The Factors Affecting Customer Relationship Management Implementation at DHL Company in Baghdad, Iraq

Qusay H. Al-Salami[1], Ibraheem A. Saadi[2], Zaid T. Sawadi[3] and Rabeea Kh. Saleh[1]

[1]Department of Business Administration, Cihan University-Erbil, Erbil, Kurdistan Region, Iraq
[2]Malaysian Graduate School of Entrepreneurship and Business, University Malaysia Kelantan, Kuala Lumpur, Malaysia
[3]Department of Management Information Systems, University of Mosul, Mosul, Iraq

Abstract—**Customer relationship management (CRM) has the ability to achieve success and growth of enterprises in the present time's environment of broad competition and rapid technological development. CRM helps organizations to know the customers well and to establish sustainable relationships with them. The main goal of this study is to investigate the factors affecting CRM implementation at DHL Baghdad. To achieve this goal and considering the research model, four hypotheses were formulated, and the required data were collected through a structured questionnaire. The data were quantitatively analyzed using SPSS 17. According to the findings derived from the data analysis, the researchers concluded that the first factor (technology) has a positive and significant influence on CRM implementation, while the other three factors (human resource, knowledge of CRM, and knowledge management) had an insignificant but positive influence on CRM implementation. Thus, H1 was supported, while H2, H3, and H4 were partly supported.**

Keywords—**Customer relationship management technology, Customer relationship management, Human resource, Knowledge management, Knowledge of customer relationship management.**

I. Introduction

Customer relationship management (CRM) becomes increasingly popular and has become one of the hottest topics of scientific and practical area in the field of business. In fact, due to the rapid competitive environment, CRM is critical and has become an area for the performance of companies. Recently, CRM has become one of the most contentious issues and a focal point in the field of business (Balaram and Adhikari, 2010). It is important to mention that CRM is largely based on the belief that establishing a continuous relationship with customers is the keystone of obtaining loyal customers who are more advantageous than those nonloyal ones (Dowling, 2002). In this regard, the successful implementation of CRM will be of large profit to the organizations adopting it as well as a help in increasing the benefits of sales through superior market segmentation, higher quality products, customizing products and services, gaining access to employee satisfaction, and above all, ensuring long-term customer loyalty, and retention (Almotairi, 2009).

This study has investigated the factors that affect CRM implementation, such as (Technology, human resource [HR], knowledge of CRM (KCRM), and knowledge management [KM]), whereby this can be achieved by providing answers to the following question.

How can technology, HR, and KCRM and KM affect CRM implementation at DHL Baghdad?

II. Review of CRM

CRM is not a product or service; it is an overall business strategy that enables companies to successfully control relationships with the customers. CRM provides an overview of customers in organizations (Parvatiyar and Sheth, 2001). The reasons for CRM coming into existence are the changes and development in the environment and market technology. The goal of a professional CRM strategy is to extend, retain, and keep the profitability of customers (Stone and Foss, 2001).

CRM is a method that can lead to build enduring relationships with the customers and raise profits by the strategies of focusing on the customer. CRM is a customer-oriented marketing effort which is dependable for managing and accumulating customers' details to serve

the customers in the present and future. Moreover, CRM is a process of strategic marketing of which the purpose is to manage, understand, and predict the customers' demands.

As well, CRM is the development, establishment, optimization, and maintenance of long-standing mutually important relationships. It is a set of business practices to verify, identify, develop, acquire, and maintain the loyalty of the customers and sustainable profitability through providing suitable services and products, in due time (Perppers and Rogers, 1999), whereby CRM is a wide-ranging strategy and process of retaining, partnering, and acquiring with customers to make greater value for the customer and the company (Parvatiyar and Sheth, 2001). It is a means of understanding the customers' behavior through deep communication with them to develop performance, which is represented in attracting clients, keeping them and increasing their profitability and loyalty (Swift, 2001).

The companies must use CRM in the field of technology, e-commerce, and research methodology to manage customer relationships (Stone and Foss, 2001). This CRM definition clarifies that it is important to use technology in dealing with customers. CRM is the act of considering the main organization's customers in the management of customer knowledge and the organization's efficiency, by way of enhancing the efficiency of the organizational decisions interrelated with leading customers, therefore, to the improvement of the performance of marketing in the organizational performance in particular (Arnett and Badrinarayanan, 2005).

