

## A THEORETICAL VIEW ON POPULARITY OF MOBILE APPS IN HOSPITALITY INDUSTRY: PRE AND POST COVID ERA

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### ABSTRACT

*Hospitality industry is one of the fastest growing industries of the world. it is expected to grow to 4548.42 billion U.S. dollars in 2022 at a CAGR of 15% and further to 6715.27 U.S. dollars by 2026 at a CAGR of 10.2 %. But it was hit hard during Covid-19 due to globally imposed travel restrictions. Mobile apps were launched by many hotels, restaurants, OTA's before covid-19, but their use was very limited mainly to hotel/restaurant search and booking. During the recovery phase post pandemic, mobile apps turned out to be a crucial factor in uplifting the growth rate of the hospitality industry. The need for contactless technology in delivering services has led to development of novel and innovative features in apps already introduced or the launch of altogether new apps. The purpose of this study is to find out underlying reasons for popularity of mobile apps post pandemic. There are many benefits of mobile app usage both for service providers and customers*

**Keywords:** Hospitality industry, ICT (Information Communication Technology), Mobile apps, Smartphones, Tourism Industry.

### INTRODUCTION

In 2021, India had 1.2 billion subscribers, out of which smartphone users were 750 million. According to Deloitte's 2022 Global TMT (Technology, Media and Entertainment, Telecom) report, It is expected to rise to 1 billion users by 2026. Most smartphone users are younger people and the ones with higher education (Laura et. al, 2019). Smartphones are those types of phones that are able to run apps through use of the internet. Mobile applications, popularly called mobile apps are softwares/set of programmed that run on a mobile device (Islam<sup>2</sup>, Mazumdar 2010). In the initial phase, there were simple apps like alarm clock, calculator, torch etc. But with the advances in technology and development of better internet infrastructure, internet-based applications become popular.

The word hospitality evolved from the Latin word hospitalitis, which referred to the relationship between guest and host (hoteltechreport, 2022). In the ancient times, people who were traveling had to rely on the kindness of locals. In the late 1700s Inns were built to provide shelters to travelers where they can take rest

and get food. With the improvement in transportation systems, there was an increase in the number of travelers. A need for a better lodging facility was felt. In the early to mid-20<sup>th</sup> century, a lot of hotel chains started doing business. The hotel industry is consistently growing till then and the number of hotels in the world was estimated to be 7,00,000 in 2019.

The advances in mobile technology have brought revolutionary changes in many industries. Hospitality industry is not an exception. Smartphones and hospitality are closely linked. The fact to support this argument as given by (Kumari Varsha, 2020) are:

- Approximately 85% of international tourists use a mobile device during their travel
- 74% of the travelers prefer using a hotel application for booking and other details
- Almost 70% of the last-minute bookings are done using a mobile device
- Aids 70% of travelers in making booking decisions
- 88% of the hotel guests wish to have a personalized experience created with the help of mobile apps.

The purpose of the present study is to review the history of smartphones, mobile applications and the tourism industry. Specific objective is to find out the types of mobile apps useful in the hospitality industry. Further, an attempt will be made to analyze the impact of Covid-19 on the use of mobile apps in the hospitality industry.

## **LITERATURE REVIEW**

Shanker (2008) described ICT in its broadest sense as varied technology consisting of mobile phone applications, Digital Cameras, Internet, WiFi , Voice over internet protocol, Global positioning system, Geographic information system, integration of (data, voice & media), digital radio.

Zelenka, J. (2009) stated that the spread of ICT into the tourism sector backed by novel online technologies (including mobile phones, PDA, IDTV) will change the way tourism product is distributed, encourage cooperation among different players in tourism sector, direct interaction with consumers and open up the door of opportunities for both old players and emerging new online intermediaries.

Belopotosky, D. (2011), explored that OTA's (Expedia, Orbitz, Travelocity) let their users find and reserve hotel rooms based on their location preferences. Airlines had also launched apps that allowed their users to check flight status, change seats and get flight notifications. or see the wait time for a security line. Rental car services also have apps that offer their customers to check the status and rent cabs.

Bethapudi (2013) pointed out that for the development of the hospitality industry, use of powerful infrastructure and mobile applications is indispensable. Integrating CMR (customer -management relations)

and SCM (supply chain management) as a single source help providing a variety of operations right from product selection, to payment and feedback can be accomplished conveniently with only one tool. The cost cutting is also achievable due to direct contact with consumers.

Tutunea Mihaela Filofteia, (2016) stated that one of the most flexible industries, the hospitality industry, was an early adopter of all innovations developed by mobile technology.

J,D. Power (2017) also emphasized that use of mobile apps can increase customer satisfaction Moreover, integrating mobile technology encourages customers to share their positive experiences on social media which is a great way to generate positive WOM (Word of Mouth).

Statista (2022) highlighted that the number of mobile app downloads has been consistently growing. The number went up by 63% from the year 2019 to 2021. 140.7 billion apps were downloaded in 2016 whereas in the year 2021 it was 230 billion. Further, it was stated that mobile apps are expected to generate revenue of more than 613 billion U.S. dollars in 2025.

