

The impact of effective CRM technology implementations on customer retention in the hospitality industry: case of Moroccan hotels

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Abstract

Customer relationship management (CRM) has become a key strategy for customizing customer experiences and improving customer satisfaction and retention, particularly in hotels. However, previous studies demonstrate that these hotels are not taking advantage of the full potential of CRM and many of them struggle to succeed with its implementation. This study analyses the main success factors of CRM implementation and their impact on customer retention, based on a sample of 80 Moroccan hotels. The results highlight that CRM are not frequently used in Moroccan hotels, mainly in 3 stars hotels. The findings reveal, as well, that investing in technology is necessary but not sufficient for achieving positive results with CRM. CRM technologies do not impact customer retention if not effectively used. We finally demonstrate the crucial role played by organizational factors (CRM technology users' acceptance, ease of use of CRM software, CRM culture in the company, knowledge management of CRM data) in improving customer retention in the hospitality industry.

JEL classification: G32

Keywords: Customer Relationship Management (CRM), organizational factors, customer retention.

1. Introduction

Customer relationship management technologies help organizations in analyzing sales opportunities, promoting existing customers purchases, maintaining good relationships with customers and improving the image of the company (Almotairi, 2009; Verma and Chandhuri, 2009). Though the mentioned benefits of CRM technologies on firm performance, many other studies show insufficient outcomes or even a negative impact of customer relationship management on business performance (El Koraichi, 2014; Bohling et al, 2006).

Bose (2002) conveys that companies must fundamentally change the way marketing is done, through the passage from managing mass customers to managing customer relationships. Relatively, Farquhar et al (2008) indicate that the quality of services and satisfaction are not enough to retain customers. Contemporary organizations need to work on establishing, maintaining and improving relationships to build long-term connections with customers and thus attain better economic performances. To do so, CRM technologies might be a good alternative.

Technologies have offered several options to businesses regarding how to keep in touch with clients and make them loyal. The use of CRM mechanism was demonstrated to reduce cost and decrease the hassles in reaching out to customers (Klutse, 2016). Accordingly, successful implementations of CRM strategies can increase sales through better market segmentations, customizing products and services, obtaining higher quality products, and gaining access to information about customer satisfaction and perception of marketed products and services (Stockdale, 2007; Verma and Chandhuri, 2009).

Though CRM technologies have grown very rapidly in developed countries, a countless number of organizations still find it hard to implement. Dickie (2009) indicates that only 16.1% of companies, out of the 1,700 companies surveyed in several countries, got satisfying outcomes from the use of CRM solutions. In Thailand, the National Statistical Office of Thailand (2007) revealed that only 20.7% of Thai companies got positive outcomes from the implementation of information and communication technologies. Everett

(2002) confirm and approve the preceding results and convey that firms complain that over 50% of CRM projects fail to achieve the projected results.

Literature on CRM focuses more on service industries for the importance of customer relationships for service providers. Such industries include banking and the insurance industry (Akroush et al., 2011; Becker, Greve, and Albers 2009; Hussain et al., 2009; Krasnikov et al., 2009; Sin, Tse and Yim 2005), telecommunication (Almotairi, 2009; Beldi et al., 2010), and healthcare delivery (Bunthuwun et al., 2011; Hung et al., 2010). Literature on CRM in the hospitality industry is still limited, in that, many studies have not explored the concept and its appropriate use in the hospital industry (Luck and Stephenson, 2009; Wu and Lu, 2012). More particularly, the concept of CRM is still at infant stages in developing countries and Africa in particular.

Several studies documented the importance of CRM in the hospitality industry (Akroush et al., 2011; Sadek et al., 2011; Sin et al., 2005). Hence, it will be of great interest to explore how CRM is used in developing countries and how the hospitality industry can take advantage of these technologies. Extending the CRM concept to the hospitality industry for hotel performance is relevant both in theoretical perspective and empirical perspective. In this regard, many studies have examined the development and implementation of CRM systems in recent years. However, these studies have failed to determine common organizational factors that could lead to an effective use of CRM solutions.

