# WORLD EXPERIENCE OF OPERATION OF INNOVATIVE HOTELS

©2024 **STROKOVYCH H. V.**

### Strokovych H. V. World Experience of Operation of Innovative Hotels

*The article considers the current world experience of operation of innovative hotels, which are complex suppliers of intelligent technologies with full implementation of high-tech relevant products and services. The conducted analysis proves that innovative technologies are used that provide hotel customers with innovative products and services. As in the classic smart home model, these technologies can be used not only directly in the room environment, but can be available in other premises of the hotel, as well as be used remotely. Innovative technologies can be used in restaurants, bars, spas, and other areas of the hotel business. They can include various information technologies, up to full automation of business processes. Restaurant guests can place orders with the help of robot waiters, dishes and drinks can be prepared by robot chefs, and delivery can be carried out based on the use of innovative automation technologies and face recognition cameras that automatically add the cost of the services provided to the room fee. A review of various approaches to the operation of innovative hotels and the results of available empirical studies on the assessment of the new experience of customers who used the services of innovative hotels is provided. It is noted that in a highly competitive economy, ensuring excellent customer experience is the basis for a company's success. The importance of continuous measurement of customer experience quality, the need to transform marketing psychology, based on a shift in emphasis on building trusting relationships with customers, creating a compelling and remarkable customer experience, information about which will be disseminated and will contribute to the growth of competitiveness of innovative hotels, is emphasized. The author describes in detail the technologies based on data analytics, the main characteristics of an innovative smart hotel, the consideration of which will contribute to the growth of competitiveness of the hotel business in Ukraine in the strategic perspective.*
*Keywords: functioning, innovative hotel, intelligent technologies, quality, marketing psychology, world experience, customer loyalty.*
*Bibl.: 28.*

*Strokovych Hanna V. – D. Sc. (Economics), Associate Professor, Professor of the Department of Hotel and Restaurant Business and Food Technologies, V. N. Karazin Kharkiv National University (4 Svobody Square, Kharkiv, 61022, Ukraine)*
*E-mail: annastrokovych@karazin.ua*
*ORCID: https://orcid.org/0000-0002-5092-9059*
*Researcher ID: https://www.webofscience.com/wos/author/record/U-3516-2018*
*Scopus Author ID: https://www.scopus.com/authid/detail.uri?authorId=56607226900*

### Строкович Г. В. Світовий досвід функціонування інноваційних готелів

*У статті розглянуто актуальний світовий досвід функціонування інноваційних готелів, які є комплексними постачальниками інтелектуальних технологій з повним упровадженням актуальних високотехнологічних продуктів та послуг. Проведений аналіз доводить, що використовуються інноваційні технології, які надають клієнтам готелю інноваційні продукти та послуги. Як і в класичній моделі розумного будинку, зазначені технології можуть бути використані не тільки безпосередньо в обстановці номера, але можуть бути доступні в інших приміщеннях готелю, а також дистанційно. Інноваційні технології можуть застосовуватися і в ресторанах, і в барах, і в СПА, і в інших сферах готельного бізнесу. Вони можуть містити різні інформаційні технології, аж до повної автоматизації бізнес-процесів. Гості ресторанів можуть розміщувати замовлення за допомогою роботів-офіціантів, страви та напої можуть готуватися роботами-кухарями, а доставка може здійснюватися на основі застосування інноваційних технологій автоматизації та камер розпізнавання осіб, які автоматично додають вартість наданих послуг у плату за номер. Проведено огляд різних підходів до роботи інноваційних готелів та результатів емпіричних досліджень щодо оцінки нового досвіду клієнтів, які користувалися послугами інноваційних готелів. Зазначається, що в умовах висококонкурентної економіки забезпечення чудової якості клієнтського досвіду є основою успіху компанії. Наголошується на важливості постійного виміру якості клієнтського досвіду, необхідності трансформації психології маркетингу на основі зміщення акценту щодо побудови довірчих відносин з клієнтами, створення переконливого та позитивного клієнтського досвіду, інформація про який поширюватиметься та сприятиме зростанню конкурентоспроможності інноваційних готелів. Автором докладно описано технології, що базуються на аналітиці даних, основні характеристики інноваційного розумного готелю, врахування яких сприятиме у стратегічній перспективі зростанню конкурентоспроможності готельного бізнесу в Україні.*
*Ключові слова: функціонування, інноваційний готель, інтелектуальні технології, якість, психологія маркетингу, світовий досвід, лояльність клієнтів.*
*Бібл.: 28.*

