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Editorial

"Reimaging the new normal: Changing hospitality trends for post-Covid-19"

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With the dawn of COVID-19 early in 2020, the governments of 96% of the travel destination across the globe imposed partial or full lockdown restricting travel to prevent and contain the spread of the virus (UNWTO, 2020). These restrictions such as lockdowns, social distancing and quarantine procedures continue to cripple the hospitality sector (Baum et al., 2020). Service providers right from Airlines to Hotels and events Organisers have suffered huge losses due to the decrease in demand of the business as many guests cancel their bookings and events get cancelled (Goodwin, 2020). COVID-19 has drastically impacted the DNA of the hospitality industry at its core (Rivera, 2020). The uncertainty due to the pandemic has forced the hospitality industry to reinvent and gear up to survive sustainably in the future (Haywood, 2020). This article aims to conceptualise a series of recent research articles on the evolving hospitality trends post COVID-19, the knowledge shared through this article will help industry professionals to reimage the new normal.

The purpose of this issue is to gather data from different sources both from scholarly articles and websites to list down the trends that have evolved in the Hospitality Industry during a pandemic. This article takes a different approach, where the pandemic is seen more as an opportunity for the industry rather than its doom; if it weren't for the boost of the pandemic the industry would have taken 20 to 30 years to make the developments mentioned in this article. The industry before the pandemic was more reluctant to adopt technology and partner with innovative startups, post-pandemic however the trends suggest a more collaborative

approach to sustain in the future. The hospitality industry is the first to be hit and the last to recover when hit by crises and disasters. Although badly hit by COVID-19, the tourism and hospitality sector will gradually reinvent itself, however, the speed of recovery and to what extent it will resume its former glory is unknown (Baum and Hai, 2020). The COVID-19 Pandemic has people fearing for protection and safety of not only their external physical health but also for the protection of their immunity; therefore, the hospitality industry keeping this aspect in mind are gearing up for the future because although the pandemic will subside the customers of the hospitality industry will expect higher standards of hygiene and safety (Dehler, 2020).

According to the survey report by PwC on Consumer Insights, consumers have evolved for the better during the pandemic; they are now more than ever into digitalisation, technology and becoming more environmentally friendly. The report also pointed out that consumers are becoming more conscious about: prices, health and data (Pricewaterhouse Coopers, 2021). The pandemic has been an eve-opener for most of the global travellers who now understand the importance of sustainable tourism, and are making more green travel choices. But there's also the fact that the consumers have been saving most of their income during the pandemic lockdowns and are anxiously waiting for the chance to start 'revenge' spending especially on moving away from their homes; this is the silver lining of the hospitality industry is waiting for making it all the more important for business owners to adapt to the evolving trends post the pandemic. According to a survey conducted by 360 Market Reach in the US, 80% of the respondents were ready to travel and 70% were planning to book for travels in the coming 6 months. This consumer mindset is called 'Revenge Travel'; wherein consumers are willing to spend more to get out into the world and declare their triumph over the COVID-19 virus. With people locked in their homes and glued to their devices, social media is playing a key role in enticing consumers with travel plans; influencers play a key role in this aspect. Therefore businesses quick to hop on to these emerging trends have a strong chance of sustaining as and when the world opens up, and these locked-in consumers with a savings dam ready to burst for them to splurge will remember the brands they have seen while scrolling social

media and choose them over the ones that are socially inactive in the digital world.

Research in the field of evolving hospitality trends post-pandemic is scarce but is slowly rising in prominence as hospitality leaders look for the best ways to cope with the challenges that are posed by the COVID-19 Pandemic. The authors through an analysis of recent articles delve into the culmination of technology and hospitality operations addressing the concerns and fears of the shareholders and stakeholders of the Hospitality Industry during and postpandemic, presenting the new image of hospitality in the years to come. Businesses with high adaptability to the technological upsurge have a competitive advantage over those that stick to the traditional approach. According to Top Hospitality Industry (2021) technology such as contactless technology, digitalised guest experience, big-data, Virtual and Augmented Reality and Artificial Intelligence are gaining popularity in the hospitality industry; in the following sections we will delve into each of these advancements in both technological and operational aspects and how these are contributing towards reimaging the new normal of the hospitality industry post-COVID-19.

