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DIGITALIZATION IN THE HOSPITALITY INDUSTRY: TRENDS THAT MIGHT SHAPE THE NEXT STAY OF GUESTS

Cvetanka Ristova

Faculty of tourism and business logistics, Goce Delcev University of Stip, Macedonia
Email: cvetanka.ristova@ugd.edu.mk

Nikola Dimitrov

Faculty of tourism and business logistics, Goce Delcev University of Stip, Macedonia
Email: nikola.dimitrov@ugd.edu.mk

Abstract

The digital technology for guests means an easy life, and accordingly to that, our appetite for this lifestyle is insatiable. With each new application or connected device, the digital technology shows us that everything is possible, and one sector in which this transformation is increasingly apparent is the hospitality one, where everything from the check-in process to in-room technology options is rapidly changing, therefore this means constant changes in the behavior of their guests. Nowadays, as automation and digitization continue to proliferate, and guests become increasingly tech-savvy, in response to this movement, touchpoints across the hospitality industry are embracing new digital trends and smart technology to make the customer journey as seamless and enjoyable.

Key words: hotel, hospitality, guests, digital, digitalization, technology

1. Introduction

Digitalization has been identified as one of the major trends changing society and business in the near and long term future (Tihinen & Kääriäinen, 2016). The impact of digitalization will be major; it has been compared to the industrial revolution by several authors (Degryse, 2016; Tihinen, *et al.,* 2016). According to the literature, digitalization, or digital transformation, refers to "the changes associated with the application of digital technology in all aspects of human society" (Stolterman & Fors, 2004). This began with the introduction of the first commonly used commercial websites in the 1990s, where digital technology brought a new level of convenience to guests in hotels. Today, developments in digital technology offer new opportunities to design new products and services. However, creating such digitalized products and services often creates new problems and challenges to hotels that are trying to innovate. In this paper, we analyze the trends that determine the shape of next stay for the guests and discuss the need of digitalization of products and services on innovations in the hospitality industry.

2. Digital technology in the hospitality industry

An article from 1995 (Hansen & Owen) predicts that technological advancements will be necessary for work in the future for hotels. They wrote about "smart cards" that the guest can use as a hotel key, as well as future "kiosks" that would facilitate the registration of guests in the hotels and would save time. Database marketing (consumer segmenting and further improvement of the guest's profile) was a trend 20 years ago, and now it is a standard tool in the day-to-day operation of hotels (Petrovits, 2014). All this is not just facts, but also evidence that perhaps the future of technology is predictable.

However, the adoption of technology in the hospitality industry began in the early 1970s, but has since continually progressed (Collins & Cobanoglu, 2008; Kasavana & Cahill, 2007; Sammons, 2000). Since its inception, industry researchers have expressed concerns about the value of technology and the possible consequences for guest satisfaction (Collins & Cobanoglu, 2008; Piccoli & Torchio, 2006), resulting in changes in their behavior initially toward the selection of the hotel product.

As a general principle, the bigger and more complex hotel object, the greater its reliance on the application of digital technology. Although, however, this is not a rule. Hotel technology is often applied at two levels (Cobanoglu *et al.,* 2011):

1) At the managerial and operational level and
2) For the services for the guests in the room.

Guest-oriented technological conveniences are usually introduced in improving the satisfaction of guests, as well as the performance and functionality of hotel staff. In the hotel room the conveniences are introduced in order to provide a more comfortable and safe environment, which can include choosing what the guest wants from the drink and food in the mini bar in his room, lighting regulation, climate and the TV, until the choice of smell for the room, and even choosing the start time when preparing his first morning cup of coffee (Ristova & Maglovski, 2018).

3. Digital technology trends in the hospitality industry

Digital technology in the hospitality industry is progressing at a faster pace than ever before, and so many of the new devices created over the past decade are expected to become standard soon. In this paper, in the next few pages the authors will focus on some of the recent technological products in the hotel industry:

- Keyless entry. The days of losing the card where the guests were standing locked out of their room are gone. In modern hotels, the smartphones of the guests exchanged cards are used to unlock the hotel rooms. On June 28, 2014 Starwood Hotels was the first hotel that provided access to their guests with their key-free rooms, through their SPG application. Since 2016, this technology has been appropriated by Hilton, Marriott as well as Hyatt and InterContinental Hotels Group.

Figure 1. SPG application of Starwood Hotels

- Mirror - TVs. Imagine watching TV in the mirror of the bathroom in the hotel room. At the BDNY (Boutique Design New York) conference in November 2018, Mirror Image Hospitality announced a partnership with Keypr, a cloud-based management form, to create the "Remi" - the "smart TV" that will serve as a TV, virtual concierge and when switched off as a normal mirror. "Remi" mirrors currently cost $ 1,800 per piece, and the complete programming equipment costs $ 2 per night from the room. The complete package includes: a mirror, a mobile application, a room tablet and a keyless entry program.