*Строкович Ганна Віталіївна – доктор економічних наук, доцент, професор кафедри готельно-ресторанного бізнесу та харчових технологій, Харківський національний університет імені В. Н. Каразіна (майдан Свободи, 4, Харків, 61022, Україна)*
*E-mail: annastrokovych@karazin.ua*
*ORCID: https://orcid.org/0000-0002-5092-9059*
*Researcher ID: https://www.webofscience.com/wos/author/record/U-3516-2018*
*Scopus Author ID: https://www.scopus.com/authid/detail.uri?authorId=56607226900*

ЗАКОРДОННИЙ ДОСВІД

ЕКОНОМІКА

Innovative technologies are gradually penetrating almost all spheres of life, fundamentally changing it, including the hotel industry [3; 12; 23]. At the same time, as many researchers note, the types of innovative technologies and the pace of their implementation vary significantly in different hotels. Therefore, for the formation of a competitive economy in Ukraine in a strategic perspective, it seems advisable to study the current foreign experience of operating innovative hotels and its gradual spread throughout the country.

The most progressive hotels use technologies such as artificial intelligence, data-driven systems, and service robots [12; 14]. Also, hotels that are comprehensive providers of intelligent technologies with the full implementation of currently available high-tech products and services. Currently, YOTEL in Singapore and New York perform intelligent functions, which include a technowall with adjustable lighting, robots delivering amenities and room service. The world's first porter robot Yobot is also used [10]. In addition, a smart hotel is characterized by the presence of various modern technologies to provide customers with non-traditional and more technologically enriched experiences [8]. Such hotels demonstrate the growth of intelligent services that are realized as a result of the integration of the use of data, connected innovative technologies that allow them to anticipate customer needs and also adapt depending on any changes in the environment or emerging situations [14].

A smart hotel uses innovative technologies that provide products and services, including the use of chatbots, facial or fingerprint recognition technologies to unlock room doors, robotic delivery of amenities, holograms for information, voice commands to control lighting, window shades, a robot concierge and many other items [8; 24]. In addition, as in the classic smart home model, these technologies can be used not only directly in the room setting, but can be available in other areas of the hotel, as well as remotely. Innovative technologies can also be used in restaurants and bars. They can include fully automated technologies. Restaurant guests can place orders with the help of robot waiters, meals and drinks can be prepared by robot chefs and delivery can be carried out based on the use of innovative automation technologies and facial recognition cameras that automatically add the cost of the services provided to the room fee [10].

Also in the fitness sector, hotel guests are provided with personalized services according to their health status, physical and psychological characteristics. Smart technologies such as a smart mirror are also available, which allow monitoring of the main human parameters [14]. One of the important goals of using innovative technologies is to achieve maximum efficiency through automation of services, which is due to increased productivity, continuity of service personnel (robots) and savings in labor costs, which will create a competitive advantage that will reduce the financial costs of hotel guests [12; 26].

One of the promising areas of operation of innovative hotels is the use of a chatbot. It also works constantly and can communicate with guests from different countries, representatives of different cultures, at any time of the day [7]. In addition, there is a reduction in waiting time due to the simultaneous use of several communication channels. Funny situations that arise during the interaction between hotel guests and robots in a smart hotel are often described as advantages from the customer's point of view [25]. In addition, the essence of these situations can be used to form a knowledge base for improving robots.