Hospitality 5.0: The way forward

In research from Pillai et al. (2021) Hospitality, 5.0 is achieved by combining the components of Industry 5.0 such as Human-cyber-physical system, Internet-of-things (IoT), and Internet-of-Services (IoS) with the scalability and extensibility of Industry 5.0's design principles to the hospitality industry. Hospitality 5.0 Technologies help in delivering higher cleanliness and hygiene standards, which are crucial factors for the hospitality industry to recuperate and operate during and post the pandemic. The new image of hospitality consists of smart technologies in culmination with human intervention acts as a shield to fight against the virus thus providing a competitive advantage for the business who are quick to adapt to the technological upsurge.

Human-cyber-physical system (HCPS): according to Pathak et al. (2019) the system is comprised of humans, artificial intelligence and an organisation's physical system all connected by high-speed

internet. Integrating predictive sensors and technological tools such as AI, automated design and adaptive planning with HCPS enables a contactless service promising to reduce health risks (Li et al., 2020).

Internet-of-Thongs (IoT): easier sanitisation after checkout can be made possible with IoT controls being synced into the guest's devices eliminating physical interactions with the hotel staff (Mogelonsky, 2020). In the research by Nadkarni et al. (2019) enabling sensors technology in guest rooms to enable lighting, motorised drapes and smart thermostats can help reduce the risks of COVID-19 contamination.

5G networks: 5G (fifth-generation cellular networks) is disrupting businesses around the world, providing 100 times faster connectivity speed and greater bandwidth transforming industries further into the future. According to a recent study conducted by (Lau, 2020) combining AI and 5G in the Hotel Industry enables faster check-in and checkout process through facial recognition software providing the hotel with real-time data changing the overall image of the industry increasing customisation, efficiency and security (Ericsson, 2021).

Augmented Reality (AR)

As the world hit the pause button on travel due to COVID-19, people glued to their devices are on a constant lookout for new ways to explore the world. The "Virtual Tourism" concept is being promoted and tested globally (Gregory, 2020). AR has three components: visualisation, storytelling and annotation, which have been recently highlighted in the Hospitality and tourism industry (Ivasciuc, 2020). According to Chandola (2020), AR offers a trybefore-you-buy experience, which in pandemic times will lead to a revival of destination travels. The Maldives Marketing and Public Relations Tourism uses Virtual Reality (VR) to showcase activities such as snorkelling and beach yoga, transporting tourists from their sofas to the scenic beauty of Maldives (Davies, 2021).

Another innovation that has gained much criticism in the past for affecting human jobs is Robotics, however with the need for social distancing and protection of the frontline staff this innovative technology is disrupting and changing the image of the Hotel industry. Hotels in Guangshou city of China are using robots in the frontlines to protect both the guests and employees in the hotel. Various tasks such as: handing out of PPEs, delivering housekeeping amenities and preparing F&B room service are being performed by the robots ensuring contactless service (Lau, 2020). In Japan, a humanoid robot that goes by the name Pepper is guiding guests through check-in and helping them find the way to the Hotels amenities. In Las Vegas's luxury triple 5-star hotel-Mandarin Oriental, Pepper joined the team as "Technical Ambassador" enhancing the guest experience at the hotel (Robot LAB Inc., 2017).

Use of Contactless Technology

Travellers and frontline workers find it much safer when transactions are contactless, the need for distancing has given rise to technological advancements that will reshape both the travel and hospitality sectors changing how we view travel and check-ins in the future. To ensure cleanliness and hygiene contactless technologies that ensure the removal of viruses such as (a) electrostatic sprayers, (b) built-in air sensors, (c) UV Light automated air purifiers, (d) advanced particle removal technology is being used (Pillai et al., 2021). According to an article by Airport Technology (2021) advanced technology such as biometric facial recognition are being used in airports wherein passengers can use their faces as boarding pass; this reduces the risk of contamination during and post-pandemic.

Hygiene and safety- the new luxury

Visual inspection by the housekeeping department was one of the oldest traditional methods to ensure that the room was hygienic enough for the guests to occupy (Stroia et al., 2012). However, the study conducted by Almanza et. al (2015), suggests that only visual inspection is not enough. According to previous studies given the present scenario, it can be difficult to regain the trust of tourists given their evolution during and post the pandemic (Kock et al., 2020). Therefore changing the perception of customers when it

comes to hygiene and safety is a priority for the hospitality industry to attract them (Shin & Kang, 2020). Previous pandemic, epidemic and terrorist attacks were the reasons for severe damage to the industry, to cite a few examples: hygiene in the hospitality industry was heightened after the outbreak of the severe acute respiratory syndrome (SARS), which crippled the Asian hospitality sector in 2003 (Pine and McKercher, 2004). Safety and security became paramount for travellers and tourists after the 9/11 attacks that took place in 2011; the hospitality industry suffered a severe blow due to the mass cancellation of travel and hospitality services (Goodrich, 2002).