This research paper tends to first bring attention to the various organizational factors affecting CRM solutions in service companies. We also try to test the impact of these organizational factors on CRM outcomes in the hospitality industry. CRM performance is measured by customer retention. A survey of 80 hotels executives was conducted on hotels operating in the Moroccan territory.

2. Research context

Moroccan hotels operate in a highly competitive business environment that is vulnerable to international competition. As well, the occupancy rates of hotels in Morocco have known significant fluctuations in recent years (Annuaire Statistique du Tourisme 2015, observatoire du tourisme, Morocco). Alshourah (2012) reveals that hotel managers need to use

appropriate strategies and practices to develop their performance. Hence, to develop both customer satisfaction and to improve profitability, hotels must nowadays emphasize on implementing a CRM strategy in appropriate manners (Ammari, 2014; Mohammed et al., 2014). However, in spite of the wide use of CRM technologies in the organizations, there have been only limited studies and publications within the hotels sector (Ammari, 2014).

The majority of service companies maintain vast quantities of customer information used to establish long-term relationships (Karakostas et al, 2005). El Koraichi (2014) argues that a 5% increase in customer retention can result in an 18% reduction in operating costs. Kumar et al (2009) examined the impact of CRM solutions on two indicators of business performance using a representative sample of US commercial banks. The results revealed that the use of CRM solutions is associated with decreasing cost efficiency and increasing profits efficiency.

Very few studies about CRM have been carried out in Morocco. EL Koraichi (2014) conducted a survey about 47 Moroccan commercial banks. He shows that despite the anticipated potential, the expected benefits of CRM solutions are still unsatisfying for bankers. He reveals that the use of CRM solutions in the Moroccan banking sector remains in its elemental state since it still focuses on gathering customer information at the branch level while the analysis and use of these information is performed at headquarters. In addition, a large part of banks adopting CRM solutions do not measure the cost of the relationship with their customers.

This study aims to test the impact of the use of CRM technologies on customer retention in the context of the hospitality sector in Morocco. As well, we tend to highlight the various organizational factors affecting CRM solutions and test their impact on customer retention in Moroccan hotels.

3. Literature review

3.1. The concept of CRM

According to Swift (2000), Customer Relationship Management (CRM) is defined as “an enterprise approach for understanding and influencing customer behavior through meaningful communications in order to improve customer acquisition, customer retention,

customer loyalty and customer profitability". Later, Bose (2002) defines CRM as "an enterprise wide integration of technologies and functions such as data warehouse, Websites, intranet/extranet, telephone support system, accounting, sales, marketing and production". Based on the two above definitions, it can be clearly concluded that CRM is mainly based on managing the customer. CRM also helps in maintaining and improving long lasting relationships with customers through efficient management and customer focused applications.

The concept of CRM differs in meanings depending on its applications. Piskar and Faganel (2009) confirm that the concept has different meaning according to the working environment. Mohammed and Rashid (2012) define CRM as "a strategic approach that enables organizations to use internal resources (i.e. Technology, people, and process) to manage the relationship with customers for the whole of their lives cycles, in order to create a competitive advantage and improve an organization's performance". However, in this study, we focus more on the technological perspective of CRM.

3.2. CRM and hotels Performance

Recent studies reveal that CRM leads to better performance in the hotel industry. Klutse (2016) conveys that any successful business needs to focus on the key following success elements: improving service quality and customer satisfaction, binding the customer to the organization through continued customer satisfaction, the use of technology to enhance satisfaction and thorough continued communication between the two parties. Service quality is the key tool to achieve competitive advantage (Dominici and Guzzo, 2010). Amoako et al., (2012) believe that service quality is the solution of all customer related problems and for achieving customer satisfaction. Customer satisfaction is the ultimate goal for managers in service firms in general and in the hospitality sector in particular. Therefore, from a customer satisfaction point of view, CRM is the key to understanding customer needs and then providing satisfying products and services to customers.

