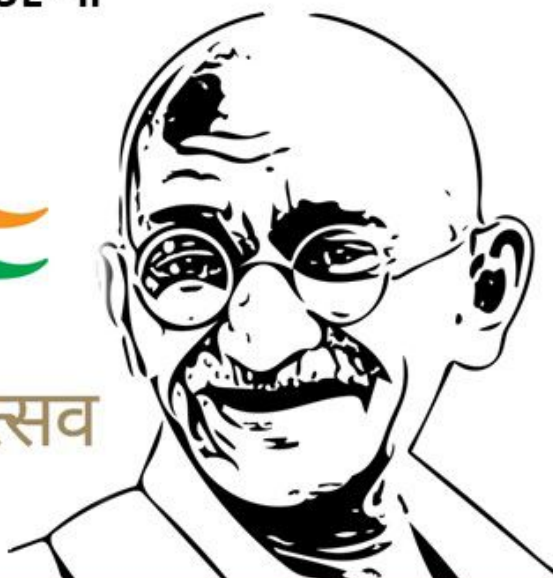


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From the Editor – Azadi ka Amrit Mahotsav

This Volume 3, Issue 2 of Indian Journal of Hospitality Management is celebrating 'India's Azadi ka Amrit Mahotsav' to resonate with its 75 years of independence. The time progressed may be looked at from the lenses of development, globalization, and democracy. The hospitality industry was one of the most under-developed sectors of the economy when India gained independence in 1947.

In 1956, the then Prime Minister of India, Late Pandit Jawaharlal Nehru recognized the potential of tourism in India which would contribute towards the growth of the economy of the country. He inspired both the public and private sector to build the best quality hotels in India for visiting dignitaries and tourists from abroad and domestic tourists. With his vision, India saw the first-ever government-invested hotel in New Delhi with the name of Ashok Hotel. In 1966, the India Tourism Development Corporation was set up which provided a complete range of ser-

vices starting from in-house travel agencies to accommodation and entertainment.

Another breakthrough in the hospitality industry came about when the government created the Ministry of Tourism and Civil Aviation in 1967. The era of the 1970s saw a major change and upgrading of hotels by the government. Inspired by the metro cities, the entrepreneurs from the secondary cities began constructing the hotels and resorts thereby giving a boost to the Indian economy and making the tourist spots accessible for the visitors.

In the 1980s, the hotel industry gained momentum due to the Asian Games, and the tourism industry was given a boost. In the 1990s, tourism was made a priority sector for Foreign Direct Investment where the hotels could attract a 51% equity from foreign investors.

From that time onwards, the tourism and hotel industry in India has been on the rise after overcoming numerous hurdles and challenges until the Covid-19 pandemic hit the entire world.

One of the worst affected industries during the pandemic is the tourism and hospitality industry which needs a boost to revive in this difficult time. The transformation has been observed in the method of earning revenue for the hotel industry during the pandemic. The hotel industry has sought other resources like the food and beverage sector, cloud kitchen, online food aggregators, and online food delivery partners during the Covid-19 pandemic for its survival and revival.

With the vaccination against Covid-19 and its success rate, the hospitality industry has a ray of hope for a boom post the pandemic but in a very different manner. The journal discusses this aspect in the food and beverage sector which is undergoing a major change in terms of the services rendered and dining. Technology has started to have a huge impact on the food and beverage industry leading to the incorporation of online services into the once human-driven system before the pandemic.

Though technology is moving at a faster pace than expected during the pandemic in the service industry, still priority is always on the customer experience. The customer always seeks to experience the touch and feel aspect hence the response to their feedback has been discreetly human-oriented. With time, the Internet of Things has brought about ease in serving the customers but to maintain its value, there is always a human touch to it.

The food industry has undergone valuable and therapeutic changes during the pandemic. It has become more health and well-being oriented when it comes to serving the customers. During the pandemic, food has become one of the most celebrated aspects of the hospitality industry. Usage of indigenous methods in the culinary journey of our hospitality industry is in the limelight during the pandemic.

Government has an important role to play in the safety of the travelers during and post the Covid-19 pandemic. Reviving the travel industry by rebuilding the traveler's confidence and trust in the safety measures being taken for the well-being of the travel-

ers is being taken care of by the government for reopening of the hospitality industry in phases.

Frontline health workers have been guarding the nation against the pandemic and serving the country by saving the lives of people and treating them during the Covid-19 pandemic. But the stress level of the frontline workers in the hospitality industry is difficult to measure but their psychology can be assessed to measure the level of stress and hence bring about changes in the processes of dealing with the guests considering the mental well-being of the employees.

Ensuring the safety of the employees while serving the guests is of utmost importance for the hospitality industry during the pandemic. Hence the government along with the governing bodies for the tourism and hospitality sector in the country have been taking mindful measures for the psychological health of their employees.

During the pandemic, women have shown exemplary courage in fighting the deadly Covid-19 virus across the globe. Yet the nutrition of the women in

India in the lower-income group of Rajasthan needs attention. The health and diet of post-menopausal women of age 40-60 years have been studied in this journal.

With the pandemic not coming to an end anytime in the near future, people are becoming more dependent on the technology aspect and have sought online platforms for food delivery which has helped the online food aggregators and restaurants a source of revenue during the pandemic.

Hopefully, the pandemic would end soon as vaccines are proving to be effective against the deadly Covid-19 virus. Every nation across the globe is hoping to revive and thrive in terms of their tourism and hospitality post the pandemic in a sustainable fashion. Let us give our tiniest effort towards the recovery of the hospitality industry and hope for a brighter and profitable business in the near future by getting back to the forgotten era of normalcy.

Dr. Jagat Krushna Mangaraj, Chief Patron

Dr. Priti Ranjan Sahoo, Editor-in-Chief

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A Study on Transforming Hotel Food and Beverage Service Experience in the Post Covid Context

Akshita Tiwari¹

ABSTRACT. The hospitality scenario has been devastated by the pandemic as the services offered by the industry involve a high degree of contact between the guest and the hotel employees. The food and beverage service department has been a victim of this whirlwind process and has to layout a new plan of action to stimulate recovery and ensure business revitalization. The current study's focal point is the transformation of the food and beverage service experience, post the pandemic in hotels. The various challenges faced by the food and beverage department while struggling with the crisis and how the department is adapting to the changing expectations and demands of the guests. The managers of food and beverage departments of 5-star hotels of Delhi NCR were contacted for a questionnaire survey. The restaurant service experience after the outbreak of pandemic will be highlighted in the current research. Development of key strategies to bounce back quickly and also win back trust of the guests will be a real challenge for the department. As it is rightly said that necessity is the mother of invention, hence food and beverage service department will also re-think, re-define and re-imagine its whole service experience to cater to the shift in guest requirements and expectations from it. The current study will have useful insights for food and beverage professionals and the hospitality industry as it will document the dramatic changes and new strategies along with current practices of the hotel food and beverage service department.

Keywords: food and beverage service; hotels; COVID-19; India; service experience; changing food and beverage service

1 Introduction

Food and beverage services department is an essential component of the hospitality industry as it is the responsible for communicating with the guests through service of food and drinks, greeting guests, order taking and various other issues and complaint handling tasks till the guests leave the hotel. Food and beverage service professionals in the hotel have to create effortless service experiences for the guests and also do the right thing at the right time! The scenario has completely changed for the department since the onset of the pandemic, the hustling bustling back areas, the fully occupied

¹ Research Scholar, Amity School of Hospitality, Amity University, Uttar Pradesh, Noida
akshitatiwari29@gmail.com

tables, the continuous order announcements to the chefs by stewards and also the regular printing of bills from the billing machine are nowhere to be seen!

The shift in the operations of the hotel and especially food and beverage service department has impacted the business as well as the whole food and beverage experience has been hampered. Every problem has its solution and the food and beverage service department is also following the same and looking out for solutions to ensure maximum guest satisfaction and to cater to guests' needs keeping in mind the pandemic appropriate standards of hygiene and cleanliness. The current study will focus on the practices and strategies applied by the F&B department to transform the food and beverage service experience in the pandemic context. The changes in standard operating procedures and daily operations will be closely studied. The study will highlight the significant changes and differences in the hotel food and beverage sector during the current times.

The guests will be experiencing a completely new way of food and beverage service till the pandemic goes away as social distancing is something which will not let the stewards and restaurant managers to roam around and keep asking the guests what they want, minimum contact services will be conducted in the restaurants, bars and room service as well. The banquets have also seen a change in its operating procedures. The department which has been continuously following strict rules of service, etiquette, grooming and from the correct side to serve food and beverages has to now change its way of working and keep the maximum focus on practicing COVID appropriate behavior. The guest behavior has also been influenced by the pandemic and they may fear to get back to hotels and restaurants. The Sunday brunches in coffee shops of luxury hotels may be seen more than half empty till the situation settles down. Till then the transformation may be noted in the hotel operations and food and beverage service experience.

2 Literature Review

The food and beverage service department since the coming up of the pandemic has witnessed that service quality is not alone the only factor to be focused upon but now the hygiene and safety of guests in respect of COVID-19 appropriate measures need to be considered. These preventive practices may directly impact the standards of service, guest expectations, service quality and guests' perception as well. For maintaining the guest satisfaction and quality of service, it becomes necessary for the food and beverage service department to formulate and improve the services according to the need of the hour and also keep a major focus on guests safety (Kunchornsirimongkol, K. 2020).

A study by (Jaswal, et al. 2020) focuses on In-room dining during the pandemic and concludes in their study that In Room dining will be the highest revenue generating sub-department of food and beverage service as the room service has been serving isolated covid patients staying in hotels and other guests as well as very few prefer to eat inside coffee shop and restaurant of the hotels. The study also noted that current times demand shift in style of service and pre-plated service is highly preferred as it requires minimum interaction among guest and the food and beverage professional.

Guests are preferring to go for hotels and restaurants that are communicating with them through online platforms about their hygienic strategies and facilities. They are keen towards hotel using sterilized hotel rooms, electronic food menus and touchless payments. Guests will prefer hotels providing discounts for longer stay periods. A healthy lifestyle is being established due to the pandemic and it has resulted in change of guest behavior (Indrianto, et al, 2020).

Food and beverage outlets should take steps in the direction of trust building among guests, re planning of menus, development of alternatives, application of hygienic service standards, updating the food supply chain, findings ways to promote the hotel's restaurants and bars. The hotel should take preventive measures for maintaining expenses and also support the staff during crisis. (Yilmaz, et al, 2021) The emphasis of hygiene, health, well-being and also sustainability is becoming relevant in the pandemic times and from the food and beverage business point of view all these elements need to be kept in mind by the hotels(Köster, S. ,2021).

3 Objectives of the Study

1. To ascertain the various changes in food and beverage service operations.
2. To find out the challenges faced by Food and beverage managers during the pandemic.
3. To suggest ways to transform food and beverage service operations in the pandemic context.

4 Research Methodology

The current study utilized both primary and primary sources of data. A structured questionnaire was circulated among the 46 Food and beverage service managers of 5-star hotels in Delhi NCR. The questionnaire involved statements with 5-point Likert scale. Data analysis was conducted with the help of frequency analysis and descriptive statistics.

5 Findings and Discussions

5.1 THERE IS A TRANSITION FROM DINE OUT TO DINE IN DURING THE PANDEMIC

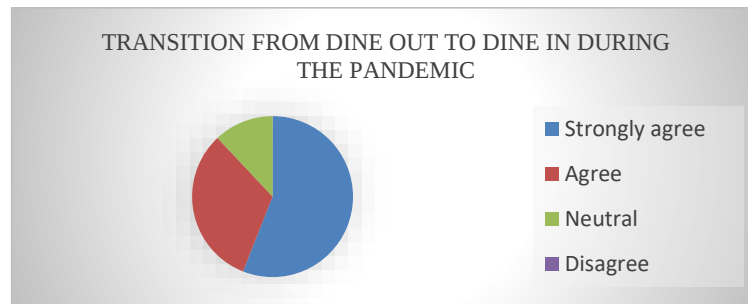


Fig. 1. TRANSITION OF DINING OUT TO DINING IN

- The food and beverage managers were questioned regarding their viewpoint of transition among guests' regarding dining out to now dining in i.e., at their homes during the pandemic, most of the respondents 56% strongly agreed to the statement and 32% agreed and 12% were neutral towards it. It can be noted from the responses that there has been a transition from dining in the restaurants to eating at home during the pandemic.

5.2 WE ARE DELIVERY ORDERS TO GUESTS AT THEIR DOORSTEP



Fig. 2. DELIVERY AT GUESTS' DOORSTEPS

- The majority of respondents strongly disagree (36%) and 22% strongly agree to the statement that they are delivering orders to guests at their doorstep, 15% disagree which implies that irrespective of the pandemic challenges, at least 51% (36% strongly disagreed and 15% disagree) of the respondents haven't thought of home deliveries for guests'.

5.3 WE HAVE INTRODUCED ELECTRONIC MENUS IN OUR F&B OUTLETS

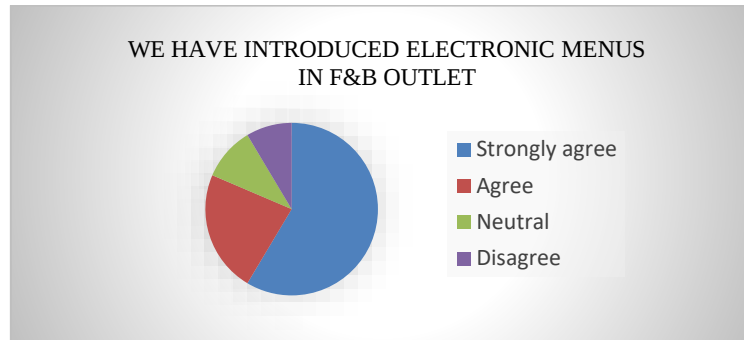


Fig. 3. ELECTRONIC MENUS

- The responses for the statement ' We have introduced electronic menus in our F&B outlets' were majorly positive, as 58% strongly agreed to the statement, 23% agreed and a meagre 9% disagreed to the statement. Hence, the pandemic has led hotels to introduce electronic menus or menus on devices like phones, tablets etc.

5.4 POST COVID, SELF-SERVICE IS APPRECIATED IN OUR F&B OUTLETS

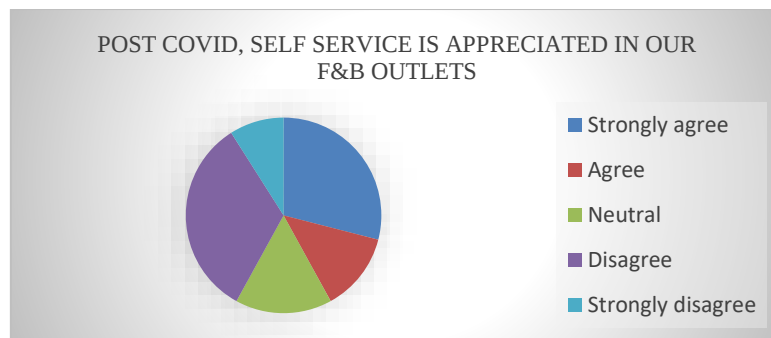


Fig. 4. SELF SERVICE DURING PANDEMIC

- The above data shows that 33% disagree to the statement that 'Post COVID, self-service is appreciated in the hotel F&B outlets', 13% Strongly agree to the statement and the third highest response was neutral (16%) towards the statement.

5.5 OUR STAFF WEAR PPE WHILE SERVING THE GUESTS

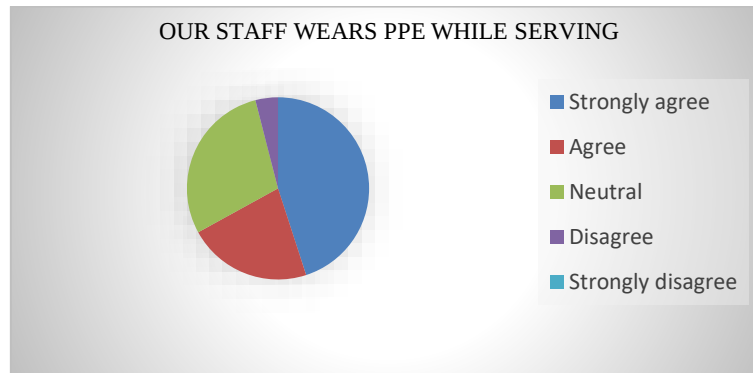


Fig. 5. PPE WORN BY STAFF

- The respondents were asked that whether their F&B staff wears PPE while serving the guests and almost half of the respondents (45%) strongly agreed to the statement, only 4% disagreed to the statement and 29% were neutral about the statement. PPE is basically the protective wear to ensure hygiene.

