

The Impact of CRM dimensions on Customer Retention in the Hospitality Industry: Evidence from the Moroccan Hotel sector

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Abstract- *Customer relationship management (CRM) has currently become one of the most controversial issues and is considered by many marketers as a focal-center in the business field. Previous literature suggest that it is essential for hotels to adopt CRM technologies to help hotel managers improve their organizations performance. Nevertheless, the relationship between CRM technology and hotel performance is still ambiguous. In an attempt to review the different perspectives of CRM, this research paper focus on the view that suggests that CRM implementations typically involve the four dimensions: (1) customer orientation (2) knowledge management (3) CRM organization, and (4) CRM technology. Our study evaluates the relationship between CRM dimensions and hotel performance (customer retention) in Morocco. A sample of 80 Moroccan hotels was examined, and regression and other tests were used for analyses and testing. Our findings demonstrates a significant effect of customer orientation, knowledge management, and CRM organization on customer retention. While the use of CRM technology has been demonstrated to not significantly affect customer retention in surveyed hotels.*

JEL classification- G32

Keywords- *Customer Relationship Management; customer orientation; knowledge management; CRM organization; CRM technology; customer retention*

1. INTRODUCTION

Undoubtedly, CRM has recently become one of the most broadly accepted instrument that supports customer-oriented organizations decisions. More specifically, CRM is regarded as one of the best strategies and practices for hotels in order to develop their performance and thus to make sure that their long-term business is survival (Wu & Lu, 2012)[41]. It is worth mentioning that CRM is mainly based on the belief that establishing long-term relationships with customers is critical for obtaining loyal customers who are much more profitable than non -loyal ones (Dowling, 2002)[11]. Though previous studies confirm the positive effects of CRM on business performance, actual results in the business world remain controversial regarding the real outcomes of CRM and its effects on businesses investing in it (Payant 2004[28]; Rigby, Reichheld, and Schefter 2002)[32].

In this regard, the successful implementation of CRM strategies will be of great benefit to the organizations, investing in it. Such organizations can reap the benefit of

increasing sales and ensuring long-lasting customer-retention and loyalty (Verma and Chandhuri, 2009)[38]. The uncertainties about the precise implication and domain of CRM led to improper implementations of CRM and therefore to unsatisfying results in improving customer relationships. James (2002)[14] attempted to provide a more conceptual clarity of CRM through identifying four key areas necessary for successful CRM implementation: (1) *strategy*, (2) *people*, (3) *processes*, and (4) *technology*. In other words, CRM can only be effective if all four areas work in harmony. More particularly and based on previous CRM studies, it can be concluded that CRM implementations can be successful only if they involve these CRM four dimensions: (1) customer-oriented strategies (Vandermerwe 2004)[38], (2) knowledge management (Stefanou, Sarmaniotis, and Stafyla 2003)[36], (3) organizing around CRM (Homburg, Workman, and Jensen 2000), and (4) the incorporation of CRM based technologies (Chen and Ching 2004)[9].

In Morocco, hotels operate in a business environment that is illustrated by strong competition, making it vulnerable to international competition. Besides, the occupancy rates of hotels in Morocco have varied significantly in recent years (Annuaire Statistique du Tourisme 2015[3], observatoire du tourisme, Morocco). This also reveals that hotel managers need to use an appropriate strategy and practice to develop their performance. Consequently, to develop both customer satisfaction and to improve profitability, hotels must nowadays emphasize on implementing a CRM strategy in appropriate manners (Mohammed et al., 2014)[24]. However, in spite of the wide use of CRM in the organizations, there have been only limited studies and publications within the hotels sector.

This research paper tend to bring attention to the application CRM dimensions in the hospitality industry. It examines the direct outcomes of the CRM activities on Moroccan hotels customers' satisfaction. A survey of 80 hotels executives was conducted on hotels operating in the Moroccan territory.

