

Implication of Contactless Technology in Hospitality Industry in Post Covid19 Era in India

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Abstract:

With the emergence of COVID19 in the form of pandemic and its restrictions the hospitality industry witnessed a huge decline in business globally and India was no exception. Due to the restrictions the movements of people were largely affected as a result the hotel and travel and tourism was immensely affected. By the beginning of 2022 when the pandemic have seized the technology has emerged as a game-changer in the hospitality industry. It has now become an important tool for hotels, restaurants, and other hospitality businesses to stay competitive and provide exceptional customer services.

Key Implication

1. ENHANCED GUEST EXPERIENCE – Contactless technology allows guests to manage their stay effortlessly, from check in to check out, using their smartphones.
2. IMPROVED SAFETY AND HYGIENE – By reducing physical contact, contactless technology helps minimize the risk of transmission of diseases.
3. INCREASED EFFICIENCY – Contactless technology automates various processes, such as check in, payments, and room services, reducing the workload of hotel staff and minimizing errors. AND MANY MORE LIKE (i) Personalization, (ii) Competitive advantage, etc.

INTRODUCTION

The COVID-19 pandemic has caused a sea change in most sectors, and hospitality is no different. As the world adjusts to the new normal with social distancing and hygiene standards, the hospitality sector in India has been embracing contactless technologies in order to fulfill the expectations of guests while being safe. This paper explores the implications of contactless technology on the hospitality industry in India with regard to hygiene, customer experience, operational efficiency, and future trends.

Hospitality Industry, mainly comprises of hotel, restaurant, airline, cruise line, hospital, bar, amusement park etc is one of the most developing and fastest growing industries in India. The approximate size of the market in the India is US\$ 24.61 billion in 2024 and is anticipated to reach US\$ 31.01 billion by 2029. The projected growth is anticipated to occur at a (CAGR) of 4.73% through this forecasted period of 2024-29. With 100% FDI permission in hotel and tourism industry in India the industry is growing at a very faster rate compared to other industries in India. In the last four fiscal years (2020-23), it has garnered

more than 25% of this investment, equivalent to US\$ 4.36 billion.

1. Objectives:

1. Enhanced Safety and Hygiene

- **Minimized Physical Interaction:** Contactless technology has the benefit of minimizing physical contact, an important safety issue in the wake of the COVID-19 pandemic. Guests don't have to touch surfaces such as a check-in/check-out at the front desk, reducing their chances of getting exposed to germs.
- **Touchless Payment Systems:** Contactless payments via mobile wallets or tap-to-pay cards allow for faster, cleaner transactions, avoiding germ spread through handling cash or card.
- **Access to Rooms:** Digital keys accessed by mobile phones let guests unlock rooms without having to touch any keycards, further adding to cleanliness and safety.

2. Self-service and automation

- **Self-Service Kiosks:** Large hospitality operations like airports, five-star hotels, and restaurants implemented self-service kiosks for check-in, ticketing, and food ordering. Such automation reduced the waiting time and man-to-man interaction time, thus optimizing efficiency.
- **AI and Chatbots:** India witnessed an increasing trend of using AI and chatbots by various hoteliers and service providers. Such systems include virtual concierges, where questions could be answered, bookings taken, and service requests like room service or housekeeping made through such virtual interface.

3. Digital Payments and Financial Transactions

- **Growing Digital Payments:** India witnessed sharp growth in adopting digital payments on account of push from the government for a cashless economy as well as growing adoption of mobile payments through Paytm, Google Pay, and PhonePe. Contactless payment solutions using QR codes or mobile wallets in hotels and restaurants are the new norm for most of these establishments, greatly reducing cash as well as the need for actual card transactions.
- **Less Handling of Cash:** Instead, cashless transactions were the norm, reducing the infection risk and making it easy for customers to pay their bills securely from their devices.

4. Guest Experience and Personalization

- **Mobile Apps for Personalization:** Most hospitality chains in India used mobile apps to offer more personalized services. Guests could control room settings such as temperature, lighting, and entertainment using the app. In addition, guests could order food, request wake-up calls, and get concierge services without having to interact with hotel staff in person.
- **Data-Driven Personalization:** Contactless technology has enabled better collection of guest data, helping hospitality businesses to tailor made ki kk offerings and services based on past preferences. For example, personalized discounts or room upgrades based on customer behavior have become more common.

4. Regional and Cultural Challenges

- **Digital Literacy:** There is still an important variation between the regions when it comes to digital literacy in India. Contactless technologies have picked up much quicker in urban cities than in the rural areas. The digital divide at times challenges hospitality businesses to present contactless experiences for all its guests.
- **Cultural Factors:** The rich cultural norms of India, such as hospitality rituals and personal

connections between guests and service staff, may create resistance to fully automated or contactless services. Many travelers still value traditional face-to-face interactions, especially in smaller, boutique hotels.