Fig. 1 clarifies the timeline of the CRM concept evolution. The change from transactional marketing to relational marketing has radically increased the significance of the long-term economic value of the organizations' customers. The concept of customer value indicates the current value of the future cash flows attributed to the customer relationship. Customer value is the economic value of the customer relationship to the company. Customer value tends to transmit the strategic planning forms toward a long-term relationship with the customer, rather than maximizing the short-term sales (Kumar and Reinartz, 2008).

First Generation >1990	Second Generation >1996	Third Generation >2002
Call Center Management	Integrated customer-facing front-end (mktg., sales, service)	Strategic CRM
Sale Force Automation	ERP integration Customer analytics Complete web integration	
Goals:		
Improve service	Reduced cost of interaction	Costs reduction
Operations increase Sales efficiency	Increase customer retention	Revenue growth
	Improve customer experience	Competitive advantage

Fig. 1. Timeline of Customer relationship management evolution (Kumar and Reinartz, 2008).

III. CRM Implementation

Implementation of the CRM system is more than the installation of a software package. All purposeful areas of the business must be involved in marketing, HRs, IT, sales, and product development and so on. This can be achieved through ensuring that all employees understand CRM with all its' aspects and what CRM means in the business. Moreover, information meetings or formal training are necessary to be provided to the employees (Mamoun et al., 2011).

The existence of a suitable strategy in the organization does not guarantee its' success with CRM. It is necessary to apply an effective implementation of CRM (Bohling et al., 2006). According to Mamoun et al. (2011), the model of CRM implementation has four main elements: Change management, readiness assessment, employee engagement, and project management. Moreover, they added, the successful CRM's implementation lies on the employment of five functional processes which combine these four elements: Value creation process, strategy development process, information management process, multichannel integration process, and performance assessment process.

The positive implementation of CRM has been proven to reduce operational costs, inspire employee confidence, develop decision-making, and increase customer satisfaction (Reid and Catterall, 2002).

Bohling et al. (2006) suggest five dimensions of CRM implementation: Organizational structure designed for relationships, managerial behaviors, employee training programs which manage relationships, systems to facilitate the process and a plan that supports retention, loyalty, and stable customer interaction. The CRM's implementation needs to be an integrated approach toward people, processes, and technology. The definitions mentioned above indicate that the successful implementation of CRM relies on staff, technological tools, and a variety of processes that cover the entire company (Reid and Catterall, 2002). In the interest of parsimony, the implementation process of CRM is examined under three headings: Processes, technology, and people.

Viljoen et al. (2005) suggest technological utilization: The use of technology in CRM facilitates the effectiveness of business operations. Mahdi et al. (2012) indicated that companies must use technological tools to increase the reliability of building relationships and help them to respond to and monitor the changing demands of customers. Technology allows companies to mechanize operations and enable CRM to be highly qualified.

In addition, technological tools facilitate change management within organizations. CRM technologies have three types that can be implemented: Collaborative CRM, analytical CRM, and operational CRM (Prasanna and Kumar, 2014). According to Viljoen et al. (2005), the operation of CRM system stores will appropriate the information of customers in databases to facilitate business communication. These systems are responsible for the CRM's functionality and they also develop the efficiency of the CRMs supporting processes. Besides that, they listed examples of several technologies which help in faxes, call centers, websites, and

mail. Analytical CRM helps companies to recognize their customers by employing different tools of data analyzing. Processes and leverage by technology increase efforts to build a relationship (Belghis, and Gholamhossein, 2013).

According to Parvatiyar and Sheth (2001), "the lifeblood of the CRM's implementation is the HR, as they are the building blocks of customer relationships." It is necessary to have a perfect staff to recover investments made in systems and processes. To have thriving CRM implementation, firms have to engage in change management, which helps the employees in the company to understand how the change affects their implementation vis-à-vis CRM implementation. Furthermore, it is necessary to consider the culture regarding change management. The culture requires staff to accept any changes and be prepared for the consequences of the implementation of CRM. This is important when establishing an organizational structure which emphasizes the need for every member of the company to focus on establishing a strong customer relationship (Dowling, 2002).

Adrian and Pennie (2006) suggested that there are five base processes that help one to be aware of CRM: Performance assessment, strategy review, value creation, multi-channel integration, and information management. Perppers and Rogers (1999) listed six necessary processes for the successful implementation of CRM: Lead management, campaign management, contract management, offer management, complaint management, and service management. In contrast, Almotairi (2009) presents three more CRM processes: Services, sales, and marketing.

