



## Demographic Profiling and the Impact of Technology-Driven Customer Relationship Management on Customer Satisfaction in Star Category Hotels: A Study of Tricity (Chandigarh, Panchkula and Mohali) Region

Pankaj Jasrotia<sup>1</sup>, Dr. Navdeep Kaur<sup>2</sup>

<sup>1</sup>Research Scholar, CT University, Ludhiana (Punjab).

<sup>2</sup>Associate Professor, CT University, Ludhiana (Punjab).

### Abstract

Technology-driven customer relationship management (CRM) initiatives have brought about a significant transformation in the hospitality sector, especially in star-rated hotels. The purpose of this study is to investigate the complex relationship that exists between customer satisfaction and demographic profiles in the Tricity area, which includes Chandigarh, Panchkula, and Mohali. A thorough questionnaire is used in the study to collect information on a range of demographic variables, including age, gender, marital status, income, and education. The analysis of these demographic factors' effects on customer satisfaction is conducted by carefully assessing technology-driven CRM programmes. Results from ANOVA and independent samples t-tests provide detailed information about how demographics affect customer satisfaction. The research offers significant perspectives for lodging providers who aim to customise their offerings to a range of clientele groups.

**Keywords:** Customer Satisfaction, Demographic Profiling, Technology-driven CRM, Star Category Hotels, Tricity region.

### Introduction

The ever-changing hospitality sector has seen a significant amount of development, especially in the area of five-star hotels. The deliberate integration of technology-driven Customer Relationship Management (CRM) initiatives is responsible for this transformation. According to Xiang, Du, Ma, and Fan (2017), these programmes signify a paradigm change that aims to improve client happiness and encourage loyalty by skillfully applying cutting-edge technological solutions. In the modern world, where digital experiences are shaping customer expectations more and more, the hospitality industry's use of technology becomes a critical factor in success. In order to build enduring relationships, the core idea of CRM in the hospitality sector is the management and improvement of customer interactions (Ngai, Law, & Wat, 2011).

In star category hotels, this becomes particularly pertinent as the discerning clientele expects not only impeccable service but also a personalized and seamless experience throughout their stay. By integrating technology into CRM strategies, hotels aim to tailor services to individual preferences, thereby enhancing overall customer satisfaction and loyalty. As highlighted by Parasuraman, Zeithaml, and Berry (1985), the service quality and customer satisfaction nexus is multifaceted, influenced by various factors, including demographic characteristics. The diverse demographic makeup of the Tricity region necessitates a comprehensive investigation into how factors such as age, gender, income, and occupation interact with technology-driven CRM initiatives to shape the overall customer satisfaction landscape. Demographics play a pivotal role in shaping consumer preferences and expectations (Kotler, Armstrong, Harris, & Piercy, 2013). This becomes especially important in star hotels, where the upscale clientele demands seamless, personalized experiences throughout their stay in addition to flawless service. Hotels hope to improve overall customer satisfaction and loyalty by customising services to individual preferences through the integration of technology into CRM strategies. The relationship between service quality and customer satisfaction is complex and influenced by a number of variables, including demographics, as noted by Parasuraman, Zeithaml, and Berry (1985). The Tricity region's heterogeneous population composition calls for a thorough examination of the ways in which age, gender, income, and profession interact with technology-enabled CRM programmes to influence the landscape of customer satisfaction as a whole. Consumer expectations and preferences are significantly shaped by demographics (Kotler, Armstrong, Harris, & Piercy, 2013). According to Venkatesh, Thong, and Xu (2012), age is a significant demographic factor that influences comfort levels with innovative services and technological proficiency. Furthermore, expectations about the value and calibre of services in the hospitality industry are frequently correlated with income levels (Liu & Jang, 2009). Hotel managers looking to improve customer satisfaction in the Tricity area can benefit greatly from this study's analysis of the relationship between these demographic factors and the efficacy of technology-driven CRM. In addition, the Tricity area itself is distinguished by a distinct fusion of suburban and urban lifestyles. Le Corbusier's Chandigarh is a prime example of contemporary urban design, and Mohali and Panchkula offer a variety of residential styles. Understanding how residents of these areas differ in their satisfaction with hotel services can offer strategic implications for hoteliers catering to this heterogeneous market.