5. Long-Term Industry Transformation

- **Hybrid Models:** With the hospitality industry evolving, it may adopt a hybrid model of contactless and traditional services where guests can opt for the degree of interaction they want.
- **Integration with Sustainability:** Contactless technology can also be used in sustainability efforts, such as eliminating paper waste by using digital receipts, menus, and brochures.

Literature Review

1. Bikanervala (Multiple Locations)

- **Technology Used:** Bikanervala, a popular chain known for Indian sweets and snacks, has implemented QR code-based menus. Customers can scan a QR code on their table to access the menu on their smartphones, place orders, and make payments via digital wallets or UPI (Unified Payments Interface) platforms.
- **Impact:** This minimizes physical interaction between the staff and customers, reducing the risk of transmission while offering a seamless dining experience.

2. MTR (Mavalli Tiffin Room) – Bangalore

- **Technology Used:** MTR is one of the most prominent South Indian restaurant chains in Bangalore. Contactless ordering and payments have been introduced at MTR to encourage customers to order digitally using a digital menu on their mobile phones and also for payments through contactless cards and wallets.
- **Impact:** The restaurant managed to maintain its high footfall with safety in place, thus making it a more efficient and hygienic experience.

3. The Big Chill (Delhi and Multiples)

- **Technology Used:** The Big Chill chain of cafes and restaurants in India has also installed a QR code system for contactless menus. By scanning the code, customers can access the menu for placement of orders and online payments.
- **Impact:** The introduction of this technology ensured that customer interactions with staff were minimized, aligning with social distancing norms while keeping the dining experience intact.

ABROAD/OUTSIDE INDIA

1. Shake Shack (United States and Global Locations)

- **Technology Used:** Shake Shack, the popular American fast-casual chain, uses contactless ordering and payment through its mobile app. Customers can order, customize their meals, and pay ahead through the app, which allows them to pick up their orders without ever having to deal with the counter staff.
- **Impact:** The use of technology ensures quick and convenient service, reduces human contact, and helps manage high volumes of customers in busy locations.

2. Domino's Pizza (International Outlets)

- **Technology Applied:** Domino's offers contactless delivery and payment systems via its mobile application. One can order and check how his pizza is being prepared at a particular moment; also, contactless payment facilities are available.

- **Effect:** As contactless delivery is applied, customers are ensured safety and convenience; they get their pizzas delivered without any physical contact.
- 3. Nando's (United Kingdom and International Outlets)**
- **Technology Used:** Ordering and payment take place via QR code scanning using this popular chain of peri-peri chicken. Customers use the QR code on their table top to access the menu, place orders, and even pay on their mobile app.
 - **Impact:** This system enhances the customer experience by allowing contactless ordering and payment, all while improving operational efficiency and cutting down on wait time.

Impact on Individuals and Society

1. Mobile check in and check out
2. Contactless Payments
3. Keyless room entry
4. Voice search and voice control

Overall, the adoption of contactless technology in Indian hospitality industry is expected to continue growing, driven by guest demand for a safe, convenient, and personalized experience.

Robots are being used in hotels and restaurants to improve efficiency and reduce costs. They're taking on tasks like housekeeping, cooking, and even serving customers. These technologies are becoming cost effective day by day, and even they are a substitute for manpower. Though they have their own limitations, at this moment they are providing services as per the need of the organization.

AI-powered chatbots are being used to provide 24/7 customer support, helping guests with their queries and requests. AI has become a sensation nowadays; with the use of AI guests are able to get customer support, can get personalized service, and can give feedback against the service to the organization. AI is being increasingly applied in hotels to enhance the guest experience, improve operational efficiency, and drive revenue.

Case studies

1. Sattvik Restaurant (New Delhi)

- **Contactless Ordering:** Sattvik, a premier vegetarian restaurant of Delhi, sends QR codes with the menu for customers to be scanned through Smartphones to have a viewable menu and subsequently placing orders. Therefore, it avoids contact and all kinds of unhealthy issues.
- **Contactless Payment:** A contactless facility is also availed at restaurants for digital payments through Google Pay, Paytm, and UPI.

2. Pizza Hut India

- **No Contact Delivery:** Pizza Hut also provides no-contact delivery, which means the food is left on the customer's doorstep with a minimum of interactions. The customer can pay via mobile wallets, cards, or UPI through online payment.
- **QR Code Menu:** Inhouse dining enables scanning of QR codes at the table to order and pay through the customer's smartphone. No need for pv
- **Haldiram**
- **QR Code Ordering:** Some outlets have used QR codes at tables that permit customers to scroll through menus and order from digital menus. That way, it does not depend on the waiting staff to interact.
- **Contactless Payment:** They can even opt for cashless transactions via mobile wallets, UPI, or cards.