5.6 6 FEET DISTANCE IS ENSURED IN BETWEEN RESTAURANT TABLES OF OUR HOTEL

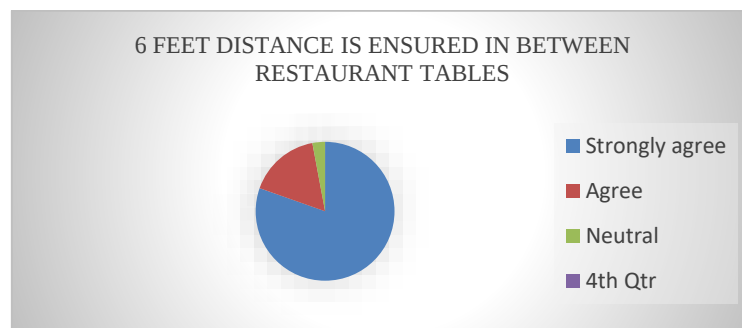


Fig. 6. 6 FEET DISTANCE BETWEEN RESTAURANT TABLES

- The statement '6 feet distance is ensured in between restaurants tables' secured 80% responses as strongly agree and 17% agreed to it and no respondents disagreed or strongly disagreed to the notion.

5.7 ROOM SERVICE IS GAINING MOMENTUM SINCE THE COMING OF COVID

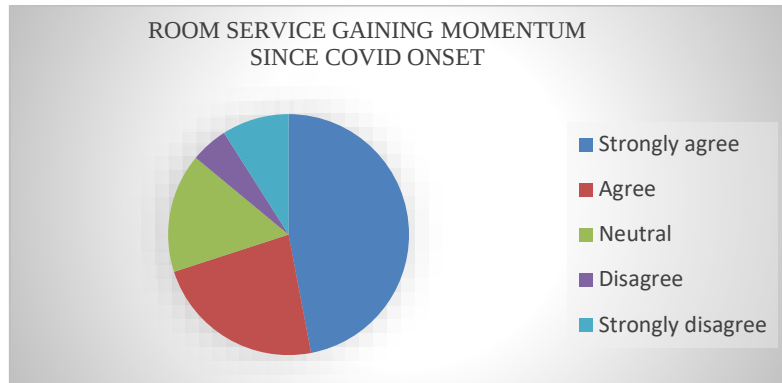


Fig. 7. DEMAND OF ROOM SERVICE

- 'Room service is gaining momentum since the coming of COVID' secured a majority of positive responses from the respondents as 47% strongly agreed to it , 23 % agreed to it and 5% agree and 9% strongly disagreed to it. This leads us to the implication that Room service is in demand during the pandemic times.

5.8 BANQUETING AND EVENTS HAVE SEEN A DOWNFALL IN DEMAND DURING THE PANDEMIC

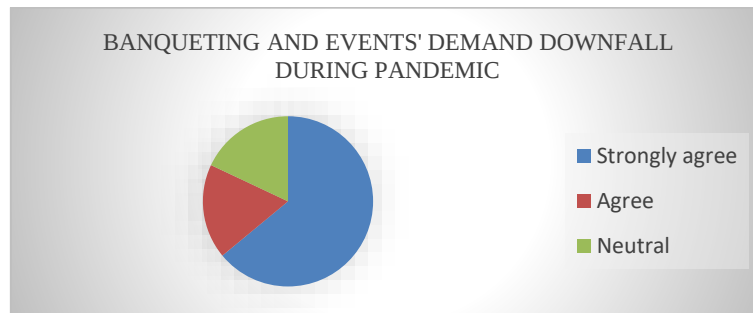


Fig. 8. BANQUETING AND ITS DOWNFALL

- The respondents were asked about banqueting and events' demand during pandemic and with a high majority (64%) strongly agreed to the statement that there is a downfall in demand of banqueting and events in the pandemic context.

5.9 A SAFE AND SANITIZED ENVIRONMENT IS CRUCIAL TO KEEP UP WITH TODAY'S DEMAND

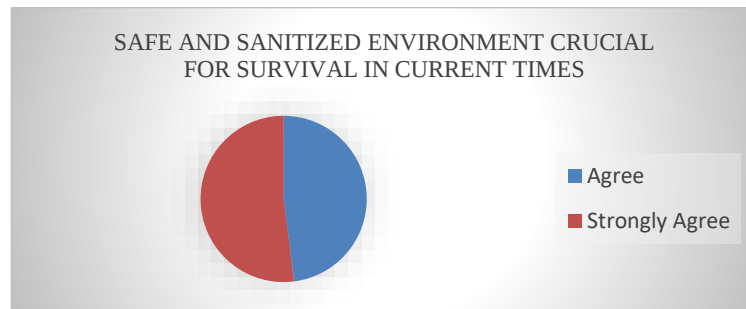


Fig. 9. SAFE AND SANTIZED ENVIRONMENT

- The respondents strongly agreed (52%) to the statement that ‘ A safe and sanitized environment is crucial to keep up with today’s demand’ and 48% agreed to it, no respondent disagreed to the statement.

6 Conclusion and Recommendations

The current study conducted a primary data collection among the F&B managers of Delhi NCR 5- star hotels and the findings may be concluded as follows:

- The food and beverage sector is seeing a shift towards dining at home during the pandemic times, the footfall in restaurants has decreased since then, guests’ prefer eating restaurant food but in the comfort of their homes.
- The hotel food and beverage outlets are starting to deliver food at guests’ doorstep.
- The F&B is witnessing a technological transformation during the pandemic as electronic menus are being introduced in the restaurants, so guests shall open the menus in their phones and order without any contact with the staff.
- Self-service is also being accepted now in the food and beverage scenario but still it isn’t been allocated as the only way of serving to the guests.
- PPE and other necessary COVID safety equipment are being worn and used by the F&B professionals to ensure safety and proper hygiene in the hotel and restaurant premises. 6 feet distance is ensured and strictly followed between the restaurant tables.
- Room service is seeing an increase in its demand as guests now have a sense of fear in going to eat in crowded places and places with multiple capacities. Banqueting and other MICE activities are seeing a downfall due to the pandemic and may take a while to recover.
- Lastly, the F&B managers very clearly understand and perceive Safety and Sanitization as the two new luxuries and important elements to survive in the current times and also to attract guests.

The current study recommends the following points:

- Further studies may be conducted on the comparison between Pre pandemic F&B service operations and post pandemic operations to highlight the changes in the same.
- The current study focused on the study area of Delhi NCR, whereas in future, studies may be based on other geographical areas to widen the scope.

References

1. Indrianto, A. T. L., Kristama, B., & Sugito, S. (2020, October). THE CHANGING BEHAVIOR OF HOTEL GUEST DURING PANDEMIC COVID 19: CASE OF SURABAYA HOTELS. In *1st International Conference of Business and Social Sciences*.
2. Jaswal, R., Dash, M., & Sharma, C. V. A Study of Impact of COVID-19 on in Room Dining of Delhi/NCR Hotels. *Hospitality and Tourism Industry amid COVID-19 Pandemic*, 163
3. Köster, S. (2021). Sustainable innovations in the Food and Beverage industry during a Covid-19 crisis.
4. Kunchornsirimongkol, K. (2020). FOOD AND BEVERAGE SERVICE QUALITY IMPROVEMENT FOR HOTEL IN THAILAND AFTER COVID-19 PANDEMIC. *PalArch's Journal of Archaeology of Egypt/Egyptology*, 17(7), 8371-8376.
5. Yilmaz, G., & Şahin, A. (2021). How does the COVID-19 outbreak affect the food and beverage industry in Turkey? Proposal of a holistic model. *Journal of Foodservice Business Research*, 1-37

Prospects and Challenges of Technology for the Hospitality Industry

Chef Bonophool Banerjee¹

Abstract. The Hospitality Industry has excelled long path with a set trend for customer experience and its highest level of satisfaction however, incorporating and adopting new technologies has not been on the top of the list. Undoubtedly, this industry is one of the major driving forces of the global economy. Our daily lives are being altered with the advancements in technology and without judging for the better or worse, technology is influencing the Hospitality industry too to adapt to survive. This widespread state of welcoming the new technologies in the industry in the recent past has crafted a new pathway in which services are provided and received. The International Hotel and Restaurant Association (IH&RA) also examined the need for technology in the hospitality industry and it is reflected that the future will be the one that to meet customer's needs on the customer's terms, technology will be the most effective solution. This paper will try to explore what is the state of art technologies currently being employed and how effectively they are facilitating to improve the guest experiences and changing the hospitality service platform. Further with the tremendous growth of the internet of things technology (IoT), to envision some potential future hospitality services and at the same time to discuss some fundamental challenges that need to be overcome to initiate long-lasting future proof solution for this hospitality industry.

Keywords: Technophile; Hospitality Service Providers (HSP); Internet of Things (IoT); Touchpoints; Back of the House (BoH); Point of sale terminals (POS); Property management system (PMS)

1 Introduction

In the pre-pandemic situation, there has been a steady growth in the domestic and international tourism sectors and as a result, the revenue generated from accommodation, food and beverage and the other services provided to the tourists and business travelers has made this hospitality industry a key driver to the global economy. To keep this growth steadily upward, the industry experts and leaders always argue for major improvements in the quality of services to be provided to adapt to the changing customer

¹ Former HOD Food Production - IHM Kolkata;
"Qualified Learning Facilitator" – Lausanne Hospitality Consulting, Switzerland;
President – World Chef Choice Federation West Bengal
Email: bonophool22@gmail.com; 9903441324

travel behaviors, especially in the post-pandemic. These improvements are very much required because our targeted customer is new generation individuals who are technophile traveling on the right budget. The implementation of the improvements leads to a complete makeover of the service packages and the underlying technological framework which is presently used by the Hospitality Service Providers (HSP). The basic vision is to provide more personalization of experiences and digitalization of services.

In and around the 2000s, the document says that there were approximately one billion computer users and many of them were wealthy enough to have a computer at home or they had to use the computer at workplaces. Rather, only a few of the guests were technologically advanced to use the computer during their stay. Today the scenario has changed as most of the guests are very much techno-savvy.

This is the age of technology and it is imperative to turn towards digitalization of services to attract the technophile guest. So, the ultimate goal of this digitalization is to develop a digital business model by pursuing hospitality services to guests' touchpoints. Such a digital service platform will make the guest able to browse, plan and pick activities at their convenience which will facilitate seamless integration of technology into their travel experiences. Starting from booking and reservation services, personalized communication, local-based service, and social media integration are a few examples of digitalized services that attract guests. The guest can always be encouraged to use in-house applications by providing special incentives such as loyalty points, coupons, and bonuses.

The future of the hospitality industry is all about the guest experience is based on how good your technology is due to the boom in the Internet of things technology (IoT). What is IoT? It is the interconnection of many physical devices used in everyday life such as sensors, actuators, identification tags, mobile devices, and many more so that guests can easily communicate directly or indirectly by using local communication network channels or via the internet. The incorporation of IoT technology will make the hotel a smart hotel and surely it will open up the avenues to provide immediate, personalized, and localized services which the HSP can apprehend the guest behaviors and preferences and likes and disliking much before with higher accuracy. The implementation of IoT will increase the efficiency level of the back end multiple departments such as front office, housekeeping, sales and marketing, etc. which is cost saving as well as smart energy-saving too. One can see the effective presence of IoT technology in this industry with an introduction to public terminals, in-room technologies, and mobile applications and some highly rated applications such as body area sensor networks, environment monitoring, and various augmented reality experience will surely escort the new business prospect to the next level.

Due to the advancement of science, technology is also advancing at a faster pace and as a result, the expectations of patrons as well as how the hospitality industry will conduct its business to meet those expectations are changing with time. Therefore, all the HSP must aim at such a future-proof technology framework so that it can be enhanced and upgraded with the changing landscape of IoT technology.

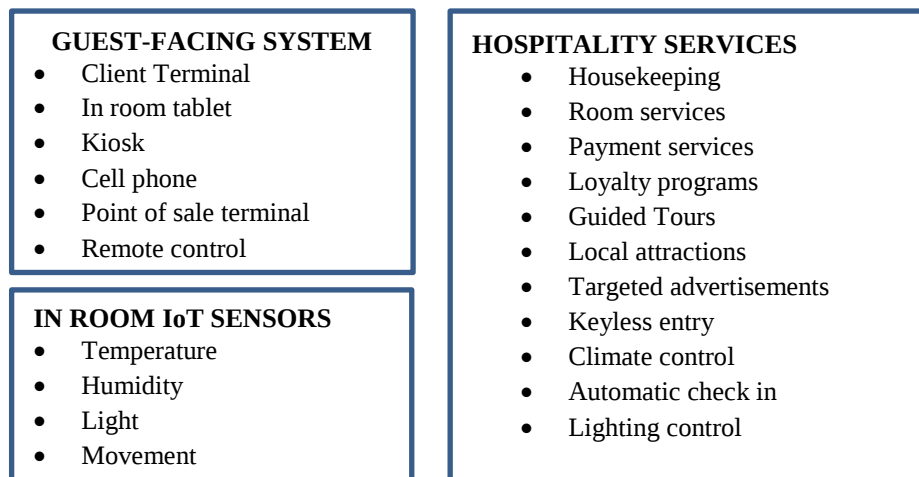
The scope of this review article is to present an overview of the role of technology in the state of art hospitality services. Also, it will be part of the discussion here that the revolution of technology following the potential future of the hospitality industry. This

paper will also give the effort to outline the challenges the HSP is facing currently and the need to overcome them for a future-proof solution.

2 State of Art Hospitality Services

With the advancement of technology, all the HSP of different categories of business models such as midscale, upscale, and luxury hotels are making a large expenditure to revamp the technological infrastructure base on digitalization of the service platform for the benefit of both the guest and the service providers. This reform of technology is focused on innovation in smart devices and IoT. Guest can interact on screen and online through various guest-facing systems which are very convenient for the guest as well as service providers to collect valuable data and feedback. The digitalization in the back of the house (BoH) management systems has increased the efficiency level, enhanced the managerial effectiveness, helped in reducing the cost of goods sold and also there is marked improvement in revenue generation and thus sustainability has improved.

Fig. 1. State of Art Hospitality Services



The different guest-facing system in a digitalized service platform in the hospitality industry includes point of sale terminals (POS), Mobile applications, different handheld devices like kiosks, client terminals, In-room tablets, remote, etc. should be integrated into the system so seamlessly in all the phases of the guest cycle such as pre-sale, point of sale and post-sale phases so that guest will experience a complete zero error digital services. The introduction of various guest-facing systems will ensure guest satisfaction by allowing guests to control the environment. It empowers the guests with services like automatic check-in and checks out, keyless entry, control of in-room functions, etc.

Many hotels allow the guests to do automatic check-in and keyless entry by using their mobile apps. There are different mobile apps with the added features to allow guests to have control of in-room IoT products. Hotels are also developing proprietary in-room tablets that facilitate the guests to order for room service, message the concierge, arrange for transportation, making free voice over internet protocol (VOIP) calls, and also choose the TV stations, movies which are on stream onto the hotel television.

Location-based services provided through a guest-facing system are another area that is linked to guest satisfaction. This technology enables on-property or off-property services like guided tours, recommendations about local events, and also suggestions for dining and entertainment options. This kind of service has two major benefits. It keeps the guest updated with the local areas and what's happening around and it enables the HSP to keep the guests within the revenue loop.

