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## **Impact of demographic variables on customer relationship management: A study of five star and five star deluxe hotels in NCR**

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### **Abstract:**

Customer relationship management is one of the most significant and burgeoning topic these days. Customer relationship management if implemented successfully helps in creating competitive advantage, increases profitability, creates a special bond with the customer and also leads to customer satisfaction and further helps in customer retention. In this paper researcher has made an attempt to see the impact of various demographic variables like gender, age, background, education, occupation and purpose of visit on customer relationship. Data was collected through a questionnaire designed to see the impact of these demographic variables on customer relationship management. Cross tabulation and Pearson Chi- Square test was applied to see the relationship between the demographic variables and customer relationship management and it was found that there is a significant relationship between all the demographic variables and customer relationship management.

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### **Introduction**

In 1998 a forecast was made by JP Morgan that internet revolution has brought a change in customer needs and requirements and now customers demand to have more interactions with corporations and the result would be a double digit growth in the demand of Customer Relationship Management. Worldwide Service organizations have been pioneers in developing customer relationship and retention strategies. Banking Industry has opted to have relationship managers for maintaining relationships with select customers, offers redeemable reward points, aviation industry uses frequent flyer programs in order to retain and reward their regular and loyal customers, retail industry offers membership cards ,credit cards also offers redeemable bonus points, telecom operators use customization. Every organization aspires to be profitable throughout and it can be done by either increasing the sales volume or by decreasing the cost and both the strategies are difficult to implement. Another way out for the same is to establish and maintain long term relationships with the customers in order to retain them and this strategy is cheaper as compared to acquiring new customers. So, this makes CRM as one of the inevitable strategy especially in service sector. Aggressive competition and globalization are the major

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reasons for the growth of CRM in recent years. (**Gefen and Ridings, 2002**).

Hospitality Industry deals with the services which are intangible and perishable. It sells an experience to the customer not a tangible product. So, the relationship depends on how satisfactory and enjoying that experience was. Hospitality Industry is selling a intangible product so employees play an important role in tangibilizing the products and are expected to create in guests a feeling of being at home which involves developing a social relationship based on warm, friendly and welcoming behavior (**Burgess, 1982**). Employees in Hospitality Industry should extend feeling of hospitality like a guest in their private homes so as to make them delighted (**Hochschild, 1983**).

CRM is an aid for the businesses to get detailed knowledge about the customer which helps in getting an insight into the consumer behavior and one can alter the business products and services in the best possible and customized way. Customers come from varied background having different demographics and there is an impact of demographic background on the needs and wants of customers. So, to investigate this relationship and see the impact of demographic variables on customer relationship management this study has been conducted.

### **Review of Literature:**

In 1992 **Kotler** in his book wrote that now the time has come and organizations need to make a shift towards long term relationship building goals from the short term transaction oriented goals. **Reichheld** in 2003 in his study on loyalty based management also conceptualized that the competitive environment has created a situation where companies cannot survive without customer-focused programmes. In the same context **Lemon, White and Winer** in 2002 stated that today's environment is dynamic and ever changing, so marketers need to understand guests' requirements and adopt dynamic customer relationship management as today's consumer keeps in mind the past, present and future aspects as well as the future expectations when taking the decision of continuing business with a firm. In this aggressive competitive scenario, CRM makes use of detailed information about present and future customers which helps in anticipating the needs of customers and responding accordingly (**Karakostas, Kardaras and Papathanassiou, 2005**).

Hospitality Organizations when design their service offerings need to collect customer information to have a deep understanding of consumers which in turn helps in promoting customer experience centrality. (**Prahalad and Ramaswamy, 2004; Binkhorst and Den Dekker, 2009**).

In today's environment hotels need to learn deeply about their customer's preferences and behavior to deliver their services in a better way. (**Papaioannou, Sarmaniotis, Assimakopoulos, and Sotiriades, 2011**).

In a study on hotel industry by **Light** in 2003 it was established hotel has many such departments which come in direct contact with the customers while delivering the service known as touch points and lots of information about the customer can be collected during the interactions. CRM is

of the objective to use that information about customers collected on various touch points which helps in establishing and maintaining long term relationships with the customers. It was also proposed in the study that chances of long stay with the organization depends on how happy the customer with the service and overall product.

**Samantha** in a study in 2009 also hold the view that guest contact staff in Hotels gather a lot of information about customers' preferences which is used for getting closer to the customers and establishing long term relationships which in turn helps in maximizing customer's lifetime value.

**Baldwin** in 2006 in his research paper established that CRM helps in getting close to the customers which in turns help the customers to be more proactive to the changing needs and wants of the customers. It ultimately helps in improving the quality of customer service and hence creates a base for increased revenues and customer retention.

**Krasnikov, Jayachandran and Kumar** (2009) recognized in their study that successful CRM implementation helps in better customization of offerings by effective communication and providing timely feedback to the customers. CRM helps in establishing one-to-one relationship with customers which further reduces costs and increase profits.

