CHAPTER - III
REVIEW OF LITERATURE AND RESEARCH DESIGN

This chapter is endowed to focus on theoretical and conceptual background of Property Management Practices appeared in the tourism and hospitality literature which is the result of previous researches carried out in the past. Further, the chapter discusses the need of present study derived from the past literature and develops research methodology to achieve objectives and to test hypotheses.

3.1 Introduction

During past few years, hotel industry has come up as world’s fastest growing industry. Hotel industry is indirectly related to the tourism industry and thus its growth is influenced by the growth of tourism industry in India. Opportunities have increased for business organizations and the developing economy in India has proved as a boom for hotel industry in India. Budget and low cost airlines and their associated price wars have provided a whole lot of options to domestic tourists. Recently launched campaign ‘Atithi Devo Bhavah’ and ‘Incredible India’ destination campaign have increased the probability of growth in domestic as well as international tourist inflow and consequently the hotel industry. India is currently ranked 12th in the Asia Pacific region and 68th overall in the list of the world's attractive destinations, according to the Travel and Tourism Competitiveness Report 2011 by the World Economic Forum (WEF). Hotel industry in India is also benefited by the several steps taken by government to boost travel and tourism in recent years. These steps include 8 % reduction in excise duty on aviation turbine fuel, 15 % abolishment of the inland air travel tax and removal of several restrictions on outbound chartered flights, which also include those relating to size and frequency of aircraft. Recently, government has decided to treat the convention centres as a part of core infrastructure, which allows them to give critical funding for the large capital investment that is also required for hotel rooms.
The hospitality industry consists of wide areas in the service industry that includes lodging, restaurants, event planning, conferences, theme parks, transportation, hospitals, cruise line, and different areas related to the tourism industry. The hospitality industry is a several billion dollar industry that majorly depends on the availability of time and disposable income of the guest. A hospitality unit such as a hotel, motel, resort, restaurant, theme park or even an amusement park consists of multiple groups such as front desk operations, direct operations (servers, housekeepers, porters, kitchen workers, bartenders, etc.), management, marketing, and human resources (back end operations). The hospitality industry covers a wide range of organizations offering accommodation, food service other services to the travellers. The industry is divided into different areas as per the skill-sets required for the work involved. Sectors include accommodation, food and beverage, business centre, adventure, entertainment and recreation, currency change, and visitor information. Property Management System majorly contributes in enhancing the revenues of the hotel in all operations these days and also providing excellent services to the guests.

Recently property management system has come up as an important aspect in the international hospitality industry. In fact, property management systems have generated huge revenue and employment opportunities in developed counties and India is no exception in this context. Thus, it has become pivotal for the service providers to understand customer expectations and perceptions as well as the factors that influence their evaluation and satisfaction with the provided service and while them select the appropriate property management system. The enormous changes have been noticed during the recent years in service operations in terms of information technology, computer applications, reduced paper work and from pre arrival to departure activities every thing is covered by information technology, of this use of property management practices adopted have dramatically changed the functioning of the hotel operations worldwide and India is no exception to this. Today, the nature of hotel industry has changed entirely to cope with the diversity of changes in requirements of guests such as reservation from mobile, internet and check in from mobiles.
Over the years PMS has become an important tool for improving productivity, efficiency and profitability of hotel operation. During the recent past many researchers have been focused on property management practices and its effect on hotels performance thus, this chapter is devoted to present a synergic view of literature in the field of property management practices and their effects on performance in hotel industry in particular.

3.2 Review of Literature

The hospitality industry covers all the aspects from provision of accommodation, food, drink and security to the people away from home and these operations have transformed a lot in recent past with the increasing use of property management systems. In simple words, PMS (software’s) is an important component of broader hotel and catering industry now days. Private and public sector establishments that range from small privately owned concerns to large international organizations especially chain hotels like Indian Hotels Ltd, Carlson Hotels, and Starwood Hotels & Resorts and from fast foods to most luxurious hotels catering are included in the hospitality industry. The hotel and catering industry employing 2.4 millions of total workforce in Great Britain and ranks as about third largest employer. In 2007, this industry has crossed the half-trillion dollar sales threshold (Frash et al., 2008). Now a days all the hotels ranging from small hotels, independent hotels or even most luxurious hotels , chain hotels are making use of information technology to provide world class living experience to their guests but also to increase their revenues and performance of the employees.

The first property management system was implemented at the New York Hilton Hotel in 1963 in order to achieve a degree of automation. This system employed computer control of front-desk operations (the system successfully improved operation control, reduced paperwork, and provided better services). According to a research report issued by the American Hotel and Lodging Association (AH&LA), although less than 10% of American hotels employed computerized operations in 1980, 95.3% of these hotels had adopted computer technology by 1994, and as many as 97.2% of all hotels with at least 300 rooms had computerized by that date. The most important concept in the field of hotel software is that of systems integration,
which refers to a hotel system's utilization and linkage. O'Connor suggested that property management system functions should include a record of guests registered at the hotel, confirmation of room type, maintenance and tracking of customer accounts and payments, front-desk tasks, and other tasks such as operating level and management level reports. The most common brand of PMS software used by the hotel sample is opera, Fidelio and Protel, IDS, Host.

An ideal management system should possess a full range of functions, and should be able to handle all transactions from initial telephone queries to final billing. As far as detailed system functions are concerned, Kasavana and Cahill (2003) defined a property management system's main transaction processing functions should include the following basic items shown in Table 1.

**Figure 6**

**Basic property management system functions.**

<table>
<thead>
<tr>
<th>Front Desk Service Systems</th>
<th>Reservations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Room management</td>
</tr>
<tr>
<td></td>
<td>Guest accounting</td>
</tr>
<tr>
<td>Back office operation systems</td>
<td>Accounts receivable</td>
</tr>
<tr>
<td></td>
<td>Accounts payable</td>
</tr>
<tr>
<td></td>
<td>Payroll accounting</td>
</tr>
<tr>
<td></td>
<td>Inventory</td>
</tr>
<tr>
<td></td>
<td>Purchasing</td>
</tr>
<tr>
<td></td>
<td>Financial reporting</td>
</tr>
</tbody>
</table>

Kasavana & Cahill, (2003) were of the opinion that for most hotels the key technology is the Property Management Systems (PMS) which is defined as “a set of application programs that directly relate to the hotel front office and back office activities e.g. revenue management, reservation management, room and rate assignment, check-in & out management, guest accounting, folio management, account settlement and room status management”. The Property Management System (PMS) is the central data infrastructure of the hotel, handling the administration of all of the guests, their profiles and bookings, as well as their stay,
the revenues generated, etc. In recent research (Kokaz & Murphy 2008, 2009) showed that almost all hotels have a property management system however the data used by the PMS is not always “visible” or available for cross functional activities and requires a level of investment in interfaces to fully maximize the benefits of the PMS data and related data sources e.g. Central Reservation System (CRS), and other relevant data sources. Murphy (2007) referred PMS as the single-most important IT application for hotels by researchers and suggests that the PMS is the most important current and future IT application in the hotel industry, followed by ‘point of sale’ (POS) and ‘central reservation systems’ (CRS). Bardi (2009) defines the hotel PMS as a network of various hardware and software applications used to manage an hotel i.e. sales & marketing, night audit, accounting, human resources management, electronic mail, security, reservations, front desk, call accounting, housekeeping, maintenance and food & beverage. Daghfous and Barkhi (2009) observed that windows is the most widely used operating system in four and five star hotels in UAE and Fidelio is the overall preferred PMS system and has highest market share worldwide. The leasing of software (via the web) is not new, albeit only recently a practice adopted by the hotel industry.