Another part of the guest-facing system is BoH management which includes property management system (PMS), Revenue and sales management (RSM), Customer relationship management (CRM), Housekeeping maintenance software, etc. For example, in-room IoT setups like thermostats, motion sensors, and ambient light sensors can be used to control light, the temperature in hotel rooms to reduce the cost especially when the rooms are either unoccupied or unsold. Daylight harvesting is another energy-saving scheme used to increase indoor lighting consistency by automatically adjusting LED lights based on natural light detected in the room.

The effectiveness of an innovative guest-facing system is reflected in developing dynamic relations between guests and HSP. This will enable the service providers to monitor the guest cycle very closely and creating a guest profile based on guest preferences, behaviors, and location services by using the BoH system so that it will be easy for the HSP to provide more personalized service offers for the repeat business. This custom profile of the guest can be shared within the large network of partners to offer highly personalized services to the guest.

Another critical area is to develop the brand value of HSP by effective use of social media platforms and connecting guests to rate and review services through online portals. The modern-day technophile guests take their decisions on online reviews when planning to purchase hospitality services. The risk factor is, even only one negative review can have a greater impact to get a potential loss. Therefore, it is very important for BoH management to monitor the online reviews and take immediate action to mitigate their effects.

The technology-based BoH management system can provide improved revenue per available room (RevPAR) by making the housekeeping and maintenance services faster with the help of in-room technologies and guest preference profiles which will ultimately reduce the downtime of the hotel rooms, optimum utilization of labor resources, and ultimately improving the guest satisfaction significantly. BoH can also take the help of in-room and on-property smart systems to discover the faults and failures thus reduce the real-time and thus leads to prompt maintenance.

3 Scope of future hospitality services

The basic mantra of the Hospitality business is all about improving the experience of customers (guests) and the success of the business depends on how visually and physically it appeals to guests. The technological advancement with its innovations and novelties are the engines of development especially in the field of manufacturing and Information and Communication Technology (ICT). Hospitality industry services are based on cooperation between a wide range of products and services and so the advantages of the technological revolution are very much obvious. It is quite visible that the development and impact of IoT in different steps of everyday life. It is very much expected that in the future these IoT devices will analyze the data automatically and provides us services. In this sector, we will focus on the potential of the IoT ecosystem in the hospitality business.

The scope of future hospitality services can be categorically represented as under:

3.1 Body area sensors

Due to the huge development of IoT wearable devices there is a revolution of services. Devices like smartphones, smartwatches, the introduction of smart clothing and smart shoes, etc. can gather user data like body temperature, heart rate, location, fitness activities, etc. Further wireless medical sensor technology has a huge scope of data collection in respect to details about different body organs and systems. The proper analysis of all these varied data can bring immense scope to HSP to offer a host of new services to the customers for a new experience. Starting from the adjustment of in-room temperature as per the requirement of the guest to adjustment of in-room lighting based on the sleep cycle of the guest. Even based on the desired fitness goal and guidelines of the guest, different health meals can also be provided by the HSP. The special medical devices may also be provided to a guest as special facilities such as providing carbohydrate-free diet or surgery meal options, low cholesterol meal options, etc. Voice search is another technology of IoT which is the trend within the hospitality industry to search for hotels, restaurants, and cafes, etc. The demand for voice control is also growing demand. This allows for control of various in-room devices and is also used for automated order taking in restaurants and cafes so that customers will no longer need to wait for someone to come to take their orders.

3.2 Energy Management

With the introduction of several IoT technology-enabled cost-saving measures, on-property green operations can be implemented. Already there are some energy-saving systems in place which include smart lighting and temperature control devices as well as low power energy-saving compact fluorescent bulbs, LED lights, etc. The energy-saving system can be further extended with the support of IoT-based technology such as IoT-enabled smart devices can alert both the housekeeping and maintenance department if any outlet or area is crossing the limit of power consumption in a given period.

It will surely facilitate the service personnel to find out the root cause of such issue, whether it is happening due to negligence of the guest or due to some other technical faults. The IoT technology can also be utilized to control water consumption by incorporating smart bathrooms installed with smart showerheads, smart sinks, flow control toilets, etc.

3.3 Augmented Reality and Beacon Technology

In today's competitive world, hotels are not just a place to spend the night, it is beyond that. It is to provide a rich hospitality experience to a guest that improves everyday life. Thus hospitality industry is an ideal place to implement the augmented reality (AR) and Beacon Technology to increase upsells and marketing objectives. Through augmented reality, the real physical world can be enhanced version and is achieved through the use of digital visual elements, sound, or other sensory stimuli.

If augmented reality is termed as pull technology, Beacon is all about pushing messages and information based on the location of the guest. The hotels can send marketing messages and information in strategic locations such as information about special drinks when the guest is returning from sightseeing.

Globally the HSP is very much in the process of incorporating AR and Beacon technology into their on-property systems and utilizing these technologies for digitally guided tours, previews of in-room facilities such as décor, amenities, etc, interactive restaurant and room service menu, instant translation services for any documents, etc.

3.4 Building Automation and Monitoring

Through this technological system both the guests and the HSP will be benefited because it will surely increase the efficiency level of the management. Through this technology, the performance of the various essential components of the building such as heating, ventilation, air conditioning, etc. can be sustained to an error-free level. The basic viewpoints of this centralized building management platform are to increase efficiency and reduce costs with a high degree of safety. Guests can be provided with the luxury of control with help of smart apps and voice assistants for their rooms. The introduction of a centralized property management system will facilitate the management to monitor the occupancy, safety, and security, controlling all electrical assets and devices from a single point only. Various energy wastage possibilities from ACs in the room, lighting in the hotel aisles, bathrooms, and many more can be eliminated by installing energy optimization sensors. With help of smart apps-based control setting of DND, or requesting Housekeeping or Laundry can be another unique way of extending the smart experience to the customers. Through this smart app, the guest can review the menu, and come to know about many hotel features. These apps can be developed by using the progressive web version so that guests do not require to download anything however they can access it through the link provided in their email via mobile browser. The IoT-enabled in-room services and on-property guest-facing systems will guide the management for all kinds of preventive maintenance much before any malfunctions are detected during physical inspections.

4 Challenges

In the present era of technological advancement and the explosion digital way of life, the hospitality industry is also transforming into a 100 % digital technology-enabled industry. On the way of becoming digitalized, online, mobile, cloud, IoT, Artificial Intelligence(AI), Block chain technology is becoming the most common platform for providing services to the customers(guests) and all these technologies is making their way in the entire aspects of hotel operation, guest services and communications, revenue management, distribution, Customer Relationship Management (CRM) and marketing, etc. These fast innovation in technology and their implementation for the best possible way is very much converging and also changed the landscape of challenges related to technology.

In this section, my effort will be to identify the major challenges associated with the effective technology-enabled hospitality industry. It is of paramount importance to address these challenges by the HSP to sustain steady growth.

In the total operational process of hotels, there are various teams like Revenue Management (RM), Sales and Marketing (S&M), multiple guest service teams such as Housekeeping, Engineering, Front Desk operate in isolation with their technology, database without having proper communication with other teams.

To become technology-driven, there are major impediments in existence as discussed below:

4.1 Reluctance to invest in digital technology

Due to lack of understanding of the need of the technology for the modern-day customers who demand a hotel technological experience which is supposed to be better than their daily life at home and that may arise the reluctance to invest. In the present day, the hospitality technological services are much beyond the flat-screen TV or the use of PMS. It is about in-room IoT sensors, guest-facing digital technology, application, and devices like streaming media hubs, voice assistants, messaging capabilities, and many more which we have already discussed in this article.

Moreover many HSP are developing their property solution for providing a new digital experience to the guests as per their metrics and methodologies to meet the demand. This kind of implementation is very effective in the case of a single property but this system may lack in potential when it is extended to an intra- organization or inter-organization as well. This situation can lead to a potential revenue loss for the HSP as they will be unable to provide personalized services to the guests.

4.2 Data fragmentation and management

This is another big challenge to the HSP. Due to the implementation of the digital environment, multiple data islands will be created through PMS, CRM, Common reporting standard (CRS), Social media, Web analysis, Marketing Data, and also through various touchpoints. Summarizing multiple data into one and analyzing them is an integral part of the hospitality service. With time the volume of all these data will grow

exponentially and to provide more personalized services to the guest, the BoH management must conduct a very careful analysis of such enormous data to create a very distinct and elaborate profile of each guest about their likings, disliking and many other preferences. Any negligence in this process will surely affect the potential loss of revenue of the hotels. Only specialized technological infrastructures can tackle this considerable computational burden on the BoH management system.

4.3 Security and Privacy

Concerning data fragmentation and management, there is another big challenge is emerging that is safety, security, and privacy of the collected data about the guests. It is mandatory on the part of HSP to ensure that the information about preferences, behavior, and location of the guests must be used and stored very carefully to protect the guests from physical, economical, and societal threats. Various IoT devices like virtual assistants and mobile key solutions, point of sales are the most prized target of cybercriminals. All HSP must ensure that any kind of digital interactions with guests must be stored as private and secured by employing robust security measures to prevent data leakages and theft. This problem can be addressed once all three stakeholders such as the guest, developers, and hotels all are their share of responsibilities to prevent such cybercrimes.

The customers(guests) must prevent themselves to share all the information about their tour & travel and stay by showing the tickets on social media where the barcodes and QR codes which often contain significantly more personal information get exposed in the public domain and become an easy hunting ground for the crooks. The hotels also play a bigger role in preventing such crimes. Every HSP must develop a very strong IT infrastructure which is, unfortunately, missing in many cases. They must ensure that servers are hardened, applications are patched, and devices are updated, strong password policies are enforced, and so on. The responsibilities of the developers are an ongoing process by keeping a strict vigil on the applications and updating it from time to time for better security. Only secured network protocol can prevent hackers and minimizes the risks.

4.4 Responsiveness

The effectiveness of a fully digitalized system in the hospitality industry is largely depending on the prompt acknowledgment of the guest requests and quick delivery of services of the HSP. The interaction between guests and HSP can be pushed to guest-facing systems and implementing it in no time through IoT sensors or devices can easily eliminate the requirement of human element and intervention when dealing with the guest. There is little room for miscommunication and systems can readily reciprocate the guests with required services against requests raised. The responsiveness is also very important for the upkeep and maintenance of the hotels. Any slow response in this regard will lead to a lower the RevPAR of the hotel. So it is again depending on the skill and capacity of the BoH management in analyzing the data collected through various IoT and take immediate action to eliminate the faults.

4.5 Human relationship

There is little doubt that technology always adds value, creates amenities, personalizes the stay however there should be a harmonious relationship and well-balanced mix between the hospitality industry and technology. The other side of the coin reflects that there is a possibility that technology will overtake the human relationship or may destroy what guests are always looking for and appreciating. So, this is another challenge to HSP to create an optimal mix of digital and human interactions to create personalized guest experiences while respecting their privacy.

5 Conclusion

As the science blessed technology is advancing at a jet speed, the expectation of the patrons are also changing and automatically to meet those needs of the customers, it is high time for the hospitality industry to embrace the technology for sustaining the growth. To meet such needs in this cut-throat competitive market, the developers must plan their buildings, infrastructure, management structure, and as well as staffing requirements.

The digitalized system does not mean that the experience of the customers only through online and IoT devices, self-check ins and online feedback. All these should be part of such a dynamic system so that the marketing and operational team must provide the highest priority to the customers' experiences. Whenever the customers are dropping any feedback during the stay or during the check-out time about their satisfactions or dissatisfactions, the BoH management must ensure that the right person follows up by communicating with the customers and solving the problem.

In the scope of this comprehensive review of papers, I have discussed and envision some potential future hospitality services and at the same time discussed some fundamental challenges that need to be overcome to initiate long-lasting future-proof solutions for this hospitality industry.

REFERENCES

1. J. DePinto. (2016) 7 trends for the internet of things in hospitality. [Online]. Available: http://www.hotel-online.com/press_releases/release/7-trendsfor-the-internet-of-things-in-hospitality#When:14:05:27Z
2. D. Tossell. (2015) Developing your digital guest strategy. [Online]. Available: http://hotlextective.com/business_review/4192/developing-your-digital-guest-strategy.
3. C. Perey, "Open and Interoperable Augmented Reality and the IEEE," IEEE Consumer Electronics Magazine, vol. 4, no. 4, pp. 133 – 135, October 2015.
4. R. C. Wood, Key Concepts in Hospitality Management. SAGE Publications Ltd., 2013.
5. Hospitality Technology. (2015) How hotels are using beacons and augmented reality. [Online]. Available: <https://hospitalitytech.com/how-hotels-are-usingbeacons-and-augmented-reality>

A study of reviving domestic tourism and travel behaviour post COVID 19

Manasi Keni¹

Abstract. This study is a systematic review of various papers and government articles published, related to reviving domestic tourism post COVID 19 pandemic. Given the current pandemic perhaps the hospitality, travel and tourism sectors have been affected at a greater extent. The pandemic had a major impact on the tourism industry as it was one of the first industries to introduce restrictions over travel. Despite all the challenges faced by the travel and tourism industry, the past has shown us it is one the most resilient industry.

With travel restrictions for international travellers, domestic tourism has a better chance to recover in the initial phase of recovery. Most of the governments across the world are finding various ways to revive domestic tourism. With certain norms of lockdown, quarantine and social distancing easing down now, domestic tourism will provide us with immense opportunity in rebuilding the economy.

Due to the fact that domestic tourism plays a vital role in the overall tourism development, destinations across the country will now heavily compete with each other to stand out and maintain their attractiveness. Thus it is pertinent for various Destination Marketing Authorities to study the perception of domestic tourists, as well as to promote and manage their destination image in a way that attracts the tourists especially after this pandemic.

Given the international travel restrictions and fear of infection, domestic tourism offers a better chance for a rebound in the early phase of recovery. Many governments are looking for ways to stimulate domestic tourism as a way to support the battling tourism industry. Therefore this paper provides with a framework for reviving the domestic tourism by focusing on five factors like technological advancement and innovation, digital presence, government initiatives, traveller support or confidence and most importantly creating a more resilient and sustainable tourism.

Keywords: travel, tourism; domestic tourism; sustainable tourism; digital presence; destination image; COVID 19; resilience

¹ Research scholar, Pacific Academy of Higher Education and Research, Debari, Rajasthan
manasikeni9@gmail.com

1 Introduction

The outbreak of COVID-19 pandemic struck the travel and tourism industry heavily. With more than 121 million cases and 2.6 million deaths (as on 01st March 2021) (Coronavirus Update (Live): 122,936,542 Cases and 2,714,291 Deaths from COVID-19 Virus Pandemic - Worldometer, n.d.) (<https://www.worldometers.info/coronavirus/>) it has proven to be one of the most devastating outbreaks in the human history. Given the effects of novel corona virus; governments around the world had no other option than imposing strict lockdown and restrictions throughout. The dramatic spread of COVID-19 has threatened human lives, disrupted livelihoods, and affected trade, economy and businesses across the globe (Rasul et al., 2021). The pandemic had shattering impact on majority of the industries and sectors worldwide. With travel ban and restrictions COVID-19 brought the ever flourishing travel industry to a halt.

Tourism is one of the most labor-intensive sectors and so this outrageous pandemic had a major impact on jobs. The most visible and immediate impact of COVID-19 is seen in the hotel and tourism sector in all its geographical segments -inbound, outbound and domestic and almost all verticals -leisure, adventure, heritage, MICE (Meetings, Incentives, Conferences & Exhibitions), cruise and corporate (“The Effect of COVID-19 on the Indian Tourism Industry,” 2020). The leisure and hospitality industry lost 7.7 million jobs, or 47% of total positions (These Industries Suffered the Biggest Job Losses in April 2020, n.d.). The Federation of Associations in Indian Tourism & Hospitality (FAITH) and the Confederation of Indian Industry had previously estimated total direct and indirect job losses due to Covid-19 on the tourism value chain — hotels and restaurants, airlines, tour operators, transport providers and other allied businesses — to be between 38 million to 50 million (Layoffs: Tourism & Hospitality Industry Begins Layoffs - The Economic Times, n.d.).

