ICT FOR ORGANIZATIONAL EFFECTIVENESS

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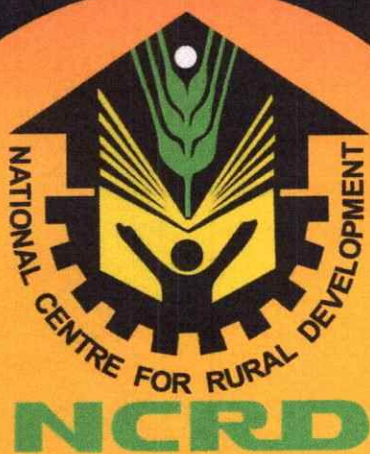
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Use of ICT in Hotel industry

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Abstract
Technology is playing an important role for the growth of hospitality industry. The impact of ICT (Information and Communication Technology) on hotel operations has been widely known as one of the major changes in the last decade. It has given new ways of communicating with guests. Moreover improving productivity is the main role of information technology (IT) in the hotel industry. This research paper focuses on relationship of ICT and operational productivity and its impact on hotel performance. Findings indicate that hotels have witnessed implementation of ICT has significant positive relationship with hotel performance, operational productivity and guest satisfaction.

Key words: Information and Communication· Technology, Hospitality industry, Hotel performance, Productivity.

Introduction

Hotel industry being a service sector is characterized by personalized services provided to the customers. In order to make the guest stay pleasant, every component of services offered to the guest from his reservation, registration, period of stay, departure and post departure needs to be handled smoothly. Technology, specifically Information and Communication Technology (ICT) has been playing an important role in improvised services offered to the guest leading to guest satisfaction, resulting in repeat business to hotels. By using appropriate ICT applications, service providers are able to go beyond the practices they followed in earlier years. In a hotel, the use of technologies can help save important time, thus reducing cost and at the same time permitting the transportation and distribution of information, as a result significantly adding to the competitive advantage of the company {3}.

ICT has been rapidly changed or enhanced from time to time and many hotels invest a lot of money to ensure that they have the latest technology {2}. The purpose of this research paper is to focus on use of technology within hotels and its vital uses.

Methodology

For this research the researchers have concentrated on three star, four star and five star properties across India. In India there are many Indian and International chain of hotels having various brands in different categories of hotels. Hotels of a particular brand in same segment such as business, budget, boutique etc follow same basic structure of business processes. The sample we have selected for the purpose of research represents such segments. The sample includes business hotels, resorts, luxury hotels and budget hotels. The Leela, The Orchid, Taj hotels, Lemon Tree, Azaya Beach Resort, Hyatt Regency are some of the examples which represents different categories of hotels that will help research to be more comprehensive with diverse market segment.

The questionnaire formulated that highlighted the level of use of ICT in hotels, various areas where ICT is made use of, its role in day to day operations, its effectiveness and its impact on increase in market share. At the same time researchers attempt to find out there is any loss in personal touch in the services offered to guest due to the use of ICT. It is likely to become more mechanic than personal as personalized service is the core of hospitality industry. Researchers also tried to find the future of hospitality sector due to advancement in ICT.

Literature Review

Information and Communication Technology (ICT) is defined the use of digital tools for business function and processes {9}. tourism literature has highlighted that information communication technologies (ICTS) result in great productivity, decreased costs, increased revenues and improve business operations and customer service {1}

Information and communication technology has played important and dominant role in every part of life. Similarly it has profound impact on the hotel industry in the services offered hotels to their customers. Technology has a great impact on the hospitality industry in recent years, and this will continue to increase the uses of computers and the growth of information technology in general {12}.

In the past few decades Computer Reservation System (CRS) which can be said as beginning of use of technology that started initially, followed by the Global Distribution System (GDS) in the 1980s, and finally the introduction of the internet from the 1990s to date shows the progress of use of ICT in hotel industry in the initial stage. The new and emerging ICT will improve the efficacy and efficiency of these systems. The possibility to use technologies as a driving force in order to augment the efficiency of the services provided to clients of the hotel industry will most probably become the key to succeeding in the particular sector {8}.