The 1990s was the breakthrough decade for hotel in terms of use of information technology in day to day operations, from pre arrival of the guests to food and beverage operations and from inventory control to human resource management. The attitude of hotel owners and operators towards property management systems is one of two extremes; make a serious go of its implications, or limit your operations to meet the minimal needs of your guests and hotel operations. Presently are the days of chain hotels may be luxury hotels or small hotels and concept of independent hotels using paper work instead of property management systems is a mere history.

W. Frawley, et al (1992) stressed that data mining is a largely automated process that uses statistical analyses to sift through massive data sets to detect useful, non-obvious, and previously unknown patterns or data trends. According to M. Levinson, “Harrah’s Knows in 1997 as Harrah’s hotels and casinos introduced a trademarked loyalty-card program, “Total Rewards,” which tracks customers’
purchasing activities and provides rewards that encourage spending at Harrah’s properties. Rather than build glitzy properties with eye-popping attractions, Harrah’s pursued a customer-service oriented strategy centered around data-mining techniques. Harrah’s used an information system called WINet to link all its properties, allowing the firm to collect and share customer Information Company wide. The process effectively changed the corporate culture from an every property-for-itself mentality to a collaborative, customer-focused enterprise. The paper states that in the hotel industry, the most common sources of data are CRSs and PMSs. Some hotel corporations also use information that resides in guest-loyalty-program databases. Hilton, for instance, analyzes data contained within its trademarked Hilton HHonors database.

Poon (1993) revealed some of the major challenges facing tourism industry and outlines the nexus between tourism and ICT. He traces the rapid shift-taking place between ‘traditional tourism sector’ and ‘new tourism industry’. Technology has a strategic role in reshaping the value chain in the industry and in the process, consumers are gradually adapting to the new values, lifestyles and new tourism products, which has re-engineered by the new technologies.

Kasavana and Cahill (1997) thus strongly demanded the use of computers to achieve the goal of incorporating information into the hospitality strategic planning process. However, computers tend to merely be used to duplicate the existing paper system. A computer can become part of the strategic planning process of a hospitality organization only when hotel managers make full use of it. The study shows that international hotel industry has been, and will be, facing a technology-based revolution. High profile and “high-tech” services have become a requirement for demanding and sophisticated hotel guests. A new challenge for hotel managers in the 21st century is how to integrate the new, complex and varied services and IT systems into their existing business operations.

Watkins (1995) stated that IT starts and ends with customers in a hotel. The investment in IT thus benefits the hotel if it enables customers to have a better experience and the hotel staff to work more efficiently to better assist customers. Davis and Davidson (1991) stressed that with IT reshaping the basic structure of the
industry and society, in addition to consumers’ need for more accurate and timely information, the pace of technology diffusion in hotels will increase at an unprecedented rate. Frew (2000) further suggested that technology will bring about a major revolution in the hospitality industry. The study shows during the period from 1992 to 2001, Hong Kong had been able to attain an average hotel occupancy rate of over 80 per cent; whereas the corresponding figure for worldwide hotels was less than 70 per cent (HKTB, 2002). To efficiently manage the several hundred rooms in each hotel at an international standard of service, hotel managers need updated management know-how and the latest IT systems. Borsenik (1993) evaluated that, most hotel decision makers did not receive training in IT; for this reason, their technical knowledge is fairly limited.

Law & Joganantam (2005) evaluated that, while the technology adoption had increased since 1997. Further, they noticed that this could be due to “a lack of enthusiasm on the part of senior hotel decision makers in utilizing IT”.

However, hotels daily operations are and will be heavily dependent on economic factors. On the supply side, look for an increase in the percentage of limited-service hotels (budget hotels) being built, as lenders are becoming more conservative and limiting the amount of capital available for hotel development. However, on the demand side, a hopeful healthy and developing economy should continue to support the demand for upgraded property management practices at the nation’s full-service properties. Owners and operators need to evaluate the role that property management system (PMS being used) will have in the overall strategic positioning and daily operations of their property. If a advanced computerized reservation system (eg GDS) is not needed to get the reservations from the types of travellers that you are targeting, then there is no need to add such a potential and expensive feature in the property management system to be used. On the other hand, those who opt for full-service property management systems (used for all the operational and non-operation departments) now have the opportunity to run hotel operations that not only enhance rooms revenues, but contribute significant profits on their own, and also increase employees performance.
Sokol, (1995). Analyzed that in the hotel industry, there are three types of conditions that are definitely appropriate for conversion to an EDI system. These conditions are: a people intensive business environment; conditions that require rapid information processing and speedy delivery of goods; and paper-intensive business processes. Emmelhainz, (1993) Found that often in hotels, people are used as “paper pushers,” performing somewhat rote tasks such as handling, reading, validating, and correcting information on paper documents. By eliminating paper documents while providing access to the same information from computer-readable and process file, a hotel positions itself to automate paper-pushing tasks. EDI can help hotels move people out of the paper loop and into the information loop in a user-friendly and productive way.

The study shows there are three major reasons why EDI is important to the hotel industry. First, EDI can eliminate time delays associated with the mailing and processing of data common to traditional paper-based systems. Data is keyed manually 22 times in a paper-based system, while using an EDI system data is manually keyed only three 3 times. Tobey, (1995) stated that EDI can reduce the average paper-based system of procurement cycle from 6 to 3 days. Second, EDI can produce significant cost savings. A survey of 1,500 EDI users found that companies can save between $1.60 and $5.20 per document processed. Sokol, (1995) analyzed EDI creates an opportunity to increase the quality of information and service provided, while at the same time improving productivity).

Law & Au, (1998) suggested that PM Practices were still primarily limited to operational and administrative areas. Senior managers were not utilising the information held in the information systems in their strategic planning and decision making.