2. CUSTOMER RELATIONSHIP MANAGEMENT (CRM)

CRM has been defined in numerous ways and with many descriptions. It can generally be defined as the art of acquiring customers and having a long-lasting relationship with them. As well, CRM can be referred to as the combination of people, processes, and technology used to understand and obtain customers for a company. It focuses on customer relationships and retention. To benefit fully from the implementation of CRM, companies must have efficient CRM strategies to ensure satisfying outcomes for the company (Chen & Popovich, 2003)[8]. In order to compete with competitors in today's market, businesses need to have more than just a professionally designed Website or software, other dimensions are to taken into consideration.

In an attempt to summarize the different definitions of CRM, this research paper focus on the definition that states that CRM implementations usually involve the four dimensions: (1) focusing on customer-oriented strategies (2) managing knowledge (3) organizing around CRM and (4) incorporating CRM based technology. The multi-dimensions concept of CRM can be considered relatively new, because of the limited studies focusing on CRM dimensions in some service sectors such as banking (Akroush et al., 2011)[2] and contact centers (Abdulateef et al., 2010)[1]. So based on this new approach, it can be presumed that CRM consists of the four abovementioned broad behavioral dimensions. The cited dimensions must be used systematically in an organization in order to guarantee an improved performance (Yim et al., 2005)[42].

2.1. Customer Orientation

The main purpose behind customer –oriented behaviors is to increase customer long-lasting satisfaction and to create customer-loyalty. Kim (2008)[15] demonstrates that customer -oriented strategies, in an organization, definitely ensures an extremely positive impact on its performance (Kim, 2008). Accordingly, King and Burgess (2008) confirm that customer orientation is a critical factor in the success of CRM projects. Besides, other studies reveal that service firms require a better understanding of customer orientation in order to enhance their performance (Kim et al., 2006[16]; Sin et al., 2005). Morgan et al (2009)[25] reveal that customer orientation has a positive impact on marketing planning capabilities. Besides, this strategy also influences the successful implementations of marketing actions or innovations (Slater and Narver, 1998)[35]. Hence, we note that despite the numerous positive impacts of customer-orientation on organizations performance, there is still a shortage of literature about its impact on service firms and hotels performance.

2.2. Knowledge Management

As mentioned earlier in the preceding section, CRM can be successful only if customer information is effectively transformed to customer knowledge (Plessis and Boon 2004). Abdulateef et al (2010)[1] convey that managing knowledge effectively greatly help organizations in building better customer relationship and enhancing organizational performance. Collecting and analyzing customers' information also help companies to develop highly personalized offerings (Sigala, 2005)[33].

In spite of the cited benefits of knowledge management, only few studies illuminate the role of knowledge management in the hotels performance. Lo et al., (2010) recommend investigating the impact of knowledge management dimension on hotel industry in future research.

2.3. CRM Organization

First, it is important to note that in order to enhance customers relationships and firms performance, organizations have to develop appropriate working environments. As a result of the previous supportive working conditions, organizations can ensure the required customer-oriented behaviors of their employees (Mechinda and Patterson, 2011)[22]. Researchers also argue that CRM cannot be successful even with the most advanced technology and even with customer - oriented approaches, unless the project is completely integrated at all levels (Sin et al., 2005; Yim et al., 2005)[42]. Ku (2010) confirm that CRM success does not only require technological quality or systems, but also effective service concept and suitable operation procedures.

With regard to the hospitality industry, Nunes and Dréze (2006)[27] report that many hotel chains flexibly quote their room prices based on the customer data that were collected previously. It goes without saying that Knowledge about customers plays a vital role in CRM,

since it helps organizations to get a clearer image about customer wants and expectations (Sin et al., 2005). Therefore, such data can be used to establish and develop beneficial and long-lasting relationships with customers.

2.4. CRM Technology

Several studies demonstrate that CRM applications help organizations to collect and analyze data about customers, respond with timely and effective customized communications, and efficiently deliver personalized offerings to their customers (Peppard 2000[29]; Vrechopoulos 2004)[40]. Marketing executives frequently adopt the latest software programs to better respond to customers and to build profitable long-lasting customer relationships. Butler (2000)[6] reveal that CRM technologies help organizations to boost customer satisfaction, increase customer retention, and build profitable long-term customer relationships. Though, CRM technologies generally end up in failure if not used properly. Accordingly, the suitable use of technology in marketing is one of the greatest opportunities in service firms. It is important to get the right information from the right people at the right time in order to make the right decisions (Moriarty et al., 2008).