Technologies based on data analytics also allow a smart hotel to offer a higher level of individualization of the offered goods, services or transaction environment [22]. Despite the information presented, most studies focus on usability, measuring usability, degree of perception or assessment of customer satisfaction from the use of modern technologies [12; 25]. In turn, in marketing psychology, the emphasis is shifted from building trusting relationships with customers to creating a compelling and superior customer experience [20; 26].

Customer experience is formed on the basis of a set of customer interactions with a product/service, a firm or part of its organization [11]. Thus, the customer experience in the hotel is formed from a set of impressions of guests of the innovative hotel, from the moment of searching for information about the hotel, booking a room, a list of all possible services that customers can potentially receive in the hotel, as well as outside it with the help of the hotel's service system.

In line with the relevance of focusing on customer experience, some researchers argue that having quality products and services is no longer enough to achieve success, so it is necessary to focus on the feasibility of measuring customer experience quality (CEXQ) in the hotel industry [1; 18] and identifying areas for improving its quality.

In a highly competitive economy, providing excellent customer experience is the basis for a company's success [6; 17] and its successful strategic outlook. Studies have proven that customers enjoy technology services, perceive them as more convenient, enjoyable, efficient, and the technology is easy enough to use [9; 14]. If guests of innovative hotels evaluate new product/service attributes positively, they expect better service quality due to the use of various technical options [7]. In addition, many researchers have confirmed a significant relationship between CEXQ and

emotions, as well as CEXQ and customer behavioral intentions [5; 17].

Let us consider the main characteristics of an innovative smart hotel. One of the characteristics is the service space, which is a virtual environment that does not require the physical presence of hotel guests and various service providers [21; 26]. Within a certain virtual environment, mobile check-in/check-out, all business processes related to the delivery of luggage, food, drinks or all aspects of hotel guest service are possible. Innovative technologies based on the collection and analysis of hotel guest data allow hotels to offer guests various customized solutions according to their preferences or individual wishes [22].

Innovative technologies are applied in many applications, with the aim of obtaining visible benefits in many aspects [14]. For example, some Marriott International hotels provide smart shower doors, where hotel guests can record their ideas in the shower and then send the image to their email [10]. These opportunities the implementation of innovative technologies ultimately form the innovative smart hotel, which is the concept of the hotel for of the future.

Smart organizational hotels allow integrating all hotels in the chain into a single automated space in order to simplify all business operations, which ultimately increases the value of the business [4]. Lai and Hung [19] conducted a study of a smart hotel and argued that a smart hotel can be built on the basis of four main elements, which are innovations in the hotel guest service model through the application of innovative information technology methods: improving operational efficiency, implementing and providing digital functions, and using intelligent systems. Wu and Cheng [25] defined the term "smart hotel" as "rather a practical business term referring to a new model of hotels operating with advanced technology." This is the shortest, but very capacious definition.

De Ruyter et al. [9, p. 186] defined automated service as "interactive, content-oriented, and web-based customer service that is driven by the customer and integrated with relevant organizational processes and customer support technologies to strengthen the relationship between the customer and the service provider." According to Kabadayi et al., intelligent services are "personalized and proactive services that are enabled by integrated technology and intelligent use of data that can anticipate and meet customer needs at specific times and/or locations based on changing customer feedback and circumstances" [14, p. 330]. The emergence and development of innovative technologies has led to significant changes in customer expectations in hotels. Many studies have identified the ben-

efits of smart hotels: improved facilities, convenience, efficiency, and profitability [8; 25].

In turn, Maklan and Klaus [20] argue that customer experience is the cognitive and affective evaluation of all direct and indirect encounters with a firm by the customer, related to their purchasing behavior, that is, all types of interactions with the firm directly affect the further purchasing behavior of hotel guests. As well as, their evaluative judgments regarding innovative hotels, and the potential prospects for changing the capacity of the consumer market of such hotels.