Last year, Electric Mirror introduced the "Savvy SmartMirror" featuring voice activation and activation on the touch. "Savvy SmartMirror" offers guests the opportunity to talk to him and ask him for room service, or for the hotel's swimming pool hours. Also, the TV can measure the room temperature. The first hotel to use "Savvy SmartMirror" will be Sinclair Hotel, a member of the Marriott's Autograph Collection in Fort Worth, Texas, and will open this summer.

Figure 2. "Savvy SmartMirror" mirror televisions

- Smart rooms. Almost 5,000 rooms at Wynn Las Vegas already have the ability to voice activated through "Amazon Echo". Meanwhile, Hilton has beta tested their first mobile-centric hotel room "Connected room", where guests can control temperature, light, blinds, thermostats and televisions with just touching their phones. "Connected room" is a Hilton solution for continuous innovation that will make it easier for hotels to keep up with the rapid changes in technology. The innovation is in the DNA of Hilton, starting with entrepreneur Conrad Hilton and buying Hilton's first property as well as becoming a pioneer in the hospitality industry nearly 100 years ago. With many innovations later, Hilton again set a new standard in the hospitality industry, giving its guests a travel experience where the room knows them and they know their room.

  Developing an intuitive system is also critical for Marriott al well, who wants to innovate constantly the global experience for guests in its 30 brands. Similarly, Marriott is in the process of launching its own "Internet of Things" room, offering services like a virtual assistant, yoga training exercises in front of a large mirror and digital frames with the ability to attach pictures of friends and family photos during the stay. The trend is pretty clear: this concept of smart rooms will bring hotel-making to a level that was unthinkable until just five years ago. Guests can now continue their favorite Netflix series where they stopped or to play their favorite Spotify playlist as soon as they register at the hotel and enter the room. Sensors on the bed will know when guests are awake or sleeping to optimally optimize room temperature and light.

- Virtual concierge. In many hotels, guests can now communicate their needs with smartphones through communication rather than staff in the hotel. Imagine asking for more towels or late checkout without having to get out of bed. There are several reasons why you would like to practice this type of concierge: automatic messages, save valuable time for guests and staff, SMS messages quickly resolve guest complaints and SMS message store data from every interaction with each guest. Thus, the guest's days will need to call the reception or to the concierge for certain requests, have long been spent. Today's hotel guests can get in touch with a message with hotel staff through the respective smartphone applications.

  For example, with the "Marriott International" and "Hilton Honors" applications, a guest can complete the registration process before arriving at the hotel, unlocking the room with a mobile key, and send a message to the hotel staff for specific requests. In November, 2015, Hyatt began using Facebook Messenger as a channel for guest services, in addition to already starting to use Twitter, also published a new version of the "Hyatt Gold Passport" application that includes the ability to text message, send messages to Facebook messenger and twitter on Twitter.

Figure 3. Hyatt – Facebook Messenger application

- Chatbots. The real revolution in digital technology in the hospitality industry is yet to come and show its first signs. When first introduced in 2016 by Facebook and Slack, it was clear that chatbots will become an integral part of the future of hotel operations, and at the same time a trend that many will follow (Goncalves, 2016). Because who does not want to talk with artificial intelligence? One of the flexibility that chatbots can offer is that they are open 24/7 and questions can be asked that can be answered at any time of the day or night.

In February 2017, the Mercure brand part of the AccorHotels Group launched the "BOT", a minute assistant as a messaging solution for instant messaging. This useful tool has allows guests and residents of the neighborhood to equally discover the "local stories" that surround them, simply by geo-location and permission to be guided. But artificial intelligence is becoming more important within certain industries, and in particular the hospitality industry. From smart rooms to chatbots, artificial intelligence helps improve the client's optimization and experience.

Recently, Cosmopolitan of Las Vegas has launched its first AI chatbot concierge named "Rose". "Rose", a concierge with a sense of humor. When guests enter the hotel, the receptionist gives them a card saying: "Find out my secrets. Write me. I am the answer to the question you never asked". The card also has a Rose phone number, on which you can write for almost everything