In summary, we can conclude that for a successful implementation of CRM projects, firms need to combine the four abovementioned dimensions—customer orientation, CRM organization, knowledge management, and CRM-based technology—into an effective overall CRM strategy. Hence, insufficiencies in any of these areas can lead to lowering CRM projects performance or even to failures.

2.5. CRM and Hotel industry

Several recent studies on CRM focus on service sectors for the higher importance of these strategies in such industries. These studies addressed industries such as banking (e.g. Akroush et al., 2011)[2], telecommunication (Beldi et al., 2010)[4], healthcare (Bunthuwun et al., 2011)[5], and contact center (Abdulateef et al., 2010)[1]. Nonetheless, research on CRM in the hospitality industry remains limited. Vogt (2011)[39] conveys that despite the increasing use of CRM in the tourism sector, very few studies investigate CRM applications in this industry. As well, many researches stressed the importance of making further research on CRM implications in the hotel sector (Akroush et al., 2011[2]; Sin et al., 2005).

Despite the fact that a number of studies confirm the reality CRM brings long-lasting benefits to organizations, some of them gain profits from implementing it while others get unsatisfying results. Mguyen et al. (2007)[23] convey that CRM brings benefits to the organizations that generate a lot of information about customers. Relatively, CRM will be ideally suited to the hotel industry, mainly if implemented successfully and effectively. Hotels generally receive a lot of data about customers, which can be transformed into useful knowledge that can be used in

the design of personalized offerings and therefore higher rates of customer satisfaction (Mguyen et al., 2007)[23].

The impact of CRM dimensions on firms performance was assessed in a number of ways, including customer satisfaction (Abdulateef et al., 2010)[1], market effectiveness and financial performance (Sin et al., 2005), customer performance and financial performance (Akroush et al., 2011)[2], and customer retention and sales growth (Yim et al., 2005). Sin et al. (2005) suggest that the use of other measurements of performance in future studies can be beneficial. One of the main measurements of the overall performance of hotels is customer satisfaction. Customer satisfaction not only leads to increasing customer retention, but also help in acquiring new customers via word-of-mouth advertising. Therefore, this study will use the return rate, as a measure of customer satisfaction, of the studied hotels in order to evaluate the impact of CRM dimensions on our sample's hotels performances.

3. HOTEL PERFORMANCE: CUSTOMER RETENTION

CRM dimensions evaluation was assessed in a number of ways, including customer satisfaction (Abdulateef et al., 2010), market effectiveness and financial performance (Sin et al., 2005), customer performance and financial performance (Akroush et al., 2011), and customer retention and sales growth (Yim et al., 2005)[42]. The use of other dimensions of performance is beneficial as suggested by previous studies (Sin et al., 2005). Customer retention is extremely vital for business to remain competitive. It has recently become more significant compared to customer acquisition. According to research conducted by Maxham (2000), customer retention had been measured by four dimensions, that is, overall firm satisfaction; positive words of mouth; repeat purchase intentions; and loyalty to the firm. In a later study by Lin and Wu (2011)[20], it has been proved that there exists a statistically significant relationship between quality commitment, trust and satisfaction and customer retention and future use of product.

4. METHODOLOGY

The objective of this study is to identify the Customer Relationship Management dimensions and their impact on hotels performance in Morocco. The method will be discussed in this study in the following order: research Design, population and sample, data collection method, data analysis, result and implication. .

4.1. Research Framework

The proposed model of this research is based on the resource based view theory. It conveys that the hotels have the resources and capabilities can effectively achieve a competitive advantage to hotels. This proposed research model contains four dimensions of CRM which encompasses customer orientation, CRM organization, knowledge management, and technology based CRM.