Kim and Choi [16] conducted an empirical study in various service settings and confirmed that CEXQ is a critical factor in the formation of customer loyalty, which they measured through repeat visits and recommendations. They recommended that specialists pay additional attention to the creation of overall CEXQ, rather than focusing only on service quality.

Maklan and Klaus [20] conducted an empirical analysis using a survey of 800 hotel guests across four different service settings and confirmed that CEXQ is an important determinant of customer behavior. In particular, they found a significant positive impact of CEXQ on customer loyalty and word-of-mouth intentions. Khan et al. [15] conducted a survey of 326 hotel customers in India and found a strong impact of CEXQ on satisfaction, which in turn shapes behavioral outcomes including word-of-mouth intentions and loyalty.

Amadeus & InterContinental Hospitality Group [2] highlighted the importance of process improvement in technology-enabled hospitality and recommended conducting regular audits through real-time interactions with guests to identify gaps and resolve issues that arise. In this regard, it is suggested to encourage guest feedback during and after their stay to help identify any potential issues and resolve them effectively.

The *purpose* of the article is to consider the current global experience in the operation of innovative hotels, the consideration of which will contribute to the growth of the hotel business competitiveness in Ukraine in a strategic perspective.

Based on this, it is consistent with J. J. Kim & H. Han [13] that the staff in a smart hotel should be reactive even though they have traditionally been trained to be proactive in certain instances regarding hotel service. The article [13] studied the impact of the current technological revolutions on the hotel industry workforce and compiled a list of tasks that could be easily completed through the use of various technologies, which include check-in and check-out, restaurant reservations, and room service orders, and that the staff (humans) are there to monitor and ensure the level of service quality delivery. Therefore,

the implementation of innovative technologies should be carried out systematically, constantly monitoring and controlling the situation, assessing the prospects for its development, making the necessary adjustments based on the adoption of effective strategic and tactical management decisions, in order to maximize positive customer feedback.

In order to increase the objectivity of identifying the preferences of guests of innovative hotels, it seems advisable to conduct a preliminary clarification of the wishes of clients regarding future service. For this purpose, a questionnaire in Google form can be developed, in which the preliminary wishes and expectations of each guest of the innovative hotel will be clarified, service will be carried out taking into account the results of the survey and analysis of previously collected data, as well as taking into account the changes made. The entire service process will be based on the management of changes arising in all business processes.

In a unified questionnaire, attention should be paid to such basic things as: the need for transfer of hotel guests, methods of ordering food, dietary restrictions, preference for a certain type of cuisine or style of food, preferred time for cleaning the room, preferred entertainment, sports, SPA, etc. In addition, it is necessary to clarify which issues are preferable to resolve directly with hotel employees, and which with robots. This will allow to most fully take into account all the wishes of guests of innovative hotels and optimize the use of innovative technologies based on the best combination of interaction between hotel employees and innovative technologies, which will ultimately have a positive impact on the creation of corresponding competitive advantages of innovative hotels. Also, as a result, this will lead to the formation of a confirmed positive experience of clients of an innovative hotel.

It is also important to note the need for continuous monitoring of innovative technologies, their assessment from the point of view of the possibility and expediency of their use in innovative hotels. If a decision is made to implement them in the work of an innovative hotel, it is advisable to inform existing and potential clients of the innovative hotel about the new opportunities.

### CONCLUSIONS

The article presents a comprehensive review of the current experience of innovative hotels in the world, including detailed information on the very essence of the concept of an innovative hotel, the range of applied intelligent technologies, the consideration of which will contribute to the growth of competitiveness of the hotel business in Ukraine in the strategic perspective. The author has conducted a thorough review of various approaches to the work of innovative hotels, which are complex suppliers of intelligent technologies with the full implementation of currently available high-tech products and services. The article focuses on the feasibility of measuring the quality of customer experience, on the transformation of marketing psychology, when the emphasis is mixed from building trusting relationships with customers to creating a convincing and excellent customer experience. Prospects for further research lie in the field of critical analysis and identification of opportunities for adapting innovative international experience to improve the hotel business in Ukraine. ∎