Reid and Catterall (2002) suggested that CRM aims to provide value for all customers and stakeholders to achieve a different valuable relationship; other than that, the strategy must be handled in progress followed by the process of creating value. Fakhraddin et al. (2013) argued that imposing and achieving the full advantages of CRM require the dedication of top management with a clear organizational change which is compiled through the expected CRM creativities. He added that the effective implementation of CRM requires a company to coordinate people effectively, business processes, and technology; it also represents the degree to which management and employees agree to take CRM and support CRM implementation.

Viljoen et al. (2005) stated that there is some complexity in measuring the outcomes of CRMs performance since, as various authors have increased the importance of the CRM idea, there is still no validated measurement scale to evaluate its outcome. The measurement of companies' performance depends on a limited number of analyses of financial measures. However, if the aim was to assess the impact of CRMs ambition, which seeks to improve relations with customers, any measure of results must also include the viewpoint of the customers. Thus, the success of the CRM implementation depends on the active participation of the workers in the organization. Hence, a CRM organization should be a primary means through which companies effect fundamental changes in the way they organize their actual business processes for customers and employees (Mamoun et al., 2011).

According to Venelin and Vanya (2017), CRM is an information system designed to manage and improves the service provided to the customer, use its contacts in targeted marketing campaigns, and organize information and interactions with its customers to create loyal customers and thus generate more income. Because of their diversity and flexibility, there are three types of standard CRM systems.

IV. Factors Affecting CRM Implantation

Table I illustrates the investigated factors from different authors which affect CRM. It is clear from this table that there are 11 authors who have published several papers related to the factors affecting CRM. As it turns out, there are four core factors (Technology, HR, KCRM, and KM) that have been investigated separately in different studies; however, they have not been put together in one study as factors affecting CRM. Based on that, this paper has been the first to do so.

V. Technology

Prasanna and Kumar have been proven that technology positively affects CRM implementation as it is mentioned

TABLE I
Factors Affecting CRM Implantation as Presented in Literature (Created by Researchers)

Authors	CRM factors							
	Technology	Human resource	Knowledge of CRM	Knowledge management	Information technology	management commitment	Communication channels of interaction	CRM strategies
Belghis and Gholamhossein,(2013)		√	√		√	√		
Fakhraddin and Marzieh (2013)				√				
Fakhraddin et al. (2013)	√						√	√
Hadi et al. (2011)			√					
Viljoen et al. (2005)	√							
Bidisha and Mukulesh, (2013)		√						
Mahdi et al. (2012)					√			
David and Wendy, (2010)	√							
Khushboo, (2015)		√						
Gebert et al. (2002)			√	√				
Garcia-Murillo and Annabi, (2002)				√				

CRM: Customer relationship management

in their published paper in 2014, "CRM technology is an important strategic tool for any organization to achieve CRM success in application." The technology role enables CRM use (Prasanna and Kumar, 2014) and allows organizations to achieve better customization and greater service at a lower cost (Mahdi et al., 2012).

Moreover, technologies play significant roles in companies' CRM programs and chiefly for those with huge customer bases. In fact, CRM technology is the backbone of various operational aspects of CRM, such as the automation of the sales force and operations of the call center. Accordingly, it is necessary from both perspectives of administrative and academic departments to understand how organizations use, implement, and take advantage of these technologies (Swift, 2001).

Whereby, Alhassan (2005) has also proved the impact of technology on CRM implementation in 2012, "as with many other modern business concepts, CRM has largely developed the Western World.

However, due to the marketing load of CRM technology vendors, organizations in developing parts of the world are only gradually adopting the technologies and principles of CRM to manage their relationships with customers."

CRM technology has been used for CRM application software in several ways of organizations' CRM programs. These range from account management applications through business intelligence systems, sales force automation, and marketing automation.

According to the perspective of a relationship process management, an organization can use CRM technology to maintain the relationship initiation and termination activities, as well as to carry out the necessary analytics to create information in supporting these activities (Mahdi et al., 2012).

H1: Technology has a positive and significant influence on CRM implementation.

VI. HR

As for HR and its relationship with CRM, Khushboo (2015) has mentioned in his published paper in 2015 that HRs positively affect CRM implementation. "It has been observed that the employees are the central effectiveness of CRM; so, due to the importance of the employees, organizations should manage its relationships with them if the organization seeks to serve well the customers. Thus, the company must consider the employees as the eyes of the customer."

According to Simns (2003), Bill Cooney, who was a deputy CEO in a USAA company, specializing in American property and casualty insurance with a profit of over $60 billion and customer retention of 100% while always ranking among the 100 top companies in the USA, remarked that: "If you do not care about your employees, the employees will not care about the customers. We must give employees everything they need to be happy; in contrast, we will have satisfied customers and that will help our company survive."