It’s undeniable that travel and tourism industry is one of the rapidly growing and among the most important industries in the world. It has contributed in the overall progress and advancement of the country’s economy for years. Despite of all the challenges faced by the travel and tourism sectors, the past has always shown us that this is one of the most resilient industries in the world. Many countries are looking to domestic tourism to help stimulate economic recovery (Helble & Fink, n.d.). In this analysis we saw that redirecting tourists from foreign destinations to domestic ones helped to fill the gap in about half of the economies (Helble & Fink, n.d.). Thus, governments, destination marketing authorities and policy makers should come up with some aid to overcome the effects faced by the tourism sector due to COVID 19.

2 Objectives of the study

1. To study the impact of COVID-19 pandemic on the travel and tourism sector by studying various research papers and government articles.
2. To provide a structure or a framework for destination marketing authorities, government and policy makers to deal with the effects of COVID-19 pandemic on the travel and tourism sectors.

3 Literature Review

The pandemic is estimated to have a debilitating impact on the Indian travel and tourism sector, which includes hotels, travel agencies, tour operators, destinations, family entertainment venues, restaurants and air, land and sea transportation, amongst others (Thornton in India, 2020). The global travel and tourism industry is estimated to lose USD 2.7 trillion in 2020 with 100 million jobs at risk (Thornton in India, 2020). As many as 100 million direct tourism jobs are at risk, in addition to sectors associated with tourism such as labour-intensive accommodation and food services industries that provide employment for 144 million workers worldwide. Small businesses (which shoulder 80% of global tourism) are particularly vulnerable (Tourism and COVID-19 – Unprecedented Economic Impacts | UNWTO, n.d.-a). Given the tourism industry's sensitivity to this pandemic situation, the body of knowledge in the field of tourism needs some quick and sound work to prepare for the future (Sharma et al., 2021). Over the past years, most of the countries have considered tourism as a contributor to economic growth and is widely accepted that year after year throughout the world a massive investment continues to pour in its development ("The Effect of COVID-19 on the Indian Tourism Industry," 2020). Whenever there has been any major impact on the economy of any country, tourism has always been the first one to get affected as people start to cut down on their travel budgets first ("The Effect of COVID-19 on the Indian Tourism Industry," 2020), tourism relatively had a direct role to play when it comes to COVID-19 which has widely spread most in the countries with a high number of tourists ("The Effect of COVID-19 on the Indian Tourism Industry," 2020).

We need to understand that to move forward, it is absolutely essential that full energy and focus of the nation must be on containing and stopping the spreading of virus as early as possible with minimum covid19 positive cases (Ghosh, n.d.). As countries gradually lift travel restrictions and tourism slowly restarts in many parts of the world, health must continue to be a priority and coordinated health protocols that protect workers, communities and travelers, while supporting companies and workers, must be firmly in place (Tourism and COVID-19 – Unprecedented Economic Impacts | UNWTO, n.d.-b). The Indian travel and tourism industry is expected to be valued at USD 460 billion by 2028 (from USD 194 billion in 2019), accounting for 9.9% of India's GDP and attracting multiple stakeholders, both domestic and international to invest in its growth (Thornton in India, 2020). Since the COVID-19 pandemic threatens to be particularly fatal for the tourism industry, a rapid review of the available literature is highly recommended (Sharma et al., 2021). Such a review will not merely consolidate the findings of the existing studies but also provide insights and directions for future researchers to focus on the appropriate problems plaguing the sector (Sharma et al., 2021).

Thus, after a careful and systematic study of various secondary sources this paper aims at developing a structure or a framework to deal with recuperating and reviving the domestic tourism at the initial stage of recovery.

4 Framework for Revival of Domestic Tourism post COVID 19



Fig. 1. Framework for reviving domestic tourism post COVID 19 (Source: Author)

Thus, Fig 1 concentrates on surviving, reviving and thriving the travel sector by focusing on five major factors such as technological advancement and innovation, digital presence, government initiatives, traveler support or confidence and most importantly creating a more resilient and sustainable tourism.

4.1 Technological Innovation

Technology was at the forefront even before the pandemic, but as the pandemic struck the world dependency on technology increased, from socializing or working while being confined in lockdown or quarantine, technology was all over. Disasters help in speeding up changes in technology (Sharma et al., 2021). The pandemic requires that the tourism sector accelerates its digitalization and make technological innovations. New processes in transportation, mobile applications in hotels, and automatic travel insurance are some of the keys for the tourism of the future (Post-COVID Tourism: Digital, Personalized, and Safer than Ever | Opinno, n.d.). Robotics, artificial intelligence, and human-robot interactions have gained an increased presence to help manage the spread of COVID-19 in hotels (Konya & Adim, 2020). The devastating effects of the pandemic have dispensed a colossal challenge for the travel and tourism sector around the world. Technological advancement and innovation will thus act as a driving force by not only dealing with technological infrastructure but also with substantial study of tourist behaviour, preferences and choices.

4.2 Digital presence

With the emergence of digital platform and profound internet technologies, various new approaches to reach the target audiences have unfolded. During the COVID-19 pandemic, while many aspects of tourism have been forced to slow down, the importance

and need for progressive digital is paramount (Why The Tourism Industry Must Embrace Digital Transformation — Now More Than Ever, n.d.). In other words, Digital presence has become a crucial part of every business today, irrespective of its size and type. Tourism industry is no different; as the customers have instant access to destination resources for planning trips, latest offers, and reviews from previous visitors to best prices offered. Social media has also changed the way people deal with brands and especially the service sectors. Social media provide low-cost and efficient management of online information exchange and relationships, including social networking, offering information for travelers, and carrying consumer generated content about products, brands, services, and issues (Lau, 2020). Government and various destination marketing authorities should in fact bring in a revolutionary change in the way they deal with the digital market. In tourism, digitalization presents opportunities for SMEs to expand their market reach, increase growth, improve operational efficiencies, and sharpen their competitive edge (Dredge et al., 2018).

4.3 Government Initiatives

To boost both foreign and domestic travel, the government has introduced several schemes, such as Swadesh Darshan Scheme, Pilgrimage Rejuvenation and Spiritual Heritage Augmentation Drive (PRASHAD) and Adopt a Heritage (Thornton in India, 2020). The main objective behind these schemes is to not only increase footfall, but enhance tourist experience and employment opportunities in a sustainable way (Thornton in India, 2020). Promoting various small businesses and implementing various other national initiatives to boost the travel sector. Building a safer environment and implementing new safety protocols for people should be at the top of the priority list. While the medium and long-term tourism impacts of COVID-19 will vary between countries, destinations, and segments of the sector, it is clear that in order to open up while the virus is still circulating, governments will need to take balanced, measured and co-ordinated policy action at the local, national and international level, in order to protect people, while minimising job losses and business closures in the immediate and long-term (Tourism Policy Responses to the Coronavirus (COVID-19), n.d.)

4.4 Traveler Support or Confidence

Rebuilding traveller confidence and support should be the primary concern as safety is on the top of the list for travellers. In an interview given to Indian Express our Tourism Minister Mr. Prahlad Singh Patel said, “We are making efforts to engage with our stakeholders and citizens of our country to sustain their interest in travelling within the conduct an assessment of the estimated job loss and revenue loss that the hospitality and tourism industries have suffered amid the pandemic’ (INTERVIEW | Domestic Tourism Will Revive Sector Post Lockdown: Tourism Minister Prahlad Singh Patel- The New Indian Express, n.d.) Accessibility, connectivity, and transport should be prioritized in rebuilding the tourism system, along with accommodation, restaurants, resorts, events, travel associations, travel technology companies, tour operators, and tourism associations (“Transport-Related CO2 Emissions of the Tourism Sector – Modelling

Results,” 2019) (The Covid-19 Crisis and Tourism: Response and Recovery Measures to Support the Tourism Sector in OECD Countries - G20 Insights, n.d.).

4.5 Resilient and Sustainable Tourism

The COVID-19 pandemic has forced the tourism sector to shift its focus to resiliency, sustainability and interconnectedness among diverse stakeholders in the sector (“UNWTO World Tourism Barometer and Statistical Annex, August/September 2020,” 2020). Enhancing sustainable regional tourism development provides considerable benefits from making tourism-dependent regions less vulnerable to economic threats, to using resources more sustainably, creating green jobs and enhancing transport connectivity (COVID-19 and Transforming Tourism, n.d.). Throughout the COVID-19 pandemic, the world has witnessed a considerable decrease in CO2 emissions, most notably within the transportation industry, including tourism-related transportation (“UNWTO World Tourism Barometer and Statistical Annex, August/September 2020,” 2020). Hence, building a more sustainable and resilient plan, through preserving nature and natural resources such as mangroves, water bodies, coral reefs, mountains etc. will lead to a better tomorrow for the generations to come ahead.

5 Conclusion

The havocing effects of COVID-19 brought the travel industry and its other ancillary industries like hotel, transport and catering etc. to a standstill. In times of such uncertainties tourism industry provides us with immense opportunity once the pandemic is over. With travel restrictions for international travelers, domestic tourism has a better chance to recover in the initial phase of recovery. Thus, concentrating on technological advancement and innovation, digital presence, government initiatives, traveler support or confidence and most importantly creating a more resilient and sustainable tourism will help recouping with the challenges faced by the travel and tourism sector. Strong digitalization will help connecting the destination mindset, leading to smart tourism and improved online brand visibility. Rebuilding traveler confidence and creating a safer environment by frequently communicating and implementing the safety policies for travel will help the travel sector to recover. Government thus will also have to play an evident role in assuring the travellers about the safety measures and introducing new technological innovations that would ensure an indefectible travel experience that is sustainable and resilient.

References

1. *Coronavirus Update (Live): 122,936,542 Cases and 2,714,291 Deaths from COVID-19 Virus Pandemic* - Worldometer. (n.d.). Retrieved March 20, 2021, from <https://www.worldometers.info/coronavirus/>
2. *COVID-19 and Transforming Tourism*. (n.d.). <https://doi.org/10.18111/wtobarometereng>

3. Dredge, D., Phi, G., Mahadevan, R., Meehan, E., & Popescu, E. S. (2018). *Digitalisation in Tourism In-depth analysis of challenges and opportunities*.
4. Helble, M., & Fink, A. (n.d.). *Reviving Tourism amid the COVID-19 Pandemic*.
5. *How Travel Brands Can Succeed in a Post COVID-19 World* | Publicis Sapient. (n.d.). Retrieved March 20, 2021, from https://www.publicissapient.com/insights/covid_19_how_travel_brands_can_learn_from_past_crisis
6. *Indian Tourism and Hospitality Industry Analysis November 2020* | IBEF. (n.d.-a). Retrieved March 20, 2021, from <https://www.ibef.org/archives/industry/indian-tourism-and-hospitality-industry-analysis-reports/indian-tourism-and-hospitality-industry-analysis-november-2020>
7. *Indian Tourism and Hospitality Industry Analysis November 2020* | IBEF. (n.d.-b). Retrieved March 20, 2021, from <https://www.ibef.org/archives/industry/indian-tourism-and-hospitality-industry-analysis-reports/indian-tourism-and-hospitality-industry-analysis-november-2020>
8. *INTERVIEW | Domestic tourism will revive sector post lockdown: Tourism Minister Prahlaad Singh Patel- The New Indian Express*. (n.d.). Retrieved March 20, 2021, from <https://www.newindianexpress.com/thesundaystandard/2020/jun/07/interview--domestic-tourism-will-revive-sector-post-lockdown-tourism-minister-prahlaad-singh-patel-2153219.html>
9. Konya, K., & Adim, V. (2020). *Technological Innovation of Hotel Services: A COVID-19 Strategic Response Entrepreneurship View project Innovation Strategy and Organization Adaptability of Hotels in Port Harcourt View project*. <https://www.who.int/emergencies/diseases/novel-coronavirus-2019>
10. Lau, A. (2020). New technologies used in COVID-19 for business survival: Insights from the Hotel Sector in China. *Information Technology and Tourism*, 22(4), 497–504. <https://doi.org/10.1007/s40558-020-00193-z>
11. *Layoffs: Tourism & hospitality industry begins layoffs - The Economic Times*. (n.d.). Retrieved March 20, 2021, from <https://economictimes.indiatimes.com/jobs/tourism-hospitality-industry-begins-layoffs/articleshow/75854257.cms?from=mdr>
12. *Pandemic-hit tourism & hospitality sector looks forward for fair deal in Budget 2021 - The Economic Times*. (n.d.). Retrieved March 20, 2021, from <https://economictimes.indiatimes.com/industry/services/hotels/-restaurants/pandemic-hit-tourism-hospitality-sector-looks-forward-for-fair-deal-in-budget-2021/articleshow/80268994.cms?from=mdr>
13. *Post-COVID Tourism: Digital, Personalized, and Safer than Ever* | Opinno. (n.d.). Retrieved March 20, 2021, from <https://opinno.com/insights/post-covid-tourism-digital-personalized-safer>
14. Rasul, G., Nepal, A. K., Hussain, A., Maharjan, A., Joshi, S., Lama, A., Gurung, P., Ahmad, F., Mishra, A., & Sharma, E. (2021). Socio-Economic Implications of COVID-19 Pandemic in South Asia: Emerging Risks and Growing Challenges. *Frontiers in Sociology*, 6, 1. <https://doi.org/10.3389/fsoc.2021.629693>
15. Sharma, G. D., Thomas, A., & Paul, J. (2021). Reviving tourism industry post-COVID-19: A resilience-based framework. *Tourism Management Perspectives*, 37, 100786. <https://doi.org/10.1016/j.tmp.2020.100786>
16. *The Covid-19 crisis and tourism: Response and recovery measures to support the tourism sector in OECD countries - G20 Insights*. (n.d.). Retrieved March 20, 2021, from https://www.g20-insights.org/policy_briefs/the-covid-19-crisis-and-tourism-response-and-recovery-measures-to-support-the-tourism-sector-in-oecd-countries/
17. The effect of COVID-19 on the Indian tourism industry. (2020). *Journal of Xidian University*, 14(7). <https://doi.org/10.37896/jxu14.7/119>

18. *These industries suffered the biggest job losses in April 2020*. (n.d.). Retrieved March 20, 2021, from <https://www.cnbc.com/2020/05/08/these-industries-suffered-the-biggest-job-losses-in-april-2020.html>
19. Thornton in India, G. (2020). *Travel and Tourism - Survive, revive and thrive in times of COVID-19*.
20. *Tourism and COVID-19 – unprecedented economic impacts | UNWTO*. (n.d.-a). Retrieved March 20, 2021, from <https://www.unwto.org/tourism-and-covid-19-unprecedented-economic-impacts>
21. *Tourism and COVID-19 – unprecedented economic impacts | UNWTO*. (n.d.-b). Retrieved March 20, 2021, from <https://www.unwto.org/tourism-and-covid-19-unprecedented-economic-impacts>
22. *Tourism Policy Responses to the coronavirus (COVID-19)*. (n.d.). Retrieved March 20, 2021, from <https://www.oecd.org/coronavirus/policy-responses/tourism-policy-responses-to-the-coronavirus-covid-19-6466aa20/>
23. Transport-related CO2 Emissions of the Tourism Sector – Modelling Results. (2019). In *Transport-related CO2 Emissions of the Tourism Sector – Modelling Results*. World Tourism Organization (UNWTO). <https://doi.org/10.18111/9789284416660>
24. UNWTO World Tourism Barometer and Statistical Annex, August/September 2020. (2020). *UNWTO World Tourism Barometer*, 18(5), 1–36. <https://doi.org/10.18111/wtobarometereng.2020.18.1.5>
25. *Why The Tourism Industry Must Embrace Digital Transformation — Now More Than Ever*. (n.d.). Retrieved March 20, 2021, from <https://www.simpleviewinc.com/blog/stories/post/why-the-tourism-industry-must-embrace-digital-transformation-now-more-than-ever/>

Analysing the Stress of Frontline Employees of Hospitality and Tourism Industry

Naiya Rana¹, Nilesh Ratnoday²

Abstract. Hospitality and tourism industry are among the most important sectors of India and provide huge economic benefits to the country. These sectors comprise of entertainment, cruises, events, parks, amusement park, casinos, hotels, restaurant, historic places, museums and various services related to tourism. Industry of hospitality and tourism is not only important in respect to business but it also employs a huge number of employees by creating full time as well as part time jobs. Both tourism and hospitality rely on each other for business and so does the people who work in these industries. Employees of these sectors have to be skilled in communicating with the customers even when maintaining a polite communication is hard. Frontline workers have to work harder as they are the face of the business.

