category (restaurant, cafe bar, lounge bar, etc.). This prior experience impacts the overall gastronomic experience at the hotel. This hypothesis has also been confirmed.

In order for a hotel restaurant to be profitable and successful, management must focus more on its guests and identify their needs as well as what they expect from food quality. Guest satisfaction is a critical issue for the survival of hotel restaurants. Delivering consistent levels of quality gastronomic products has a significant impact on guest retention in hotel facilities. In order to achieve food quality, it is crucial to conduct regular internal and external quality audits in gastronomy. Based on the research, we can come to the conclusion that commitment, focus, constant improvement and maintenance of quality in the gastronomic offer of products and services and employees in the hospitality facility of the hotel can have a positive effect on the successful operation of the hospitality facilities and thus the ultimate satisfaction of the guests. Constant improvement, monitoring of set standards and adequate seminars are necessary so that hotel facilities can establish consistent quality in gastronomy. In accordance with the above, it can be concluded that there are no universal quality standards in gastronomy in managing guest satisfaction. Standards and quality mean different things to different guests, and this is supported by the partial confirmation of the set hypotheses. When concluding the research questions, the global crisis epidemiological situation should also be taken into account, and perhaps some answers to the survey questionnaire would be different from those received.

#### Conclusion

In accordance with the following recommendations were made for hotels in Serbia to improve quality in the gastronomic sector: Given the large number hotels with higher category in Serbia, it is necessary to constantly monitor modern trends and innovations that contribute to business in contemporary tourist markets. By applying these trends and innovations, hotel companies can ensure their competitiveness [35]. Due to the competition in the tourist market, it is suggested that hotels form synergies with other hotel companies to strengthen their market presence. By collaborating within mutual interests, hotel companies can operate together, facilitating international business, accessing new markets, and attracting new users of gastronomic services. Considering the fast pace of life and the demand for instant solutions, it is essential for hotels to develop their own quality standards. These standards can help establish and maintain good business practices. Hotels that have a thorough understanding of their guests, including their needs and wishes, have a significant advantage over those that do not track guest demands. Therefore, it is crucial for hotels to understand their service users, along with their socio-demographic characteristics and economic motives. This understanding will enable hotels to better implement new and existing systems for improving gastronomic quality, adjusting gastronomic products (food and drinks) according to guest preferences, and ultimately impacting business profits positively. Communication with guests is also a vital step. It is recommended to utilize social platforms such as TripAdvisor and Booking.com to promote hotels, their services, and gastronomic products. This promotion can

increase visibility and potentially increase the number of users of gastronomic and hotel services. Moreover, constant monitoring of the satisfaction of users of gastronomic services is required. Given the willingness of guests to share their experiences, pictures, and videos with their loved ones and on the Internet, a good strategy is to follow relevant forums and platforms. By analyzing the information and new knowledge gained from these sources, hotels can identify and resolve problems, using the information to their advantage to create guest satisfaction, which is the primary goal of hotel companies.

Although this study uses the APUCI model to offer useful insights about the caliber of gastronomy services in Serbian hotels, it is crucial to recognize its limitations. A notable drawback is the dependence on respondents' self-reported data, which could introduce biases like recall or social desirability bias and compromise the accuracy of visitor satisfaction surveys. The findings may also not be as applicable to other areas or nations due to the concentration on hotels in Serbia, since cultural and contextual factors can greatly affect the expectations and experiences of visitors.

To evaluate the APUCI model's suitability and efficacy in various hospitality contexts, it would be advantageous for future study to test it in various geographical locations. A more thorough insight of customer satisfaction across the industry might also be obtained by broadening the study to include a wider variety of hospitality venues, such as cafes and restaurants. Additionally, using mixed-method techniques, such qualitative interviews, could improve the data and provide more in-depth understanding of the elements affecting visitor experiences. Future studies can help develop a more sophisticated understanding of gastronomy service quality and client happiness in the hospitality industry by tackling these constraints and investigating these avenues.