Therefore, Simns (2003) stated the success of CRM depends heavily on the involvement of the staff in all stages.

It is quite wrong to impose the CRM without the mutual involvement between the employees and the customers.

The most complex stage in the CRM process is contacting the individuals in the firm. Internal marketing plays the most significant task of customer service delivery and customer-oriented processes in every organization. Internal marketing is the interactivity between marketing and HR management (Mamoun et al., 2011).

Kumar and Reinartz (2006) suggested that customers would prefer to communicate with employees rather than electronic systems. This indicates the reason of why academic researchers state that HR is the first priority to be considered among all the CRM resources. Based on Rigby et al. (2002), CRM can be implemented more powerfully by encouraging employees to be more conscious of customer's expectations. HR management is an extremely important element for employees' behavior and skills in the company.

H2: HR has a positive and significant influence on CRM implementation.

VII. KCRM

This factor deals with people or organization administrators who are involved in drawing up the policies and in driving CRM to success (Belghis and Gholamhossein, 2013).

KCRM is one of the factors that positively affect CRM implementation as it is mentioned by Garrido-Moreno and Padilla-Meléndez in their published paper in 2011, "It is important for administrators to have good management capacity; they must know CRM and understand it well. They are expected to make clear visions to guide the company through representing CRM in an effective approach, to assume responsibility for developing strategies of CRM, and to propel performance through some securities supporting CRM, including working environment, resources, technology, and time. The directors have to have the ability to relieve the troubles which make them unsuccessful in achieving the target they had expected."

While Greenberg (2001) has also proved that KCRM strongly affects CRM implementation, "The employees are required to known well the CRM system, organizational visions and strategies, and to also be aware of the customer-oriented services' values as well as the importance of building and maintaining a perfect relationship between the organization and its customers."

H3: KCRM has a positive and significant influence on CRM implementation.

VIII. KM

According to the high growth of customers' knowledge, managing knowledge has become an important key in all aspects of the CRM process, which helps in getting successful CRM. Thus, managers must manage and update their knowledge to identify and achieve the customers' needs as fast as they can (Stefanou et al., 2003).

The company cannot focus on customers without knowing the customers' needs. Customer needs driven the CRM strategies to clarify the needs of the customer through analyzing customer information. According to Stefanou et al. (2003), when an organization transfers customer information to customer knowledge, it is an exponent of CRM success. Gebert et al. (2002) state that information about customers must be collected through interactions across all areas or functions of the organization so that a 360-degree customer view is established, maintained, and continually updated."

According to Garrido-Moreno and Padilla-Meléndez, who proved the significant relationship between KM and CRM implementation in their published paper in 2011 "CRM utilization is directly associated with the increase of customer knowledge, which in contrast will positively affect customer satisfaction. KM helps an organization to improve its relationship with its valuable customers to obtain loyal customers and create competitive advantages."

Moreover, Zablah et al. proved this significant relationship in 2004, "organizations must be expert at managing knowledge about their customers and knowledge that is beneficial to the customers; consequently, customer focus will be one of the organization's goals."

This knowledge includes, but is not limited to, industry, knowledge about one's company, customers, competitors, the processes and procedures that allow companies to work well with partners and the company structures that allow companies to be effective and efficient (Belghis and Gholamhossein, 2013).

H4: KM has a positive and significant influence on CRM implementation.

IX. Research Model

The research model (Fig. 2) suggests that the research independent variables (technology, HR, KCRM, and KM) have a significant and positive influence on CRM implementation.

The research questions which are 25 demonstrates in Table II with its resources that measuring the research dependent and independent variables. Five questions were asked based on each variable.

X. Research Methodology

The case study of this research is DHL Company/Baghdad branches. DHL is a division of a German postal center, offers international express mail services. DHL established in 1969 to deliver documents between San Francisco and Honololo. In the late seventies of the 20th century, the company has expanded it activates in the whole world. In Iraq, there are many DHL branches separated in seven Iraqi Governorates that are Baghdad, Mosul, Basra, Salah AL-Dien, Erbil, Tikrit, and Kirkuk.