The housekeeping teams are gravitating more towards clinically clean rather than aesthetically clean according to an article by Chatterjee (2020), SOPs and training procedures are being revisited to ensure COVID-19 procedures are being ingrained into the DNA of hospitality professionals. The teams are to be trained by Health Professionals occasionally to cope with the COVID-19 pandemic. According to an article published in Forbes (Ceaser, 2021), to cope with the heightened cleanliness expectations of hospitality customers Ecolab developed Ecolab Science Certified Program developed combining enhanced cleaning measures with workplace auditing and training. An excellent example is Marriot International; they have set up the Marriot Cleanliness Council reassuring the guest's safety by requiring them to cover their face and establishing such safety and hygiene standards (Marriott Cleanliness Council | Marriott Bonvoy, 2021).

Service Blueprint

During this pandemic, the service blueprint in all hospitality sectors had to be revised with additional disinfecting and sanitation being incorporated in various customer touch points, although using the right cleaning products helps keep the germs at bay but not using them properly can prove to be less effective, the Ecolab training programs mentioned in Forbes (Ceaser, 2021) outlines when, where and how to clean especially high-touch areas. Additionally, personalised service is transforming into contactless service especially in high-touch areas such as online payment, mobile check-in checkout process, QR codes, chat-bots and voice

assistance; these technological advancements in the industry are enabling faster service with less or no contact between the hospitality professionals and the customers (Revfine.com, 2021). The image of the service design will also be altered by the health and wellness requirements of the travellers and guests, it is predicted in an article by (McKinsey, 2021) that consumers are looking for six types of health and wellness categories: health, nutrition, sleep, appearance, fitness and mindfulness. Hence having these included, as personalised amenities for the guests will attract more consumers during and post COVID19.

Take-away and Ghost Kitchens

With the pandemic here to stay many Restaurants and Hotels are turning to takeaway and home delivery as an option to sustain amidst the social distancing and lockdown restrictions. According to an article in Vogue, the restaurants of the five-star hotel such as the Grand Hyatt, The Park, Taj Palace and the like have all taken up this option to sustain in the Industry (Goyal, 2020).

Companies such as Amazon and Wal-Mart are researching drone delivery and found that it was a much cheaper and environmentally friendly alternative to Delivery trucks. The Hospitality Industry is also not far behind with multiple food deliveries being carried out by Drones (Campbell, 2017).

Many startups that were related to food delivery and virtual restaurants flourished with the dawn of the pandemic, one such innovation for restaurants where the concept of Ghost Kitchens, in this concept each restaurant pays a certain fee as rent for the kitchen space and additionally pays commission for each delivery (Luna, 2019). Startups like Doordash and Karma Kitchen are excellent examples of this concept. According to an article by Restaurant Dive analysts predict that Ghost Kitchens have a long way to grow and flourish even after the pandemic as online delivery is a consumer behaviour that will stick around much longer (Kelso & Kelso, 2020).

Sustainability

Sustainability is one of the oldest issues that Hospitality has been dealing with is gaining more spotlights after the pandemic hit. Therefore it is inevitable that this trend would change the image of hospitality for the better with many of the consumers and business owners taking their sustainable responsibility more seriously during and post-pandemic era. According to a recent article written (2021)hospitalitytech.com, Milburn in environmental sustainability has skyrocketed with the dawn of the pandemic, with travel restrictions being one of the barriers to travel out of the country, staycations and local travel are becoming increasingly popular, the people are looking for a getaway to free their mind from the four walls of their home. Post COVID19, the image of sustainability is drastically changing, this is due to an enormous increase in awareness for the environment and its protection, local sourcing and inbound travel are booming; hence the new consumers are becoming more concerned and are opting for environmentally responsible organisations. Along with other transformations, sustainability is also transforming from a niche subject to becoming the new normal post-COVID-19. Companies are now turning towards green technology such as energy-saving building features, AI-powered dashboards to predict the demand and supply to prevent wastage. The eco-conscious guest now looks for companies that source locally and that are supporting the local community be it with the ingredients, employment, or décor. Hotels and restaurants are looking into sourcing locally from local vendors.