Frontline workers are those who face the customer and make instant decisions for fulfilling the demands of the customers along with maintaining the image of the company. It has been seen various times that frontline workers often get caught among the image of the company and demand of the customer. This causes stress among the employees.

This research work aimed to assess the stress level of the employees and to accomplish its goals, survey method has been used. For conducting a survey, 2 hypotheses have been created based on which a questionnaire was designed using 5-point Likert's scale. Further, the questionnaire was sent to 100 frontline employees working in the hospitality and tourism industry. There were 54 responses which were received. These responses were then properly sampled and analysed. The hypotheses were tested by using one-way ANOVA. The study shows a significant impact of role conflict over the stress of the frontline employees in the hospitality and tourism industry. Also, performance is also a major cause because of which frontline employees are stressed.

Keywords: Stress; frontline; employees; hospitality; tourism; performance

¹ Assistant Professor at State Institute of Hotel Management, Siddhpur, Gujarat
rananaiya099@gmail.com

² Teaching Associate at State Institute of Hotel Management-Indore, Madhya Pradesh
nratnoday@gmail.com

1 Introduction

The hospitality and tourism industry of India have grown to be the main sectors that supports the growth of the nation. A huge amount of financial support is generation with this industry and also it provides a numerous job for the individuals. Since the country have rich historical heritage and culture, diversity, different geographical areas, natural beauty, diverse traditions, various food culture, etc., industry have a wide scope of development in future also. The industry also helps in attaining a huge amount of FDI for the country (Huang et al., 2018).

The issue of occupational stress has been hiked and the frontline workers of hospitality and tourism industry are the one who have been affected the most. Their job is most vulnerable which also comprises of reduction in job performance, therapeutic decision-making, and mental health. Performance and role conflict are the major reasons because of which frontline workers gets stressed which reduces their ability to perform better.

The hospitality and tourism industry often offers financially beneficial career options, few of which are: tourism officers, event planner, theme park manager, hotel manager, tour guides, travel agents, waiters, chefs, etc.

1.1 Employment Opportunities and Challenges in Tourism and Hospitality Sectors

Hospitality and tourism sector is a very customer cantered industry and therefore, requires workers who are highly skilled. There are huge opportunities offered by the industry, even for the student who wants to work as a part time. At many places, there is no requirement for waiting to get hired. One can simply start working as a guide without making any investments. Various other employment opportunities are tour operation companies, transport services, food and beverages, hotels, etc.

Along with these benefits, this industry comes with various challenges such as political instability, seasonality, rigid corporate and undemocratic culture, low training and education, unequal treatment, discrimination sexual harassments, poor working conditions and poor pay. These challenges decrease the customers' visits which increase the turnover of the employees.

1.2 Front line employees

The first conversation of a customer is handled by a frontline employee and it is the role of the frontline employee to create and maintain the interest of the customer to increase the business. There are various types of skills required for working in this industry; however, the most essential skill is the skill of communication. Frontline employees handle the problems, clears the obstacles, promotes the brand and increases the business (Kang et al., 2021). They are basically the base of the business and acts as a bridge between the customer and the organization. Frontline worker works face to face, through calls, social media or other platforms (Sampson, 2014).

Frontline workers must be very skilled as they are face of the brand and they are the only person who will interact with the customers. they represent the company and the reputation of the company very much depends upon their skill. There skills constitute of emotional intelligence, wit, common sense, IQ, intuition, empathy, adaptability, poise and composure along with appropriate communication skill.

Since hospitality and tourism industry is a business of service and frontline workers are the only interaction for the customers, these workers are considered as the key for success of the business. They have to show patience, handle the calls, drive the customers to long distance different locations, take the order of the customer, etc. along with maintaining the integrity of the company.

1.3 Stress issues of front-line employees

Stress is very common for the employees and workplace is a major concern and it can also damage the employees both emotionally and physically. Frontline workers are more prone to these issues as they have to suffer from harmful emotional and physical responses from the customer and also from the organization if the customer files a complaint against them or the organization loses any business (Ross, 1995). It is one of the major causes for stress which leads to deteriorate the performance and productivity of the frontline employees. Such stress also triggers “common mental disorders” like “post-traumatic stress disorder”, anxiety and depression.

There are many employees in the industry of hospitality and tourism who are searching for other career options because of the stress level which they cannot endure. The main problem is that stress is still not taken as illness in this industry even though, this industry suffers the most from this issue. A better work life balance is a basic requirement for all the employees and this sector is hugely lagging in this aspect. In the field of hospitality and tourism industry, stress has grown to be a major issue for all the employees. When the season is down and the business is at its lowest, the employees suffer from stress because of the fear of losing their job. On the other hand, during the peak season during the peak season the employees are distressed because of the work pressure and work timing.

Undoubtedly, high work pressure has to be endured by the workers working in the hospitality and tourism industry. It needs high level of alertness and patience which sometimes become unbearable and the situation goes out of control (O'Neill & Davis, 2011). Stress is a major factor for reduction in the performance and still performance is assessed on those factors which cause maximum stress. Some employees take it as a challenge and finds solutions for it but most gets stressed and lose their productivity.

There are numerous definitions for stress but very commonly it is defined as a disturbance among the inside and outside world. The approach is with which every individual response over the issue of stress they are facing decides their vulnerability towards it. The environment in which individuals work, is a major determinant of their stress issue. With so many aspects, defining stress has become very difficult. There are many operations in the hospitality industry and it is very hard to maintain all those operations. Inefficiency and ineffectiveness make the employees incompetent and force them towards stress issues.

The frontline workers, even when they can't endure the pressure and are in extreme stress, don't complaint or take medication and continue with their work as they fear of losing their job, which is probably their only source of income. They don't understand that this stress is dragging them down both emotionally and physically. In addition, stress is dragging their performance also.

Distinguishing among stress and pressure is of high importance along with understanding an individual can feel challenged. (Pallesen, 2007)

There are various types of demands made in the hospitality and tourism industry which also constitutes of physical demands like lifting heavy stocks, standing for long time, long working hours, and cleaning large space for whole day, etc. Moreover, during the time of recruitment, many workers are asked to sign a agreement in accordance of which they will work over 48 hours every week but many of the workers doesn't accept this clause and opt themselves out of it. Majority of the chefs are seen to work for more than 60 hours every week. However, if a worker opts out of the "working time regulations", it means that they are not legally provided with the 11 hours/day resting period within their shifts. They are also not permitted for taking a rest after every 6 hours of working and also, they are not entitled with weekly rest day. Since, rest is the most important medication a stressed person can use, unavailability of rest can damage them more.

Considering all the mental demands is of high importance for an employee, especially in hospitality and tourism industry. Frontline workers have to deal with all the complaints, slangs and abuses of the customers and still they have to maintain their calm and work with a smile on their face. However, they don't have any place to relieve their stress and insufficient rest boosts their stress level.

Role conflict

When incompatible demands for work is experienced by employees, occurrence of role conflict takes place. Role conflict has been very extensively researched as a variable for job stress and is brought in consideration as a major reason for causing stress among the employees. Role conflict reduces the productivity of an employee and impact the mental as well as physical health. Role ambiguity is another factor which is also a major cause for stress. When employees are not clear of their role or they are provided with the role they are suited for, they lose their performance and productivity. There are various types of strains with which the role conflict is linked.

A theoretical base is provided by role theory for understanding the concept of role conflicts. In accordance of the role theory, every worker has their own operations and every operation has their responsibilities and rights. Simultaneously, employees skill themselves for multiple tasks. A frontline worker has to sometimes work for back-of-office work which can both be exhausting and interesting. Role conflict is generally for those employees who are multi tasker.

Performance related stress

Performance is a major concern which when reduced boosts the stress level of an employee, especially for the frontline employees. Generally, stress and performance go in a cycle; when performance is reduced, stress increased and when stress increases,

performance is reduced. Performance is considered to be a major factor affecting the employees with mental and physical hazards. When an employee feels stressed, he/she loses concentration over the work and a clear reduction in performance can be observed. However, recognizing the factors causing the stress is very critical as the front-line employees are trained for managing their emotion. But managing the emotions cannot keep them away from being stressed and rather make them more prone to it.

1.4 Stress and Health

Emotional Exhaustion

Frontlines have to be in contact with customers for whole day and are deprived of expressing their real feelings. They spend so much time expressing their gratitude for their customers that they forget the way of expressing their own feelings. This makes them emotionally exhaust.

Overall Health

Frontline workers have to speak for long hours, even when they are stressed. This impacts their health negatively. There are various types of health issues which they endure on daily basis like backaches, headaches, soreness of muscles, etc.

Daily Stress and Health

Various types of health and stress issues are there which are faced by frontline employees like conflict with customers or co-workers, overload of work, etc. On some occasions, when they are having some health issues, they still have to be active and cannot let their health problem affect their working.

Daily Stress and Substance Use

Many a times, it is seen that, when employees are in stress, they use caffeine, alcohol or tobacco to relieve their stress. It might mentally relieve their stress for time being but it's a slow poison which will ultimately make them more ill. Since, frontline employees have to face the customers for long hours, they are usually seen addicted to these and consider it as a solution which in fact is making them more ill.

1.5 Employees empowerment

It is important to empower the employees but with appropriate methods. Below mentioned are few methods which can empower the employees, increase their performance and reduce their stress levels:

Satisfied Frontline Employees Create Satisfied Customers

The most important factor which must be understood by every organization is that when employees are satisfied, they will satisfy the customer more enthusiastically.

Those businesses who are focusing and making efforts for their frontline employees are basically investing in their business only and increasing the quality of their operation. Frontline employees are the one who converts the customers into real sale. There are various reasons because of which an organization must keep their frontline employees happy:

- Happy employee provides better service to the customers
- Happy employee is more productive that basically hike the business' profitability
- Happy employee performs better and keeps the customer happy that provided a better service experience to the customer and enhances the loyalty of the customers.

Frontline Employees are the Face of the Company

It must be understood that frontline employees represents the brand. This means that whatever a frontline employee does is basically done by the company. It shows the values, culture, mission and vision of the company. It stresses upon the importance of keeping the frontline employees more enthusiastic and engaged.

Frontline Employees Know and Understand Customers' Pain Points

The job of frontline employees is to entertain the customers and they spend their years doing the same. This also states that they know the company's customers better than the management. They know what will be the reaction and turning point of the customer. It shows the importance and value of the frontline employees.

Empowering Frontline Staff Creates a Bottom-up Culture

The days when management orders were to be followed blindly are gone now. Nowadays, employees have to be witty and capable of making quick decisions otherwise they might lose potential customers and huge amount of profit. On the other hand, employees also have to be creative and innovative or else they can lose their position as frontline employees

It is important to keep the Frontline Employees engaged at work

It is important that frontline employees are kept engaged with work. If frontline employees are not engaged in their work, then it affects:

- Absenteeism
- Performance
- Customer ratings
- Quality
- Profit

2 Literature reviews

(Sérgio Borralha et al., 2016) conducted a review study and reviewed the data on hospitality professionals. The authors collected the data from science direct, web of science (Medline, “social sciences citation index”, “Social Sciences Index Expanded”) and Web of Knowledge. The authors made a search over the articles which were published with the year 2000 to 2014. The authors verified that there were 51 articles over job satisfaction, 31 articles over mental exhaustion, burnout and stress. The importance of such variable in the tourism and hospitality industry was described and discussed.

(O’Neill & Follmer, 2020) performed a systematic review for synthesizing and summarizing those past literatures which is related to the occurrence of conflict among the work family. Various areas which require addition attention were highlighted. The review stated work-family conflicts as a major reason for stress. Further, suggestions were provided for enhancing the performance through reducing the stress.

(Wen et al., 2020) aimed for understanding the turnover intention of the employees and to attain the same, authors revealed the impact of stress and related issues over the turnover intention of the frontline employees in the service sector. The authors also examined the impact of the work environment over the frontlin. An analytical study was performed by collecting a sample size of 583 from a primary source and used questionnaire to do the same. The data was collected of the frontline employees of hotels located in South China. Further, on the basis of the respondents’ views, role stress was revealed as a 4-D construct (quantitative overload, qualitative overload, ambiguity and conflict). This construct has a significant impact over burnout.

(Bi et al., 2021) performed an investigation over the behaviours of the Jay-customers as it is considered as an important factor which induces job stress and also reduces the work satisfaction level of the frontline employees in the hospitality industry. To provide a base to this theory, the authors conducted an analytical study and collected data of 302 employees working in restaurant business. The study area was selected as various towns of South Korea. Based on the results obtained in this study, the authors suggested a conceptual model to understand the manner in which the frontline employees get negatively influenced by the jay-customers.

3 Objectives

- To find the impact of role conflict over the frontline employees of hospitality and tourism industry.
- To analyze the impact of performance over the frontline employees of hospitality and tourism industry.
- To study the stress issues of frontline employees as stress is taken as an important aspect.

4 Methodology

This research work aimed to assess the stress level of the employees and to accomplish its goals, survey method has been used. To conduct a survey, 2 hypotheses have been created based on which a questionnaire was designed using 5-point Likert's scale. Further, the questionnaire was sent to 100 frontline employees working in the hospitality and tourism industry. There were 54 responses which were received. These responses were then properly sampled and analyzed. The hypotheses were tested by using one-way ANOVA. The results were interpreted based on the testing. The study area Bhopal, Madhya Pradesh. The collection of data is only made through primary sources. It helped this research work to attain a real time data and analyze the current stress issues of frontline workers working in hospitality and tourism industry.

5 Data analysis and interpretation

The collected samples are converted into proper data form and are exhibited and interpreted in this section:

Table 1. Age group

Age group	Responses	Percentage
18-30 years	19	35.19%
31-40 years	15	27.78%
41-50 years	13	24.07%
Above 50 years	7	12.96%
Grand Total	54	100%

Based on the above-mentioned table, it can be interpreted that out of 54 respondents, 19 (35.19%) respondents belong to age group of 18-30 years, 15 (27.78%) respondents belong to age group of 31-40 years, 13 (24.07%) respondents belong to age group of 41-50 years and 7 (12.96%) respondents belong to age group of above 50 years.

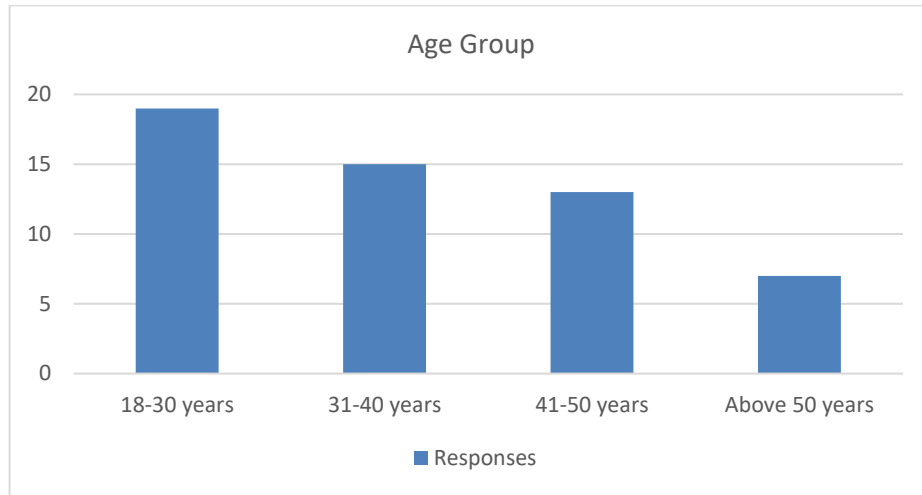


Fig. 1. Age group

Table 2. Gender

Gender	Responses	Percentage
Male	40	74.07%
Female	14	25.93%
Grand Total	54	100%

The above-mentioned table exhibits that there were 40 (74.07%) male and 14 (25.93%) female respondents.