#### References

 Alhelalat, J. A., Ma'moun, A. H., & Twaissi, N. M. (2017). The impact of personal and functional aspects of restaurant employee service behaviour on customer satisfaction. *International Journal of Hospitality Management*, 66, 46-53. https:// doi.org/10.1016/j.ijhm.2017.07.001

- Alrousan, R. M., & Abuamoud, I. M. (2013). The mediation of tourist's satisfaction on the relationship between tourism service quality and tourists' loyalty: Five stars hotel in Jordanian environment. *International Business Research*, 6(8), 79. https:// pdfs.semanticscholar.org/51e3/1a5b62308482b2b1f29a258b 4ba6f66bf8d4.pdf
- Andaleeb, S.S., & Conway, C. (2006). Customer satisfaction in the restaurant industry: an examination of the transactionspecific model. Journal of Services Marketing, 20(1), 3-11. https://doi.org/10.1108/08876040610646536
- Ariffin, A. A. M., & Aziz, N. A. (2012). The effect of physical environment's innovativeness on the relationship between hosting quality and satisfaction in hotel services. *International Journal of Trade, Economics and Finance, 3*(5), 337-342. http:// www.ijtef.org/papers/223-CF301.pdf
- Bekele, F. (2020). The effect of service quality on customer satisfaction: in the case of hyatt regency hotel (Doctoral dissertation, St. Mary's University). http://repository.smuc. edu.et/bitstream/123456789/5723/1/The%20Effect%20of%20 Service%20Quality%20on%20Customer%20Satisfaction%20 Hyatt%20Regency%20Hotel%20Addis%20Ababa%20Final.pdf
- Bhat, M. A. (2012). Tourism service quality: A dimensionspecific assessment of SERVQUAL. *Global Business Review*, 13(2), 327-337. https://doi.org/10.1177/097215091201300210
- Blanchard, T. C., & Matthews, T. L. (2007). Retail concentration, food deserts, and food-disadvantaged communities in rural America. Remaking the North American food system: Strategies for sustainability, 201-215. https://shorturl.at/rhxL2
- Borovčanin, D., & Kilibarda, N. (2020). Assuring good food handling practices in hospitality, financial costs and employees' attitudes: A case study from Serbia. *Scientific journal" Meat Technology"*, *61*(1), 82-94. https://doi.org/10.18485/ meattech.2020.61.1.8
- Claver, E., Tari, J. J., & Pereira, J. (2006). Does quality impact on hotel performance? *International Journal of Contemporary Hospitality Management*. https://doi.org/10.1108/09596110610665357
- Daskalaki, Vasiliki V. and Voutsa, Maria C. and Boutsouki, Christina and Hatzithomas, Leonidas, Service Quality, Visitor Satisfaction and Future Behavior in the Museum Sector (January 30, 2020). *Journal of Tourism, Heritage & Services Marketing* (*JTHSM*), 6(1), 3-8, DOI: 10.5281/zenodo.3603167, Available at SSRN: https://ssrn.com/abstract=3747772
- Debata, B. R., Patnaik, B., Mahapatra, S. S., & Sree, K. (2015). Interrelations of service quality and service loyalty dimensions in medical tourism: a structural equation modelling approach. *Benchmarking: An International Journal*. https://doi.org/10.1108/ BIJ-04-2013-0036
- Edoun, E. I., Mbohwa, C., & Bhila, M. T. Y. (2019). The impact of waste management in the hospitality industry Johannesburg north, South Africa. https://ieomsociety.org/ieom2019/ papers/596.pdf
- Garg, A. (2014). Mechanic clues vs. humanic clues: Students' perception towards service quality of fast-food restaurants in Taylor's University Campus. Procedia-Social and Behavioral Sciences, 144, 164-175. https://doi.org/10.1016/j.sbspro.2014.07.285
- Grimm, J. H., Hofstetter, J. S., & Sarkis, J. (2014). Critical factors for sub-supplier management: A sustainable food supply chains perspective. *International journal of production economics*, *152*, 159-173. https://doi.org/10.1016/j.ijpe.2013.12.011