Conclusion

The fundamentals of Hospitality such as attention to detail, personalisation and providing a unique guest experience have not changed and continue to be the qualities emphasised in the industry. The recovery pattern shows that people are still opting to travel despite the restrictions both in domestic and luxury travel. Consumers are anxiously waiting to splurge their savings on travel and unique experiences at the same time they have evolved and their concerns are heightened with regards to health, safety and

environment-friendly alternatives. Therefore it is important to keep up-to-date with the industrial trends, whether you are a traveller waiting to spend your accumulated income on experiences or a business owner trying to stay on top of the competition. This article delving through the latest scholarly articles and articles on relevant websites accumulated valuable insight and data regarding recent hospitality industry post-COVID-19 developments in the Pandemic, giving the readers a 360-degree view of the latest developments. Although research in this field is relatively new, upon examining the evolving trends digitalisation and technology was found to be a dominating trend to determine the sustenance of the global hospitality industry in the future. Many technologically driven startups are partnering with hospitality organisations and helping them gear up for the future post the pandemic. Every sector of the industry has seen developments in terms of technology: (1) Front desks with the contactless payment and check-in/checkout options; (2) Food and Beverage with contactless delivery of food to the consumer's doorstep; (3) housekeeping with sanitation, cleaning procedures, modified blueprint; and (4) 5 Star Kitchens and Restaurants turning to unconventional ways of renting out ghosts kitchens to partnering with third-party vendors.

Taking on a positive approach to the COVID-19 pandemic, the authors hope that this article will provide the necessary insight to the readers in examining the trends that evolved in the hospitality industry through the past two years. Organisations are taking a more holistic approach and not only looking into the safety and hygiene needs of the guests and travellers but are also looking into boosting the morale and health of their employees both physical and mental through various training sessions, this would have been dormant in some cases if not for the wakeup call from the pandemic.

As we move forward to the end of 2021, the availability of vaccines indicates an improvement towards cities lifting lockdowns and most of the outlets reopening, ban on travel being lifted and social gathering once again resume. Reimaging the future of hospitality is not complete without addressing the technological advancements in all sectors of the hospitality industry and brand new ideas keep

emerging every single day around the globe, this in combination with already existing technology leads to a new way of approaching the crisis of COVID-19. By accelerating these ideas and applying them to change the traditional ways of serving the global citizens, the hospitality industry is pushing itself further into the future. Hospitality businesses around the globe are being forced to adapt or else they will have to face extinction.

Through this article, the authors hope that the readers are equipped with the latest trends around the globe that are reshaping and changing the image of hospitality. We find that in the COVID-19 era, traditional welcome and SOPs have been replaced with preventive measures of scanning, sanitising and social distancing. Although the personal touch is often lost in these procedures it is what is expected as new normal and acceptable to both the frontline employees and consumers. However, personalisation remains one of the determining factors for the sustenance of any business, the industry has found ways to follow the safety protocols and yet still deliver a unique personal experience for the consumers, businesses mentioned in this article have used various measures of adapting to the changing image of hospitality and are not only sustaining but gaining competitive advantage doing so. We also provide an insight into the behaviour of new consumers this will help in the prediction of future trends that will alter the image of the hospitality industry in the coming future.

Leena Fukey Issue Editor

References

"Contactless Airport Boarding: Biometric Technology with SITA."

Airport Technology | Airport News & Views Updated
Daily, 2 July 2021, https://www.airporttechnology.com/features/contactless-airport-boardingbiometric-technology-with-sita/.

"What Is 5G? How Will It Transform Our World? - Ericsson." www.ericsson.com, 2021, https://www.ericsson.com/en/5g.