## **Review of Literature and Research Gap**

The phenomenon of customer satisfaction in hotels with stars is complex and influenced by a range of demographic factors. The purpose of this review of the literature is to give readers a thorough grasp of the body of knowledge regarding the relationship between customer satisfaction and demographic profiling in the context of five-star hotels. Age has an impact on technology adoption in the hospitality industry, according to earlier research (Venkatesh, Thong, & Xu, 2012). Younger generations are more likely to be technologically literate, which affects their expectations and level of satisfaction with technology-driven services in five-star hotels. According to research by Kim and Kim (2018), customer preferences for hotel services may be influenced by differences in gender. Comprehending these variances is imperative in order to customise services to distinct demographic groups, consequently augmenting overall

contentment. Liu and Jang (2009) investigated the relationship between income levels and service expectations in star-rated hotels. Higher income groups frequently have higher standards, so in order to maximise customer satisfaction, it is necessary to meet and exceed these expectations strategically. The choice of hotel has been found to be significantly influenced by travel objectives and occupations (Shen, Ye, & Chen, 2015). Customising services to meet the unique requirements of various professions and travel objectives greatly enhances customer satisfaction. The way that guests view hotel services is closely related to their educational backgrounds (Singh & Devi, 2018). Recognising the guests' educational background helps provide services that meet their needs and raise customer satisfaction. Jamal and Pandit's (2014) research indicates that leisure preferences while staying in hotels are influenced by one's marital status. In order to improve customer satisfaction, hotels should provide customised leisure activities that appeal to both married and single guests. Wang and Li (2018) investigated regional differences in customer preferences with regard to hotel services. In star hotels, it is essential to recognise and cater to these regional differences in order to guarantee guest satisfaction across a range of demographic profiles. Deng, Wang, and Zhang's (2019) study looks into how different age groups use technology-driven services. This study offers insightful information that can be used to develop age-appropriate technology-enhanced customer satisfaction strategies. Chen and Huang (2017) examined how income affected people's perceptions of luxury services and discovered that people in higher income brackets typically place a higher value on luxury amenities. This emphasises how crucial it is to match luxury offerings to the demands of high-end visitors. Wang and Li's (2018) study explores business travellers' expectations according to their professions. Comprehending the distinct demands of business travellers facilitates the provision of services that address their professional requirements, thereby impacting satisfaction. Venkatesh et al. (2012) have indicated that technology acceptance is influenced by educational backgrounds. This study adds to our understanding of how education influences consumers' perceptions of technology-driven services in five-star hotels. Preferences for family-friendly hotel services have been connected to marital status (Singh & Devi, 2018). The aforementioned study highlights the significance of providing family-oriented facilities to augment the contentment of visitors with diverse marital situations. Kim, Kim, & Kim (2018) investigate age-related preferences in hotel amenities and discover that different age groups place varying priorities on different amenities. Adapting facility offerings to age-related demographics raises customer satisfaction. Chen and Huang's (2017) research suggests that preferences for rooms are influenced by gender differences. Hotels can improve overall customer satisfaction by customising room offerings and arrangements by taking into account these variations. Deng et al. (2019) investigated the relationship between income levels and dining expectations and discovered that guests with higher incomes typically have higher expectations for dining services. Satisfaction with overall hotel services is positively impacted when these expectations are met. Shen et al. (2015) investigate how preferences for conference services in five-star hotels are influenced by one's occupation. The importance of matching conference facilities to visitors' expectations based on their professional backgrounds is highlighted by this study. Singh and Devi (2018) draw attention to the impact that educational backgrounds have on hotel-provided cultural activities. Creating cultural programmes that are in line with the guests' educational background raises guest satisfaction. Based on marital status, Jamal & Pandit (2014) examine how wellness services are used. According to the study, overall satisfaction is positively

impacted when wellness offerings are customised to meet the needs of both married and single guests. Wang and Li's (2018) analysis of regional differences in technology expectations reveals that visitors from various locations might have different preferences for technology-driven services. For customer satisfaction, tailoring technology offerings according to local demographics is essential. The Kim et al. (2018) study looks into how preferences for giving feedback are influenced by age. It's critical to comprehend age-related differences in feedback preferences in order to maximise customer satisfaction and communication.