Little by little, technology tends to become a critically important permanent competitive advantage for the hospitality industry. In view of the benefits it provides to the industry, the extensive use of technology appears to be inevitable {11}. ICT based facilities provide greater competitive advantage. Intensity of competition has impact on decision of level of adoption of ICT application in business processes.

The hotels are able to develop guest intelligence system that implies seeking, collecting and storing the right data, sharing the data throughout the entire organization and using this data through all levels of the organization to create personalized, unique experiences {13}. If this data is used appropriately, it will help in creating magic experience that guest seek.

Information and Communication Technologies in Hotel Organizations

Technology becomes a main source of sustainable competitive advantage and a strategic weapon, especially in the tourism and hospitality industries, owing to the pivotal role information plays in the description, promotion, distribution, amalgamation and delivery of tourism products. {10}. ICT has considerably changed the role of management in value creation process since it speeds up management procedures and upgrades its efficiency

and thereby its performance.

The new information and communication technology has measurable impact on hotel productivity, employee satisfaction, service quality and innovation. {5} ICT in hotel industry comprises of an essential elements as far as the increase in productivity is concerned and the strengthening of effectiveness, within the scope of satisfying the customers. ICT applications covers numerous functions by use of internet, e-mail, electronic reservation of rooms, registration of guests during check in, allocation of rooms and room rates, delivery of guest services, placing the orders for meals or beverages, and updates on room status. Others include creation of guest history records, guest accounts, and coordination of guest services.

IT can influence, by significantly reducing the relevant time required for rendering services, the level of satisfaction of the visitors and the effectiveness of the particular business, resulting to the increase of competitive advantages that directly related to IT use. {6}. When hotels utilize ICTs and the internet widely for their reservations, it enables both customers and the travel agencies to access accurate information on room availability {4}.

The use of ICT in hospitality industry can be presented as below

- **Before Stay**
  - Reservation Channels
  - Customer Profiling for srvice Customization
- **During Stay**
  - PMS
  - OMS
  - Telephonic and Wireless Intergrations with the Mainstream Softwares
- **Post Stay**
  - Data Analysis
  - Customer Profiling
  - Redefining Target Market
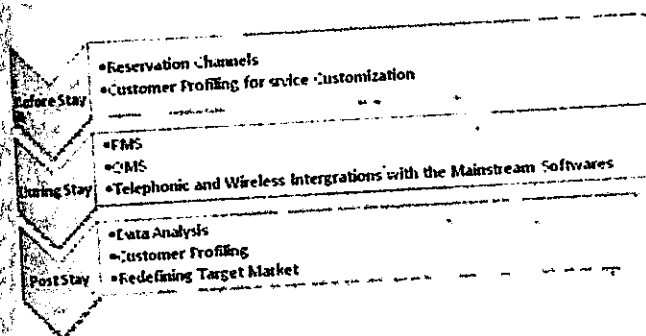
Before Stay-

The uphill task for any organization is to reach their target market. Due to the fickle nature of loyalty and because of a cut throat competition there is always a better offer available for the customers. In this chaos of market cannibalization, choosing the right tool to reach the desired market is of prime importance. ICT is a huge help in this aspect. It provides different channels like OTA's (online Travel Agents) for volume and business sustenance, CRS for nationwide coverage, and Global Distribution Systems for customers across oceans.

These platforms help them to have a dynamic pricing strategy, which changes according to availability of rooms and competition. Using real time information which again is gathered using the ICT tools, and because of the rising demand from mid to upper mid-market segments these tools become more necessary due to the sheer magnitude of business volume and turnovers.

During Stay-

Hotels in order to stand out and provide the best of services, study social media platforms to identify the likes and dislikes of their visiting guest resulting in customer profiling and their services are customized accordingly. The use of Property Management Systems to gather repeat customer's data like birthdays, anniversaries, likes and preferences is a common practice now. The Majority of the processes in hospitality industry are carried out by computers. It involves advertisement, sales of rooms, advance bookings, guest details recording, POS integrated billings, management reporting and many more. That allows

employees to focus solely on guest needs and satisfaction rather than doing barren paper work.