However, in Baghdad, there are six DHL branches which located at Sadoun Street, Palestine Street, Kadhimiya, Sixty-
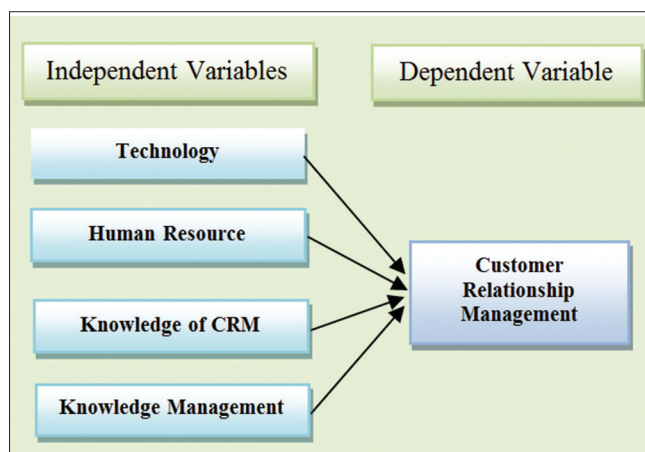

Fig. 2. Research model (Created by Researchers).

Two Street, and Mansour Branch with a total population of 93 employees.

In the process of gathering data; quantitative approach was used to collect information from the employees of DHL/Baghdad. A structured questionnaire has been used with closed-ended questions. The purpose of the questionnaire was to measure the influence of the research independent variables (Technology, HR, KCRM, and KM) on the dependent variable CRM implementation. The questionnaire consists of three sections. Section 1 consists of three general questions related to the respondents' background and experience. Section 2 consists of five questions related to overall CRM performance in the company, and its impact on the marketing and financial results. Section 3 consists of 25 questions measuring the research's dependent and independent variables. Five questions were asked based on each variable, while five-point Likert scale was used as a response scale for each statement in the survey questionnaire which ranges as 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, and 5 = strongly agree. The researchers used the rating scale because it is clear and commonly used to ask people about their opinion and attitude (Tsapelas et al., 2010). The questionnaire has been distributed randomly among the employees using a sample survey method, and the results are generalized to the entire population. Randomization has been used as it protects against bias in the selection process, so in distributing the questionnaire there was no preferential treatment in respondents selection. The researchers were keen to distribute questionnaires to a range of gender and age. This is to avoid bias for surveying all the respondents from only a certain range of age and gender. Finally, the data statistically analyzed using (SPSS) software.

XI. Population and Sample

The target population of this study was the employees of DHL/Baghdad. The sample size is 75 employees from the population of 93 employees. This sample was calculated using Eq. 1 based on a formula (Yamane, 1973; Anaman and Okai, 2016) given as follows, while the significant level is accepted at 95%.

TABLE II
MEASUREMENT SCALE ITEMS FOR MODEL VARIABLES (ADAPTED THE QUESTIONNAIRES FROM PREVIOUS STUDIES)