you need during your stay. (In the background, Cosmopolitan employees are on hand to help you with something that "Rose" can not.) Do you need more towels in your room? Also write to "Rose". Want to order a pizza at 3 o'clock? Also write to "Rose".
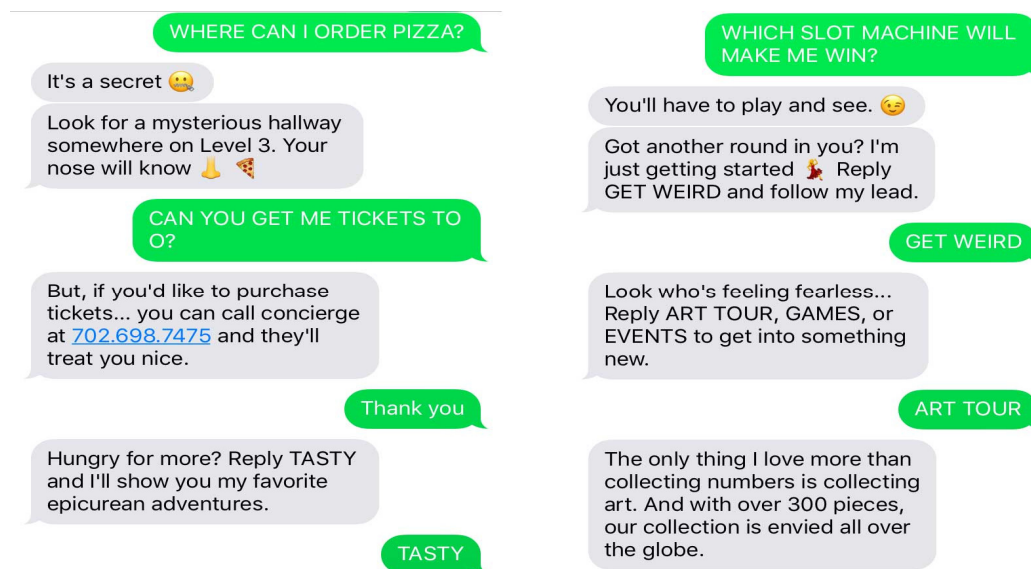
Figure 4. Cosmopolitan of Las Vegas - Rose AI chatbot

- Mobile technology. As we have already established, digital technology infiltrates virtually in every aspect of our lives, and hotels must understand that almost every guest that registers in the hotel, resort or spa has a smartphone in their pockets. Many hotels already use social media as a tool that will ease the process of registering guests in the hotel, mainly through a site-based sign-in application, sharing their Twitter experience and sharing their photos with friends and followers on Instagram and Facebook. This trend in technology will continue and hotels can expect even more social media activity from guests who, as we have said, use these platforms to give feedback on their experience, to complain, but also to provide compliments for their stay.

Photographer and tourist blogger Jen Pollack Bianco, while checking in the Sheraton, Bratislava found a book "Instagram moments" in her room that came with a note stating: "As we know Jennifer wants to publish pictures on Instagram, so we thought you enjoyed this selected choice of 25 of our most beloved photos from Bratislava". The Ritz-Carlton Naples resort in Naples asked their fans on Facebook to answer what kind of cafe they drink. If you answered, and while staying with them, your coffee will arrive sweet enough without the need to ask for more sugar.

Figure 5. Jen Pollack Bianco Instagram moment's book

- Mobile applications. Mobile apps in the hotels have really redefined the guest experience. Because the service has the highest value in the hospitality industry, the necessity of engaging, interacting and attracting is vital. The importance of mobile applications in hotels has risen rapidly in recent years, and more hotels are turning to their implementation.