3. The Imperial (New Delhi)

- QR Code Menus and Ordering: The Imperial hotel, which offers fine dining, uses QR codes to allow guests to view the menu and place orders directly from their smartphones.
- Digital Payment: The restaurant accepts contactless payments, making transactions more secure and efficient.

4. WE MADAM RESTURANT (KOLKATA)

- Robots have taken over the world! Kolkata has a newly opened a restaurant named "WE MADAM" where the dining experience is definitely a walk into the future. On arriving the restaurant the guest will be witnessing is a all woman restaurant to justify the name suggest "WE MADAM". The most interesting thing which the entire guest will experience is that the foods are served near the table by a **Girl Robot** which is an entirely unique concept for the guests. To experience this lot of guest flock the restaurant, this is one of a kind of restaurant in Kolkata.

Conclusion

Improved Hygiene and Safety

- Touch less Check-ins and Check-outs: In the wake of COVID, there is a heightened focus on hygiene and cleanliness. Contactless check-in/check-out processes are becoming the new norm. Guests can use mobile apps, QR codes, or kiosks to avoid direct contact with staff, thereby reducing the chances of virus transmission.
- Contactless Payments: Contactless payments, through NFC technology or QR codes, reduce the handling of cash or cards, making the transaction process hygienic. This also saves time, adding to efficiency.

Personalization of Services

- Data Analytics: Contactless systems can collect and analyze data related to guest preferences and behavior, which will enable hotels to tailor their services according to individual requirements. For example, using the behavior of guests, hotels can preset room preferences or recommend activities to enhance customer satisfaction.
- Remote Concierge Services: The guests can avail themselves of concierge services from the comfort of their mobile devices or room tablets without any direct face-to-face interactions. This creates a seamless experience for customers with customized options.
- Lower Operational Expenses: Contactless systems reduce labor expenses, and less touch points mean reduced time spent on cleaning and sanitizing, hence reducing operational expenses.
- Energy Savings: Many contactless systems have energy-saving technology, such as smart thermostats and lighting, which reduces energy consumption and operating costs.

Challenges and Barriers

- Technological Infrastructure: Contactless systems require a high investment in technology, infrastructure, and staff training. This might be a challenge for smaller or resource-limited hotels.
- Digital Divide: In India, which is a very diverse country, there is still a segment of the population that is not as tech-savvy or lacks access to Smartphone or high-speed internet. This may limit the widespread adoption of contactless solutions in some demographics.
- Cyber security and Data Privacy: With an increased reliance on digital systems, the risk of cyber attacks, data breaches, and privacy concerns rises. Hospitality businesses need to invest in robust cyber

security measures to protect both guest information and business operations.

Operational Efficiency

- **Routine Operations Automatization** Routine operations including room service orders, housekeeping reservations, check-in/check-out are automated via contactless technology and help with reduced human mistakes, making things run more effectively.
- **Optimal Reduction of the Workforce, with Redistribution to the Most Relevant Services.** Automated technologies and increasing the use of contactless tools provide hotels an opportunity to work out their headcounts and free staff for most essential or personalized services with less customer-to-staff interactions.

Regulatory Compliance and Government Guidelines

- **Health Protocol Compliance:** Health authorities and governments, including the Indian government, have issued directives for safe operation in hospitality sectors, which mostly include mandates on reducing physical contact between guests and staff. The adoption of contactless technologies will ensure compliance with health protocols and instill confidence among guests.

Sustainability

- **Reduction in Paper Usage:** Contactless technologies help reduce the need for printed materials like menus, brochures, and invoices, contributing to sustainability efforts. This also aligns with the growing trend of eco-conscious travelers who prefer green and sustainable practices.

Future Trends and Innovation

- **AI and Robotics:** Expect the hospitality industry to continue integration of artificial intelligence (AI) and robotics - from robotic cleaners to AI-driven service assistants, which will also reduce human contact while improving service efficiency.
- **Virtual and Augmented Reality (VR/AR):** In the post-pandemic world, VR/AR may further grow as potential customers can tour hotel properties or experiences virtually, without having to physically visit.

Staff Training and Re-skilling

- **Shift in Workforce Roles:** As the industry adopts contactless technology, hospitality managers must re-skill their staff to effectively use new tools and technologies. Training will shift from traditional customer service skills to more technical knowledge, such as operating automated systems, understanding AI-driven analytics, and troubleshooting tech-based systems.
- **Hybrid Roles Adaptation:** Employees will be expected to work in hybrid roles where they have to manage human interface and technology. The managers will have to ensure that their employees are well-equipped to provide great service in this new environment while operating technology tools that create a positive guest experience.

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