Namasivayam, et al, (2000) determined whether the hotel industry of Auckland really looks in to the use of ICT which is in this study to identify how Information and Communication Technology (ICT) affects business processes and service delivery within hotels. Further they stated technology in isolation, as part of a single function of a business or focused on the technology itself rather than how it fits into a business. Thus, the study tried to find the use of information and communication
technology in the hotels units of Auckland; and their impact level by finding the extent to which the systems are used. The study also finds that Training new staff was a point of particular concern, where learning the system could take precedence over guest service. This could be addressed by extended use of simulation and role play training along with active mentoring of new staff once they are on the front line. While the technology itself can provide some solutions to the problems caused by the dual role of ICT, (for example by allowing guests to do some of the data collection for hotels by making their own booking online), care must be taken to ensure systems are appropriately designed to allow the separation of the tasks. Krazmien & Berger, (1997) opined while initial training provides the basic skills, continuing guidance and feedback are required to develop an employee’s skills to their full potential. The study shows that the technology itself can provide some solutions to the problems caused by the dual role of ICT, (for example by allowing guests to do some of the data collection for hotels by making their own booking online), care must be taken to ensure systems are appropriately designed to allow the separation of the tasks.

Buhalis (1998) attributes this trend to both the rapid advances in technology as well as increasing demand of customers who look forward to flexible, accessible and interactive inputs.

Cline, et al (1999) stated that the strategic use of technology in marketing is one of the most significant opportunities the hospitality industry has at this moment. Even where an information and management system is implemented, very few hotel organizations have a formal customer-oriented e-business strategy. Most of them focus actions and research primarily on transaction-centric solutions, to improve the efficiency of internal operations and administrative Procedures property management systems (PMS), the core being the delivery of the guest folio. The system, based on a data warehouse with an accessible and user-friendly interface, will integrate different operational systems and databases (PMS, Central Reservation System, etc.) and will be able to store multiple profiles for the same customer, depending on his/her behavior and nature of travel. This study proposes a reference model to analyze and profile hotel guests, describing the methodology followed to
define the guest information matrix (GIM) on which the user interface and the CIS database will be built. Furthermore, service industry is perhaps the most challenging industry what comes to use of ICT and e-Business systems. Some services can be fully automated and transfers to e-Business environment, while others are impossible to automate because of their nature. Catering industry is one of the slow-movers. Companies in catering industry, especially small and medium sized companies, are only taking first steps to exploit ICT and e-Business systems. This study tried to find out the major difficulties and barriers in use of ICT and e-Business systems in catering industry. We also have outlined some of the ways and presented some systems, how companies in catering industry could benefit from the use of ICT and e-Business systems.

Brooks, (1999) stated that chains of hotels (tier 1 players) generally have in place integration of the Property Management System (PMS) with the corporate Central Reservation System (CRS) and GDS. CRS integration allows for individual properties to benefit from the extensive reach of the chains marketing network and to allow for cross selling amongst properties within the chain. GDS integration allows chain properties to extend their reach beyond that of their chain marketing network. This interoperability of systems is an example of collaboration around IT (known as collaborative commerce), especially the CRS which has been the most commonly used Wide Area Network (WAN) application in hotels. Similarly, Ansel and Dyer (1999) revealed that there are many systems in use and even more are offered by system providers. Most of the systems are about automating back-office functions, including payroll, accounting, and inventory systems. The now familiar POS systems appeared in the early 1980s, transplanted from retail merchandising. They freed employees from having to remember items’ prices, since operations could simply designate a key for menu item. They also allowed easy update of prices, change menu items and track sales data more accurately.

Wagner (1999) stated that one system among many that are crucial to hotel operations is the property management system. “Hotels of varying sizes and segments are relying on a new generation of property management solutions to help them deliver stellar service to guests.” Freed (2008) also stated that, PMS software is
being customized, so front-desk clerks can offer guests a choice of which style of room and what amenities they want in that room at boutique hotels. Mamaghani (2009) stated that as technology is being slowly but surely adopted in Hotels as with the rest of the hospitality industry, there are still some issues with how this technology is being applied to get best results. “The success of a travel or tourism business is largely dependant on how well they make use of the technology that is available and developing.” Murphy (2007) suggested that PMS is often referred to as the single-most important IT application for hotels by researchers and suggests that the PMS is the most important current and future IT application in the hotel industry, followed by ‘point of sale’ (POS) and ‘central reservation systems’ (CRS).

Gilbert & Powell Perry (2000) studied that in past the hotel chains have been quick to capitalize on new technology, the same can be sending of web technology, with the most major chains having presence & booking ability on internet. Connolly and Olson (2000), viewed that Information and Communications Technology is the single greatest force affecting change in the hospitality industry. Buhalis (1998) relates this trend to both the rapid advances in technology as well as the increasing demands of the customers who look forward to flexible, specialized, accessible and interactive products and communication with principals. Wei et al (2001) emphasized that there is significant impact of geographical location on the adoption and use of the Internet among hotels. The study reveals that the competition level among the hotels in a location can also influence the adoption propensity of a hotel. The general occupancy rate in the location is an indicator of the competitive intensity among the hotels in a location. High levels of occupancy rate at a location imply that the competition is low, and the hotels can expect to get their rooms filled with relative ease while low levels of occupancy point towards higher levels of competition to attract customers between the hotels in the location. High levels of competition may prompt the hotels to aggressively use ICT based technologies both for attracting customers as well as to increase the efficiency of its operations. The size of the hotel has an important effect on ICT adoption propensity. Effective adoption of several ICT technologies requires a substantial investment of resources. Lack of resources may affect the inclination of small hotels to adopt costly ICTs and therefore large hotels can be expected to be more inclined to ICTs. The study
considers an issue which has not received much empirical attention – ie. The ICT adoption propensity in the hotel industry.

Westerlund, (2000), stressed on the use of internet information delivery and on-line document printing has provided the backbone for the current stream of e-commerce – as it can overcome many traditional business obstacles and operational barriers by delivering access to global market and providing new leverage with old large powerful suppliers.

Haynes and Fryer, et al. (2000) were concerned with various aspects of human resource management in the hotels. Egan & Nield (2000) Hotel properties in different locations tend to cater to different markets, with clears distinctions between Central Business District (CBD), city fringe and suburban properties.

Keen and Mackintosh (2001) called on use of mobile application in hotels as “the mobilization of knowledge” – when compared to e-commerce, and many statements on an impending m-revolution have, in fact, been triggered by the assumption that mobile services will involve (i) lower barriers and (ii) greater benefits in comparison to both e-commerce and traditional commerce. In view of that, the key question is to find some way to assess the value of mobile applications to prospective users, and to gain an understanding of the factors that may delay the penetration of the mobile Internet on a larger scale. The study revealed that Intelligent software technologies will allow mobile services to be personalized and context-aware to improve travellers’ and tourists’ experiences. Context-aware mobile services will make a difference as the services and contents adapt to both the environment and to personal interests. Thus it is not too unrealistic to believe that a future competitive edge in the travel and tourism industry may be built around innovative uses of new mobile technology and services. As per the study Back in 2001, Open Grid expanded its FastBoo solution to enable Hilton customers to wirelessly (i) find a U.S Hilton®, Conra or Hilton Garden Inn® hotels; (ii) review property description; (iii) display availability and rates; (iv) reserve a room; (v) retrieve/cancel a reservation and (vi) access their Hilton HHonors® loyalty program profile (members only). Similarly, O’Connor, (2001) reviewed statistics quoted in the Horwath Worldwide Hotel Industry Studies, direct reservations fell from approximately 39 percent in 1995 to
just 33 percent in 1999, with the corresponding growth being focused exclusively in electronic channels. The Web has dramatically changed the way people communicate, research information, make decisions and particularly the way in which they buy goods and services. Travel products in particular have proven to be some of the most suitable for sale online. Baker et al, (2001) stressed on the availability of multiple points-of-sale poses some interesting questions. Unlike in the physical world, where a potential customer would have to telephone or visit several suppliers, comparison-shopping on the Web is easy and can be achieved in seconds.