### BIBLIOGRAPHY

1. Alnawas I., Hemsley-Brown J. Examining the key dimensions of customer experience quality in the hotel industry. *Journal of Hospitality Marketing & Management*. 2019. Vol. 28. Iss. 7. P. 833–861.
DOI: https://doi.org/10.1080/19368623.2019.1568339

2. Drivers of Change in Hospitality. Cornell University, SC Johnson College of Business, Center for Hospitality Research. *Amadeus & InterContinental Hospitality Group*. 2019. URL: https://sha.cornell.edu/wp-content/uploads/sites/4/2019/05/Amadeus-Drivers-of-Change-in-Hospitality.pdf

3. Anderson J., Rainie L. The future of well-being in a tech-saturated world. *Pew Research Center*, Washington, DC, 2018. URL: https://www.pewresearch.org/internet/2018/04/17/the-future-of-well-being-in-a-tech-saturated-world/

4. Buhalis D., Leung R. Smart hospitality – Interconnectivity and interoperability towards an ecosystem. *International Journal of Hospitality Management*. 2018. Vol. 71. P. 41–50.
DOI: https://doi.org/10.1016/j.ijhm.2017.11.011

5. Chen C.-F., Chen F.-S. Experience quality, perceived value, satisfaction and behavioral intentions for heritage tourists. *Tourism Management*. 2010. Vol. 31. Iss. 1. P. 29–35.
DOI: https://doi.org/10.1016/j.tourman.2009.02.008

6. Choo P. W., Tan C. L., Yeo S. F. A review of customer experience quality measurement in Malaysian heritage hotels. *Global Business and Management Research*. 2018. Vol. 10. Iss. 1. P. 379–395. URL: http://surl.li/biawsr

7. Dabholkar P. A. Consumer evaluations of new technology-based self-service options: An investigation of alternative models of service quality. *International Journal of Research in Marketing*. 1996. Vol. 13. Iss. 1. P. 29–51.
DOI: https://doi.org/10.1016/0167-8116(95)00027-5

8. Dalgic A., Birdir K. Smart hotels and technological applications. In *Handbook of research on smart technology applications in the tourism industry* / E. Çeltek (Ed.). P. 323–343. IGI Global, 2020.

9. De Ruyter K., Wetzels M., Kleijnen M. Customer adoption of e-service: An experimental study. *In-*

*ternational Journal of Service Industry Management*. 2001. Vol. 12. Iss. 2. P. 184–207.
DOI: https://doi.org/10.1108/09564230110387542

10. Morgan B. 10 Examples of Customer Experience Innovation in Hospitality. *Forbes*. 2020, February 20. URL: https://www.forbes.com/sites/blakemorgan/2020/02/20/10-examples-of-customer-experience-innovation-in-hospitality/#15842ce42033

11. Gentile C., Spiller N., Noci G. How to Sustain the Customer Experience: An Overview of Experience Components that Co-create Value with the Customer. *European Management Journal*. 2007. Vol. 25. Iss. 5. P. 395–410.
DOI: https://doi.org/10.1016/j.emj.2007.08.005

12. Ivanov S., Webster C. Adoption of robots, artificial intelligence and service automation by travel, tourism and hospitality companies – a cost-benefit analysis. *International Scientific Conference "Contemporary tourism – traditions and innovations"*, 19–21 October 2017, Sofia University.