- Hart, C. W., & Casserly, G. D. (1985). Quality: A brand-new, timetested strategy. Cornell Hotel and Restaurant Administration Quarterly, 26(3), 52-63. https://doi.org/10.1177/001088048502600316
- 16. Holjevac, I. A. (2006). Društvena odgovornost kao informac ijska dimenzija kvalitete života social responsibility as information dimension of quality of life. *Informatologia*, *39*(3), 153-158. https://core.ac.uk/download/pdf/14382915.pdf
- International Organization for Standardization. Contributing to the UN Sustainable Development Goals with ISO Standards; ISO: Geneva, Switzerland, 2018; Preuzeto sa: https://www. iso.org/files/live/sites/isoorg/files/s tore/en/PUB100429.pdf.
- Jeon, M. M., Kang, M. M., & Desmarais, E. (2016). Residents' perceived quality of life in a cultural-heritage tourism destination. *Applied Research in Quality of life*, 11(1), 105-123. https://doi. org/10.1007/s11482-014-9357-8
- Jeong, J., & Seo, S. (2014). Importance of satisfaction with food for older adults' quality of life. *British Food Journal*. https:// doi.org/10.1108/BFJ-01-2013-0019
- 20. Kondo, Y. (2000) Innovation versus standardization. *The TQM Magazine*, 12(1), 6-10. https://doi.org/10.1108/09544780010287177
- Kukanja, M., Gomezelj Omerzel, D., & Kodrič, B. (2017). Ensuring restaurant quality and guests' loyalty: an integrative model based on marketing (7P) approach. *Total Quality Management* & *Business Excellence*, 28(13-14), 1509-1525. https://doi.org/ 10.1080/14783363.2016.1150172
- Liu, C. H., & Yen, L. C. (2010). The effects of service quality, tourism impact, and tourist satisfaction on tourist choice of leisure farming types. *African Journal of Business Management*, 4(8), 1529-1545. https://academicjournals.org/journal/AJBM/ article-full-text-pdf/D30607626312.pdf
- Lo, K. P. Y. (2011). Designing service evidence for positive relational messages. *International Journal of Design*, 5(2). https:// ftp.isdi.co.cu/Biblioteca/BASE%20DE%20DATOS%20DE%20 GREENSTONE/internat/index/assoc/HASH01d7.dir/doc.pdf
- 24. Majid, M. A. A., Samsudin, A., Noorkhizan, M. H. I., Zaki, M. I. M., & Bakar, A. M. F. A. (2018). Service quality, food quality, image and customer loyalty: An empirical study at a hotel restaurant. *International Journal of Academic Research in Business and Social Sciences*, 8(10), 1432-1446. https://hrmars.com/papers\_submitted/5310/Service\_Quality,Food\_Quality,Image\_and\_Customer\_loyalty\_An\_Empirical\_Study\_at\_a\_Hotel\_Restaurant.pdf
- Masrurul, M. M. (2019). Impact of service quality on customer satisfaction in Bangladesh tourism industry: an empirical study. Advances In Management, 12(1). https://www. worldresearchersassociations.com/mngmntspecialissue/23.pdf
- Mmutle, T., & Shonhe, L. (2017). Customers' perception of service quality and its impact on reputation in the hospitality industry. https://repository.nwu.ac.za/bitstream/handle/10394/27781 /2017Customers\_perception.pdf?sequence=1&isAllowed=y
- 27. Mohammad, A. A. A. (2014). Managing Demand for Hotel Establishments during Downturn Times and their Impact on Hotel Revenues: A Case Study of Cairo Hotels (Doctoral dissertation, Doctoral dissertation, School of Management, Cardiff Metropolitan University). https://shorturl.at/VqNmR
- 28. Mok, C., Sparks, B., & Kadampully, J. (2013). *Service quality* management in hospitality, tourism, and leisure. Routledge. https://rb.gy/3zns1u