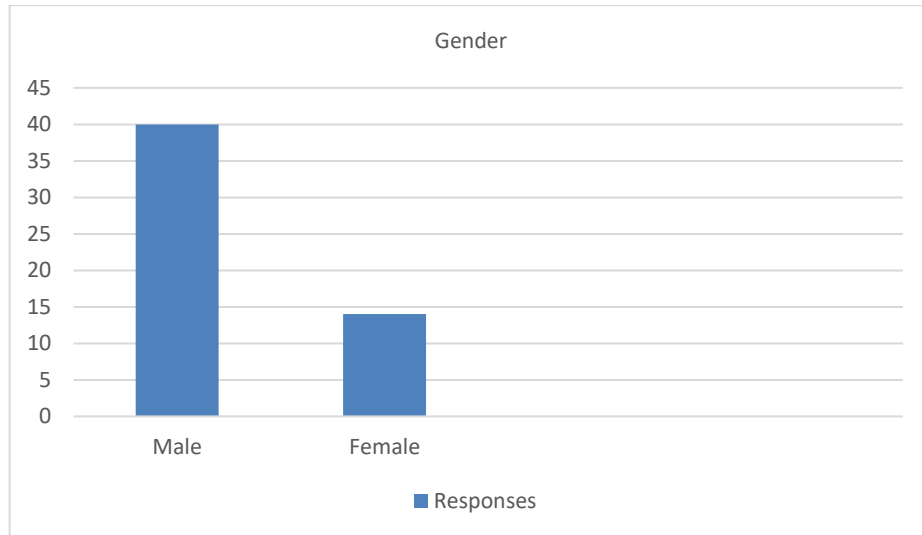


Fig. 2. Gender

Table 3. Education

Education	Responses	Percentage
10 th passed	15	27.78%
12 th passed	11	20.37%
Graduate	25	46.30%
Post graduate and above	3	5.56%
Grand Total	54	100%

On the basis of educational qualifications, the responses obtained exhibits that 15 (27.78%) are 10th passed, 11 (20.37%) are 12th passed, 25 (46.30%) are graduate and 3 (5.56%) are graduate.

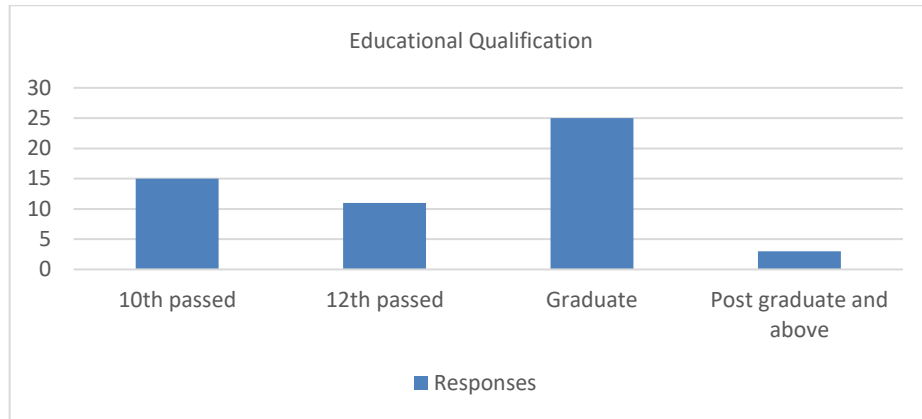


Fig. 3. Education

Table 4. Responses over questionnaire

Questionnaire	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
An employee of hospitality and tourism industry are generally confused regarding their role	18	12	7	6	11
Employees feel more stressed when they don't know their role	16	12	11	10	5
A frontline employee has to deal with different and rude customers which make them question their role and they think of changing their role because of the associated stress	21	11	8	1	13
In hospitality and tourism industry, employees work in shifts and they have to share the credit of their work with other colleagues.	20	15	7	4	8
Generally, frontline employees of hospitality and tourism industry fights to host their customers which often becomes very stressful.	17	15	1	12	9

Frontline workers have more burden of performing better	7	14	6	12	19
Meeting rude customers often degrades their performance level	14	12	6	9	17
Many a times, frontline employees are rated bad by the customers even after performing at their best	16	11	3	12	16
Performance is the parameter on which the frontline workers are judged because of which they over stresses for performing better	6	15	11	14	12
Over stressing over performance often results in stress and employees lose their performance	16	14	6	8	14

The above-mentioned table exhibits the responses of the 54 respondents along with the questions of the questionnaire. These responses are further utilized for testing the hypotheses of this study.

5.1 Hypothesis testing

Hypothesis 1:

H₀₁: There is no significant impact of role conflict over the stress of the frontline employees in hospitality and tourism industry

H_{a1}: There is a significant impact of role conflict over the stress of the frontline employees in hospitality and tourism industry

ANOVA						
Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	494	4	123.5	12.35	3.21E-05	2.866081
Within Groups	200	20	10			
Total	694	24				

From the above table, it is observed that the “value of p is less than 0.05, i.e., $p=0.000$ ”. Hence, null hypothesis is rejected. Thus, it can be stated that there is a significant impact of role conflict over the stress of the frontline employees in hospitality and tourism industry.

Hypothesis 2:

H₀₂: There is no significant impact of performance over the stress of the frontline employees in hospitality and tourism industry

H_{a2}: There is a significant impact of performance over the stress of the frontline employees in hospitality and tourism industry

ANOVA						
Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	230	4	57.5	5.927835	0.002583	2.866081
Within Groups	194	20	9.7			
Total	424	24				

From the above table, it is observed that the “value of p is less than 0.05, i.e., $p=0.002$ ”. Hence, null hypothesis is rejected. Thus, it can be stated that there is a significant impact of performance over the stress of the frontline employees in hospitality and tourism industry.

6 Conclusion

Hospitality and tourism industry comprises of various types of challenges and mostly these challenges are their frontline employees. Role conflict and performance are pushing the frontline employees towards stress. The study shows a significant impact of role conflict over the stress of the frontline employees in hospitality and tourism industry. Also, performance is also a major cause because of which frontline employees are stressed. Stress has become a major issue for the frontline employees and without proper training, it cannot be treated. There are various training programs which can be modified and used. Various questions like how big is the factor of stress is in the hospitality and tourism industry or what can be done to reduce, are worked by many researchers. Many researchers provided solution which could have been effective, if brought in use. So, it stresses on the importance of implementation of training programs with proper tested approaches.

References

1. Bi, Y., Choi, S., Yin, J., & Kim, I. (2021). Stress on frontline employees from customer aggression in the restaurant industry: The moderating effect of empowerment. *Sustainability (Switzerland)*, 13(3), 1–15. <https://doi.org/10.3390/su13031433>
2. Huang, S. (Sam), van der Veen, R., & Song, Z. (2018). The impact of coping strategies on occupational stress and turnover intentions among hotel employees. *Journal of Hospitality Marketing and Management*, 27(8), 926–945. <https://doi.org/10.1080/19368623.2018.1471434>
3. Kang, S. E., Park, C., Lee, C. K., & Lee, S. (2021). The stress-induced impact of covid-19 on tourism and hospitality workers. *Sustainability (Switzerland)*, 13(3), 1–17. <https://doi.org/10.3390/su13031327>
4. O'Neill, J. W., & Davis, K. (2011). Work stress and well-being in the hotel industry. *International Journal of Hospitality Management*, 30(2), 385–390. <https://doi.org/10.1016/j.ijhm.2010.07.007>
5. O'Neill, J. W., & Follmer, K. (2020). A Multilevel Review of Hospitality Industry Work–Family Conflict Research and a Strategy for Future Research. *Journal of Hospitality and Tourism Research*, 44(1), 3–44. <https://doi.org/10.1177/1096348019864653>
6. Pallesen, E. S. (2007). *Work-related Stress and Health among Hotel Employees in Malmø*.
7. Ross, G. F. (1995). Work stress and personality measures among hospitality industry employees. *International Journal of Contemporary Hospitality Management*, 7(6), 9–13. <https://doi.org/10.1108/09596119510095334>
8. Sampson, W.-G. (2014). Work-related Stress in Hotels: An Analysis of the Causes and Effects among Frontline Hotel Employees in the Kumasi Metropolis, Ghana. *Journal of Tourism & Hospitality*, 04(02). <https://doi.org/10.4172/2167-0269.1000127>
9. Sérgio Borralha, Jesus, S. N. de, & Pinto, P. (2016). Hotel employees: A systematic literature review. *Tourism & Management Studies*, 12(1), 120–126. <https://doi.org/10.18089/tms.2016.12112>
10. Wen, B., Zhou, X., Hu, Y., & Zhang, X. (2020). Role Stress and Turnover Intention of Front-Line Hotel Employees: The Roles of Burnout and Service Climate. *Frontiers in Psychology*, 11(January), 1–13. <https://doi.org/10.3389/fpsyg.2020.00036>

Nutritional profile of post-Menopausal women belonging to lower middle-income group of Pilani town of Rajasthan: An observational study

Shikha Dixit¹

Abstract. Woman are important pillars of every society. They contribute human potential and strength to the development of a nation. Nutrition plays an important role in building their health, which is generally compromised especially among lower and lower middle class. An observational study was done on 70 post-menopausal woman of age group 45-60 years of age of lower middle-income group who used to visit general OPD of Birla Hospital, Pilani, Rajasthan from February 2019 to February 2020. Subjects were evaluated for their nutritional status by 7 days dietary recall method, to get information on the dietary pattern, nutrient intake, source of nutrients and food habit. A questionnaire was filled for their family history and physical activities. Certain exercises and endurance tests were done for checking their physical fitness. It has been observed that 80% of the respondents are healthy females with good stamina and functional flexibility and with no complaint of joint pains (commonly seen in post-menopausal woman), as their diet was rich in milk and milk products throughout life. This study fosters a deeper understanding of how diet taken in early childhood, through adolescence and beyond affect health later in life and would be helpful to woman at large.

Keywords: Nutrition profile; functional flexibility; endurance; dietary recall

1 Introduction

Diet plays an important role in determining a person's health at every stage of life. Dietary habits and food intake largely determine the nutritional profile of a person. Nutritional profile refers to the state of an individual as it is affected by food intake and utilization of nutrients. (1)

The WHO constitution (1946) envisages "the highest attainable standard of health is a fundamental right of every human being". (2)

At every phase of life, women have specific needs and opportunities to optimize their health and wellbeing. (3).

Women's nutrition received political and programme focus in 2018, owing to the nationwide launch of the POSHAN Abhiyaan 2018-20. (4), which was launched by honorable Prime Minister from Jhunjhunu, Rajasthan on 8th march 2018(5).

¹ Visiting faculty, IHM Gwalior, & Visiting Dietitian at Birla Sarvajani Hospital
shikhadikshit@gmail.com

Menopausal woman represents a community on the threshold of the ageing process. After menopause, females show increased susceptibility to slow developing chronic disease states like cardio-vascular disorders, cancer(lung/Breast), diabetes, osteoarthritis, osteoporosis due to estrogen deficiency, slight stature, limited lean body mass etc. owing due to low estrogen levels.(6).

Physical fitness levels also decrease with age. Functional fitness represents the physical capacity that is needed to undertake normal everyday activities, independently and without the early onset of fatigue. (7) However, as the age proceeds physical fitness (strength, endurance, agility, and flexibility) reduces.

More than 80% of the woman experience physical and psychological symptoms in these years. (8).

This study was carried out with the objective to find out how dietary habits and dietary intake throughout lifetime influences the health and functional fitness in later years especially among post-menopausal woman.

This study fosters a deeper understanding of how diet taken in early childhood, through adolescence and beyond affect health later in life and would be helpful to woman at large.

2 Methodology

A total of 200 females of age group 45-60 years of Pilani and adjoining areas who used to come to general OPD of Birla Sarvajani Hospital, Pilani, Rajasthan were randomly selected. After briefing them about the objective of the study a 7 days dietary recall was taken initially. The different food items consumed were converted into their raw equivalents, categorized into their respective food groups and the daily intake of protein, fat, carbohydrate and calcium were calculated using the tables of nutritive value of Indian foods (9).

Their background information regarding their occupation, medical history, dietary habits was collected by questionnaire method.

Anthropometric measurements were taken too. Body weight was measured by digital weighing scale and height by salter's spring balance.

For fitness they were tested for sit and reach test and sit up test. The sit and reach test is a common test of flexibility and is an easy and quick test to perform. It helps to measure the extensibility of the arm strings and lower back (11). Sit up test measures the strength and endurance of the abdominals and hip-flexor muscles were done on them to check their bone health.

RDA (Recommended Dietary Allowance) for Indians recommends 2450 kcal for woman (heavy worker), 50 gm proteins, 15 grams fat, and 400 mg calcium per day (12). Table 1 shows the RDA for woman.

Table 1. Dietary requirement

Particulars	Weight (kg)	Energy (Kcal)	Protein g/day	Fat g/d	Calcium mg/d	Iron mg/d
Sedentary worker	50	1800	50	15	400	30
Moderate worker	50	2100	50	15	400	30
Heavy worker	50	2450	50	15	400	30
Pregnant woman	50	+300	+15	25	1000	38

Source: ICMR, 1989 (13)

Average intake of nutrients of respondents was calculated and compared with the R.D.A given by ICMR (Indian council of medical research).

BMI was calculated by using the formula given by Garrow (10) i.e., $BMI = WT (Kg)/HT (m^2)$ as shown in Table2.

Table 2. BMI standards

GRADE	BMI
Normal Range	18.5-24.9
Overweight/Pre-obese	>25
Grade I	30-34.9
Grade II	35-39.9
Grade III	>40

Source: Textbook of Nutrition and Dietetics by Kumud Khanna (14)

The data obtained by 7-day dietary recall is converted into raw ingredients and nutrient intake was calculated using food composition table (15) and compared with recommended dietary allowance. The percent of recommended dietary allowance (RDA) was calculated using the following formula: $\text{Percent RDA} = \frac{\text{Intake of nutrients}}{\text{RDA}} \times 100$

Nutrient intake of 7 consecutive days will be added and mean values of these will be used for further analysis as shown in Table3.

Table 3. Average Daily Intake of Food (Moderate cost)

Foods (gm)	N=200(veg)	Suggested intake (Heavy worker)
Cereals	300	440
Pulses	62	60
Green leafy vegetables	100	100
Roots and tubers	80	100
Fruits	-	60
Milk and milk products	1200	400
Fats and oils	40	40
Meat, fish and eggs	-	-
Sugar and jaggery	50	40

Source: Data collected

3 Data Analysis

On the basis of a sample of 200 women respondents a good 75% of women were found to be under the normal BMI range of 18.5 to 24.9 whereas 19% of the women were underweight (Refer Table 4). Average BMI of underweight women was 17.5 marginally lower than required standard of 18.5 (Fig 1)

Table 4. Body mass Index (BMI)

Body mass Index (BMI)				
BMI	Range	Average BMI	Number of Women	% of Women
Less than 18.5	Underweight	17.5	38	19%
18.5-24.9	Normal	21.6	150	75%
>25	Overweight	31.8	12	6%
Total number of women			200	

Source: Prepared by the researcher

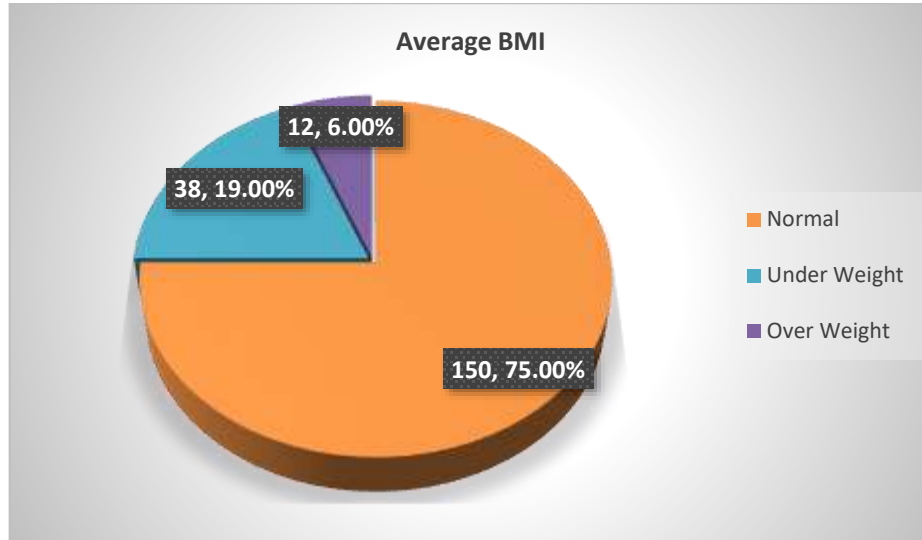


Fig. 1. Average BMI of respondents

It was found that in this region average daily intake of women comprises of a very good amount of dairy and dairy products as a habit since childhood. On an average a woman consumes 1.2 liters of milk products in their diet along with required portion of Jaggery and pulses in sufficient quantity (refer Table 5).