Factors	Measurement criterions (indicators)	References
Customer relationship management	There is a perfect CRM system in the company.	Ampoful, A. (2012). The Effect of Customer Relationship Management (CRM) on the Profitability of Financial, Master Thesis, Institute of Distance Learning, KNUST.
	CRM system in the company building better relationship with customers	Saeed, F. (2011). Customer Relationship Management Practices, Master Thesis, Luleå University of Technology.
	CRM directly affects trust and perceived customer value	Maroofi, F., & Dehghani, M. (2013). The effect of knowledge management on CRM prosperity. *International Journal of Research*, 9 (3), 80-81.
	CRM achieves growth in sales and market share	Maroofi, F., & Dehghani, M. (2013). The effect of knowledge management on CRM prosperity. *International Journal of Research*, 9 (3), 80-81.
	CRM increases the profitability of the company	Maroofi, F., & Dehghani, M. (2013). The effect of knowledge management on CRM prosperity. *International Journal of Research*, 9 (3), 80-81.
Technology	CRM customizations documented	Drohan, R. (2010). Exploring the Nature of Effective Customer Relationship Management Capability, Master Thesis, Waterford Institute of Technology.
	CRM technologies support the customer's environment, such as (Database, operating system, web server, and so forth)	Saeed, F. (2011). Customer Relationship Management Practices, Master Thesis, Luleå University of Technology.
	The company applies Microsoft Dynamics CRM update rollups on your environments such as (Server, Client, Email Router, Report Server….)	Drohan, R. (2010). Exploring the Nature of Effective Customer Relationship Management Capability, Master Thesis, Waterford Institute of Technology.
	IT organization utilizes and adheres to an established operations framework such as Microsoft Operations Framework (MOF) or Information Technology Infrastructure Library (ITIL)	Maroofi, F., & Dehghani, M. (2013). The effect of knowledge management on CRM prosperity. *International Journal of Research*, 9 (3), 80-81.
	The company provides you a roadmap for your CRM system such as (Upgrades, additional features, technical enhancements, and so forth.)	Lynch, P. (2008). Measuring and Understanding the Intensity of Industrial User Involvement in the Early Stages of New Product Development, PhD Thesis, Waterford Institute of Technology.
Human resource	The employees are well trained in using customer-related technologies	Rigby et al., 2002; Reinartz et al. (2004). Keramati et al. (2009). Keramati et al., 2010.
	There is a qualified technical staff to provide technical support for the use of technology to build satisfactory relationships with customers	Nili, A. (2010). The Impact of CRM on Customer Retention in Electronic Banking, Master Thesis, Luleå University of Technology.
	There is marketing and sales expertise to have the desired CRM	Rigby et al., 2002; Reinartz et al. (2004). Keramati et al. (2009). Keramati et al., 2010.
	The employees have shown their commitment to the customers' strategy	Nili, A. (2010). The Impact of CRM on Customer Retention in Electronic Banking, Master Thesis, Luleå University of Technology.
	Firm motivates employees to submit with CRM objectives	Maroofi, F., & Dehghani, M. (2013). The effect of knowledge management on CRM prosperity. *International Journal of Research*, 9 (3), 80-81.
Knowledge of CRM	The company implemented CRM guidelines	Ghavani, A. (2006). The Impact of CRM on Customer Retention, Master Thesis, Luleå University of Technology.
	The company has enough knowledge about CRM practices and improvement	Barbara, E. (2011). Improving Customer Relationship Management in the Banking Industry. Master Thesis, Kwame Nkrumah University of Science and Technology.
	The company prepared employees to work in CRM environment	Barbara, E. (2011). Improving Customer Relationship Management in the Banking Industry. Master Thesis, Kwame Nkrumah University of Science and Technology.
	There is a clear action to educate all employees on CRM system	Ghavani, A. (2006). The Impact of CRM on Customer Retention, Master Thesis, Luleå University of Technology.
	CRM practices customers oriented	Ghavani, A. (2006). The Impact of CRM on Customer Retention, Master Thesis, Luleå University of Technology.
Knowledge management	There is intranet facilitates interaction between employees in a different location and accelerates flow knowledge sharing	Kumer, T. (2007). Customer Management in the e-Business Environment, Master Thesis, Lulea University of Technology.
	Leadership and charisma are one of the organizational culture features that lead to successful customer knowledge sharing the atmosphere	Kumer, T. (2007). Customer Management in the e-Business Environment, Master Thesis, Lulea University of Technology.
	Management has Customer experience about products and\or services, which enhance tacit knowledge sharing process.	Ventaglio, D. (2013). Knowledge Management Driving Customer Behavior, Master Thesis, Pepperdine University.
	Self-management is one of the organizational culture features that lead to success in customer knowledge sharing the atmosphere	Vaezitehrani, S. (2013). Customer Knowledge Management in Global Software Projects, Master Thesis, Chalmers University of Technology.
	Groupware products and\or software enhances rapid knowledge creation, classification, storing, and reuse	Ventaglio, D. (2013). Knowledge Management Driving Customer Behavior, Master Thesis, Pepperdine University.

CRM: Customer relationship management

$$n = N/[1+N\,(e)^2] \qquad (1)$$

$n = 93/[1+93\,(0.05)^2] = 75$ samples

Here, n=Sample size, N=Population of sample, e=Significance level (0.05).

A pilot test was conducted before finalizing the questionnaire, and the survey was conducted during the month of March 2019.

XII. FINDING AND DISCUSSION

The questionnaire was distributed among the employees of DHL/Baghdad; for the purpose of investigating the influence of technology, HR, KCRM, and KM on CRM implementation.

The first section of this questionnaire is three general questions related to the respondents' background and experience as reported in Table III.

The second and third sections of the questionnaire are measuring the research dependent and independent variable. Different statistical analysis was used. First, the mean value and standard deviation for all variables were determined after computing the five items related to each variable. Furthermore, a reliability analysis using Cronbach's Alpha was performed to determine to what extent items are related to each other.

According to Nunnally and Bernstein, (1994) Cronbach's alpha with larger values (>0.70) indicates higher internal consistency in the measured dimension and hence greater

reliability. The result indicates that the measurement set used in the study was reliable as Cronbach Alpha >0.70.