ICT is a collection of applications and software which works as a networking web of data sharing, integration of one sub system to another resulting in faster and more efficient transfer of information e.g. Telephonic integration with PMS enabling housekeeping staff to clear rooms, update room status by using room telephones. This minimizes miscommunication, human error, time of delivery. All these processes also gather huge amount of data from guests and employees, which is later used to create guest history records, room and amenity preferences and thus constantly rediscovering the ever changing market needs. Moreover use of ICT in hospitality benefits the hotel management by providing critical information and helps in making the policies to be adopted in the organization. It saves labor cost, and ultimately increases profits.

The introduction of Operation Management Systems has shown how important guest satisfaction is for hotels, OMS like Vesta and Triton makes sure that guest gets what he needs within specified duration of time, helps engineering department in handling complaints and issues, all of this is recorded, resulting in guest preference items, patterns, departmental performance analysis and focuses the management's attention where it is most needed, facilitating in interdepartmental communication for efficiency and productivity.

Post Stay-

Tourism is an information sensitive sector. The information or data which has been collected in the preceding parts is now analyzed to understand customers' needs and profiles, redefining target markets at the end of each sales cycle. We see the industry evolve in front of our eyes, faster than ever, this equips hotels to change with constantly shifting demands of today's market.

Under Customer Relationship Management, Loyalty program is one such attempt to acquire and sustain market share, increase intimacy with customers thereby increased level of customer satisfaction to retain the business has become possible only because of ICT. The reviews on social media are another perspective of ICT which minimizes the gap between perceived services and actual services. The expectation of customers has increased tenfold and to understand and meet those with a constant eye on "costs" is a challenge that can only be accomplished with real time information that is derived from ICT tools.

The chunk of ICT tools are concentrated on use of technology for marketing and advertizing purposes. From marketing the product on the internet, to reaching and advertising the product by using platforms like social media, e mail, paid media (Google ads, programmatic display). Real time room rate comparison sites like "trivago". In room registration and check ins of guests through portable devices, delivery of guest services using OMS like Triton and Vesta are all the tools which are taking us to self-sustained ecosystem of information system, successfully aligning "People", "Process", "Technology" together.

Findings-

In the research, the synergy of ICT tools are observed to yield revenue, facilitate in efficient operations and furthermore are proved to be a market differentiator working as a marketing tool for hotels. Below indicates the findings based on data collected through questionnaire-

1. Responses received from hotels unanimously agreed that ICT plays a very crucial role in hotel business and revenue generation. Many believe that embracing ICT is a must; it has evolved from being an enabler into a differentiator.

2. Most commonly used ICT tool across all the categories of hotel has been found to be Property Management Systems that incorporates IDS, Opera, and Champaign. It involves the activities from guest room bookings to departure and post departure.

3. The average spending for growth and maintenances of ICT tools was found to be between 5-10 per cent of the total budget amongst all categories, whereas the highest 20% was observed in business hotels.

4. With the use of ICT tools, 66% hotels saw up to 20% increase in revenue, and the rest registered 10% increase.

5. The hotels in the category of business and budget have been observed to be benefited the most from ICT. Hotels in these categories have seen more than 40% increases in revenue compared to 10-20% increase in Luxury hotels and Resorts.

6. Most of the hotels disagree that the use of ICT tool has some impact on loss of personal touch to the services offered to the guests.

7. When the opinion was sought about future of ICT for hotel industry they responded in acceptance and promising bright future. Furthermore they agreed that it makes the process paperless and on the finger tips. Also according to them digitalization will provide channels for fast and easy alternatives to conventional process. They added that ICT presents opportunity to grow further, and will surely make the difference in the hotel industry.

Conclusion

Many organizations have gradually increased their investment in information technology for planning in order to boost the efficiency of their business processes, support management decision-making, and improve productivity {7}.

The hotels in all categories are adopting ICT tools to remain in competition and provide best possible services to their customers. Advancement in Information and Communication Technology is being incorporated in the hotels. It is influencing operational productivity and guest service delivery. Gradual technological advancements are also empowering greater connectivity, speed, transparency and information sharing.

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