This proposal is based on prior researches (Abdullateef et al., 2010[1]; Chang et al., 2010[7]; Wu & Lu, 2012)[41]. The research examines the relationship between customer relationship management dimensions and hotels performance. Thus, we propose the following hypotheses:

- H1. Customer orientation has an influence on customer retention.
- H2. Knowledge management has an influence on customer retention.
- H3. CRM organization has an influence on customer retention.
- H4. CRM technology has an influence on customer retention.
- H5. CRM dimensions have an influence on customer retention.

4.2. Measurement of Variables

Based on previous literature, regarded customer relationship management was operationalized utilizing the measuring of our factors in the previous research. The scales of customer orientation, knowledge management, CRM organization, and CRM Technology- adopted from the study by (Mohammed, & Rashid, 2012). Items were rated on a five point Likert scales (1=strongly disagree, and, 5= strongly agree.). To measure retention, each respondent in this study was asked to choose one of five intervals at which the retention rate of their falls (0-20%, 21%-40%, 41%-60%, 61%-80%, 81%-100%). The mean of intervals was used to run our regression analysis.

4.2.1. Control variable

This paper uses hotel classification as a control variable. 4 and 5 stars hotels are generally more sophisticated hotels with more equipment, larger room, better quality, higher prices, etc. In general, there are no big differences between 4 and 5 stars, while 3 stars hotels have much less equipment, quality, and comfort. Reicher & Szeghegyi (2015)[31] convey SMEs are less likely to use CRM strategies. Therefore, we decided to include a dummy variable for hotel classification as a control variable ("1" if the hotel is 4 or 5 stars, and "0" otherwise).

4.3. Sample and Data Collection

To investigate hypotheses for this research, self-administered questionnaires were used for data collection. Leedy and Ormrod (2005) convey that the best method to learn about the relationship between measurable factors with the intention of explaining, predicting and managing phenomena is the quantitative research technique. As well, quantitative methods are useful to analyze and prove theories, explored significant factors for future research and relate factors posed by questions or hypothesis, using standards of validity and reliability and statistical procedures (Creswell, 2009)[10].

This study examines the relationship between CRM dimensions and Moroccan hotels performance. For the purpose of this study, we select hotels with 3, 4, and 5 stars since these hotels are more likely to use CRM

strategies. According to the Moroccan tourism ministry (2015), there are 180 three stars hotels, 169 four stars hotels, 63 five stars hotels. To ensure a representative sample, we targeted 100 hotels from the three categories according to the number of Moroccan hotels in each category. We also tried to make our sample geographically representative by selecting hotels according to the geographical distribution of Moroccan hotels. A quota sample was selected randomly. The target respondents were hotels directors and marketing directors. When it was not possible to contact these executives, other most senior person responsible for marketing activities was selected.

A self-administered questionnaire was applied using in-person questionnaires (60 questionnaires) and mail questionnaires (20 questionnaires). In order to increase the response rate of mail questionnaires, phone contact was used to explain the purpose of the study and to motivate potential respondents to fill the questionnaires. The questionnaire contained questions on CRM dimensions and on hotel performance measures, mainly customer retention rate. Questions about the hotel performance measures were asked before CRM dimensions in order to avoid biased answers. The CRM dimensions examined in the questionnaire included (a) customer oriented strategies (5 items), knowledge management practices (4 items), CRM organization (4 items), and CRM technology application (a dummy variable with "yes" or "no" was used). Three months were spent to fill the questionnaires; we took this relatively long period because we had to travel in person to fill the personnel questionnaires into cities like Marrakech, Rabat, Fes, Ifrane, and Casablanca. A total of 88 completed questionnaires were collected, representing an 88% response rate. Eight completed questionnaires were discarded due to missing or extreme values.

4.4. Data Analysis

Before the main analysis, numerous statistical tools and techniques were used with the help of SPSS software, version 20. These contain validity and reliability analyses in order to evaluate the goodness of measures and descriptive statistics, to describe the characteristic of respondents and test of differences, to test non-response bias. Then, multiple regression analysis were used to test the influence of customer relationship management dimensions on customer retention.