13. Kim J. J., Han H. Hotel of the future: exploring the attributes of a smart hotel adopting a mixed-methods approach. *Journal of Travel & Tourism Marketing*. 2020. Vol. 37. Iss. 7. P. 804–822.
DOI: https://doi.org/10.1080/10548408.2020.1835788

14. Kabadayi S., Ali F., Choi H. et al. Smart service experience in hospitality and tourism services: A conceptualization and future research agenda. *Journal of Service Management*. 2019. Vol. 30. Iss. 3. P. 326–348.
DOI: https://doi.org/10.1108/JOSM-11-2018-0377

15. Khan I., Garg R. J., Rahman Z. Customer Service Experience in Hotel Operations: An Empirical Analysis. *Procedia – Social and Behavioral Sciences*. 2015. Vol. 189. P. 266–274.
DOI: https://doi.org/10.1016/j.sbspro.2015.03.222

16. Kim H., Choi B. The Influence of Customer Experience Quality on Customers' Behavioral Intentions. *Services Marketing Quarterly*. 2013. Vol. 34. Iss. 4. P. 322–338.
DOI: https://doi.org/10.1080/15332969.2013.827068

17. Knobloch U., Robertson K., Aitken R. Experience, Emotion, and Eudaimonia: A Consideration of Tourist Experiences and Well-being. *Journal of Travel Research*. 2017. Vol. 56. Iss. 5. P. 651–662.
DOI: https://doi.org/10.1177/0047287516650937

18. Knutson B. J., Beck J. A., Kim S., Cha J. Identifying the Dimensions of the Guest's Hotel Experience. *Cornell Hospitality Quarterly*. 2009. Vol. 50. Iss. 1. P. 44–55.
DOI: https://doi.org/10.1177/1938965508326305

19. Lai W. C., Hung W. H. Constructing the smart hotel architecture – A case study in Taiwan. In *Proceedings of the 17th International Conference on Electronic Business*. 2017. P. 67–71. ICEB, Dubai, UAE, December 4–8. URL: https://iceb.johogo.com/proceedings/2017/ICEB_2017_paper_73-full.pdf

20. Maklan S., Klaus P. Customer Experience: Are We Measuring the Right Things? *International Journal of Market Research*. 2011. Vol. 53. Iss. 6. P. 771–772.
DOI: https://doi.org/10.2501/IJMR-53-6-771-792

21. Meuter M. L., Ostrom A. L., Roundtree R. I., Bitner M. J. Self-Service Technologies: Understanding Customer Satisfaction with Technology-Based Service Encounters. *Journal of Marketing*. 2000. Vol. 64. Iss. 3. P. 50–64.
DOI: https://doi.org/10.1509/jmkg.64.3.50.18024

22. Piccoli G., Lui T. W., Grün B. The impact of IT-enabled customer service systems on service personalization, customer service perceptions, and hotel performance. *Tourism Management*. 2017. Vol. 59. P. 349–362.
DOI: https://doi.org/10.1016/j.tourman.2016.08.015

23. Talwar R. The Future of Business: Critical Insights into a Rapidly Changing World from 60 Future Thinkers. Fast Future Publishing Ltd, 2015. 592 p.

24. Tuominen P. P., Ascenção M. P. The hotel of tomorrow: A service design approach. *Journal of Vacation Marketing*. 2016. Vol. 22. Iss. 3. P. 279–292.
DOI: https://doi.org/10.1177/1356766716637102

25. Tussyadiah I. P., Park S. Consumer evaluation of hotel service robots. In *Information and Communication Technologies in Tourism*. Springer, 2018. P. 308–320.
DOI: https://doi.org/10.1007/978-3-319-72923-7_24

24. Verhoef P. C., Lemon K. N., Parasuraman A. et al. Customer Experience Creation: Determinants, Dynamics and Management Strategies. *Journal of Retailing*. 2009. Vol. 85. Iss. 1. P. 31–41.
DOI: https://doi.org/10.1016/j.jretai.2008.11.001

25. Wu H.-C., Cheng C.-C. Relationships between technology attachment, experiential relationship quality, experiential risk and experiential sharing intentions in a smart hotel. *Journal of Hospitality and Tourism Management*. 2018. Vol. 37. P. 42–58.
DOI: https://doi.org/10.1016/j.jhtm.2018.09.003