CRM is more important than ever for service firms and is considered as the glue that binds the customer and the organization. Fan (2011) argue that CRM makes it possible to integrate various information technology software and systems that the whole process of managing customer relationships a reality. In the hospitality industry, effective communication is crucial since it enables consumers to specify the type of services they need from the company, which leads to building long term relationship and more particularly better customer retention (Hamid et al., 2011). An understanding of CRM in the hospitality industry will help improve the relationship between hotels and their guests.

Several previous studies reveal that CRM implementations brings improved performance to firms investing in it (Zablah et al., 2004; Coltman, 2007). This positive relationship is due to the use of CRM as a business strategy not only to obtain new customers but also to retain and satisfy existing ones. CRM can improve organizational performance through higher customer satisfaction and loyalty, reduced customer acquisition costs and enhanced profitability (Piccoli et al., 2003). Accordingly, CRM will be ideally suited to the hotel industry, mainly if implemented successfully and effectively, taking into our account that hotels receive big quantities of data about customers. Such data can be transformed into useful knowledge (Lin and Su, 2003; Mnguyen et al., 2007; Nasution and Mavondo, 2008). In addition, the growing customer acquisition costs, rising customer expectations, price-sensitive travelers, more sophisticated clients, uncertain market and less brand loyalty are all key factors that strongly urge hotels to use CRM solutions.

CRM customer-centric view, rather than product-centric, improves interaction with customers, increases the value of proposed products and services and generates customers' loyalty and profitability (Zablah, 2004). However, CRM strategy implementations do not bring the desired benefits in all cases (Richards and Jones, 2008). Thomas et al (2004) convey that the extensive application of CRM projects has not led to substantially higher customer retention rates. Jeffery and Leliveld (2004) confirm that company investments in CRM projects are generally made in an uncoordinated manner. Such pushed executives to make more efforts to learn from their mistakes and refine their CRM activities and objectives through defining key success factors for obtaining the desired outcomes from CRM applications (Sheth 2002).

3.3.CRM Key success factors

Many marketing experts and practitioners reveal that the CRM technology alone cannot maintain a competitive advantage for the company. Inappropriate implementations of CRM technologies leads to unsatisfying outcomes of CRM projects. The failure of many firms to reap the economic outcomes of investments in CRM technology is a symptom of an underlying problem. King & Burgess (2008) suggest the following key factors for successful CRM projects:

- ✓ Support of senior management
- ✓ Communication of CRM strategy
- ✓ Knowledge management capabilities

- ✓ Willingness to share data
- ✓ Willingness to change business processes to be adapted with new CRM strategies
- ✓ Technological preparation
- ✓ Technology supplier support
- ✓ Willingness to change the corporate culture
- ✓ Capability to integrate CRM systems

A number of studies examined CRM key success factors. Lawson et al (2011) suggest two categories of CRM success factors:

- ✓ Technical Factors (IT infrastructure, training, computer maintenance, CRM application complexity, supplier support)
- ✓ Organizational factors (management support, organizational change management, knowledge management, user acceptance, personal innovation, technological knowledge of users).

Hung et al (2010) suggest that CRM technologies cannot be efficient without taking into consideration organizational characteristics such as the size of the organization, technological capabilities of staff, and the level of innovation in senior management, knowledge management capabilities, and CRM features. Nguyen & Waring (2013) propose employees training and involvement, employees' characteristics, and the quality of IT resources as key success factors for CRM projects. Finally, Kavosh et al (2012) recommend defining the objectives of CRM implementation, the participation of consumers and users of CRM solutions, and careful collection of information related to the implementation of CRM by employees at different levels, as key elements for a successful implementation of CRM solutions.