Napier, et al, (2001) revealed that over 400 millions of computers on more than 400,000 networks worldwide today are communicating with each other. Pechlaner and Osti, (2001) opined that in recent years there has been a growing interest in the importance of technological advances and innovation with respect to the growth of an economy. Similarly, the ICT affect the strategic behavior of firms in the tourism sector.

Kasanova & Brooks (2001) found that Interoperable systems already exist in chains, but do not exist amongst independent hotels. Independents appear to resort to subscription to affiliate reservation networks that allow non-chain properties to participate as overflow facilities rather than network amongst themselves. In this way independent hotels are able to maintain their individuality and distinctive methodology. Adams, (2001) stated that many hoteliers are offering free-to-guest services such as High-speed Internet Access (HSIA), premium channels on the TV in order to stay competitive in their market segment. This strategy has led, in some hotels, to an increased occupancy, potentially higher ADR, and in helping satisfy guest needs. Further, Kasanova & Brooks (2001) pointed out that independent hotels appear to resort to subscribe to affiliate reservation networks that allow non chain properties to participate as overflow facilitates rather than network among them.

Holiday Travel, (2001) found that Since November 1997, Travelocity.com first became the exclusive online travel agent for Yahoo and Netscape – both were approached by their global users at the time. Then global expansion started in 1998 when Travelocity.co.uk was launched in London. By April 1999 Travelocity.com.ca opened in Toronto, and in October 2001 Travelocity.co.en Francais was launched in
French. In fact, its performance and the ability of Travelocity to handle its 30 million-member database had leaded its official website earning many special awards including: *Best Commerce Website Webby Award* in 2001 and being selected as one of *PC Magazine’s* Top 100 Web Sites. The study concluded that one key issue for the e-business application in service operations is about the possibility of online delivery of the services customers ordered - as not all types of services (or products) can be delivered online. This paper presents certain recent development of e-business application in the hospitality industry (e.g., travel industry, and recreational entities) with a focus on the online travel booking industry. Two case studies are then used to illustrate the described development - one is about a local hotel industry’s effort, Macon, Georgia, to use the Internet and online booking services to boost its local market. Another describes the operations and its competitive strategy of one of the leading online travel agency - *Travelocity*.

Majority of hotel brands now use multiple simultaneous electronic channels of distribution, making their product available to a relatively wide audience. While the use of voice through a Central Reservation Office has fallen slightly, there has been a growth in the availability of hotel company’s own Website, with practically all of the large brands now making their product available for sale in this manner. In the study five categories of electronic B2C distribution channels were identified from the literature. In addition to the company’s own consumer website, these included Global Distribution System-based sites such as Expedia and Travelocity, Switch company-based sites such as Travel Web and pure Web based sites such WorldRes. As a result, most companies now use multiple routes to the marketplace to service this demand. Approximately four-fifths of the major brands used the GDS based intermediaries Expedia and Travelocity respectively, three quarters used Travel Web and only approximately one third used WorldRes at the time of the study. This study represents the first major attempt to understand Hotel Company’s pricing strategies over electronic routes. Hotel reservations made on five different consumer-focused online travel sites were analyzed to establish if a logical pricing strategy on behalf of the hotel suppliers could be established.
Choi and Kimes (2002) stated booking systems in hotels and presented an overview of some of the internal technology as the following discussion outlines. For each individual hotel, the Property Management System (PMS) is at the centre of both technology and hotel operations. This system is used to manage the room inventory, record guest details and produce billing information. It often interfaces with other systems such as the telephone systems and food and beverage point of sales terminals to allow integrated billing and management reporting.

Brenshnahan, Bryajolfsson & Hitt (2002) showed that ICT productivity benefits happen only when ICT are combined in a cluster of organizational changes like increase use of IT, product (Service Changes).

Sigala (2002) also found that increased use of ICT systems and “informate” exploitation leads to greater pay offs. With in the context of hospitality industry it is also argued that relationship between ICT and value is not direct one, but ICT gives value when they are used to redefine, informationalise product & services and rationalize processes.

Joo, (2002) stated that GDS evolved from computer reservation systems and enable the aggregation of information from airlines which enables travel agents (as information brokers) and tourists to ‘make reservations and order other services in a single marketplace’.

This is further confirmed by Tiedemann et al. (2008) in their sample of 50 Spanish hotels, who state that 3-4 star hotels are less likely to share information than the upscale hotels. Hotel organisations utilise their PMS to carry out operational and administrative tasks while dealing with multiple distribution channels: GDS, CRS and direct. The Internet as a booking medium and source can enter at any of these levels and can potentially cause distortions in pricing and yield management There is a range of ICT provided for guest use, such as phone, fax and voicemail services. This range is growing and expanding but presents problems with integration with internal technology and service support, as well as revenue generation.

Kumar and Zahn (2003) opined that information and communication technologies (ICT) enable new means to provide services for customers. Internet, mobile and
handheld devices, wireless connections, and digital television provide opportunities for developing new service channels.

Adams (2004) stated that another IT system in place is the newly emerging kiosk technology. This technology has also evolved through the times and through several industries has found its way in to the Hotel industry. Hotel check-in kiosks need to be able to not only process the check in or check out but also print a receipt and dispense keys – preferably within a short amount of time. Tim Kearns, Marketing Director for MontegoNet is quoted as saying, “Hotel check-in kiosks are more complex than informational kiosks because they have to tie into a back-end reservation system, accept payment from the guest and dispense a key card.”

Vinod, (2004) stressed on the increasing sophistication of ICT allows for the capturing of additional information to facilitate management of revenue rather than solely per room yield.

Singh and Kasavana (2005) predicted that future IT applications will probably rely on wireless infrastructure, and that online purchasing with cashless payments will become more Common place.

For chain properties, with their greater need for information to allow delivery of their brand promise across properties, there are extra levels of complexity. This need forms a nexus with the training problems meaning that they are more likely to experience problems with staff interacting with the computer rather than guests. The need for consistency can become a barrier to service delivery rather than a guarantee of quality. The dominance of chain properties among those who were positive about using technology raises a number of interesting possibilities. These properties have large IT/EDP departments available, as well as the ability to purchase better support from software suppliers. They are better supported and more able to access resources to allow them to address any problems that do arise.