26. Wu H.-C., Cheng C.-C., Ai C.-H. A Study of Exhibition Service Quality, Perceived Value, Emotion, Satisfaction, and Behavioral Intentions. *Event Management*. 2016. Vol. 20. Iss. 4. P. 565–591.
DOI: https://doi.org/10.3727/152599516X14745497664514

**REFERENCES**

Alnawas, I., and Hemsley-Brown, J. "Examining the key dimensions of customer experience quality in the hotel industry". *Journal of Hospitality Marketing & Management*, vol. 28, no. 7 (2019): 833-861.
DOI: https://doi.org/10.1080/19368623.2019.1568339

Anderson, J., and Rainie, L. "The future of well-being in a tech-saturated world". *Pew Research Center*, Washington, DC, 2018. https://www.pewresearch.org/internet/2018/04/17/the-future-of-well-being-in-a-tech-saturated-world/

Buhalis, D., and Leung, R. "Smart hospitality – Interconnectivity and interoperability towards an ecosystem". *International Journal of Hospitality Management*, vol. 71 (2018): 41-50.
DOI: https://doi.org/10.1016/j.ijhm.2017.11.011

ЗАКОРДОННИЙ ДОСВІД

ЕКОНОМІКА

Chen, C.-F., and Chen, F.-S. "Experience quality, perceived value, satisfaction and behavioral intentions for heritage tourists". *Tourism Management*, vol. 31, no. 1 (2010): 29-35.
DOI: https://doi.org/10.1016/j.tourman.2009.02.008

Choo, P. W., Tan, C. L., and Yeo, S. F. "A review of customer experience quality measurement in Malaysian heritage hotels". *Global Business and Management Research*. 2018. http://surl.li/biawsr

"Drivers of Change in Hospitality. Cornell University, SC Johnson College of Business, Center for Hospitality Research". *Amadeus & InterContinental Hospitality Group*. 2019. https://sha.cornell.edu/wp-content/uploads/sites/4/2019/05/Amadeus-Drivers-of-Change-in-Hospitality.pdf

Dabholkar, P. A. "Consumer evaluations of new technology-based self-service options: An investigation of alternative models of service quality". *International Journal of Research in Marketing*, vol. 13, no. 1 (1996): 29-51.
DOI: https://doi.org/10.1016/0167-8116(95)00027-5

Dalgic, A., and Birdir, K. "Smart hotels and technological applications". In *Handbook of research on smart technology applications in the tourism industry*, 323-343. IGI Global, 2020.

De Ruyter, K., Wetzels, M., and Kleijnen, M. "Customer adoption of e-service: An experimental study". *International Journal of Service Industry Management*, vol. 12, no. 2 (2001): 184-207.
DOI: https://doi.org/10.1108/09564230110387542

Gentile, C., Spiller, N., and Noci, G. "How to Sustain the Customer Experience: An Overview of Experience Components that Co-create Value with the Customer". *European Management Journal*, vol. 25, no. 5 (2007): 395-410.
DOI: https://doi.org/10.1016/j.emj.2007.08.005

Ivanov, S., and Webster, C. "Adoption of robots, artificial intelligence and service automation by travel, tourism and hospitality companies – a cost-benefit analysis". *Contemporary tourism – traditions and innovations*. Sofia University, 2017.

Kabadayi, S. et al. "Smart service experience in hospitality and tourism services: A conceptualization and future research agenda". *Journal of Service Management*, vol. 30, no. 3 (2019): 326-348.
DOI: https://doi.org/10.1108/JOSM-11-2018-0377

Khan, I., Garg, R. J., and Rahman, Z. "Customer Service Experience in Hotel Operations: An Empirical Analysis". *Procedia – Social and Behavioral Sciences*, vol. 189 (2015): 266-274.
DOI: https://doi.org/10.1016/j.sbspro.2015.03.222