3.4.CRM Performance Measures

With increasing competitiveness, hotels are more concerned with customer satisfaction and profitability, both in the short as well as in the long-term. The use of the financial measures is not only short-term oriented but sometimes inadequate to capture the customer perspective of performance (Kaplan and Norton, 1996). Customer-related performance measures are then needed to quantify customer relationships (Shoemaker and Lewis, 1999)

and to differentiate customers who are well-intentioned of CRM efforts (Noone & Kimes 2003).

CRM performance was measured in many 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). The use of other measurements of performance can also be beneficial as suggested by Sin et al. (2005). One of the main measurements of the overall performance of hotels is customer satisfaction which leads to increasing customer retention. Hence, our study uses the return rate, as a measure of customer satisfaction, of the studied hotels in order to evaluate the impact of CRM solutions on our sample's hotels performances.

Maxham (2000) reveals that customer retention had been measured by four dimensions including: overall firm satisfaction, positive words of mouth, repeat purchase intentions, and loyalty to the firm. Lin and Wu (2011) argue that there is a significant relationship between quality commitment, trust, satisfaction and customer retention and future use of product. Hence, this research paper uses customer retention as a measure of hotels performance.

4. Methodology

4.1. Hypothesis development

The objective of this study is to test the impact of the use of CRM technologies on customer retention in Moroccan Hotels. As mentioned earlier, our sample is composed of hotels that use CRM technologies in addition to others that do not use these software. So, first we test whether the use of a CRM software alone can positively affect customer retention. Our first hypothesis will be as follows:

H1: Using CRM technologies positively affect customer retention in Moroccan Hotels

Effective implementations of CRM technologies require taking into consideration several key success factors in order to achieve better outcomes. Based on prior literature, six key success factors have been selected for the purpose of this study. These factors are particularly related to CRM technology and include:

- Users' acceptance (Lawson et al, 2011)

- Employees training with regard to CRM (Lawson et al, 2011)
- Ease of use of CRM technology (Lawson et al, 2011)
- CRM solutions supplier support (King & Burgess, 2008)
- CRM culture in the company (Kavosh et al, 2012)
- knowledge management through the use of CRM data to make personalized offers to customers (Hung et al, 2010)

The second objective of our study is to measure the impact of taking into consideration the six above-mentioned organizational factors, which are considered as key success factors in previous literature, on customer retention in Moroccan hotels. For this objective, we use only hotels using CRM technology in our sample (46 hotels out of the 80 hotels surveyed). Hence, our second hypothesis will be as follows:

H2: Effective implementations of CRM technologies positively affect customer retention.

4.2 Measurement of variables

In order to test whether the use of CRM technologies affects customer retention in Moroccan hotels, we use a dummy variable to measure whether the uses or not CRM software. The organizational factors items were rated on a five point Likert scales (0=strongly disagree, and, 4= 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%, and 81%-100%). The mean of intervals is used to run our regression analysis.

4.3 Sample and data collection

To investigate hypotheses for this research, self-administered questionnaires were used for data collection. Leedy and Ormrod (2005) cited the quantitative research technique as the best method to learn about the relationship between measurable factors. In addition, Creswell, (2009) argue that quantitative methods are suitable to examine and prove theories, explore significant factors for future research and relay factors posed by questions or hypothesis. This study examines the relationship between CRM technology use 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. There are 180 three stars hotels, 169 four stars hotels,

63 five stars hotels (Annuaire Statistique du Tourisme 2015, observatoire du tourisme, Morocco). To ensure a representative sample, 100 hotels were targeted from the three groupings based on the number of hotels in each category. We also tried to make our sample geographically representative by selecting hotels based on the geographical distribution of hotels Morocco. A quota sample was selected randomly. The target respondents were hotels directors and marketing directors.