Moreover, correlation analysis was used to investigate the strength and direction of the linear relationship between the independent variables and the dependent variable. According to Cohen, (1988) the strength of relationship between two variables considered low in case of r=(0.10-0.29/−0.10-−0.29), moderate r=(0.30−0.49/−0.30-−0.49), and high r=(0.50-1/−0.50-−1). This research indicated that there is a highly significant positive relationship found between all independent variables and CRM implementation as r>0.5, p<0.001 for all variables. The higher the score is on technology, HR, KCRM, and KM, the more success in CRM implementation will be achieved. Table IV presents the results of reliability and correlation.

The regression statistic shows that R^2 is 0.778 which means 78% of the variation in CRM implementation is explained by the independent variables. The Durbin Watson statistics show that the serial correlation of residuals is 1.731 which falls within the acceptable range (1.5 and 2.5). This indicates that there is no autocorrelation problem in the data. The F value (61.445) is also found to be significant at 5% level of significance (0.000). This concludes that the regression model used in this study was fit.

The collinearity statistics (tolerance test and variance inflation factor [VIF] test) were used to determine the presence of multicollinearity among the independent variable in this study. Both the VIF and tolerance fall within acceptable range (VIF = 1-10 and tolerance = 0.1-1.0) that means there is no multicollinearity problem in the regression model used for this study. Furthermore, the result indicates that technology has a positive and significant influence on CRM implementation; as it assigned a high unstandardized coefficient value (beta) of 0.747; and p=0, while HR, KCRM, and KM have an insignificant and positive influence on CRM implementation, as they assigned positive unstandardized coefficient values; and p>0.01. Thus, H1 was supported, while H2, H3, and H4 were partly supported. Details of regression statistics are presented in Table V.

TABLE III
RESPONDENTS' BACKGROUND

Factor	Categories	Frequency	Count	Percentage
1. Gender	Male	75	47	63
	Female		28	37
2. Work experience	<1	75	14	19
	1-2		33	44
	3-5		19	25
	>5		9	12
3. Managerial level	Top	75	9	12
	Middle		21	28
	Lower		45	60

TABLE IV
RELIABILITY AND CORRELATION RESULTS

Factors	No. of items	Mean±Std. deviation	Cronbach's alpha	Correlation			
Independent variables (IV)							
Technology	5	4.38±0.829	0.925	IV with DV	Pearson Correlation (r)	Sig. (2-tailed)	Correlation's direction
Human resources	5	4.20±0.881	0.857	Tech and CRM	0.880	0.000	High
Knowledge of CRM	5	4.24±0.836	0.820	HR and CRM	0.662	0.000	High
Knowledge management	5	4.32±0.617	0.853	KCRM and CRM	0.777	0.000	High
Dependent variable (DV)							
CRM implementation	5	4.22±0.845	0.842	KM and CRM	0.530	0.000	High

CRM: Customer relationship management, KM: Knowledge management, KCRM: Knowledge of customer relationship management, HR: Human resource

TABLE V
RESULTS OF REGRESSION STATISTICS

Factors	Unstandardized coefficient value (beta)	p value	Collinearity statistics	
			Tolerance	VIF
Technology	0.761	0.000	0.179	5.585
Human resource	0.043	0.589	0.472	2.120
Knowledge of CRM	0.090	0.425	0.256	3.903
Knowledge management	0.058	0.543	0.652	1.534

R^2= 0.778, Adjusted R^2 = 0.766, F value= 61.445, Sig. F change= 0.000
CRM: Customer relationship management, VIF: Variance inflation factor

XIII. CONCLUSION

This study focused on the factors that affected CRM at DHL Baghdad. The purpose of this study was to measure the influence of independent variables (technology, HR, KCRM, and KM) on CRM implementation. According to the finding of this study, it has been found that the first factor (technology) has a positive and significant influence on CRM implementation; as it assigned a high unstandardized coefficient value while the other three factors (HR, KCRM, and KM) have insignificant but positive influence on CRM implementation.

As they assigned positive unstandardized coefficient values, thus, H1 was supported, while H2, H3, and H4 were partly supported.

Finally, it can be concluded that high quality of CRM implementation will enhance the organization sales and marketing activities.

Without customers, you will not have a long-term business. To attract customers, the organization must have good effective CRM system which helps to classify the customers' needs and communicate them in a way that can meet their satisfaction.

REFERENCES

Adrian, P., & Pennie, F. (2006). Customer relationship management: From strategy to implementation. *Journal of Marketing Management,* 22(6), 135-168.

Alhassan, G. (2005). CRM technology use and implementation benefits in an emerging market. *Journal of Database Marketing and Customer Strategy Management*, 3(19), 82-97.