So, the above review states that customer relationship management is an effective business strategy to increase profitability and detailed information about customers can be collected by hotels while interacting with them which further helps in understanding the needs and preferences of customers. The demographic details of customers also help in analyzing the differences in preferences of customers according to their gender, age, background and other details.

## **RESEARCH METHODOLOGY**

The main objective of the study is to analyze the impact of demographic variables on customer relationship management.

### **HYPOTHESES**

Following hypotheses have been developed to meet the objective of the study:

H<sub>0</sub>1: There is no impact of gender on customer relationship management.

H<sub>1</sub>: There is significant impact of gender on customer relationship management.

H<sub>0</sub>2: There is no impact of age of respondents on customer relationship management.

H<sub>2</sub>: There is significant impact of age of respondents on customer relationship management.

H<sub>0</sub>3: There is no impact of background of respondents on customer relationship management.

H<sub>3</sub>: There is significant impact of background of respondents on customer relationship management.

H<sub>0</sub>4: There is no impact of education level of respondents on customer relationship management.

H<sub>4</sub>: There is significant impact of education level of respondents on customer relationship management.

H<sub>0</sub>5: There is no impact of occupation respondents on customer relationship management.

H<sub>5</sub>: There is significant impact of occupation of respondents on customer relationship

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management.

H<sub>0</sub>6: There is no impact of purpose of visit on customer relationship management.

H<sub>6</sub>: There is significant impact of purpose of visit on customer relationship management.

## DATA COLLECTION

### SECONDARY DATA

Secondary data has been collected by reviewing research papers, thesis, journals, books, newspapers, magazines, proceedings of the conferences etc.

### PRIMARY DATA

For collection of primary data a structured questionnaire was developed which was pre tested. To achieve the objectives of the study the questionnaire has been divided into two parts. The first Part A has been made to collect the diverse demographic details of the respondents. Part B of the questionnaire comprise of the questions related to customer relationship management.

### SURVEY SAMPLE OF THE STUDY

The survey sample includes the guests visiting five star and five star deluxe hotels in Delhi, Gurgaon, Noida and Faridabad. A total of 700 questionnaires were sent to five star and five star deluxe properties in NCR and we got back 600 questionnaires out which 525 were complete and worth using for analysis.

### RELIABILITY ANALYSIS

To determine the reliability of structured questionnaire Cronbach's Alpha test is used. The high value of Cronbach's Alpha (0.965) is suggesting the high reliability of the scale.