- 2021 Top Hospitality Industry Trends. (2021). Ehl. Edu. https://hospitalityinsights.ehl.edu/hospitality-industry-trends [Accessed 28 October 2020].
- Almanza, B. A., Kirsch, K., Kline, S. F., Sirsat, S., Stroia, O., Choi, J. K., Neal, J., 2015. How clean are hotel rooms? Part I: visual observations vs. microbial contamination. J. Environ. Health 78 (1), 8–13.
- Baum, T. and Hai, N.T.T. (2020), "Hospitality, tourism, human rights and the impact of COVID-19", International Journal of Contemporary Hospitality Management, Vol. 32 No. 7, pp. 2397-2407.
- Baum, T., Mooney, S. K. K., Robinson, R. N. S. and Solnet, D. (2020), "COVID-19 impact on hospitality workforce – new crisis or amplification of the norm?", International Journal of Contemporary Hospitality Management, Vol. 32 No. 9, doi: 10.1108/IJCHM-04-2020-0314.
- Campbell, J. F.; Sweeney, D.; Zhang, J. Strategic design for delivery with trucks and drones. Available online: https://www.researchgate.net/publication/316169890_Strategic_Design_for_Delivery_with_Trucks_and_Drones (accessed on 24 September 2021).
- Ceaser, J. (2021, September 18). Blueprint For Better: How The Hospitality Industry Is Meeting New Consumer Expectations For Cleanliness. Forbes. https://www.forbes.com/sites/ecolab/2021/02/01/bluepr int-for-better-how-the-hospitality-industry-is-meeting-new-consumer-expectations-for-cleanliness/?sh=5c404b143de2
- Chandola, S., 2020. Returning to a new normal with AR & VR. Available at Chandola, S., 2020. Returning to a new normal with AR & VR. Available at https://www.geospatialworld.net/blogs/returning-to-a-new-normal-with-ar-vr/, [Accessed 21 September 2021].
- Chatterjee, D. (2020, April 28). Debashis Chatterjee: Revisiting housekeeping protocols in the post-Covid world. Express Food Hospitality. https://www.foodhospitality.in/guest-

- column/debashis-chatterjee-revisiting-housekeeping-protocols-in-the-post-covid-world/420704/
- Davies, C. (2021, February 7). Virtual reality tourism ready for takeoff as travellers remain grounded. The Guardian. https://www.theguardian.com/technology/2021/feb/06/virtual-reality-tourism-ready-for-takeoff-as-travellers-remain-grounded
- Dehler, N., 2020. Hospitality's New Normal Must Include Hi-tech, Self-service Tech. https://hospitalitytech.com/hospitalitys-new-normal-must-include-hi-tech-self-ser vice-tech.
- Goodrich, J. N., 2002. September 11, 2001 attack on America: a record of the immediate impacts and reactions in the USA travel and tourism industry. Tourism Management 23 (6), 573–658.
- Goodwin, H. (2020), "Latest developments in responsible tourism. Responsible tourism partnership", available at: https://responsibletourismpartnership.org/2020/04/12/la test-developments- inresponsible-tourism-04-2020/ (accessed 9 September 2021).
- Goyal, R. (2020, June 26). All the 5-star hotels that are offering delivery and takeaway services during COVID-19 in your city. Vogue India. https://www.vogue.in/culture-and-living/content/5-star-hotels-in-india-offering-delivery-and-takeaway-services-during-covid-19-in-your-city
- Gregory, T., 2020. 'Virtual tourism' is suddenly everywhere in coronavirus era. Will it stick?, Available at https://www.sfchronicle.com/bayarea/article/Virtual-tourism-is-suddenly-everywhere-in-15195780.php, [Accessed 17 September 2021].
- Haywood, K. M. (2020), "A post COVID-19 future-tourism reimagined and re-enabled" Tourism Geographies, Vol. 22 No. 3, pp. 599-609.
- Ivasciuc, I. S. (2020). "AUGMENTED REALITY AND FACIAL RECOGNITION TECHNOLOGIES. BUILDING BRIDGES BETWEEN THE HOSPITALITY INDUSTRY AND