A self-administered questionnaire was applied using in-person questionnaires (60 questionnaires) and mail questionnaires (20 questionnaires). Mail questionnaires, phone contact were used to explain the purpose of the study and to motivate potential respondents to fill the questionnaires. To measure CRM technology application in Moroccan hotels (a dummy variable with “yes” or “no” was used). Organizational factors were assessed using a five point Likert scales (0=strongly disagree, and, 4= strongly agree.). A total of 88 completed questionnaires were collected, representing an 88% response rate. Eight completed questionnaires were discarded due to missing or extreme values. Eighty questionnaires were retained for analysis.

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 was used to test the impact of the organizational factors on customer retention.

5. Results and Implications

5.1. Descriptive statistics

Table 1 (as shown below) provides the frequency of use of CRM technologies among sample's hotels. The results show that only 46 out of 80 hotels in the sample use CRM technologies. These results show also that 60% of 5 stars surveyed hotels, 75% of 4 stars hotels, and only 39% of 3 stars hotels use CRM software. These results can be explained by the fact that 4 and 5 stars have more developed management systems, and therefore they are more likely to use CRM technologies.

[Insert Table 1]

In order to test the impact of organizational factors on customer retention, we limit our sample to the hotels using CRM technologies (only 46 hotels in the sample use CRM technologies). As explained earlier, six organizational factors were extracted from previous literature and will be tested in our sample. These factors include:

- Users acceptance (referred to in the analysis as « CRM_USERS_ACCEPTANCE »)
- Employees training with regard to CRM (referred to as « CRM_TRAINING »)
- Ease of use of CRM technology (referred to as « TECHNOLOGY_EASE_OF_USE »)
- CRM solutions supplier support (referred to as « CRM_SUPPLIER_SUPPORT »)
- CRM culture (referred to as « CRM_CULTURE »)
- knowledge management through the use of CRM data to make personalized offers to customers (referred to as « KNOWLEDGE_MANAGEMENT »)

First, the 6 organizational factors were given scores based on five point Likert scales (0=strongly disagree, and, 4= strongly agree). The 6 items were summed to create the CRM technology score (the means of organizational factors scores). As a first step, we test the impact of CRM technology score on customer retention. Then, we test the impact of organizational factors on customer retention. Table 2 shows detailed descriptive statistics of our organizational factors.

[Insert Table 2]

5.2. Reliability Analysis

All the items (questions evaluating CRM success factors in the hotels of our sample) are rated on a five point Likert scales (0=strongly disagree, and, 4= strongly agree). Cronbach's Alpha was executed to test whether these items go together (interrelate) well enough to add them together for future use as composite variables.

Leech et al. 2005 confirm that 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 few 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

As shown in table 3, in order to assess whether the 6 organizational factors formed a reliable scale, Cronbach's alpha was computed. Accordingly the alpha for the 6 items was 0.72, which indicates that the items form a scale that has reasonable internal consistency/reliability.

[Insert Table 3 here]

5.3. Regression analysis

5.3.1. CRM technology use and customer retention

The first step in our analysis is to test the relationship between CRM technology use and customer retention in Moroccan hotels. Butler (2000) convey that CRM technologies help organizations to improve customer satisfaction, increase customer retention, and build profitable long-lasting 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).

$$\text{CUSTOMER_RETENTION} = \alpha + \beta_1(\text{CRM_TECHNOLOGY_DUMMY}) + \varepsilon \quad (1)$$

The results of the above regression are reported in Table 4. Our results show different results from what was expected. They show that there no significant evidence that CRM technology affect customer retention. These results can be explained by the fact that CRM technologies generally end up in failure if not used properly (Dutu and Halmajan, 2011).

[Insert Table 4 here]

5.3.2. CRM organizational factors and customer retention.

As a first step in our analysis, we tried to test whether the use CRM technology improves customer retention. We have demonstrated that there is no significant relationship between CRM technology use and customer retention. This insignificant relationship might be due to the inappropriate implementation of CRM technologies. As a second step, we tried to limit our study to the hotels using CRM technologies. We included in our analysis the use of organizational factors for a better implementation of CRM software and therefore better

outcomes. We tried to test whether the use of organizational factors positively influence customer retention (hypothesis 2). To do so, we examine the relationship between Effective use of CRM technologies (CRM_TECHNOLOGY_SCORE) and customer retention.