TABLE:1.1

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.965	.965	29

## ANALYSIS OF DATA AND DISCUSSION

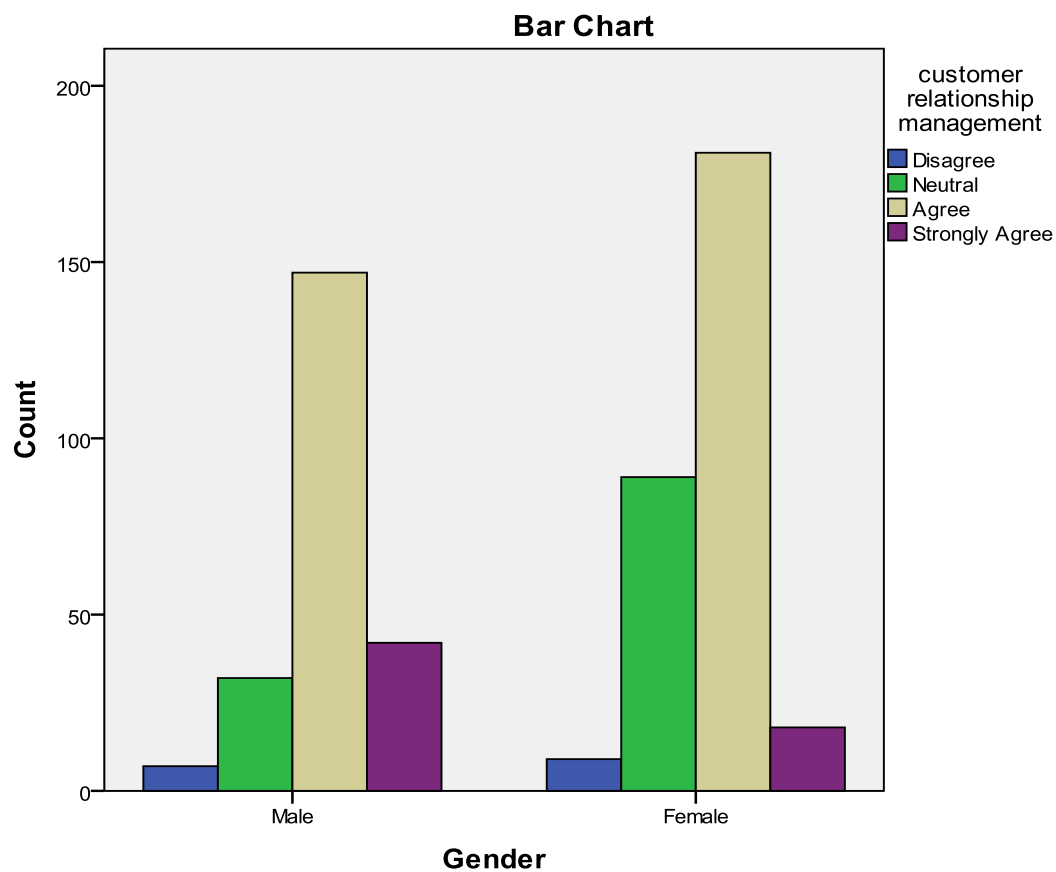
### IMPACT OF GENDER OF RESPONDENTS ON CUSTOMER RELATIONSHIP MANAGEMENT

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**TABLE: 1.2**

GENDER AND CUSTOMER RELATIONSHIP MANGAGEMENT CROSSTABULATION							
			customer relationship management				Total
			Disagree	Neutral	Agree	Strongly Agree	
Gender	Male	Count	7	32	147	42	228
		Expected Count	6.9	52.5	142.4	26.1	228.0
		Residual	.1	-20.5	4.6	15.9	
	Female	Count	9	89	181	18	297
		Expected Count	9.1	68.5	185.6	33.9	297.0
		Residual	-.1	20.5	-4.6	-15.9	
Total		Count	16	121	328	60	525
		Expected Count	16.0	121.0	328.0	60.0	525.0

**FIGURE: 1.1**



**TABLE: 1.3**

CHI - SQUARE TESTS			
	Value	Df	Asymp. Sig. (2-sided) <i>p</i>
Pearson Chi-Square	31.705 <sup>a</sup>	3	.000
Likelihood Ratio	32.505	3	.000
Linear-by-Linear Association	23.539	1	.000
N of Valid Cases	525		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 6.95.

Higher value of Pearson Chi- Square 31.705 and a low value of associated *p* clearly indicate that there is a significant impact of gender of respondents on customer relationship management. The cross tabulation table above and the bar chart displays that customer relation management strategies are more successful on females as compared to males. So, the null hypothesis  $H_0$ 1 is rejected and the alternate hypothesis  $H_1$  is accepted.

#### IMPACT OF AGE OF RESPONDENTS ON CUSTOMER RELATIONSHIP MANAGEMENT

TABLE: 1.4

		customer relationship management					Total
		Disagree	Neutral	Agree	Strongly Agree		
Age of the Resopondents	Below 20	Count	0	15	11	6	32
		Expected Count	1.0	7.4	20.0	3.7	32.0
		Residual	-1.0	7.6	-9.0	2.3	
	21-40	Count	3	78	235	45	361
		Expected Count	11.0	83.2	225.5	41.3	361.0
		Residual	-8.0	-5.2	9.5	3.7	
	41-60	Count	13	28	82	7	130
		Expected Count	4.0	30.0	81.2	14.9	130.0
		Residual	9.0	-2.0	.8	-7.9	
	61 and above	Count	0	0	0	2	2
		Expected Count	.1	.5	1.2	.2	2.0
		Residual	-.1	-.5	-1.2	1.8	
Total		Count	16	121	328	60	525
		Expected Count	16.0	121.0	328.0	60.0	525.0