## **CONCEPTUAL FRAMEWORK**

The mobile technology used by hotels can enhance the customer experience during hotel stay as it offers incredible value and escalate their satisfaction by improving the quality and flexibility of hotel services, communication efficiency and service personalization (Zhang et al., 2019). As smartphone users uses mobile apps for arranging their travel and hospitality services, Many renowned hotels as well as OTA's (Online Travel Agents) have launched their own mobile apps to increase the use of their platform to increase hotel bookings (Elsayed F. sally et al., 2018)

### **Types of Mobile Apps in Hospitality Industry**

1. Hotel Reservation: One of the oldest mobile applications in the hospitality industry is used to find best hotels and offers and booking a hotel room. (e.g: Trivago, Booking.com, Hotels.com, Travelocity).
2. Self-ordering apps: includes apps that allows guests to check out menus and place orders through their phones.
3. Food and catering apps: these types of apps help consumers find local places to dine out.
4. Payment apps: provides an alternative to cash payments by allowing customers to make digital payments (Phonepe, Paytm etc.)
5. Language translating apps: this category of mobile applications helps tourists while they are away in foreign countries.
6. Chatbots: a computer program used to handle queries regarding services. It offers interaction with users through text or voice commands. Chatbots have removed the time constraint.

7. Social Media apps: Facebook, twitter, Instagram, Whatsapp are widely used by guests to share their travel stories.

### **Advantages of Mobile Apps for Hoteliers**

- Increased productivity of workers due to focus on core hospitality services.
- Offers an opportunity to establish direct contact with customers.
- Better queue management.
- Creating better deals and rewards for individual customers.
- Delightful customer experiences.
- App integrated loyalty programs.
- Collection of user data and feedback.
- Remove language barriers.

### **Advantages of Mobile Apps for Customers**

- Simple and fast reservation process.
- Customized offers and deals.
- Digital payments.
- Control over services.

### **Pre and Post-Covid Implications**

In January, 2020 following the spread of COVID-19 to almost all parts of the world, it was declared that the pandemic will be nothing short of economic shock to the whole world that will cause serious loss to the lives of people and their businesses (World Bank,2020). Various precautionary measures like social distancing, hand hygiene, wearing masks, lockdowns and temporary shutdown of public places and businesses were announced as a global response to control the spread of deadly virus. So, the businesses were forced to create better approaches, innovate and apply new strategies.

Before the onset of the pandemic, the hospitality industry was realizing the importance of mobile technology and its adoption. Rob Law et al. (2018) pointed out that mobile technology turned out to be a necessity for travelers in their daily lives as well as during trips. Taylor short (2015) based on a survey of travelers in the U.S. finds that most of the travelers would prefer to choose a hotel that allows smartphone to check in, uses lobby technology and facial recognition technology. Openkey (2019) found that hotels were using technology to manage loyalty programs, do room reservations and maintain a calendar of events on-site. There is not much evidence on use of technology in the hospitality industry (Davalhi, 2020). But in

line with other businesses adaptation of technology to avoid losses, hospitality industry too had introduced contactless ordering through mobile apps, takeaway and delivery apps, pre booking through app (Prithvi Dhanda, 2020)

SMART tourism will help the hospitality industry to recover (Wen et al.; 2020). The covid-19 had accelerated the digital transformation (Jingjie Zhu et al; 2021). The mobile apps that were introduced to offer extra convenience have now become necessities (Travelpulse, 2020). A survey (2020) on contactless technology preferences highlighted that 80 % of guests will prefer mobile apps to check in and check out, 73 % to open doors of the room, 47% to order room service and 48 % will prefer revisiting a restaurant that gives an option to order food through an app. The use of apps that unfolded during pandemic and had become utmost important post-pandemic are:

1. **Remote Check-in Through App:** offers guests an option of self-check-in and staff to focus on other customer services and hotel affairs.
2. **Digital Keys:** hotels all over the world are allowing guests to access hotel rooms using digital keys via their phones.
3. **Mobile Apps for Guest/Staff:** Guests can see and avail all the facilities (car rental, dry cleaning etc.) offered by the hotel through their phone app. Similarly, staff can use apps to enhance customer experience and to offer personalized offers during and after their stay.
4. **Loyalty Management:** Guests can be encouraged to use apps to avail loyalty rewards.
5. **Virtual Reality:** Mobile apps can offer virtual tours of rooms and other facilities to customers to enhance their decision process.
6. **Push Notifications:** Hotels can enable push notifications through customer phones regarding sanitization of their rooms, gym or restaurant.

## CONCLUSION

Innovative mobile technology is a bliss for all types of travelers. Before the advent of sophisticated mobile technology, people were forced to do on-site bookings. During periods of upsurge demand, people's travel experiences turned horrific due to denial of rooms for stay, seats in flight due to overbookings. Newer mobile technology combined with the internet opened avenues for different players in the hospitality industry. Apart from offering better services, it also introduced newer business models (such as online travel agents, booking websites/ apps). With the increased use of smartphones and its applications, the hospitality industry is also bound to engage customers through launching apps. Many renowned hotel chains like Hilton hotels, Marriott hotels, airline operators, travel agents, theme parks, event companies

worldwide had launched their own apps which encourages their customers to explore, book and avail their services through their own personal devices. Earlier, companies were not investing much in adding features to their apps. But, due to increased demand of contactless technologies post covid phase, hospitality service providers are now introducing a variety of new features such as digital key, self-check-in and check-out, integration of artificial intelligence and virtual reality to offer enhanced features on their apps. All these apps proved to be beneficial both for time starved customers as well as service providers. The scope of this paper was limited to the historical background of mobile apps, their benefits and role in the post-covid recovery of industry and economy. The future research could include surveys of consumers on the usefulness of apps.

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