- TOURISTS DURING PANDEMIC." SERIES V ECONOMIC SCIENCES, 13(62)(2), 75–92. https://doi.org/10.31926/but.es.2020.13.62.2.8
- Kelso, A., & Kelso, A. (2020, October 5). How the pandemic accelerated the US ghost kitchen market "5 years in 3 months." Restaurant Dive. https://www.restaurantdive.com/news/how-the-pandemic-accelerated-the-us-ghost-kitchen-market-5-years-in-3-mont/585604/
- Kock, F., Nørfelt, A., Josiassen, A., Assaf, A. G., & Tsionas, M. G. (2020). Understanding the COVID-19 tourist psyche: The Evolutionary Tourism Paradigm. Annals of Tourism Research, 85, 103053. https://doi.org/10.1016/j.annals.2020.103053
- Lau, A. (2020). New technologies used in COVID-19 for business survival: Insights from the Hotel Sector in China. Information Technology & Tourism, 22(4), 497–504. https://doi.org/10.1007/s40558-020-00193-z
- Li, X., Wang, B., Liu, C., Freiheit, T., & Epureanu, B. I. (2020). Intelligent Manufacturing Systems in COVID-19 Pandemic and Beyond: Framework and Impact Assessment. Chinese Journal of Mechanical Engineering, 33(1). https://doi.org/10.1186/s10033-020-00476-w
- Luna, N. (2019, October 17). DoorDash launches shared ghost kitchen in Silicon Valley. Nation's Restaurant News. https://www.nrn.com/fast-casual/doordash-launches-shared-ghost-kitchen-silicon-valley
- Marriott Cleanliness Council | Marriott Bonvoy. (2021, August 31). Clean.Marriott.Com. https://clean.marriott.com/
- McKinsey & amp; Company. (2021, July 27). Wellness in 2030. McKinsey & amp; Company. Retrieved October 8, 2021, from https://www.mckinsey.com/industries/consumer-packaged-goods/our-insights/wellness-in-2030.
- Milburn, T. (2021, August 24). The Post-COVID Renewal: The Shift To Sustainable Offerings in The Hospitality Sector.

- Hospitality Technology. https://hospitalitytech.com/post-covid-renewal-shift-sustainable-offerings-hospitality-sector
- Mogelonsky, L., 2020. Why Hoteliers Should Make Guestroom IoT a Top Priority (After COVID Safety Measures). https://hoteltechnologynews.com/2020/07/why-hoteliers-should-make-guestroom-iot-a-top-priority-after-covid-safety-measures/.
- Nadkarni, S., Kriechbaumer, F., Rothenberger, M., Christodoulidou, N., 2019. The path to the hotel of things: internet of things and big data converging in hospitality. J. Hosp. Tour. Technol. 11 (1), 93–107. https://doi.org/10.1108/JHTT-12-2018-0120.
- Pathak, P., Pal, P. R., Shrivastava, M., & Ora, P. (2019). Fifth revolution: Applied AI & human intelligence with cyber physical systems. International Journal of Engineering and Advanced Technology, 8(3), 23–27.
- Pillai, S. G., Haldorai, K., Seo, W. S., & Kim, W. G. (2021). COVID-19 and hospitality 5.0: Redefining hospitality operations. International Journal of Hospitality Management, 94, 102869. https://doi.org/10.1016/j.ijhm.2021.102869
- Pine, R., McKercher, B., 2004. The impact of SARS on Hong Kong's tourism industry. Int. J. Contemp. Hosp. Manage. 16 (2), 139–143. https://doi.org/10.1108/09596110410520034.
- PricewaterhouseCoopers. (2021, June). PwC's Global Consumer Insights Survey 2021. Retrieved October, 2021, from http://www.pwc.com/gx/en/industries/consumermarkets/consumer-insights-survey.html
- Revfine.com. (2021, September 3). Hospitality Trends: The Latest Trends in Hospitality for 2022. https://www.revfine.com/hospitality-trends
- Rivera, M.A., 2020. Hitting the reset button for hospitality research in times of crisis: Covid19 and beyond. Int. J. Hosp. Manag. 87, 102528 https://doi.org/10.1016/j. ijhm.2020.102528.
- RobotLAB Inc. (2017). Business Robots Pepper Humanoid Robot. Business.Robotlab.Com.

- https://business.robotlab.com/pepper-use-cases (accessed 24 September 2021).
- Shin, H., & Kang, J. (2020). Reducing perceived health risk to attract hotel customers in the COVID-19 pandemic era: Focused on technology innovation for social distancing and cleanliness. International Journal of Hospitality Management, 91, 102664. https://doi.org/10.1016/j.ijhm.2020.102664
- Stroia, O.V., Kirsch, K., Kline, S., Neal, J., Sirsat, S., Almanza, B., 2012. Empirical study on the cleanliness of hotels cleanest and dirtiest spots. In: Paper Presented at the 17th Annual Graduate Conference. 5–7 January, Auburn, AL available at: http://humsci.auburn.edu/hrmt/hospitality/GradConference2012/POSTERpresentations.
- UNWTO (2020), "COVID-19 response: 96% of global destinations impose travel restrictions, UNWTO reports. [Online]", available at: www.unwto.org/news/covid-19-response-travel-restrictions (accessed 9 September 2021).