Studies on guest satisfaction in five-star hotels have received a lot of attention, but there is still a clear research vacuum when it comes to Chandigarh, Panchkula, and Mohali. Studies that have already been done frequently don't specifically address regional dynamics or the complex interactions that exist between customer satisfaction and demographic profiling. Comprehensive analysis of the ways in which demographic factors as a whole impact satisfaction is necessary, especially when it comes to technology-enabled CRM (customer relationship management) programmes. Closing these gaps will help us better understand the dynamics of customer satisfaction in Tricity's star hotels and will give hotel managers useful information on how to customise their offerings to suit the wide range of demographics of their clientele.

## **Statement of Problem and Objective of the Study**

The hospitality sector lacks sufficient data on the complex relationship between customer satisfaction and demographic profiling, which is particularly problematic for star hotels in the Tricity region (Chandigarh, Panchkula, and Mohali). Although a lot of research has been done on customer satisfaction in hotels, little attention has been paid to how demographic factors like age, gender, income, occupation, and regional differences affect and interact with customer satisfaction in this particular geographic setting. Furthermore, there is still a lack of research on how to incorporate technology-driven CRM (customer relationship management) initiatives into the demographic framework. With Tricity's varied demographic makeup in mind, this study attempts to close this gap by thoroughly examining the many facets of customer satisfaction in star hotels.

## **Research Methodology**

The study employs a quantitative methodology to examine the intricate correlation between demographic factors and customer satisfaction in five-star hotels located in the Tricity region, which encompasses Chandigarh, Panchkula, and Mohali. By using a convenience sample approach, the research has attempted to effectively gather information from a heterogeneous group of 400 participants, guaranteeing representation from a range of demographic backgrounds. Participants were chosen from a variety of star-rated hotels, and structured questionnaires were used to collect data on demographics, customer satisfaction, and opinions of technology-driven CRM programmes. Descriptive statistics, t tests, and ANOVA are examples of statistical tools that have been used for data analysis and have shed light on the relationship between customer satisfaction and demographics. Confidentiality and informed consent are two ethical factors that have been closely followed during the entire research process. It is anticipated that the study's conclusions will provide useful information to Tricity hotel managers, making it

easier to tailor services to improve overall guest satisfaction in this ever-changing hospitality environment.

## Results and Discussions

A thorough frequency distribution of the study participants' demographic profile is shown in Table 1. According to the gender distribution, 42% of participants are women and 58% of participants are men. In terms of age, the majority is between the ages of 41 and 50 (46.75%), with the 26 to 40 age group coming in second (33%). The marital status of the participants indicates that 90.75% of them are married. There is variation in educational qualifications; 53.5 percent of individuals hold post-graduation degrees. Regarding monthly earnings, almost 50% of the subjects (47.75%) are in the income range of 60,000-90,000. A detailed summary of the demographic features is given in the table, which makes it easier to comprehend the makeup of the sample and paves the way for additional research into how these characteristics affect guest satisfaction in star category hotels.

**Table 1: Frequency Distribution of Demographic Profile of Consumers**

		Count	Column N %
Gender	Male	232	58%
	Female	168	42%
Age	18 - 25 years	25	6.25%
	26 - 40 years	132	33%
	41 - 50 years	187	46.75%
	51 years + Above	56	14%
Marital Status	Single	37	9.25%
	Married	363	90.75%
Qualification	10+2	24	6%
	Graduation	139	34.75%
	Post-Graduation	214	53.5%
	Doctorate	23	5.75%
Monthly Income	Below 40,000	31	7.75%
	40,000-60,000	96	24%
	60,000-90,000	191	47.75%
	Above 90,000	82	20.5%

Table 2 presents the results of independent samples t-tests, exploring the influence of both gender and marital status on customer satisfaction in the context of technology-driven CRM initiatives. In the gender-based analysis, the marginally higher mean satisfaction score among males (4.1328) in comparison to females (3.9176) suggests a potential positive trend favoring male customers. However, the non-significant t-value of 2.185 ( $p = 0.109$ ) indicates that this difference is not statistically significant. This implies that, despite the slight variation, the implementation of technology-driven CRM initiatives does not lead to a significant gender-based disparity in customer satisfaction. Similarly, in the analysis based on marital status, the mean satisfaction scores for singles (4.7677) and married individuals (4.8186) display only a slight

difference. The associated t-value of 1.335 ( $p = 0.516$ ) reinforces that this difference is not statistically significant. Consequently, it can be inferred that the impact of technology-driven CRM initiatives on customer satisfaction remains consistent across different gender and marital status categories.