Law & Jogaratnam (2005) stated that description of ICT used in hotels is very much focused on administrative and operational uses, in part reflecting the views of managers who do not see ICT as part of their strategic tool kit.
Chathoth (2006) emphasized about the critical importance of IT to hotel operations. The PMS is central to everything that goes on in a hotel operation. It has progressed beyond the single process of check-in, reservation, check-out to a multiple-function software that integrates revenue management, links to loyalty programs, manages online distribution channels, “pushes and pulls” rates to third party online travel agents (OTA), performs inventory management and allocates human resources. The study presents the use of property management systems in basic hotel operations and is not only limited to check in and check outs. The bigger the hotel, the more PMS functionalities they have and the higher RevPar they reported. Chain hotels appear to have PMS software with more functionality. The study showed that more than 90% of hotels collect both customer-related and operational data on a real time or daily basis for all functions of Rooms Management. In the F&B Management division, most data is collected regarding the convention/conference and catering function, where more operational data rather than customer-related data is collected and this is done mostly on a real time or daily basis.

Werthner (1999) provides a more detailed and logical understating of the industry’s structure by focusing on the concepts, definitions, consumer behavior, economic aspect, market transactions, etc. Information Technology (hardware & software developments), information management, intelligent applications and system integration etc are examined carefully. Sabado (2005) focused that role of ICT is crucial both in theory, practice and praxis. It must be understood in the context of its application as a part of marketing, customer service, revenue management etc. The study reveals that there has been a paradigm shift in the management of contemporary organizations related to tourism industry as a result of the more established relationships between business and technology. Information and communication tools are indispensable to the tourism industry as the ICT system is being rapidly diffused throughout the industry allowing none of the players to break free from its impacts.

In 2001 international tourism expenditure amounted to US$462 billion. By 2013 it is forecast to reach US$2,279.2 billion (WTTC, 2003). The World Tourism Organization (1999) predicts that the tourism sector will expand by an average of
4.1% a year over the next two decades, surpassing a total of one billion international travelers by the year 2010 and reaching 1.6 billion by the year 2020. As a result, the industry's share of world GDP will rise from 10.5% in 1990 to 11.4% by the end of 2005. Accordingly tourism is increasingly seen as a key driving force for economic development in nations around the world. Buhalis (1998, 2003) found that the increasing use of the Internet and other communication technology is changing the way the industry does business, allowing small operators to access those interested in their product irrespective of location, and allowing firms of all types to reap productivity gains. The study revealed that Small business owners were often intimidated by the ‘hidden costs’ of ICT adoption, such as personal training and upgrading software. They were also wary of time commitments and the problems of relying on external expertise. Even if resources were provided, relatively few SMTE made use of the true potential of the Internet. During investigation it was found that all hotels interviewed in Auckland had property management, payroll, accounts and point of sales systems. Those involved in the conference market also used software in this area. The PMS and POS were regarded as particularly vital. As on manager mentioned “we would struggle to keep the hotel operating without them, we have manual systems running in parallel and manual back ups but to rely on these would be exceedingly difficult”. Many of the PMS in place do have the option to allow direct transfer of the data from the web, but as yet several of the hotels were not ready for this and continue to rely on manual entry. The survey results show that the large hotel sector in New Zealand makes a great deal of use of ICT in terms of everyday operations, telephone call charging, general accounting systems, reservations systems and property management systems are all common place. This paper states that with small and medium sized operators rarely highlighted labour loss due to the introduction of ICT. Productivity and efficiency improvements were often noted but could not often be tied to specific changes in employment. The primary advantage of ICT mentioned in the in depth interviews in this study with Auckland hoteliers is efficiency. There was little doubt that without the current systems in place labour requirements would be higher and less time would be available for guest services. This study has highlighted a number of key issues in the relationship between ICT adoption and labour use/demand in the New Zealand
accommodation sector. The main findings can be summarized as follows:

• In common with other parts of the world, the New Zealand accommodation sector is becoming increasingly reliant on ICT. Large hotels have already invested heavily and are now enhancing and fine-tuning their use of more mature technologies. For small operations the take-off in ICT use has occurred more recently. Future investment in ICT is unlikely to slow.

• The Internet and the use of on-line information by consumers and suppliers is playing a major role in influencing overall accommodation industry performance and organisation. The impact of on-line booking is being felt across all segments of the industry. As the Internet evolves into a single, powerful ‘information highway’ supported by diverse technology applications, there will be many opportunities for more flexible and efficient sales processes, data-warehousing, customized service provision and labour monitoring.

• There are a growing number of policies that are encouraging ICT uptake by small and large accommodation enterprises. A key question must be asked though – to what extent do these policies incorporate dimensions that can cope with the related labour use and demand dimensions?

• There is growing pressure on the labour market with demand for skilled and experienced workers outstripping supply in both urban and rural settings. In many cases, companies are also finding it difficult to find reliable, semi or unskilled workers. The projected growth of tourism and the new skill requirements created by increased ICT adoption, mean that the labour market may struggle to meet industry needs for some time to come.

• For large hotels, the drive to improve efficiency and cut labour through ICT adoption came primarily during the mid-1990s. PMS and other labour saving technologies are now relatively established and ‘bedded-in’. The primary impact of ICT on labour use is now in the area of skills acquisition requirements, multi-tasking needs and enhancements in service provision.

• For smaller operators the impact of ICT on employee productivity/labour reduction has been relatively limited. Most of these operations employ outsiders
to handle more ‘basic’ operations such as bed-making, cleaning and occasional front office work.

- Owners and family members in small operations are often the people who handle more sophisticated activities involving bookings, accounting and the overall operation of properties.

The role of the SME business owner is pivotal in establishing ICT goals, identifying information needs and managing both the financial resources for the ICT investment as well as the implementation phase. It is clear that many of these operators are feeling the growing impact of ICT in their day to day business operations. Many feel that they require increased ICT training and knowledge to be able to keep up with fast moving trends in this area.

For the success of any service organization, quality PMS plays pivotal role. There is a close interaction of customers with several aspects of organizations, as they participate in delivery and consumption of services.

Capterra (2010) evaluated 210 companies providing property management systems and stated that there are many service providers for all types of hotels across the globe. They further observed that there is a huge competition in the hospitality market which offers wide range of PMS features as per requirements of hotel properties. Ham, et al. (2005) found that hotel organizations are benefiting from information technology applications. Kokaz & Murphy (2008,2009) have pointed out that almost all the hotels have a property management system but the data used in PMS is not always available to be used for cross functional activities and requires some investment in this regard in the systems to maximize the benefit of PMS. Thus a property management system is the central data infrastructure of the hotels which handles all the details of the guests, their profiles, bookings the revenues generated etc.