FIGURE: 1.2

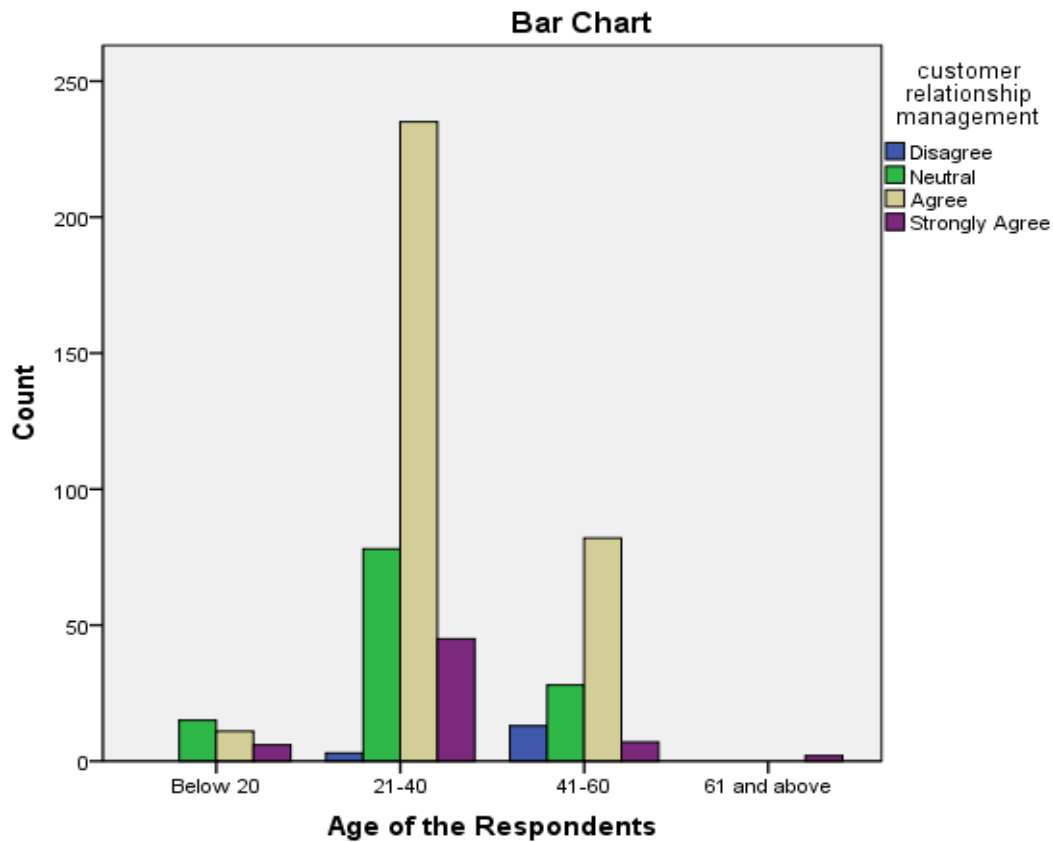


TABLE: 1.5

CHI - SQUARE TESTS			
	Value	Df	Asymp. Sig. (2-sided) <i>p</i>
Pearson Chi-Square	61.694 <sup>a</sup>	9	.000
Likelihood Ratio	50.166	9	.000
Linear-by-Linear Association	3.875	1	.049
N of Valid Cases	525		

a. 7 cells (43.8%) have expected count less than 5. The minimum expected count is .06.

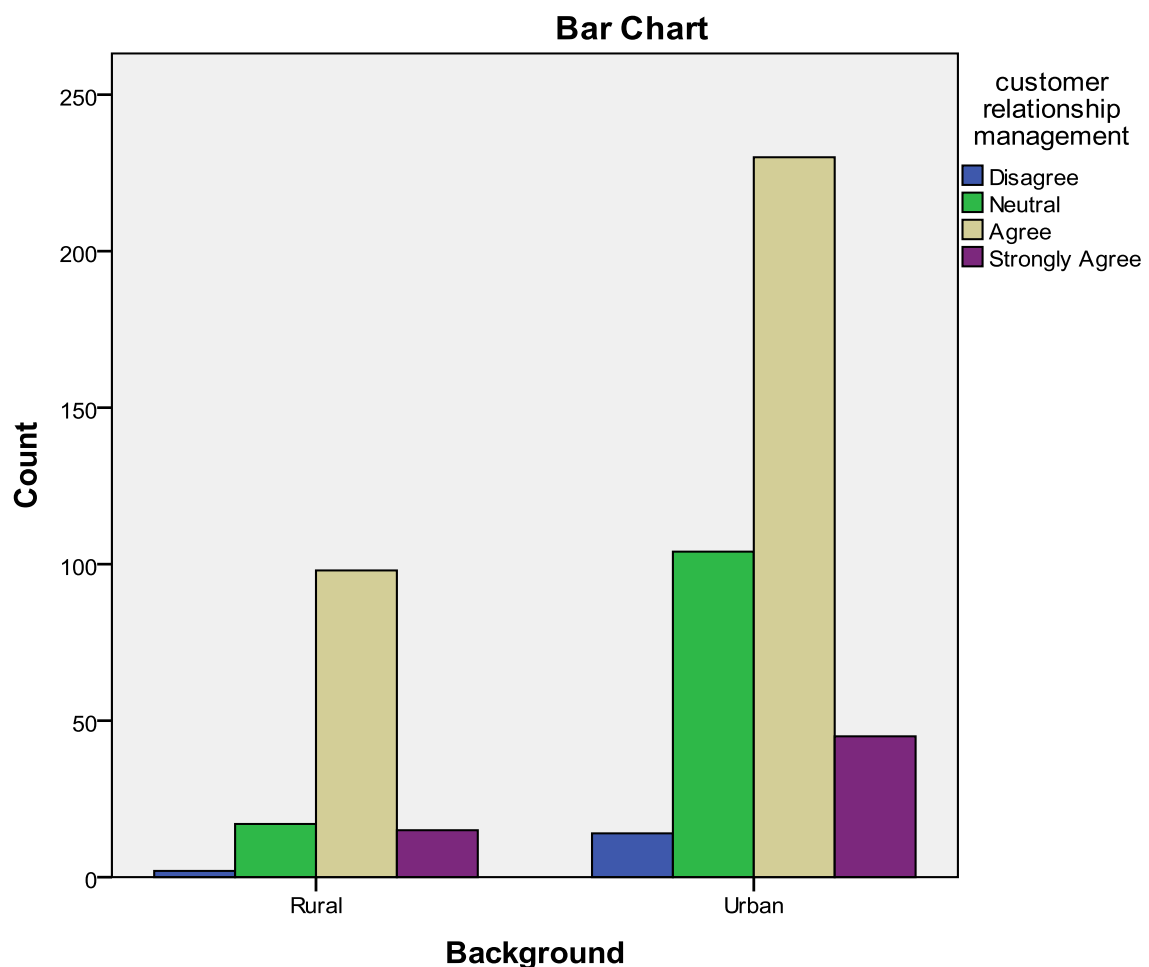
Higher value of Pearson Chi- Square 61.694 and low value associated *p* .000 connotes that there is a significant effect of age of respondents on customer relationship management. The cross tabulation table and the bar diagram above shows that five star hotels in NCR are able to effectively maintain customer relationships with respondents between the age group of 21-40 as compared to other age groups. So, the null hypothesis  $H_02$  is rejected and the alternate hypothesis  $H_2$  is accepted.