5. RESULTS AND IMPLICATIONS

5.1. Descriptive statistics

Table 2 (as demonstrated below) provides the descriptive statistics of the four main variables built in this study model. Detailed descriptive statistics of each variable can be found in Table 1 that contain means and standard deviations as below.

Table 1: Descriptive statistics for CRM dimensions and customer retention rate

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Customer orientation	80	2,2000	3,8000	2,997500	,4494652
Customer retention	80	30,00%	70,00%	50,2500%	14,05009%
Knowledge management	80	2,25	4,00	2,9719	,40369
CRM organization	80	2,25	3,75	2,9219	,30188
CRM_technology_dummy	80	0	1	,59	,495
Valid N (listwise)	80				

5.2 Reliability Analysis

The CRM dimension variables included in the study are composed of a number of items that measure each of these variables. All the items (questions evaluating the CRM dimensions in the hotels of our sample) are rated on a five point Likert scales (1=strongly disagree, and, 5=strongly agree). The Cronbach's Alpha was performed to test whether these items go together (interrelate) well enough to add them together for future use as composite variables.

In general, we use the unstandardized alpha, unless the items in the scale have quite different means and standard deviations. As with other reliability coefficients, alpha should be above .70; however, it is common to see journal articles where one or more scales have somewhat lower alphas (e.g., in the .60-.69 range), especially if there are only a handful of items in the scale. A very high alpha (e.g., greater than .90) probably means that the items are repetitious or that you have more items in the scale than are really necessary for a reliable measure of the concept (Leech et al. 2005).

5.2.1 Customer orientation reliability test

In order to assess whether the 5 items that were summed to create the customer orientation score formed a reliable scale, Cronbach's alpha was computed. Accordingly the alpha for the 5 items was .84, which indicates that the items form a scale that has reasonable internal consistency/reliability.

5.2.2 Knowledge management items

Cronbach's alpha was computed for the 4 items of knowledge management. Accordingly the alpha for the 4 items was .766, which indicates that good internal consistency.

5.2.3 CRM organization items

Cronbach's Alpha was also computed for the four items of CRM organization items, but the .625 alpha for the CRM organization scale indicated minimally adequate reliability. Even though, this alpha can be accepted as mentioned earlier (Leech et al. 2005).

5.2.4 CRM technology

For this dimensions, we used a dummy variable (yes or no) to test whether the use of CRM-technologies affect customer retention.

5.3 Multiple Regression Analysis

In this research, we examine the impact of CRM dimensions on customer retention in Moroccan hotels. As mentioned earlier, previous literature indicate that CRM dimensions positively affect firm performance.

5.3.1 Customer orientation strategies and customer retention

The first step in our analysis is to test the relationship between customer orientation strategies and customer retention in Moroccan hotels. Prior literature suggests that firms using customer oriented strategies enjoy higher customer satisfaction and therefore higher customer retention rates (Kim et al., 2006[16]; Sin et al., 2005).

In order to test whether using customer oriented strategies leads to higher retention rates, we estimate a regression with retention rate (RETENTION_RATE) as a dependent variable and the score of Customer orientation items (the mean of the 5 items of customer orientation as used in the questionnaire) as an independent variable. For the purpose of completeness, we estimate all of the subsequent regression equations with hotel classification dummies.

$$\text{CUSTOMER_RETENTION} = \alpha + \beta_1(\text{CUSTOMER_ORIENTATION}) + \beta_2(\text{HOTEL_CLASS_DUMMY}) + \varepsilon \quad (1)$$

The results of the above set of regressions are reported in Table 2. As expected, our results show a significantly positive relationship between customer orientation and customer retention. This result holds for both equations. This can be explained by the fact highly ranked (4 & 5 stars hotels) are more likely to be more customer-oriented than 3 stars hotels. Our results confirm the findings of previous literature and approve that Customer orientation strategies leads to increasing customer retention rates (Kim et al., 2006[16]; Sin et al., 2005).