Many scholars stated that e-POS systems can improve customer service, customer satisfaction eg. Through interface with customer databases; enables staff to be more productive ; improves communications and control of activities among employees in service delivery ; reduce and monitor costs and increase revenues Chand & Anand
(2011) said information and technology is the single greatest force affecting change in hospitality industry. The propensity to adopt the systems is reflected in the time taken by an organization before adopting a technology (Rose and et al. (2000)). The propensity of research has also received a lot of attention over the years.


Piccoli, et al. (2001) examined the potential role of ICT in the various stages of customer service delivery without considering overall integration into day to day operations.

O’Connor & Frew (2001) evaluated that while hotels may have cooperated with each other in the past and relied on traditional channels of distribution, the Internet has introduced more intermediaries into the arena, with hotels having their own Web sites, using specialist ISPs to distribute their product, destination management systems (DMS) providing online booking, and various other links and sites. Namasivayan, Enz and Siguaw (2000) pointed out the uptake of technology in U.S. hotels, reanalysing data from 4,250 hotels drawn from a survey conducted on behalf of the American Hotel and Lodging Association, examining facilities in hotels. They divided technology into three categories: efficiency and productivity, guest service delivery and revenue management. They found that, of the hotels in their survey, nearly 70% using technology had adopted four or less of the ten technologies under consideration. The tendency was for adoption of revenue and productivity enhancing technology over all levels of adoption. Milne and Ateljevic (2001) stressed that the expectation of hotels that there will be improvements in service quality from implementing ICT. Lexhagen, Nysveen, & Hem (2005) suggested that Mobile technology can also be used for coordination during large festivals, and an enjoyable and useful mobile coordination service motivates staff usage. Kasavana, March (2005) emphasized on use of self-service technologies in the hotel industry has grown considerably, especially in the areas of self check-in, in-room check-out, and foodservice kiosks . Squires, (2008).
Siguaw, J.A et al. (2000), evaluated that IT systems are expected to prioritize and help improve guest services, increase employee productivity and guest satisfaction enhance revenue generation. (Freed, 2008) found that “The biggest benefit hoteliers reported from a hosted property-management application is the centralization of data.” Also, PMS software is being customized, so front-desk clerks can offer guests a choice of which style of room and what amenities they want in that room at boutique hotels.

Technology plays an important role in hotels’ revenue management activities. (Collins and Cobanoglu,; et al. (2008) stated that the adoption of the information technology (IT) in the hospitality industry started in early 1970s and has been rapidly developing ever since. The study of Rob Law, Catherine Cheung (2006) showed that the hotel websites of Hong Kong, Taiwan and other regions played a good hotel booking functions. Real customers (E-consumers) and potential customers (E-buyers, E-lookers) consistently believed that the hotel website provide effective, accurate and timely updating of the hotel. Information. Lashley & Lee-Ross (2003) found that the main functional use of PMS in a hotel is in Rooms Management, F&B (service and Production) , Human Resource Management and Sales & Marketing

The critical examination of available literature on Property Management Practices revealed that no work has been done to study the Property Management Practices in India. A few studies have been conducted in U.S. / European Countries, but these have overlooked and ignored the impact of Property Management Systems on hotel performance. Therefore the present study has proposed to explore and fill the gap in the area of Property Management Practices.

3.3 SELECTION OF PROBLEM

Above discussion confirmed that Property Management Practices plays very important role to achieve maximum profit and guest satisfaction. It becomes more important where there are more rooms, more food and beverage outlets and importantly for chain hotels. In other words where people are serving to people and service deliver is the paramount factor for guest satisfaction. It becomes more important the use of property management systems for hotel industry where human
resource is the biggest asset and employees play a vital role in guest satisfaction. Many studies have demonstrated the usage of various property management system practices and their implications in the context of financial performance of the organisation. The generalisability of these results, however, is limited by the case study or anecdotal nature of the evidence they are based on. Therefore, there is a need for further empirical work to identify the importance and usages of property management practices and their relationship with some of demographic variables such as size, category, age, capital, number of employees and type etc. Moreover, there is need to conduct applied study on the impact of property management practices on organisational performance especially in comparative context in Indian hotel industry.

The hotel industry is chosen as the study area, as it is the critical industry accommodating the increasing number of visitors, employees using information and technology and is the second largest foreign-exchange earner in India after manufacturing industry. Tourists’ arrivals reached new records of 5.79 million in 2010, generating US$ 11.39 billion in tourism receipts (Ministry of Tourism, 2010). Moreover, the hotel industry is projected to generate total revenue of about 11.34 billion during the period of the 11th Indian Plan (The Planning Commission, 2009).

The hotel industry in India is going through a transformation phase after a turbulent and difficult year. One of the major reasons for the increase in demand for hotel rooms in the country is the growth in sectors like information technology, defence, petrochemicals, medical tourism, telecom, retail and real estate. Rising stock market and new business opportunities are also attracting hordes of foreign investors and international corporate travellers to look for business opportunities in the country. Similarly, the Government of India’s ‘Incredible India’ promotion campaign and the ‘Atithi Devo Bhavah’ campaign have also helped the growth of domestic and international tourism and consequently the hotel industry. India is finally emerging as a choice destination going by its rank as the fourth most preferred travel destination and one of top five destinations among 167 countries.

Thus, the promises and challenges of this industry make it a useful research site for the present investigation. In light of the above, the decision to target the Indian hotel
organisations reflects desire to add exploratory data to the emerging property management practices in Indian hotels. Moreover, recognising these very facts the present study has been undertaken on the topic entitled “Property Management Practices in Chain and Independent Hotels of National Capital Region (NCR)”.

3.4 OBJECTIVES OF STUDY:

The main objectives of the study are:

1. To examine the existing Property Management Practices in the selected Chain and Independent hotels.

2. To evaluate the variations in Property Management Practices in different properties according to their demographic characteristic

3. To compare the Property Management Practices in selected chain and Independent hotels.

4. The study aims at examining how the Property Management Practices contribute to organization performance.

5. To suggest some practical remedies for making the Property Management Practices more effective.

3.5 HYPOTHESIS OF STUDY:

Consequently, considering the importance of food and beverage service practices in the Indian hotel industry, we may hypothesise that:

H1. There is a positive relationship between the importance of Property Management Practices and the adoption of property management practices

H2. There is a positive association between the control variables (demographic) of the hotels and the adoption of property management practices.