We estimate a regression with retention rate (RETENTION_RATE) as a dependent variable, and (CRM_TECHNOLOGY_SCORE) as an independent variable. Effective use of CRM technologies is measured by CRM_TECHNOLOGY_SCORE, which is the mean of the scores given to the abovementioned six success factors based on the five point Likert scale. Reliability test has been already performed and shows reasonable consistency for the six items.

$$\text{CUSTOMER_RETENTION} = \alpha + \beta_1(\text{CRM_TECHNOLOGY_SCORE}) + \varepsilon \quad (2)$$

[Insert Table 5 here]

The results of the above regression are reported in Table 5. Our results show that CRM_TECHNOLOGY_SCORE is positively related to customer retention. This suggests that effective use of CRM technologies positively affect customer retention as suggested by (Dutu and Halmajan, 2011).

The next step is to test whether examined organizational factors affect customer retention. We estimate a multiple linear regression with retention rate (RETENTION_RATE) as a dependent variable, and organizational factors as independent variables as shown in equation 3.

$$\begin{aligned} \text{CUSTOMER_RETENTION} = & \alpha + \beta_1(\text{CRM_USERS_ACCEPTANCE}) \\ & + \beta_2(\text{CRM_TRAINING}) + \beta_3(\text{TECHNOLOGY_EASE_OF_USE}) \\ & + \beta_4(\text{CRM_SUPPLIER_SUPPORT}) + \beta_5(\text{CRM_CULTURE}) + \\ & \beta_6(\text{KNOWLEDGE_MANAGEMENT}) + \varepsilon \end{aligned} \quad (3)$$

[Insert Table 6 here]

The results of the above regression are reported in Table 6. The results confirm our previous findings that using organizational factors positively influence customer retention

rates. We also show that some organizational factors influence customer retention while others do not. Our results suggest that CRM technology users' acceptance, ease of use of CRM software, CRM culture in the company, knowledge management of CRM data significantly influence customer retention in the sample's hotels. However, employees training and CRM suppliers support do not have significant positive impact on customer retention.

6. Conclusion

This research paper bring attention to the use of CRM technologies among Moroccan hotels and the organizational factors affecting CRM solutions use in the hospitality industry in Morocco. We also tried to test the impact of these organizational factors on CRM outcomes in the hospitality industry. First, we tested the impact of the use of CRM technologies on customer retention. Then, we tried to examine effective use of CRM technologies, through the implication of some key success factors in the implementation process, on customer retention. Finally, we studied the impact of the highlighted organizational factors on customer retention in Moroccan hotels.

Our results show the CRM technologies are not widely used in Moroccan hotels, mainly in 3 stars hotels. We also suggest that CRM technologies do not impact customer retention if not used properly as previously suggested by (Dutu and Halmajan, 2011). The findings demonstrate, as well, that organizational factors such as CRM technology users' acceptance, ease of use of CRM software, CRM culture in the company, knowledge management of CRM data have a significant positive impact customer retention in Moroccan hotels. However, employees training and CRM suppliers support do not have significant positive impact on customer retention.

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Table 1: frequency of CRM technology use among hotels of the sample

Use of CRM technology	Number of hotels	%
3 stars hotels	33	100%
No	20	61%
Yes	13	39%
4 stars hotels	32	100%
No	8	25%
Yes	24	75%
5 stars hotels	15	100%
No	6	40%
Yes	9	60%
Total	80	

Table 2: Descriptive statistics for organizational factors and customer retention rate

The following table documents the descriptive statistics for the variables used in this paper.