Kim, H., and Choi, B. "The Influence of Customer Experience Quality on Customers' Behavioral Intentions". *Services Marketing Quarterly*, vol. 34, no. 4 (2013): 322-338.
DOI: https://doi.org/10.1080/15332969.2013.827068

Kim, J. J., and Han, H. "Hotel of the future: exploring the attributes of a smart hotel adopting a mixed-methods approach". *Journal of Travel & Tourism Marketing*, vol. 37, no. 7 (2020): 804-822.
DOI: https://doi.org/10.1080/10548408.2020.1835788

Knobloch, U., Robertson, K., and Aitken, R. "Experience, Emotion, and Eudaimonia: A Consideration of Tourist Experiences and Well-being". *Journal of Travel Research*, vol. 56, no. 5 (2017): 651-662.
DOI: https://doi.org/10.1177/0047287516650937

Knutson, B. J. et al. "Identifying the Dimensions of the Guest's Hotel Experience". *Cornell Hospitality Quarterly*, vol. 50, no. 1 (2009): 44-55.
DOI: https://doi.org/10.1177/1938965508326305

Lai, W. C., and Hung, W. H. "Constructing the smart hotel architecture - A case study in Taiwan". *Proceedings of the 17th International Conference on Electronic Business*. 2017. https://iceb.johogo.com/proceedings/2017/ICEB_2017_paper_73-full.pdf

Maklan, S., and Klaus, P. "Customer Experience: Are We Measuring the Right Things?" *International Journal of Market Research*, vol. 53, no. 6 (2011): 771-772.
DOI: https://doi.org/10.2501/IJMR-53-6-771-792

Meuter, M. L. et al. "Self-Service Technologies: Understanding Customer Satisfaction with Technology-Based Service Encounters". *Journal of Marketing*, vol. 64, no. 3 (2000): 50-64.
DOI: https://doi.org/10.1509/jmkg.64.3.50.18024

Morgan, B. "10 Examples of Customer Experience Innovation in Hospitality". *Forbes*. February 20, 2020. https://www.forbes.com/sites/blakemorgan/2020/02/20/10-examples-of-customer-experience-innovation-in-hospitality/#15842ce42033

Piccoli, G., Lui, T. W., and Grun, B. "The impact of IT-enabled customer service systems on service personalization, customer service perceptions, and hotel performance". *Tourism Management*, vol. 59 (2017): 349-362.
DOI: https://doi.org/10.1016/j.tourman.2016.08.015

Talwar, R. *The Future of Business: Critical Insights into a Rapidly Changing World from 60 Future Thinkers*. Fast Future Publishing Ltd, 2015.

Tuominen, P. P., and Ascencao, M. P. "The hotel of tomorrow: A service design approach". *Journal of Vacation Marketing*, vol. 22, no. 3 (2016): 279-292.
DOI: https://doi.org/10.1177/1356766716637102

Tussyadiah, I. P., and Park, S. "Consumer evaluation of hotel service robots". In *Information and Communication Technologies in Tourism*, 308-320. Springer, 2018.
DOI: https://doi.org/10.1007/978-3-319-72923-7_24

Verhoef, P. C. et al. "Customer Experience Creation: Determinants, Dynamics and Management Strategies". *Journal of Retailing*, vol. 85, no. 1 (2009): 31-41.
DOI: https://doi.org/10.1016/j.jretai.2008.11.001

Wu, H.-C., and Cheng, C.-C. "Relationships between technology attachment, experiential relationship quality, experiential risk and experiential sharing intentions in a smart hotel". *Journal of Hospitality and Tourism Management*, vol. 37 (2018): 42-58.
DOI: https://doi.org/10.1016/j.jhtm.2018.09.003

Wu, H.-C., Cheng, C.-C., and Ai, C.-H. "A Study of Exhibition Service Quality, Perceived Value, Emotion, Satisfaction, and Behavioral Intentions". *Event Management*, vol. 20, no. 4 (2016): 565-591.
DOI: https://doi.org/10.3727/152599516X14745497664514