H4. There is a positive impact of Property Management Practices on hotel organization performance.
2.6 RESEARCH METHODOLOGY

AREA OF STUDY

About Delhi – National Capital Region

The National Capital Region (NCR) in India is a name for the conurbation or metropolitan area which encompasses the entire National Capital Territory of Delhi as well as urban areas ringing it in neighbouring states of Haryana, Uttarakhand, Uttar Pradesh and Rajasthan. With a total area of about 33,578 km² (12,965 sq mi), it is the world's second largest urbanagglomeration by population and the largest by area. The concept of National Capital Region was mooted in first master plan of Delhi, notified in 1962. The aim of the concept was to develop a metropolitan area around Delhi, so as to divert increasing pressure of population
from the region. The concept was essential in order to protect Delhi's infrastructure from excessive pressure and a planned development of the region. NCR is the India's largest and world's second largest agglomeration with a population of 22,157,000. The whole of the National Capital Territory, and parts of three neighbouring states lie within the National Capital Region (NCR) of India as per the *Delhi Master Plan 2021*. These are:

<table>
<thead>
<tr>
<th>State</th>
<th>Area in km²</th>
<th>Area in miles²</th>
<th>Population 2011 Census</th>
</tr>
</thead>
<tbody>
<tr>
<td>NCT of Delhi</td>
<td>1,483</td>
<td>573</td>
<td>16,753,265</td>
</tr>
<tr>
<td>Haryana</td>
<td>13,413</td>
<td>5,179</td>
<td></td>
</tr>
<tr>
<td>Uttar Pradesh</td>
<td>10,853</td>
<td>4,190</td>
<td></td>
</tr>
<tr>
<td>Rajasthan</td>
<td>7,829</td>
<td>3,023</td>
<td></td>
</tr>
</tbody>
</table>

**NCT Delhi**

The National Capital Territory of Delhi lies central to the National Capital Region. It includes the city of Delhi and New Delhi, the seat of India's central government. This region has largest concentration of population in whole of the NCR. The population of Delhi at the 2011 census was 16,753,265 persons.

**Haryana**

Bordering Delhi on the west, north and south, Haryana contributes the largest area, 13,413 km² (5,179 sq mi), to the National Capital Region and forms its western and northern territory. The districts of the state included in NCR (with their 2011 Census populations) are:

- Gurgaon (1,514,085)
- Sonipat (1,480,080)
- Panipat (1,202,811)
- Faridabad (1,798,954)
- Rohtak (1,058,683)
Uttar Pradesh

Uttar Pradesh (UP) provides a major portion of the NCR. It borders Delhi on the east and forms the eastern territory of the NCR. Meerut is the second largest city in NCR. The districts of the state included in NCR (with their 2011 Census populations) are:

- Meerut
- Baghpat
- Bulandshahr (3,498,507)
- Ghaziabad (4,661,452)
- Gautam Buddha Nagar District (Noida and Greater Noida) (1,674,714)

Rajasthan

Rajasthan borders Delhi to the west and forms the western territory of the NCR. The district of the state that is included is:

- Alwar

Aims and Objectives

The Plan aims to promote growth and balanced development of the whole region through providing economic base in the identified major settlements (Metro Centres/Regional Centres) for absorbing economic development impulse of Delhi, efficient transport network, development of physical infrastructure, rational land use pattern, improved environment and quality of life.

Zones of NCR

- NCT-Delhi covers an area of 1,483 km²
- Central Capital Region (CNCR) is about 2000 km². It includes suburbs like Faridabad-Ballabghar complex, Gurgaon-Manesar complex, Sonipat-Bahadurgarh, Sonipat-Kundlicomplex, Ghaziabad-Loni Bulandshahar complex and Noida-Greater Noida complex.
- Highway Corridor Zone proposed with a minimum width of 500 metres on either side of ROW of National Highways. Approximate area is 300 km² (excluding controlled areas).
Sampling and Data Collection

Sample hotels were identified from the highly respected directory of the Ministry of Tourism, Govt. of India and FHRAI that serves as a resource centre for business information and maintains relevant databases of hospitality firms. To initiate the sample, 450 Front Office managers, F&B Managers were contacted through mail, only 320 managers responded and agreed to participate in the survey, all of which were sampled. They represented a mix of industry, size and operation. A survey methodology was chosen because it was deemed to be the most efficient way of reaching a large number of respondents, whereas the data required facilitated the use of a mail-administered questionnaire with close-ended questions. Of the total sample, usable questionnaires were returned by 200 respondents.

Sample Table

Research Instruments

Property Management practices: the research used existence of 27 property management system practices measured on a Likert-type 5-point scale ranging from 1=never 5= Always) for usages. The scale includes the three central attributes of property management practices (Reception & Reservation, F&B practices, Finance and Accounts practices) as discussed in the literature.

Reception & Reservation Practices: For any hotel reservation and reception practices play a vital role in overall satisfaction of customers as well as in the context of use of property management practices.

F&B practices: Various studies have identified some of the functions of property management systems being used in food and beverage service practices in a broader sense which are widely used globally such as KOT, billing, service delivery time.

Accounting & Finance: As per the growing demand of hotel operations be it individual properties or chain, Finance and Accounts practices play a vital role in delivering a high end service to such group of customers and also hotel in increasing revenues.
Measures

Property Management system Practices: We used existence of 27 property management system practices (see first column of Table I) measured on a Likert-type 5-point scale ranging from 1=never 5=very often in case of usage and 3-point scale (1=not important, 2=moderately important, 3= important) for importance. For the classification of the property management system practices we followed the methodologies of past studies (Vich-i-Martorell, 2004; Jogaratnam, 2005; Cheyne, et al., 2006; and Kokaz & Murphy, 2008 & 2009).

Organisational performance variables: The research used the existence of 8 performance variables (Profitability compared to business unit objectives, Market share compared to business unit objectives, Sales growth compared to hotel industry average, Sales growth compared to hotel industry average, Return on investment compared to industry average, Is your PMS user friendly etc) derived from review of literature and were measured on Likert-type 7-point scale ranging from 1=very strongly disagree, 2=Strongly disagree ,3=disagree, 4= neutral, 5=agree ,6=strongly agree and 7= very strongly agree.

Control Variables: in this study following control variables were used such as Number of employees, Age of organisation, Capital investment, Type of enterprise, Type of Ownership etc based on the past studies in the field of hotel management. Moreover, these variables have been used to examine the relationship between food and beverage service practices and Control variables.

2.7 DATA ANALYSIS METHODS

In order to achieve the objectives of present research and to test the hypotheses, this study employed following analysis methods:

1. Factor analysis was performed to identify Property Management Practices,

2. One-way ANOVA was employed to test the association of the demographic variables with hotel performance and Property Management Practices,

3. The t-test was used to compare the perceived Property Management Practices in the Chain Hotels and Independent Hotels in National Capital Region NCR
4. Correlation analysis was used to test the relation between Property Management Practices and Hotel Performance.

3.8 IMPORTANCE/SIGNIFICANCE OF STUDY

1. The study will be a model study in the area of Property Management Practices particular and in hospitality industry in general.

2. It will help the industry professionals especially Front Office Managers to design result oriented strategies.

3. It will help the Hospitality organizations to improve their performance.

4. It will guide the scholar’s and other those who are interested in conducting similar researches.

3.9 LIMITATIONS OF THE STUDY

All possible efforts were made to maintain objectivity, validity and reliability of the study, yet certain limitations need to be kept in mind whenever its findings are considered for implementation. These are discussed as under:

1. Beyond conceptualisations of the property management practices, research is needed that should considers several PMS measures that are likely to impact the reliability and validity of empirical investigations.