Table 5. Average daily intake of food

Average daily intake of food		
Foods (Grams)	Average intake $\pm \sigma$	Suggested Intake
Cereals	300 $\pm$ 35.5 σ	400
Pulses	62 $\pm$ 14.2	60
Green leafy Vegetables	100 $\pm$ 7.2	100
Roots& tubers	80 $\pm$ 10.6	100
Fruits	Rarely	60
Milk & Milk products	1200 $\pm$ 130.2	400
Foods & Oils	40 $\pm$ 10.7	40
Sugar & Jaggery	50 $\pm$ 7.2	40

Source: ICMR 1987(17)

Daily average intake of nutrients due to consumption of above mix of foods it has been observed that these women have a good balance of Calcium (1150 on an average) with a standard deviation (SD) of 130.2, which is way higher than that recommended by RDA. An average of 2100 Protein intake and 55 units of fats are consumed by them (Refer Table 6).

Table 6. Average daily intake of nutrients

Average daily intake of nutrients		
Nutrients	Average intake $\pm \sigma$	RDA
Energy	1920 $\pm$ 120	2450
Proteins	55 $\pm$ 3.5	50
Fat	57 $\pm$ 4.7	15
Calcium	1150 $\pm$ 178	400

Source: ICMR 1990(18) n=200

78% of women were found to be fit on the basis of Sit and reach test and were found to be above the desired norms. Only a small 3% could not qualify the test.

Table 7. Result of sit and reach test

Result of sit and reach test			
Standard Norms	Frequency	Cm.	Inches.
Super	2%	> +30	> +11.5
Excellent	5%	+21 to +30	+8.0 to +11.5
Good	37%	+11 to + 20	+4.5 to +7.5
Average	33%	+1 to +10	+0.5 to +4.0
Fair	20%	-7 to 0	-2.5 to 0
Poor	2%	-15 to -8	-6 to -3
Very Poor	1%	< -15	< -6
	100%		

SOURCE: Research Quarterly on fitness (19)

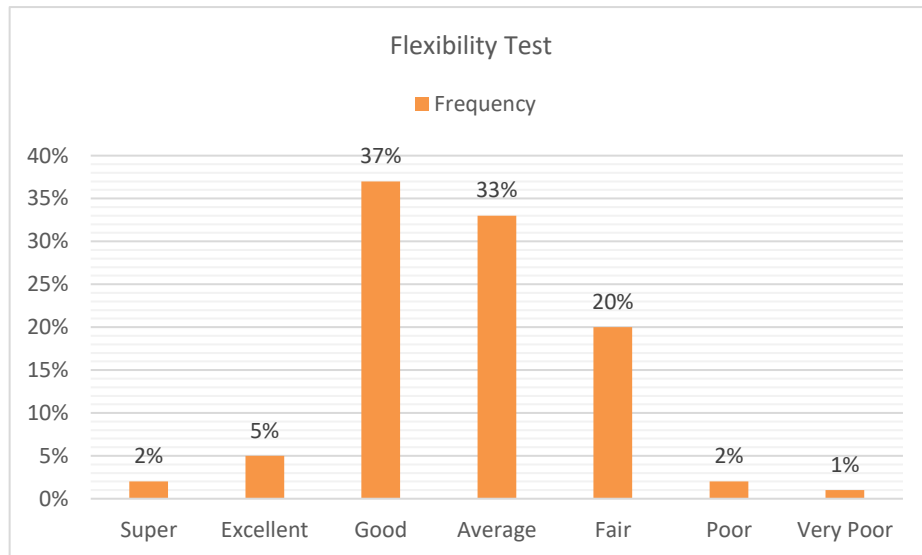


Fig. 2. Flexibility Test

4 Findings

It was found that the subjects were taking 2 meal patterns throughout their life which comprises of milk and milk products and cereals and early dinners comprising of cereals and milk and milk products again. The 2 meal pattern was the reason behind controlled weight and also toward the underweight range in some cases. This pattern might increase the probability of sugar level fluctuations in the subjects.

The BMI of around 45% respondents were in the normal range of 18.5-24.9. 25% of subjects were underweight with BMI less than 18.5 and 30% of subjects were overweight with a BMI of 25 (Figure:1).

The average daily intake of energy was 1920 ± 120 kcal which was less than the RDA of 2450 kcal given by ICMR (Table-6). The energy balance was disturbed as energy intake was less as compared to energy output. This was the main reason behind low weight in subjects as per the ICMR standards.

The average daily intake of Proteins was 55 ± 3.5 grams which was almost equal to 50 grams, RDA given by ICMR (Table-6). Protein is essential for normal calcium metabolism, and on high protein diet calcium is absorbed more. A study shows decrease in calcium balance in post-menopausal women was improved by increased dietary protein which causes decreased calcium excretion indicating increased calcium absorption (20).

The average daily intake of fat was found to be 57 ± 4.7 grams per day which was much higher than the recommended levels of 15 grams/day (Table-6). Increased fat intake was used for energy supply to balance out the energy intake through other sources like cereals.

The average daily intake of calcium was 1150 ± 178 grams per day which was much higher than the RDA of 400 grams given by ICMR (Table-6). The increased intake of milk and milk products was the reason behind high calcium sources along with moderate consumption of green leafy vegetables.

It was observed that the food groups taken by subjects on an average show that there is difference between RDAs and their intake (Table-5). It was found that among all the food groups, the subject's diet was rich in milk and milk products group, intake of around 1.2 liters on an average, which is the reason behind their good bone health in spite being menopause with no complaint of pain in knees and joints, which is generally seen in females of this age.

Bone related problems start around the time of menopause. The amount of calcium naturally excreted by the body increases during this time that is why the amount of calcium needed goes up. Estrogen helps our gut absorb calcium, so we absorb calcium less effectively as our hormone level changes and if these calcium needs aren't met, bone loss can accelerate (21). It has been observed that this belt of Rajasthan takes more of milk and milk products in their diet along with finger millets, dalia and dals as their staple food.

Women when tested for endurance exercises, sit and reach test and sit up test it was found that 37% of the females were in good range of flexibility. 33% respondents were in average range and 20% of respondents were in fair range. Whereas only 2% and 1% were in poor and very poor range (Figure-2).

It has been found that in this belt of Rajasthan females work in fields especially those of low and lower middle socio-economic status and walk many kilometers due to lack of proper conveyance adding to their fitness and normal parameters of BMI, flexibility and fitness and overall health and well-being.

Woman who walks more than 7.5 miles per week has higher mean bone density of the whole body and of legs and trunk region than women who walk less than 1 mile/week (22).

5 Implications

When the world is following vegan diet, with a big no to animal products including milk, this study on dietary intake and eating habits of menopausal woman of low and lower middle socio-economic status will highlight the importance of milk and milk products which is considered as a complete meal in itself along with easy availability. Milk and milk products are still in priority in food list of this small town. Milk and buttermilk are considered as a welcome drink to the guest coming home instead of tea and other beverages. For determining the physical fitness more endurance exercises can be added to support the study.

This study when done with the help of bio-medical parameters will help in establishing the importance of milk and milk products which are very important for females particularly for bone health if taken regularly since early childhood.

This study will showcase the way for other detailed studies on Diet and Bone health taking ways to find out bone health through x-ray techniques like DEXA scan.

6 Limitations

This study was restricted to analyzing health by looking into nutritional intake of subjects with no complain of any joint pains as the subjects were completely fit and able to do their endurance exercises like sit and reach for physical fitness.

Sit and reach test is specific to the range of motion and muscles and joints of the lower back and hamstrings and may not be relevant to other parts of the body.

Bio-chemical assessment is required for accurate analysis of health and bone health.

References

1. Sangwan, S., Chikara, S. and Puni, S. (1993). Factors affecting nutrition status. Indian Journal of Nutrition and Dietetics. 30:159-63.
2. Constitution of the world Health organization, Basic Documents, forty-fifth edition, supplement, October 2006.
3. WHO newsletter, Women's and girl's health throughout the life course, 30 May 2019.
4. Poshan Abhiyaan, E-learning, ICMR-NIN modules.
5. POSHAN Abhiyan, Ministry of women and Child Development, Government of India.
6. WHO newsletter, Women's and girl's health throughout the life course '30 May 2019.

7. Milanovic Zoran, Pantelic Sasa, NicJames, Age related decrease in physical activity and functional fitness among elderly men and women, Dove press journal, clinical interventions in aging 2013;8,549-556.
8. J Clin Diagn Res.2013 Jan; 7(1): 135-9.doi: 10.7860/JCDR/2012/4910.2688.Epub 2013 Jan 1.
9. Gopalan, C.; Rama, Sastri, B. V and Balasubramaniam, S.C. (1989). Nutritive value of Indian foods, Revised and updated by Narasinga Rao B.S.
10. Khanna, Kumud (2001). Textbook of Nutrition and Dietetics, 189.
11. Wells, K.F. & Dillon, E.K. (1952). The sit and reach. A test of back and leg flexibility. Research Quarterly, 23.115-118.
12. Swaminathan M. (2000). Advanced textbook of Nutrition and Dietetics, 20-21.
13. Swaminathan M. (2000). Advanced textbook of Nutrition and Dietetics, 2021.
14. Khanna Kumud (2001). Textbook of Nutrition and Dietetics, 189.
15. Gopalan, C.; Rama, Sastri, B. V and Balasubramaniam, S.C. (1989). Nutritive value of Indian foods, Revised and updated by Narasinga Rao B.S.
16. Swaminathan M. (2000). Advanced textbook on Food & Nutrition, 21.
17. ICMR (1987). Nutritive value of Indian foods. National Institute of Nutrition. Indian council of medical Research.204.
18. ICMR (1990). Nutrient requirements and recommended dietary allowances for Indians. A report of expert group of Indian council of medical research, National institute of Nutrition, Hyderabad.
19. Wells, K.F. & Dillon, E.K. (1952). The sit and reach. A test of back and leg flexibility. Research Quarterly, 23.115-118.
20. Heaney, R. (1982). Nutritional factors estrogen in age related boneless. Clin.Invest.Med.5:147-155.
21. Nordin, D.E., A. Horsman and R, Crilly, (1980). Treatment of spinal osteoporosis in post-menopausal women. Brit.Med. Journal 281:451.
22. E. A Krall et al. Am J Med .1994 Jan; 96(1): 20-6.doi:10.1016/0002-9343 (94)90111-2.

Online Food Aggregators: Marketing Strategy during Covid-19 Pandemic

Priti Ranjan Sahoo¹, Smrutirekha², Jagat Krushna Mangaraj³

Abstract. The research objective of this study was to analyze the marketing strategy of the online food aggregators during the Covid-19 pandemic. The study focuses on the perception of the customer and the service provider in terms of online food ordering and delivery platforms. Cloud kitchen services have gathered a lot of eyes due to low-cost investment and high market demand. This study also focuses on the growth of cloud kitchen during the Covid-19 pandemic. The research method includes usage of secondary data and interviews with the concerned organizations through video conferencing applications. This study indicates the importance of online food aggregators and cloud kitchens in the customers' lives during the pandemic and how the service providers have managed to adapt various marketing strategies for survival and revival during the Covid-19 pandemic.

Keywords: Marketing mix; Market Positioning; Differentiation strategy; Covid-19 Pandemic; Online food aggregators

1 Introduction

E-commerce is the electronically purchasing or selling of goods on an online platform. E-commerce has been on a surge because it served home delivery of not only goods but also services. E-commerce is technology-driven and works on smartphones, tablets, laptops and even draws customer data. Many companies are excelling in e-commerce,

¹ **Priti Ranjan Sahoo**

Dr. Priti Ranjan Sahoo is Associate Professor,
KIIT School of Management, KIIT University (Institution of Eminence), Bhubaneswar, India.
E-mail: prsahoo@ksom.ac.in, Telephone: +91 9178808500

² **Smrutirekha**

Ms. Smrutirekha is a Research Scholar, KIIT School of Management,
KIIT University (Institution of Eminence), Bhubaneswar, India.
E-mail: smrutirekha195@gmail.com

³ **Jagat Krushna Mangaraj**

Dr. Jagat Krushna Mangaraj is the Principal, Institute of Hotel Management, Ahmedabad, India, E-mail: principal@ihmahmedabad.com

such as Amazon, which started selling books initially. From the idea of retail e-commerce came retail food delivery, which acts as a medium of home delivery for the restaurant.

The food industry was gaining its stand in the global market and India since 2009 but initially, having food at a restaurant was a charm for food lovers. The restaurant started the takeaway process, and even they started delivering the food over phone calls, which earned them huge revenue. Companies like Pizza Hut and Dominos began to deliver the food at their doorstep, which gained the market share for the company.

The current Global scenario of online food delivery app is on the rise, and competition is also increasing among companies like Zomato, Uber Eats, Grub Hub, Deliveroo. Due to their marketing mix strategy, they differentiated them from the competitors and gained the market share. Every food delivery company is trying to innovate and implement new ideas to capture more customers and increase their customer base and revenue. Logistic services are critical factors that have earned the enormous eyes of the companies they are trying to improve. Soon, the Global food delivery sector will touch \$200 Billion marks, which will change the market scenario.

India is the 4th largest economy in the world, and MNCs are trying to invest in India. Companies like Swiggy, Zomato, Food Panda have gained popularity in India and are the market leaders in this sector. India is a developing nation so is the food sector, so the companies are trying to enter into the cloud kitchen model, which will help them earn more revenue with low investment.

2 Literature Review

2.1 Online Food Delivery Aggregators

Swiggy

Due to the logistic of the operations, Swiggy was a massive hit in its segment with an active partner of 1.25 lakhs and 30,000 restaurants partners. Swiggy's main work was to control the value chain of the customer's experience. Due to its strong logistics, it guided its team with proper substances and proper channelization of the work and the delivery of the food items. Swiggy's primary promotion strategy was through social media handles, which grabbed a lot of attention from brand positioning, gaining the customers' trust, and having the highest number of social media followers beating its competitors and social media influencers. "No minimum order policy" & "30 minutes' delivery" grabbed the eye of the customers, which took the market by storm, and Swiggy popularly gained its trust in the market.

Zomato

Zomato gained its value/position as an authentic review of the restaurants and food hub places. Zomato is used to find the restaurant, search, discover, and deliver business. It wanted to create a world where food consumption and taste patterns are detailed and shared wisely with the suppliers.

Zomato's main target groups are the 18-35 years' working people or students who don't want to go outside and eat rather than sit at home. Zomato uses a demographic segmentation strategy to target the groups. Zomato mainly earns primarily through referrals and Z coins, and the Zomato gold premium membership. Zomato is very efficient in delivery time predictions, logistics optimization, and delivery supply prioritization.

Uber eats

Word of mouth marketing has been essential for hyper-local strategy which is followed by Uber Eats. Sponsoring events, first-time trials, and referral bonuses at the starting drew customer attention for both the drivers and the customers. Uber Eats develop operational roles and marketing roles to have an interface with restaurants and grow business.

Food Panda

Food Panda tries to make a hassle-free and simple method of ordering food. Food Panda has direct contact with restaurants and customers with its app and its user-friendly App usage. Food Panda confirms the order and estimated delivery time by sending an SMS. Food Panda has a review section where consumers can comment on several features like delivery, sales process, overall impression, and taste. Its distribution network includes more than two thousand partners like Mast Kalandar, Baskin Robins, Nirula's, Subways, and Pizza Hut, increasing its market demand.