**IMPACT OF BACKGROUND OF RESPONDENTS ON CUSTOMER RELATIONSHIP MANAGEMENT**

**TABLE: 1.6**

			customer relationship management				Total
			Disagree	Neutral	Agree	Strongly Agree	
Background	Rural	Count	2	17	98	15	132
		Expected Count	4.0	30.4	82.5	15.1	132.0
		Residual	-2.0	-13.4	15.5	-.1	
	Urban	Count	14	104	230	45	393
		Expected Count	12.0	90.6	245.5	44.9	393.0
		Residual	2.0	13.4	-15.5	.1	
Total		Count	16	121	328	60	525
		Expected Count	16.0	121.0	328.0	60.0	525.0

**FIGURE: 1.3**



**TABLE: 1.7**



CHI SQUARE TESTS			
	Value	Df	Asymp. Sig. (2-sided) p
Pearson Chi-Square	13.178 <sup>a</sup>	3	.004
Likelihood Ratio	14.292	3	.003
Linear-by-Linear Association	7.012	1	.008
N of Valid Cases	525		

a. 1 cells (12.5%) have expected count less than 5. The minimum expected count is 4.02.

Higher value of Pearson Chi- Square 13.178 and low value of p .004 which is less than .05 connotes that there is a significant impact of background on customer relationship management. The cross tabulation table and the bar diagram above that customers from urban background are more oriented towards establishing relationship with hotels as compared to customers from rural background. So, the null hypothesis H<sub>03</sub> is rejected and the hypothesis H<sub>3</sub> is accepted.

**IMPACT OF EDUCATION OF RESPONDENTS ON CUSTOMER RELATIONSHIP MANAGEMENT**

**TABLE: 1.8**

		customer relationship management					Total
		Disagree	Neutral	Agree	Strongly Agree		
Education	Matriculation	Count	0	8	8	0	16
		Expected Count	.5	3.7	10.0	1.8	16.0
		Residual	-.5	4.3	-2.0	-1.8	
	Senior Secondary	Count	0	19	27	8	54
		Expected Count	1.6	12.4	33.7	6.2	54.0
		Residual	-1.6	6.6	-6.7	1.8	
	Graduate	Count	11	25	79	8	123
		Expected Count	3.7	28.3	76.8	14.1	123.0
		Residual	7.3	-3.3	2.2	-6.1	
	Post Graduate & above	Count	5	69	214	44	332
		Expected Count	10.1	76.5	207.4	37.9	332.0
		Residual	-5.1	-7.5	6.6	6.1	
Total		Count	16	121	328	60	525
		Expected Count	16.0	121.0	328.0	60.0	525.0