2. Due to time and financial constraints, it does not represent a large scale sample.

3. Respondents had been reluctant in disclosing the data and especially with large hotels, were the HR policies clearly mention not to disclose any information to outsiders.

4. Most of the data obtained was from Delhi.

5. The study is heavily dependent on primary data, which is very time consuming.

6. In few small hotels, people were found to be semi-educated who could not properly respond to the questions, which were their understanding.

7. Finally, future research should consider incorporating other important items that have not been considered or omitted from other studies and are likely to influence the adoption of training & development practices in Indian hotels such
as management support, employee’s satisfaction and attitudes, quality of information perceived, training & development needs, perceived benefits and problems in implementation and the cross-comparison.

3.10 ORGANISATION OF STUDY

The study will be divided into following chapters.

Chapter 1

- Introduction- General Profile of hotel industry in India
- INCREDIBLE INDIA: FULL OF WARM HOSPITALITY
- HOTEL INDUSTRY: HISTORICAL BACKGROUND
- PRESENT SCENARIO OF HOTEL INDUSTRY IN INDIA
- FUTURE TRENDS OF HOTEL INDUSTRY IN INDIA

Chapter-2

- Property Management Systems: an overview
- Property Management Systems: Meaning of PMS and different property management practices used in hospitality industry
- TYPES OF PROPERTY MANAGEMENT SYSTEMS
- ADOPTING A PROPERTY MANAGEMENT SYSTEM
- Property management practices and hotel performance.
- References

Chapter 3

- Review of Literature- It will cover the relevant work done in field of Property Management Practices in Hotel Industry in particular and other sectors in general.
- Research Design- it will illustrate the nature of problem, objective, hypothesis, scope, methodology, chapter scheme and limitation of the study.
- References
Chapter 4

Analysis and Interpretation- Will deal in analysis of data and its importance.

Chapter 5

- Findings and conclusion- will cover important findings and conclusion drawn by testing hypothesis.
- Suggestions- Will include summary and suggestions for further study.

3.11 QUESTIONNAIRE USED FOR THE RESEARCH

Dear Respondent

The aim of this questionnaire is to ascertain your opinion related to Property Management Practices in your organization. Your response (s) will be much appreciated and will be kept confidential, as it will facilitate the research topic, PROPERTY MANAGEMENT PRACTICES IN CHAIN AND INDEPENDENT HOTELS OF NATIONAL CAPITAL REGION (NCR)

Manish Anand
Asstt. Professor
M.M. Institute of Hotel Management.
M.M.University Mullana Ambala

Please tick mark (✓) the appropriate option or fill the response.

Part I (Demographic profile)

1. Name of Organization

2. Type of Organization

   Chain: □

   Individual: □

3. Star Category

4. Hotel Location
### 5. PROPERTY MANAGEMENT SYSTEM

#### 6. Age (in years)

<table>
<thead>
<tr>
<th></th>
<th>≤5</th>
<th>6-10</th>
<th>11-15</th>
<th>16-20</th>
<th>≥20</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### 7. Capital (in billion Rs)

<table>
<thead>
<tr>
<th></th>
<th>≤50</th>
<th>51-100</th>
<th>101-200</th>
<th>201-300</th>
<th>≥300</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### 8. Employees (numbers)

<table>
<thead>
<tr>
<th></th>
<th>≤100</th>
<th>51-100</th>
<th>101-200</th>
<th>201-300</th>
<th>≥301</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

### B. Property Management Practices:

#### 1. FRONT OFFICE PRACTICES: (RECEPTION & ROOM RESERVATION)

<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>Very Strongly Agree</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
<th>Very Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Confirmation mail in advance makes a guest more satisfied</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sending SMS also about confirmation to the Guest Via PMS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Multiple Check-in &amp; Check outs can be taken</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Guests can check their bills on the TV Screen in rooms.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Guests can also request or register complaint on IVR</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sending E-mails for Updates greetings to Guests makes them more satisfied</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Making Occupancy Report is easier.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>----------------------------------</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Room Revenue &amp; ARR Can be calculated easily</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Linkage of PMS with other Properties.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>Very Strongly Agree</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
<th>Very Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue can be increased through GDS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Room Forecasting can be done easily.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Making a Reservation is better than dairy or Whitney systems</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Guest’s Preference, History can be recorded for long time</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corporate &amp; FIT can be easily distinguished</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cancellation can be done easily and retention charges can be charged online.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Promotions &amp; Offers can be shared online on social networking sites, sms or e-mail</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Helps in Coordinating with sales &amp; marketing Dep’t.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Special Requests of Guest can be shared with other departments in a better way.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## FOOD & BEVERAGE PRACTICES

<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>Very Strongly Agree</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
<th>Very Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Guest can view Order No &amp; Service Time.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Better way to post the bill in Master Folio of the Guest</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Guest’s Preference and special request can be saved and used later on.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Helps in getting report of guests with complementary meals.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## ACCOUNTING & FINANCE PRACTICES

<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>Very Strongly Agree</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
<th>Very Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Daily Revenue can be calculated easily</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Helps in calculating salary of employees easily.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Night Auditing can be done in a better way.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Discrepancies can be found easily.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Daily Discounts &amp; Allowance given to guest can be calculated easily.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VARIABLES</td>
<td>Very Strongly Agree</td>
<td>Strongly Agree</td>
<td>Agree</td>
<td>Neutral</td>
<td>Disagree</td>
<td>Strongly Disagree</td>
<td>Very Strongly Disagree</td>
</tr>
<tr>
<td>--------------------------------------------------------</td>
<td>---------------------</td>
<td>----------------</td>
<td>-------</td>
<td>---------</td>
<td>----------</td>
<td>-------------------</td>
<td>------------------------</td>
</tr>
<tr>
<td>Profitability compared to business unit objectives</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Market share compared to business unit objectives</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sales growth compared to hotel industry average</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sales volume compared to business unit objectives</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Return on investment compared to industry average</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Is your PMS user friendly</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quality holds more importance than quantity</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Does your PMS helps in saving Cost. E.g. Less Paper</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Name: ___________________________________________

Position: _______________________________________

Address: _______________________________________

Phone:
REFERENCES


Brooks, R. M. 1999, From the Hotel Property’s Perspective: The Network Computing Alternative: Hotel Online


Daghrfous, A. & Reza Barkhi, R (2009), The strategic management of information technology in UAE hotels: An exploratory study of TQM, SCM, and CRM implementations, Technovation, 29 (9), 588-595


Identifying and measuring the “value-added” elements, INTEHL Report, 4, 18-24.


Kasavana, M.L. & Cahill, J.J. (2003), Managing Technology in the Hospitality Industry, Educational Institute, Lansing, MI, USA.


(Internet Web References Sites)


<Holiday Travel Newsroom: Travelocity.com> - accessed in November, 2001