Table 2: Relationship between customer orientation and customer retention

Coefficients ^a					
Model		Unstandardized Coefficients		t	Sig.
		B	Std. Error		
1	(Constant)	3,726	9,407	,396	,693
	CUSTOMER_ORIENTATION	14,241	3,060	,456	,000

	HOTEL_CLASS-DUMMY	6,529	2,777	,230	2,351	,021
a. Dependent Variable: CUSTOMER_RETENTION						

5.3.2 Knowledge management and customer retention

The second step in our analysis is to test the relationship between knowledge management practices and customer retention is Moroccan hotels. Prior literature suggests that CRM can be successful only if customer information is effectively transformed to customer knowledge (Plessis and Boon 2004)[30]. Yim et al. (2005) [42] demonstrate that knowledge management has a positive effect on customer retention.

In order to test whether knowledge management leads to higher retention rates, we estimate a regression with retention rate (RETENTION_RATE) as a dependent variable and the score of knowledge management items

(the mean of the 4 items of knowledge management as used in the questionnaire) as an independent variable.

$$\text{CUSTOMER_RETENTION} = \alpha + \beta_1(\text{KNOWLEDGE_MANAGEMENT}) + \beta_2(\text{HOTEL_CLASS_DUMMY}) + \varepsilon \quad (2)$$

The results of the above set of regressions are reported in Table 3. As expected, our results show a significantly positive relationship between knowledge management and customer retention. This result holds for both equations. This can be explained by the fact highly ranked (4 & 5 stars hotels) are more likely to use knowledge management practices than other hotels. Our results confirm the findings of Yim et al. (2005).

Table 3: Relationship between knowledge management and customer retention

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1,840	10,464		,176	,861
	KNOWLEDGE_MANAGEMENT	15,031	3,457	,432	4,349	,000
	HOTEL_CLASS_DUMMY	6,366	2,817	,224	2,260	,027
a. Dependent Variable: CUSTOMER_RETENTION						

5.3.3 CRM organization and customer retention

The third step in our analysis is to test the relationship between CRM organization and customer retention is Moroccan hotels. Yim et al (2005) reveal that CRM organization is essential for firms in order to change the way they organize their actual business processes for employees and customers. Previous literature also demonstrate that there is a positive impact of CRM organization on customer retention and on financial and marketing performance (Akrouh et al., 2011[2]; Sin et al., 2005).

In order to test whether CRM organization leads to higher retention rates, we estimate a regression with retention rate (RETENTION_RATE) as a dependent variable and the score of CRM organization items (the mean of the 4

items of CRM organization as used in the questionnaire) as an independent variable.

$$\text{CUSTOMER_RETENTION} = \alpha + \beta_1(\text{CRM_ORGANIZATION}) + \beta_2(\text{HOTEL_CLASS_DUMMY}) + \varepsilon \quad (3)$$

The results of the above set of regressions are reported in Table 4. As expected, our results show a significantly positive relationship between CRM organization and customer retention. This result holds for both equations. This can be explained by the fact that highly ranked (4 & 5 stars hotels) have generally better CRM environment and organization than other hotels. Our results confirm the findings previous literature (Akrouh et al., 2011[2]; Sin et al., 2005).

Table 4: Relationship between CRM organization and customer retention

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	-3,840	14,298		-,269	,789
	CRM_ORGANIZATION	17,036	4,792	,366	3,555	,001
	HOTEL_CLASS-DUMMY	7,343	2,920	,259	2,514	,014
a. Dependent Variable: CUSTOMER_RETENTION						

5.3.4 CRM technology and customer retention

The fourth step in our analysis is to test the relationship between CRM technology use and customer retention in Moroccan hotels. Butler (2000) reveal that CRM technologies help organizations to boost customer satisfaction, increase customer retention, and build profitable long-term customer relationships.