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
CRM_USERS_ACCEPTANCE	46	2,00	4,00	2,7826	,46729
CRM_TRAINING	46	2,00	3,00	2,5652	,50121
TECHNOLOGY_EASE_OF_USE	46	1,00	3,00	2,6522	,52567
CRM_SUPPLIER_SUPPORT	46	2,00	3,00	2,7609	,43127
CRM_CULTURE	46	,00	3,00	2,7826	,55430
KNOWLEDGE_MANAGEMENT	46	,00	4,00	2,6522	,70608
RETENTION_RATE	46	,30	,70	,5696	,14122
Valid N (listwise)	46				

Table 3: Reliability statistics for technology use

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
,719	,721	6

Table 4: Relationship between CRM technology use and customer retention

The tables document the relationship between CRM technology use and customer retention in Moroccan hotels. 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). A coefficient of 5% is used:

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,415 ^a	,172	,162	12,86408%

a. Predictors: (Constant), CRM_TECHNOLOGY_DUMMY

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2687,199	1	2687,199	16,238	,567
	Residual	12907,801	78	165,485		
	Total	15595,000	79			

a. Dependent Variable: CUSTOMER_RETENTION

b. Predictors: (Constant), CRM_TECHNOLOGY_DUMMY

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	43,333	2,239		1,351	,452
	CRM_TECHNOLOGY_DUMMY	5,773	2,922	,415	1,330	,523

a. Dependent Variable: CUSTOMER_RETENTION

Table 5: Relationship between effective use of CRM technology and customer retention

The tables document the relationship between effective CRM technology use and customer retention in Moroccan hotels. We estimate a regression with retention rate (RETENTION_RATE) as a dependent variable and CRM_TECHNOLOGY_SCORE as an independent variable. A coefficient of 5% is used:

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,697 ^a	,486	,474	,10242

a. Predictors: (Constant), CRM_TECHNOLOGY_SCORE

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	,436	1	,436	41,546	,000 ^b
	Residual	,462	44	,010		
	Total	,897	45			

a. Dependent Variable: RETENTION_RATE

b. Predictors: (Constant), CRM_TECHNOLOGY_SCORE

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	,049	,082		,599	,552
	CRM_TECHNOLOGY_SCORE	,195	,030	,697	6,446	,000

a. Dependent Variable: RETENTION_RATE

Table 6: Relationship between CRM organizational factors and customer retention

The tables document the relationship between CRM organizational factors use and customer retention in Moroccan hotels. We estimate a regression with retention rate (RETENTION_RATE) as a dependent variable and the 6 examined organizational factors as an independent variables. A coefficient of 5% is used:

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,865 ^a	,749	,710	,07607

a. Predictors: (Constant), CRM_USERS_ACCEPTANCE, CRM_TRAINING, TECHNOLOGY_EASE_OF_USE, CRM_SUPPLIER_SUPPORT, CRM_CULTURE, KNOWLEDGE_MANAGEMENT.

ANOVA^a

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	,672	6	,112	19,349	,000 ^b
Residual	,226	39	,006		
Total	,897	45			

a. Dependent Variable: RETENTION_RATE

b. Predictors: (Constant), CRM_USERS_ACCEPTANCE, CRM_TRAINING, TECHNOLOGY_EASE_OF_USE, CRM_SUPPLIER_SUPPORT, CRM_CULTURE, KNOWLEDGE_MANAGEMENT.

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-,286	,107		-2,671	,011
	CRM_USERS_ACCEPTANCE	,070	,028	,233	2,482	,017
	CRM_TRAINING	,012	,027	,043	,448	,656
	TECHNOLOGY_EASE_OF_USE	,101	,029	,375	3,434	,001
	CRM_SUPPLIER	-,016	,034	-,048	-,463	,646
	CRM_CULTURE	,096	,028	,375	3,389	,002
	KNOWLEDGE_MANAGEMENT	,052	,022	,262	2,334	,025

a. Dependent Variable: RETENTION_RATE