FIGURE: 1.4

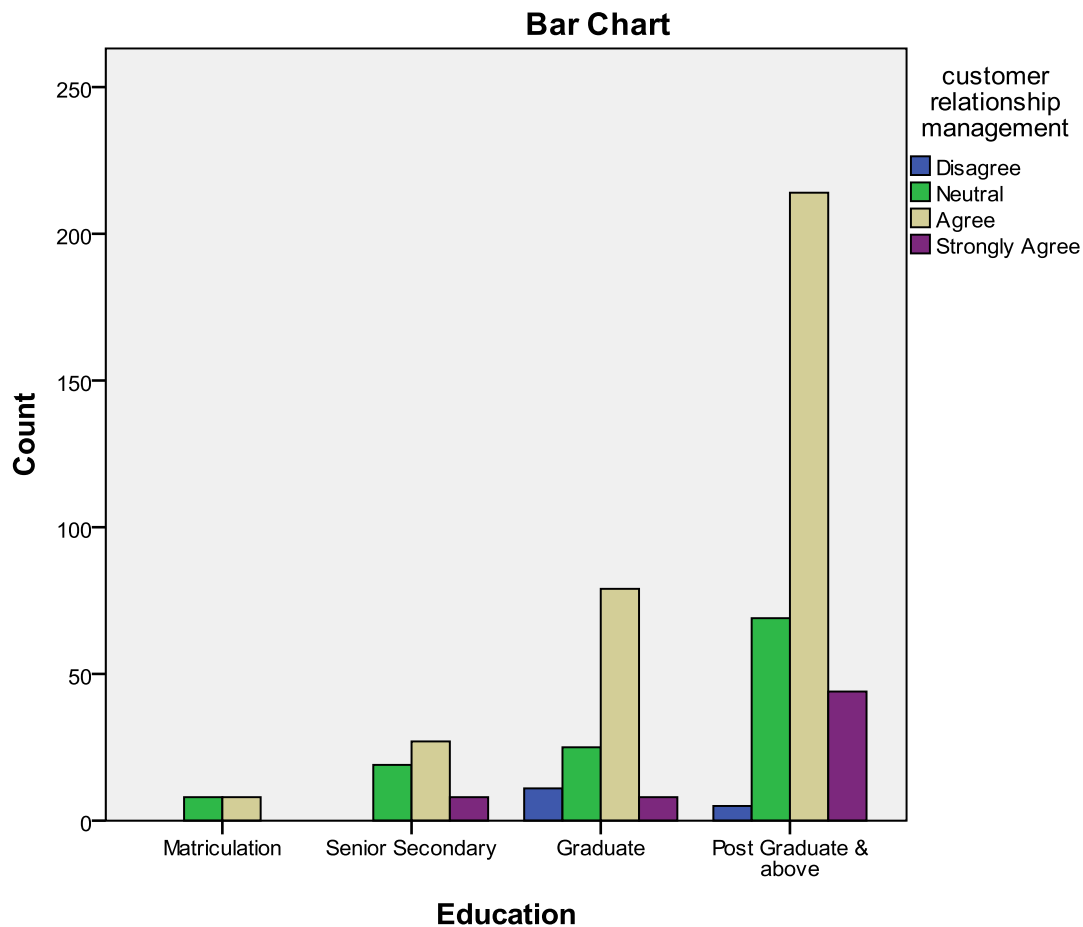


TABLE: 1.9

CHI SQUARE TESTS			
	Value	Df	Asymp. Sig. (2-sided) <i>p</i>
Pearson Chi-Square	36.339 <sup>a</sup>	9	.000
Likelihood Ratio	34.852	9	.000
Linear-by-Linear Association	8.670	1	.003
N of Valid Cases	525		

a. 5 cells (31.3%) have expected count less than 5. The minimum expected count is .49.

Again the high value of Pearson Chi-Square 36.339 and the low value of *p* .000 indicate there is a significant effect of education on customer relationship management. The cross tabulation table and bar diagram above clearly displays that five star hotels are able to effectively manage customer relationships with respondents having post graduation and above as education. So, the null hypothesis  $H_04$  is rejected and its alternate hypothesis  $H_4$  is accepted.

**EFFECT OF OCCUPATION OF RESPONDENTS ON CUSTOMER RELATIONSHIP MANAGEMENT**

**TABLE: 2.0**

			customer relationship management				Total
			Disagree	Neutral	Agree	Strongly Agree	
Occupation	Self Employed	Count	7	50	94	13	164
		Expected Count	5.0	37.8	102.5	18.7	164.0
		Residual	2.0	12.2	-8.5	-5.7	
	Government Employee	Count	4	25	113	11	153
		Expected Count	4.7	35.3	95.6	17.5	153.0
		Residual	-7	-10.3	17.4	-6.5	
	Private Sector Employee	Count	5	46	121	36	208
		Expected Count	6.3	47.9	130.0	23.8	208.0
		Residual	-1.3	-1.9	-9.0	12.2	
Total		Count	16	121	328	60	525
		Expected Count	16.0	121.0	328.0	60.0	525.0