In order to test whether CRM technology use leads to higher retention rates, we estimate a regression with retention rate (RETENTION_RATE) as a dependent variable, and a dummy variable for the use of CRM technology (yes or no) as an independent variable (CRM_TECHNOLOGY_DUMMY).

$$\text{CUSTOMER_RETENTION} = \alpha + \beta_1(\text{CRM_TECHNOLOGY_DUMMY}) + \beta_2(\text{HOTEL_CLASS_DUMMY}) + \varepsilon$$

(4)

The results of the above set of regressions are reported in Table 5. Our results show different results from what was expected. They show that there no significant evidence that CRM technology affect customer retention. This result holds for both equations. These results can be explained by the fact that CRM technologies generally end up in failure if not used properly (Dutu and Halmajan, 2011)[12].

Table 5: Relationship between CRM technology use and customer retention

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	42,124	2,550		16,520	,000
	CRM_TECHNOLOGY_DUMMY	10,762	3,095	,379	1,478	,110
	HOTEL_CLASS-DUMMY	3,069	3,095	,108	,992	,324
a. Dependent Variable: CUSTOMER_RETENTION						

5.3.5 Robustness of results

As a last step, we perform our analysis by including all CRM dimensions variables together in a single equation. Our regression equation takes the following form:

$$\text{CUSTOMER_RETENTION} = \alpha + \beta_1(\text{CUSTOMER_ORIENTATION}) + \beta_2(\text{KNOWLEDGE_MANAGEMENT}) + \beta_3(\text{CRM_ORGANIZATION}) + \beta_4(\text{CRM_TECHNOLOGY_DUMMY}) + \beta_5(\text{HOTEL_CLASS_DUMMY}) + \varepsilon$$

(5)

The results of the above set of regression are reported in

Table 6. The results confirm our previous findings that hotels with better customer orientation strategies have higher customer retention rates. We also show that knowledge management and CRM organization are significantly positively related to customer retention in the hotels of our sample. Hotel classification also has a positive effect on customer retention. Hotels with 4 and 5 stars have better customer retention rates than other hotels. However, we show that CRM technology use is not significantly related to customer retention

Table 6: Relationship between CRM dimensions (customer orientation, knowledge management, CRM organization, CRM technology) and customer retention.

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-4,034	13,467		-,300	,765
	CUSTOMER_ORIENTATION	2,187	2,030	,134	4,694	,019
	KNOWLEDGE_MANAGEMENT	1,905	1,756	,201	3,037	,003
	CRM_ORGANIZATION	1,501	1,426	,103	2,810	,037
	CRM_TECHNOLOGY_DUMMY	1,526	3,126	,265	1,408	,189
	HOTEL_CLASS-DUMMY	1,199	1,113	,148	2,441	,024
a. Dependent Variable: CUSTOMER_RETENTION						

6. CONCLUSION

This paper examines the impact of CRM dimensions on customer retention in Moroccan hotels. These dimensions include customer orientation, knowledge management, CRM organization, and CRM technology. Our results show that a better application of CRM dimensions leads to increasing customer retention rates. For instance, we

show that customer orientation, knowledge management, and CRM organization are positively related to customer retention. We also show that CRM is not limited to only technology and that investing in CRM technologies do not necessarily lead to a better performance (performance is measured by customer retention in our case). So, our results show that CRM technology use is not significantly related to customer retention. We used hotel classification

as a controlling variable and it has been showed that there a positive relationship between hotels classification and customer retention. Hotels with 4 and 5 stars have higher customer retention rates than other hotels (3 stars hotels in our study).

7. LIMITATIONS OF THE STUDY AND FUTURE RESEARCH

The first limitation of our study was the measurement of customer retention rate in the sample hotels. The rates used were based on hotels managers' answers which might be biased, especially that there was no exact formula used by these hotels to calculate customer retention rates. Second, respondents had to choose an interval at which their retention rate fall because they didn't have exact numbers with regard to customer retention. Finally, for CRM technology use, we used a dummy variable to show whether the hotel uses or not CRM technologies. So, whether the CRM technology was appropriately used or not and its effect of customer retention is to be examined in a future study.

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