2.2 Online Cloud Kitchen Aggregators

Cloud kitchen is also known as "Dark Kitchen," "Ghost Kitchen," "Virtual Kitchen." Cloud Kitchen means a restaurant you cannot go to, but you can get food from there. The outlet or kitchen can be opened anywhere and the organization can start selling food from there. It concentrates on off-premises serving the food to the customer through delivering the food to places. One has to pay for the chef who would make the food and not even the staff serving the meal in a dine-in restaurant.

The Cloud kitchen business model is one of the most trending models in the business world. Many biggies are trying to enter into this business which will create a new segment for the well-established companies. Even in this pandemic, the food sector has suffered loss, but due to the cloud kitchen business, they could recover their losses by making it available. Strategies may differ from company to company, but they almost use the same commonalities to establish a working business but differentiation matter a lot to keep them ahead of others, which will increase their revenue and brand awareness in the market.

The physical presence may be befitted for someone like 5-star hotels because they invest a lot in ambiance and try to make it implicit so that a customer will pay more for enjoying the moment. Still, in cloud kitchen, they don't have any personal touch to build customer relations; they have a limited audience as only tech-savvy customers reach

out for ordering food. They have a little brand presence as compared to traditional outlets. Overall, if you see, they have easy expansion over others as it requires low operational cost and investment cost. The ordering process is very streamlined as compared to other methods. These are also now referred to as "Digital Restaurant Brands." Now every sector in the food industry, especially Health Brands, is also entering into the business to increase their availability in different places and locations to reach out to more customers. Examples of Cloud Kitchen Brands are Faasos, Behrose, Oven story, Fresh Menu, HolaChef, Box8, etc.

3 Methodology

This study has been conducted basing the available secondary data. Secondary data has been drawn and explored from various sectors to show the positioning and the market strategy used by the companies. Literature review has been conducted considering Indian food aggregators and their present scenario. This research paper shares knowledge about the food delivery companies, their positioning strategies, their implementation ways, their segment group, target group and even the marketing mix strategy and the secondary data sources used were from the company's official website, published documents, reports released by market research agencies and thesis papers. The research also contains the details collected over video interviews of technology giants and the investors who have invested and what led them to invest in a new idea.

4 Findings and Discussion

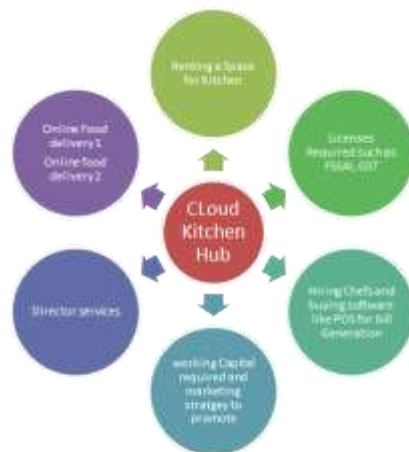


Fig. 1. Cloud Kitchen Model

- There are multiple source of order taking therefore there should a point of sale in cloud kitchen services so that the order is not mixed up and the right order goes to the right counter

- Different chefs are hired for different cuisines so that order does not get mixed up and it help them to maintain the order and the right cuisines goes to right person
- Different staff are setup for such as order taking person, diverting the order to the correct counter, for packaging, for delivering and for sanitation
- If you have multiple brand under your cloud kitchen, then either u can hire one chef who can handle multiple order that comes through different brand or else you can hire multiple chefs for designated brands
- If you don't have delivery partners, then you can also hire multiple delivery boys for the services
- Managing the supplies is one of the toughest job to do. The supplies must reach in time or else the cloud kitchen will suffer loss. Supplies should be ordered in bulk or else if you order a certain small amount they the supplies would cost you more so managing these stuff is much more important to keep the coordination intact
- Proper inventory is stored or backed so that on the ease the requirement of multiple brand under the banner. So POS (point of sale) helps in managing all these stuffs

4.1 Marketing Strategy and use of Technology

Cloud kitchen companies are trying to make their way into the food business with a huge competition. Market strategies are made on the basis of the scenario or trend of the market and on the consumer behaviour. Taking the present scenario of the market, its evolving and increasing but the main things to focus is on the what makes their product differentiated from others so that they can grab the attention of the customer. Indian market is a huge base where the external companies or the global leader are trying to enter but before that they need to study Indian Market because in Indian Market customer required good quality of food in cheap price which makes difficult for the companies to fulfil the requirement but there is also different sector which happens to understand the Indian market like Swiggy and zomato where they were able to control the market by understanding the customer requirement. Understanding the consumer behaviour is one of the foremost strategy for the companies so that they can place the product and make modification according to the customer and market.

4.2 Modern Marketing of Cloud Kitchen

Segmentation means dividing the market on the basis of characteristics, needs and behaviour. Basically they are for segment marketing in which they are providing the facilities same for all customers even they are providing foods and cuisines according to the needs and choice of customer so that whenever they crave for any cuisine they need the app makes it available for the customer. Now-a-days segmentation can be demanding as per the need and want of customer. Segmentation can be geographic and demographic, Psychological and behavioural criteria also. Segmentation can be simultaneously used in multiple criteria to know about customer. Such as Swiggy and Zomato they use both demographic and geographic criteria to understand the which Income level group or gender is ordering from which area and what should be the price and definition should be use so that he/she can reorder next time. Segmentation also helps

in differentiating the company from competitors such as swiggy Faasos they use promotion coupons for different cities to grab the attention. They try to segment in such way that it can be measurable, accessible, profitable, differentiable and actionable. Segmentation needs to be aligned with the corporate strategy.

Second important point of modern marketing in who is your target audience. Targeting is one of the foremost important or one of the standing pillar for the marketing strategy. Understanding the target audience and making available the food makes them loyal customer and happy customer. Such as Fresh Menu is targeting the people of age group 18-34, who are willing to stay at home and wants their food delivered to their doorstep. If the target concentration is correct it helps in positioning the brand in the market. Finding the target audience also helps in segmenting and providing them with the best foods nearby. Faasos and Box 8 have their own delivery services but they have their outlet in preferred location so that they target customers of that area and increase their customer base so that they will help company get more customers through word of mouth promotion.

Positioning is the process through which we design the company offering to attend to a segment where a pool of seconds with valid proposition. Position means clarify the brands what it offers and they try to understand the customer. Online food delivery companies they try to position in such a way that whenever any customer wants to order any food the 1st brand that comes to the mind should be their brand so they are to present their brand in such a way either by using quotes or through social media platform basically they use marketing mix strategy to position their brand and segmentation and targeting helps them simultaneously.

Table 1. Presence and Promotional Activities on Social Media Handle

Cloud Kitchen Companies	Twitter	Facebook	Instagram	YouTube	LinkedIn
Deliverect	Yes	Yes	Yes	Yes	Yes
Door Dash	Yes	Yes	Yes		
Rebel Foods					Yes
Deliveroo	Yes	Yes	Yes		
Kitchen Popular					
Rebel Foods India	Yes	Yes	Yes		
Box8	Yes	Yes			
Inner Chef	Yes	Yes	Yes		
Fresh Menu	Yes	Yes	Yes		

4.3 Future of Cloud Kitchen and New Trends

Cloud kitchen is itself in a developing phase. Still, it has been caught in the eye of big players such as Swiggy, Zomato, Food Panda, who are the market leader in India are also trying to enter into the cloud kitchen business model, which will not only increase competition but will also increase the valuation of food business in India.

Bring multination companies such OYO and Future Groups also eyeing to enter into this business to enter into the food business and increase their segment.

The food business is also inching towards profitable business and delivery system/logistic system also needs improvement so drone delivery system is being introduced and many companies like Faasos and Swiggy are acquiring drone delivery companies for their faster delivery services.

Even a small business owner can step into cloud kitchen and expand their business to locals. The hiring of local drivers will increase. Cloud kitchen is helping in diversifying the business for the companies which will initial stage may not be profitable, but in the future, it will add valuation to the Indian economy.

Increase of promotion in social media which will garnish the platform and brand awareness which increases the marketing strategy and new development will come such as Loyalty features for the customer which will give customers free delivery and promotional coupons and discount.

4.4 SWOT Analysis of Online Food Delivery Business

Strength

- Having experienced staff and a robust delivery system which will increase in the efficiency in working as well as in delivering the food
- Well Recognized Brand and brand value increase the presence and the 1st preference for any customer by recognizing the brand.
- Lower prices as per competitive pricing strategy will give an upper hand over others.
- Serving fresh foods for the customers and earning the trust of customers on which they will indirectly refer the app for ordering food online
- Availability of choices in the menu gives the customer insight into options and may provide a competitive advantage

Weakness

- Availability of limited capital holds the hand of the company. Still, to increase their brand awareness, they need money to invest in advertisements, billboards, ads, and even social media to reach more customers.
- Ingredients required for food are increasing day by day but selling the food at the same old price becomes tough for the companies, which becomes difficult to attract a price-conscious market.
- Lack of trust among the customers about the sanitation, ingredients they are using, and on the services as compared to a dine-in branded restaurant
- Many part-timers do delivery rider services that are not permanent, which affects the company when they leave this job and go-ahead for the better opportunity that affects its logistics.

Opportunities

- Some companies have their proper outlets for pickups to reduce the trust issues, such as Faasos and Fresh Menu.

- Inclusion of drinks and bar menu services with food may earn more customers and increase their sales.
- Expansion into other cities and places so that they can create a more significant customer base and increase their valuation
- They can even improve customer services such clearing the customer problems, providing proper solutions, increasing the logistic and improving logistic services.
- Seeing the present scenario, online food delivery services have gained the market rather than the restaurant and must hold the market by differentiating among competitors

Threats

- Competitive pricing may affect the companies when the competitors reduce the price.
- Not many companies can have their outlet due to funding issues
- Trust issues of customers can led-down the company as reviews matter a lot in online business
- Delivery of contaminated food may also risk the companies brand value
- Due to the economic slowdown, people may order fewer over apps which may affect the company's business and revenue
- The online takeaway and food delivery service market is comprised of many competitors. It has become challenging for online companies to differentiate their products and offer low prices in a competitive environment

Table 2. List of Indian Origin Cloud Kitchen Companies

Global operating companies	Financial investing ventures	Market share	Growth forecast
FAASOS, BEHROZ, OVEN STORY (REBEL FOODS)	\$125 MILLION funding raised from Lightbox Ventures II, Lightbox Expansion Fund, Sequoia Capital India, ru-Net South Asia, and RB Investments	Market leader in India with a market share of 70% (oven story)	Planning for outlets in different locations to increase their market presence and revenue Drone delivery services
BOX 8	\$ 27 MILLION funding raised from ewtp Ecosystem Fund, IIFL Seed Ventures Fund, Mayfield	One of the most preferred site to order meal and has been on high demand on Delhi, Mumbai, Chennai etc.	Planning for expanding in different location and increasing its customer base.

	Ventures, Indian Angel Network	Market is growing in a vast way	Creating shared kitchen bases with different restaurants
INNERCHEF	\$16.5 MILLION FUNDED BY Mohan Das Pai's Saha Fund, and M&A Partners, Taizo Son's Mistletoe Inc. And Das Capital	There has been slow down in market growth of Inner Chef from 24.81 to 25.7 %	They are raising capital so that they can have more kitchens in different locations and are preferring the locations which are not yet explored
FRESH MENU	\$ 6.5 MILLION RAISED FUND	They are one in their class and their market share is just after rebel foods and they are one of the most developing cloud kitchen services in India and their growth percentage is more than 28% annually	They are planning for more outlets in different cities as already they outlets which help them either deliver the food or pick up services are available which makes them unique One of the growing companies so OYO is planning to invest in inner chef and may acquire it which will increase the market share of inner chef by 50%

5 Conclusion

India is the land of spices, and after Bollywood, food is the second best thing anyone prefers. India has been one of the most preferred countries where investment over food has never been a loss-making sector for any company. Today, Millennials are either food freaks by eating at different restaurants or ordering food over food delivery apps from their favorite restaurants. In the present scenario, food delivery companies are one of the significant growth sectors in the world.

Many ventures are ready to invest in start-ups that are exceptions in the market and have shown growing status and can earn huge revenues in the future. Investors from India and outside, such as Canadian Ventures, Tencent Ventures, Ali Baba, Info Edge,

etc., have invested a lot of money in the food delivery start-ups in India. Due to these investment firms, our economy has also grown up and has shown signs of growing.

Food delivery services are right now on its peak time where the companies either try to bring down more and famous, small restaurants in the app to increase the variety of options for the customers and trying to improve the interface of the app to make hassle-free usage for the customer. Swiggy and Zomato are now on the top of the game, trying to increase their business and revenues into the cloud kitchen model.

The more they reach, the more the gain has pulled in the competitors to get the maximum customer and provide them the food they are craving. The more the presence and services provided to customers in different cities earn them more revenues and customers. Targeting geographic places helps them target the customers and helps them get to know the demand and helps in forecasting the scenario, and helps them plan strategies for the future.

The promotion has been one of the most essential and valuable tools to promote their app and brand awareness. Social media is one of the best ways to promote the app and create awareness about the product you are offering that helps solve the consumer's problems and satisfy the customer's needs. Loyalty programs run for the customer help customers get some benefits for ordering food from certain apps such as Zomato gold and Uber VIP.

Seeing the scenario, many companies use competitive pricing strategies to compete with the competitors and sustain the market. Pricing is one of the significant factors that can divert customer minds from switching one app to another, so pricing needs to do according to geographic locations and with restaurant tie-ups.

Many organizations have made a significant tie-up with many restaurants and grant them benefits such as reducing commission charges concerning competitors to gain the trust of suppliers and restaurants so that they can change the prices according to the time and scenario.

Due to Food delivery companies, many jobs have been created, including the delivery guys who have been earning a certain amount to run their families. Many companies have more than 30,000 delivery guys who make their logistic services fast and help them achieve their target by delivering the food in time which is the prime factor for any company. Having the best logistic services has quickly gained the market, such as Swiggy, Dunzo, Zomato, Deliveroo, etc.

Overall the food delivery companies have been implementing many strategies to increase their customer, revenues, and hold over the market. Strategies can be either to the Technology or promotion over social media and its methods, specifying who their target audience is and what innovative technology they are implementing to solve the customer problem and satisfy customer needs.

Reference:

1. Digital Food Delivery Apps Revolutionizing Food Products Marketing in India N.Thamaraiselvan, G. R. Jayadevan, K. S. Chandrasekar
2. Food delivery apps in India: wherein lies the success strategy? N. Meenakshi and Anamika Sinha

3. <http://www.fnbnews.com/Top-News/cloud-kitchens-and-profitability-in-the-online-food-delivery-platform-53456>
4. <https://slickpos.com/article/research/cloud-kitchen-all-you-need-to-know/>
5. <https://www.quora.com/What-is-the-concept-of-cloud-kitchen#:~:text=A%20cloud%20kitchen%20is%20primarily,food%20to%20the%20customers%20doorstep.>
6. <https://www.nrn.com/operations/what-s-difference-between-ghost-kitchen-and-virtual-restaurant>
7. https://medium.com/@hunaidas_13465/cloud-kitchen-a-historical-view-and-a-case-study-from-an-operations-perspective-4ea48ac516f7
8. <https://www.managementstudyguide.com/cloud-kitchen.htm>
9. <https://www.slideshare.net/RanvijaySingh39/the-cloud-kitchen-market-opportunity-report-2019>
10. <https://marker.medium.com/how-dominos-won-the-pandemic-e5f0929cb5dd>
11. https://www.youtube.com/watch?v=Fc5nf-Vo_yg
12. <https://www.youtube.com/watch?v=LPAURyyr0DE>
13. https://www.youtube.com/watch?v=Fc5nf-Vo_yg



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INSTITUTE OF HOTEL MANAGEMENT AHMEDABAD

**Between Koba Circle & Infocity Road.,
Bhaijipura Patia, P.O. Koba.**

Gandhinagar – 382426. Gujarat. India.

+ Mob: + 91-9428 01 6272

+ Tel: + 91-79-232 76 657

Mail: info@ihmahmedabad.com