FIGURE: 1.5

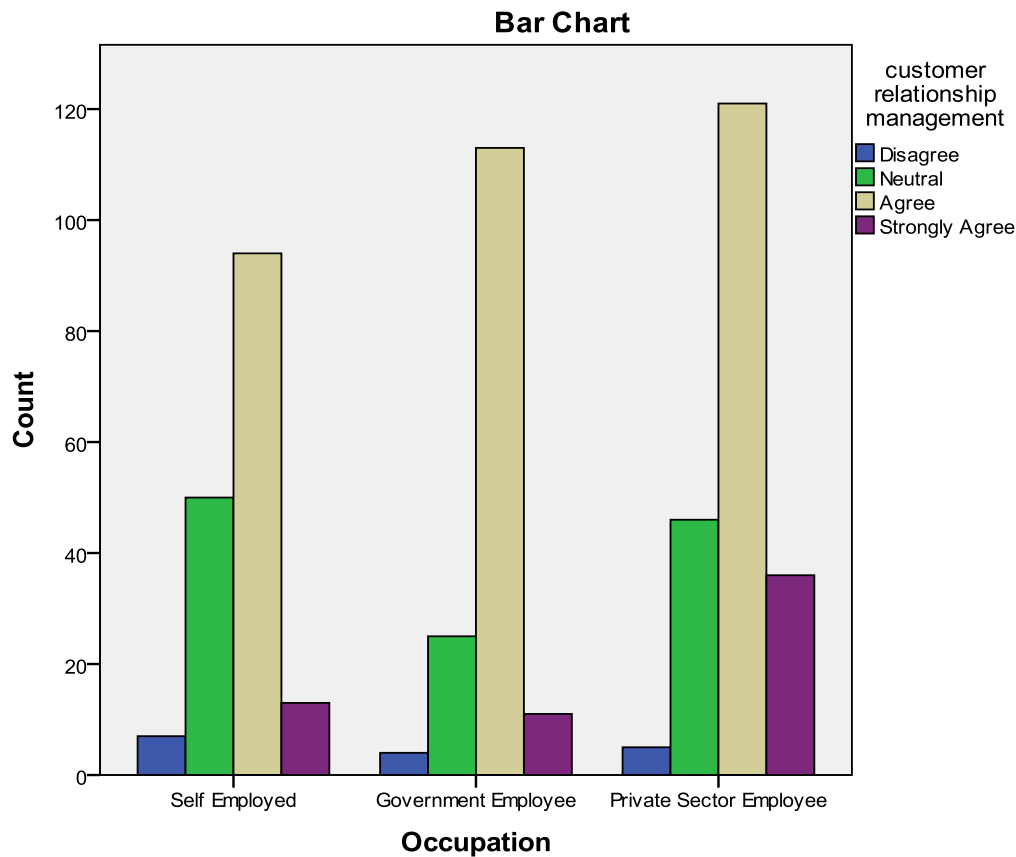


TABLE: 2.1

CHI SQUARE TESTS			
	Value	Df	Asymp. Sig. (2-sided) p
Pearson Chi-Square	23.126 <sup>a</sup>	6	.001
Likelihood Ratio	22.614	6	.001
Linear-by-Linear Association	9.369	1	.002
N of Valid Cases	525		

a. 2 cells (16.7%) have expected count less than 5. The minimum expected count is 4.66.

High value of Pearson Chi- Square in above table and low value of p represents that there is significant effect of occupation of respondents on customer relationship management. The cross tabulation table above and the associated bar diagram exhibits that customers who are working in private sector are more positive and oriented towards customer relationship management strategies used by hotels. So, the null hypothesis  $H_0$  is rejected and its alternate hypothesis  $H_1$  is accepted.

**IMPACT OF PURPOSE OF VISIT ON CUSTOMER RELATIONSHIP MANAGEMENT**

**TABLE: 2.2**

			customer relationship management				Total
			Disagree	Neutral	Agree	Strongly Agree	
Purpose Of visit	Leisure	Count	0	72	131	21	224
		Expected Count	6.8	51.6	139.9	25.6	224.0
		Residual	-6.8	20.4	-8.9	-4.6	
	Business Visit	Count	6	8	53	16	83
		Expected Count	2.5	19.1	51.9	9.5	83.0
		Residual	3.5	-11.1	1.1	6.5	
	Visiting friends and relatives	Count	10	27	94	15	146
		Expected Count	4.4	33.6	91.2	16.7	146.0
		Residual	5.6	-6.6	2.8	-1.7	
	Others	Count	0	14	50	8	72
		Expected Count	2.2	16.6	45.0	8.2	72.0
		Residual	-2.2	-2.6	5.0	-.2	
Total		Count	16	121	328	60	525
		Expected Count	16.0	121.0	328.0	60.0	525.0