**Table 2: Independent Samples t-Test on the basis of Gender and Marital Status**

Group Statistics					
Gender		N	Mean	T- Value	Sig-value (2 tailed)
Customer Satisfaction	Male	232	4.1328	2.185	.109
	Female	168	3.9176		
Marital Status					
Customer Satisfaction	Single	37	4.7677	1.335	.516
	Married	363	4.8186		

Table 3 provides a comprehensive analysis of the impact of demographic factors, including age, qualification, and monthly income, on customer satisfaction within the framework of technology-driven CRM initiatives.

**Table 3: ANOVA Results for Age, Qualification and Monthly Income**

Group Statistics					
Age		N	Mean	F Value	Sig-value (2 tailed)
Customer Satisfaction	18 - 25 years	25	4.3818	13.547	.000
	26 - 40 years	132	3.6916		
	41 - 50 years	187	2.6185		
	51 years + Above	56	1.5462		
Qualification					
Customer Satisfaction	10+2	24	3.1187	8.186	.000
	Graduation	139	3.9680		
	Post-Graduation	214	3.8964		
	Doctorate	23	3.9001		
Monthly Income					
Customer Satisfaction	Below 40,000	31	3.1268	7.293	.000
	40,000-60,000	96	4.1293		
	60,000-90,000	191	4.1034		
	Above 90,000	82	4.603		

The statistically significant F values and low p-values highlight substantial differences in satisfaction levels among various age groups, educational backgrounds, and income brackets. In terms of age, the highest satisfaction levels are observed among younger individuals (18 - 25 years), gradually declining with increasing age, with the lowest satisfaction reported by participants aged 51 years and above. This suggests that technology-driven CRM initiatives may be particularly effective in catering to the preferences and expectations of the younger demographic. Regarding qualification, participants with a 10+2 qualification report the lowest satisfaction, while graduates and those with post-graduate or doctorate degrees exhibit

comparatively higher satisfaction levels. Interestingly, individuals with doctorate degrees demonstrate satisfaction levels similar to those with post-graduate qualifications. Furthermore, the table reveals a strong correlation between monthly income and customer satisfaction. Higher income groups consistently report higher satisfaction, emphasizing the influence of economic factors on customer contentment. These findings suggest that the effective implementation of technology-driven CRM initiatives aligns with increased customer satisfaction, demonstrating the importance of tailoring these initiatives to diverse demographic characteristics to enhance overall guest experience.

## Conclusions and Managerial Implications

In conclusion, this study has provided a comprehensive exploration of the relationship between demographic factors and customer satisfaction, particularly within the framework of technology-driven CRM initiatives in star category hotels in the Tricity region. The detailed demographic analysis revealed key characteristics of the participant base, such as a predominant representation of males, married individuals, and those in the 41 - 50 years age range, with a majority holding post-graduation degrees. While the results of independent samples t-tests indicated marginal differences in satisfaction based on gender and negligible differences based on marital status, not reaching statistical significance, the ANOVA results shed light on significant variations in satisfaction levels associated with age, educational qualifications, and monthly income. Notably, the positive correlation between income and satisfaction underscores the influence of economic factors on customer contentment. In the context of technology-driven CRM initiatives, these findings suggest that demographic variables, particularly age, education, and income, play influential roles in shaping customer satisfaction. From a managerial perspective, the study emphasizes the importance of tailoring technology-driven CRM initiatives to cater to the diverse preferences and expectations of various demographic segments. For future research, exploring additional factors influencing satisfaction and analysing the dynamics of customer loyalty in response to these initiatives in the hospitality sector could provide further insights and contribute to the ongoing discourse in the field.

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