Virgin Hotels created "The Know" - a preferential program designed to create exceptional experiences. By filling in the online questionnaire, guests can choose what they want to have in their mini bar, emphasize specific allergens, and even choose which cocktail will wait for them when they arrive. By treating guests as individuals rather than as a homogeneous group, means that in the future, the chances are more likely to return guests.
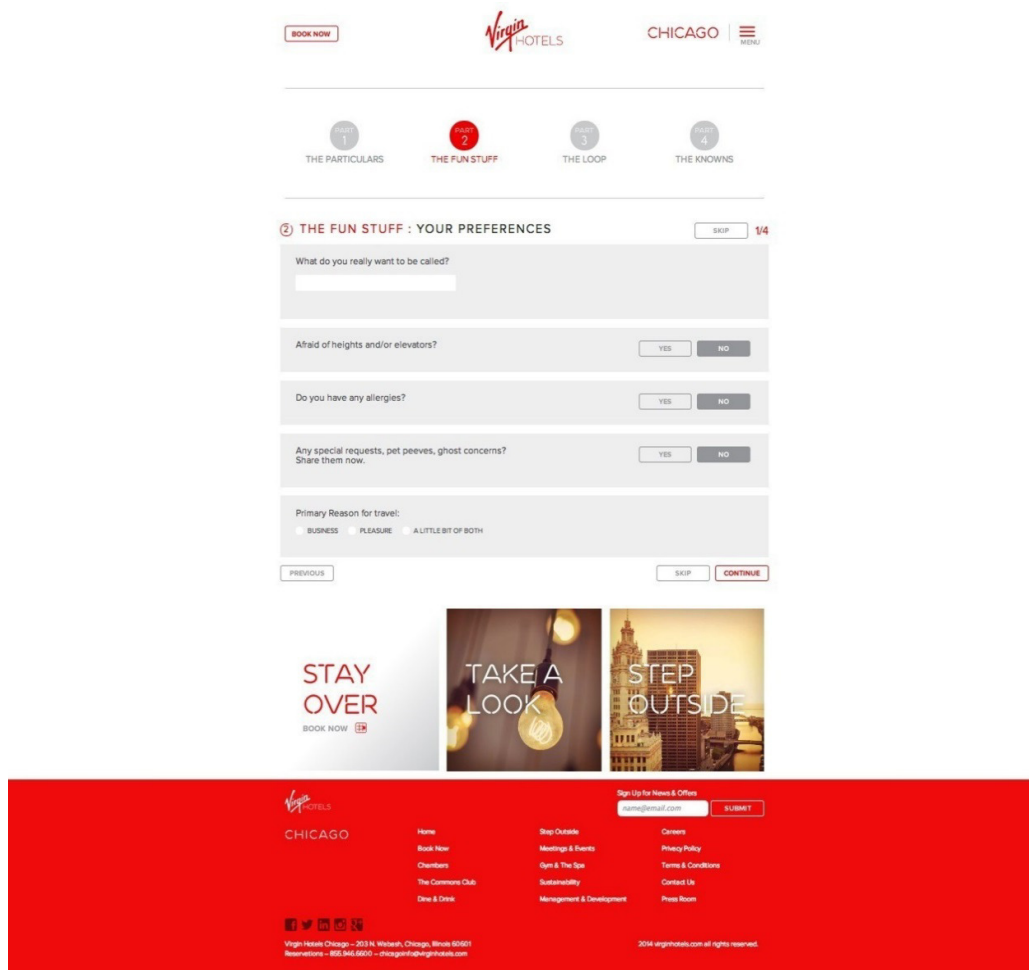
Figure 6. Virgin Hotel – The Know application

4. Why digitalize?

Many believe that when it comes to the hospitality industry that there isn't a lot of ways to be innovative. But, since our lives become more focused on digital technologies, the transformation is affecting all industries, including the hospitality (Ristova & Maglovski, 2018). It needs to be understood that digitalization is a step change even greater than the Internet. Exponential technology advances, greater consumer power and increased competition mean the hospitality industry will face the threat of commoditization. The winners will act now, and build a strategic advantage that leaves their competitors wondering what happened. With this, digital innovation is key for the competitiveness of the hospitality industry in the tourist destination, as well in the tourist market for the guest's attention. (Ristova & Maglovski, 2018).

Once upon a time guests would book in a hotel over the phone, by walking into a hotel, or through a travel agent. Now online travel agents (OTAs), hotel websites and social media dominate in the hospitality industry. Digital technology has allowed hotel guests to instantly access any information

they're looking for on the Internet via a PC, laptop, tablet, or smartphone – with mobile bookings in particular experiencing constant growth. It's also given them the expectation that their behavior, history, and preferences will not only be remembered, but used for an even greater level of assistance and personalization. Mobile apps also could be utilized in a more effective way to reduce the hotel's marketing cost and reach out to the potential guests. (Kwon *et al.,* 2013) Guests can book their own hotels online, choose to stay in a stranger's house, and search online hotel reviews on their mobile – all while connected to the hotel Wi-Fi. All of this can be performed autonomously and in their own time. Therefore, with hospitality being a high-tech and high-touch industry, the guest experience is expected to be high-tech and high-touch.

In general, hospitality needs to digitalize to be able to control the loss of control over the customer relationship, increased competition and the threat of commoditization, and the need to engage digitally with suppliers, partners and employees in addition to guests.

5. Conclusion

The rapid deployment and use of digital technology that was once a trend is now becoming widely accepted in all parts of society. With a society that has become increasingly technologically guided, consumers now have the opportunity to experience efficient services provided by the companies. This is especially true for the hospitality industry, whose trend has resulted in guests expecting targeted, more active and equally efficient products and services. The guest's experience is the most important characteristic to reach the goals of a hotel. If the hotel doesn't offer a great experience, then it has high chances of losing its guests to others.

This is why, digitalization represents an opportunity for the hospitality industry, leading to great changes and growth. Hotels are aiming to provide their guests with innovative solutions and emerging technologies such as IoT, VR & big data and the results are quite clear; higher guest satisfaction, better experience, better previsions, better management.

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