FIGURE: 1.6

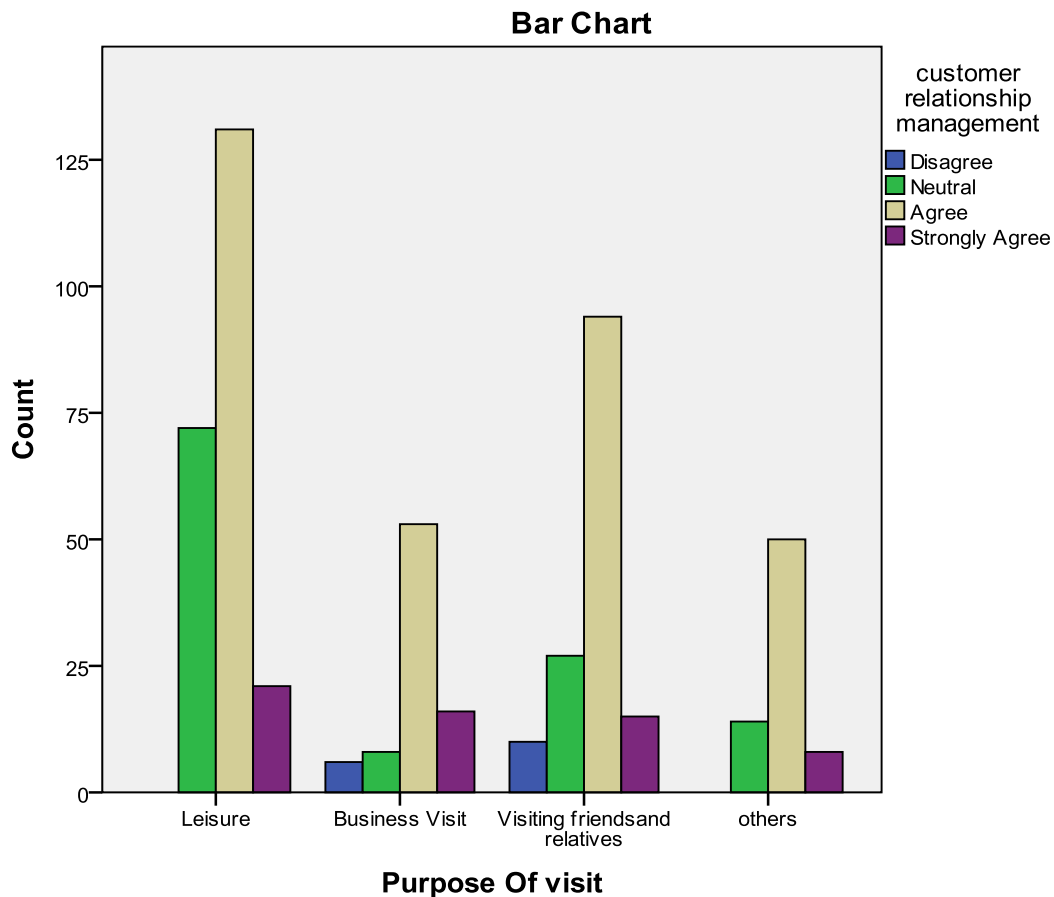


TABLE: 2.3

CHI SQUARE TESTS			
	Value	Df	Asymp. Sig. (2-sided) p
Pearson Chi-Square	43.660 <sup>a</sup>	9	.000
Likelihood Ratio	49.860	9	.000
Linear-by-Linear Association	1.233	1	.267
N of Valid Cases	525		

a. 3 cells (18.8%) have expected count less than 5. The minimum expected count is 2.19.

Table above shows that there is a significant impact of purpose of visit on customer relationship management (High value of Pearson Chi- Square 43.660 and low value of p .000). Moreover, the cross tabulation table and bar diagram above clarifies that customer relationship management is more effective on guests travelling for leisure purpose. So, the null hypothesis  $H_0$  is rejected

### **Conclusion:**

From the above analysis and discussion it can be concluded that there is a significant relationship and impact of demographic variables on customer relationship management. Moreover, it has also been established that customer relationship management is more effective on females as compared to males, on customers of age group 21-40 years as compared to other age groups, on urban background customers. Customers who are post graduate and above in education are more positive and oriented towards the customer relationship strategies used by hotels. Then it was also found that customer relationship management strategies have more impact on customers working in private sector and customers who visit the hotel for leisure purpose. So, this information can be very useful while designing customer relationship management strategies.

### **References:**

- Baldwin, E. A. (2006). *How to Win Using Customer Relationship Management*. Ohio: Thomson
- Binkhorst, E. and Den Dekker, T. (2009). Agenda for co-creation tourism experience research. *Journal of Hospitality Marketing & Management*, Vol. 18 No 2/3, pp. 311-327.
- Burgess, J. (1982). Perspectives on gift exchange and hospitable behavior. *Journal of Hospitality Management*, vol. 1, no. 1, pp 49-57
- Gefen, D. and Ridings, C.M. (2002). Implementation team responsiveness and user evaluation of customer relationship management: a quasi-experimental design study of social exchange theory. *Journal of Management Information Systems*, Vol. 19 No. 1, pp. 47-69.
- Hochschild, A.R. (1983). *The managed heart: commercialization of human feeling*. Berkeley: University of California Press
- Karakostas, B., Kardaras, D. and Papathanassiou, E. (2005). The state of CRM adoption by the financial services in the UK: an empirical investigation. *Information & Management*, Vol. 42 No. 6, pp. 853-863.
- Kotler, P. (1992). It's time for total management. *Business Week*, (2968) 31-33.
- Krasnikov, A., Jayachandran, S. and Kumar, V. (2009). The impact of customer relationship management implementation on cost and profit efficiencies: evidence from the US commercial banking industry. *Journal of marketing*, Vol.73 (6), pp. 61-76.
- Lemon, K.N., White, T.B. and Winer, R.S. (2002). Dynamic customer relationship management: incorporating future considerations into service retention decision. *Journal of Marketing*, Vol. 66, pp. 1-14.
- Light, B. (2003). CRM packaged software: A study of organizational experiences. *Business Process Management Journal*, Vol 9, pp 303-316.
- Papaioannou, E., Sarmaniotis, C., Assimakopoulos, C. and Sotiriades, M. (2011). CRM systems employed in the hotel sector: a case of a Greek 5-star hotel. *Proceedings of*

*Advances in Hospitality and Tourism Marketing and Management*, Istanbul, 19-24 June, pp. 408-413

- Prahalad, C.K. and Ramaswamy, V. (2004). *The Future of Competition: Co-creating Unique Value with Customers*. Harvard Business School Press, Boston, MA.
- Reichheld, F.F. (2003). Loyalty-Based Management. *Harvard Business Review*, Vol 71 No(2), pp 64-72
- Samanta, I. (2009). The impact of e-customer relationship in hotel industry. *Communications in Computer and Information Science*, Vol. 49 No. 3, pp. 484-494.