- Munoz, A. M., Civille, G. V., & Carr, B. T. (1992). Sensory Evaluation in Quality Control Van Nostrand Reinhold. New York. https://rb.gy/34whyl
- Nam, K. W., Kim, B. Y., & Carnie, B. W. (2018). Service open innovation; design elements for the food and beverage service business. *Journal of Open Innovation: Technology, Market, and Complexity*, 4(4), 53. https://www.mdpi.com/2199-8531/4/4/53
- Namkung, Y., & Jang, S. (2007). Does food quality really matter in restaurants? Its impact on customer satisfaction and behavioral intentions. *Journal of Hospitality & Tourism Research*, *31*(3), 387-409. https://doi.org/10.1177/1096348007299924
- Namkung, Y., & Jang, S. (2008). Are highly satisfied restaurant customers really different? A quality perception perspective. *International Journal of Contemporary Hospitality Management*, 20(2),142-155. https://doi.org/10.1108/09596110810852131
- Nwokah, N. G., & Adiele, K. (2018). Predictory effect of food quality on patronage of quick-service restaurants in Port-Harcourt, Nigeria. *African Journal of Hospitality, Tourism and Leisure*, 7(1), 1-11. https://www.ajhtl.com/uploads/7/1/6/3/7163688/ article\_8\_vol\_7\_1\_2018.pdf
- Parsa, H. G., Self, J. T., Njite, D., & King, T. (2005). Why restaurants fail. Cornell Hotel and Restaurant Administration Quarterly, 46(3), 304-322. https://doi.org/10.1177/0010880405275598
- Petković, G., Pindžo, R., & Bradić-Martinović, A. (2022). Competitiveness factors of Serbian tourism. *Ekonomika* preduzeća, 70(1-2), 113-127. http://ebooks.ien.bg.ac.rs/1759/1/ petkovic\_et\_al\_220405\_112338\_831.pdf
- Prasad, K., Wirtz, P. W., & Yu, L. (2014). Measuring hotel guest satisfaction by using an online quality management system. *Journal of Hospitality Marketing & Management, 23*(4), 445-463. https://doi.org/10.1080/19368623.2013.805313
- Redžić, D. (2018). Significance of quality in the tourism industry: Research study on the perception of stakeholders in tourism. Менаџмент у хотелијерству и туризму, 6(2), 11-20. https:// www.ceeol.com/search/article-detail?id=725954
- Renko, S., Renko, N., & Polonijo, T. (2010). Understanding the role of food in rural tourism development in a recovering economy. *Journal of Food Products Marketing*, 16(3), 309-324. https://doi.org/10.1080/10454446.2010.485096
- Riley, M. (2005). Food and beverage management: A review of change. International Journal of Contemporary Hospitality Management, 17(1), 88-93. https://doi.org/10.1108/09596110510577707
- 40. Ruffin, F. E. (2008). *Kitchen Smarts: Food Safety and Kitchen Equipment*. The Rosen Publishing Group, Inc. https://rb.gy/pt83jf
- Ryu, K., Lee H.R., & Kim, W.G. (2012). The influence of the quality of the physical environment, food, and service on restaurant image, customer perceived value, customer satisfaction, and behavioral intentions. *International Journal* of Contemporary Hospitality Management, 24(2), 200-223. https://doi.org/10.1108/09596111211206141
- Sulek, J. M., & Hensley, R. L. (2004). The relative importance of food, atmosphere, and fairness of wait: The case of a full-service restaurant. *Cornell Hotel and Restaurant Administration Quarterly*, 45(3), 235-247. https://doi.org/10.1177/0010880404265345
- Trišić, I., Štetić, S., & Vujović, S. (2021). The importance of green procurement and responsible economy for sustainable tourism development: Hospitality of Serbia. *Ekonomika preduzeća*, 69(7-8), 450-459. https://www.ses.org.rs/uploads/ tris\_ic\_et\_al\_220529\_71626\_234.pdf

- Uysal, M., & Williams, J. A. (2013). Current issues and development in hospitality and tourism satisfaction. Routledge. https:// rb.gy/prnzzh
- Zrnić, M. (2020). Study on Food Traceability Importance in Tourism Industry. *Turističko poslovanje*, (25, 26), 17-25. https:// scindeks-clanci.ceon.rs/data/pdf/0354-3099/2020/0354-30992025017Z.pdf
- 46. Zrnić, M., & Lončar, I. (2024). Enhancing guest satisfaction in hotels: Researching the impact of quality hospitality service on gastronomic experiences in the tourism industry in Serbia. *Ekonomika preduzeća*, 72(3-4), 233-244. https://www.ses.org. rs/uploads/zrnic\_lonc\_240627\_111056\_775.pdf
- Zrnić, M., Brdar, I., & Kilibarda, N. (2021). The importance of traditional food quality - the viewpoint of the tourism. *Scientific journal" Meat Technology"*, 62(1), 69-76. https://doi.org/10.18485/2021.62.1.7



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