Almotairi, M. (2009). A Framework for CRM Success (pp. 13-14). Proceedings of the European and Mediterranean. The First International Conference on Information Systems. Izmir, Turkey: CRM.

Anaman, K., & Okai, J. (2016). Extent of awareness of birth control methods and their use by women in a PERI-urban area of Accra, Ghana. *Modern Economy*, 7, 39-54.

Arnett, D., & Badrinarayanan, V. (2005). Enhancing customer-needs-driven CRM strategies: Core selling teams, knowledge management competence, and relationship marketing competence. *Journal of Personal Selling and Sales Management,* 1(4), 329-343.

Balaram, A., & Adhikari, B. (2010). Managing customer relationships in service organizations. *Administration and Management Review,* 21(2), 65-78.

Belghis, B., & Gholamhossein, H. (2013). Studying the factors affecting the customer relations management (CRM) in marun petrochemical company. *Interdisciplinary Journal of Contemporary Research in Business,* 4(11), 845-957.

Bidisha, L., & Mukulesh, B. (2013). Employee retention: A review of literature.

IOSR Journal of Business and Management, 14(2), 8-16.

Bohling, T., Bowman, D., LaValle, S., Mittal, V., Narayandas, D., Ramani, G., & Varadarajan, R. (2006). CRM implementation: Effectiveness issues and insights. *Journal of Service Research,* 9(2), 184-194.

Cohen, J. (1988). *Statistical power analysis for the behavioral sciences*. 2nd ed. Hillsdale, NJ: Lawrence Earlbaum Associates.

David, J., & Wendy, L. (2010). A multi-layered approach to CRM implementation: An integration perspective. *European Management Journal,* 28(10), 153-167.

Dowling, G. (2002). Customer relationship management: In B2C markets, often less is more. *California Management Review*, 44(3), 87-104.

Fakhraddin, M., & Marzieh, D. (2013). Symptom of knowledge management ability for KM efficiency. *International Journal of Research in Social Sciences*, 3(4), 1-13.

Fakhraddin, M., Bahareh, M., & Hooshmand, F. (2013). Effective factors on CRM development. *Asian Journal of Business Management,* 5(1), 52-59.

Garcia-Murillo, M., & Annabi, H. (2002). Customer knowledge management. *Journal of the Operational Research Society*, 53(8), 875-884.

Garrido-Moreno, A., & Padilla-Meléndez, A. (2011). Analyzing the impact of knowledge management on CRM success: The mediating effects of organizational factors. *International Journal of Information Management,* 31(6), 437-444.

Gebert, H., Geib, M., Kolbe, L., & Riempp, G. (2002). Towards Customer Knowledge Management Integrating Customer Relationship Management and Knowledge Management Concepts (pp. 296-298). The Second International Conference on Electronic Business (ICEB 2002). Taipei, Taiwan: ICEB.

Greenberg, P. (2001), *CRM at the speed of light: Capturing and keeping customers in internet real time*. Osborne/McGraw-Hill, Berkeley, California.

Hadi, N., Ilham, S., & Shishi, K. (2011). The influence of customer knowledge on CRM performance of Malaysian ICT companies: A structural equation modeling approach. *International Journal of Business and Management,* 6(7), 181-198.

Khushboo, B. (2015). Trends in HRM and CRM. *IJRAR International Journal of Research and Analytical Reviews,* 2(1), 49-53.

Kumar, V., & Reinartz, W. (2006). *Customer relationship management: A databased approach*. Hoboken, NJ: John Wiley and Sons.

Kumar, V., & Reinartz, W. (2008). *Customer relationship management: A database approach*. New York: John Wiley and Sons, Inc.

Mahdi, B., Mazaher, G., & Mohammad, A. (2012). Information Technology (IT) as an Improvement Tool for Customer Relationship Management (CRM). The First International Conference on Leadership, Technology, and Innovation Management (pp. 59-64). Procedia-Social and Behavioral Sciences, Isfahan, Iran: CRM.

Mamoun, N., Samer, E., Hesham, S., & Bayan, N. (2011). Customer relationship management implementation an investigation of a scale's generalizability and its relationship with business performance in a developing country context. *International Journal of Commerce and Management,* 21(2), 158-191.

Nunnally, J., & Bernstein, H. (1994). *Psychometric theory*. 3rd ed. New York: McGraw-Hill, Inc.

Parvatiyar, A., & Sheth, J. (2001). Customer relationship management: Emerging practice. Process, and discipline. *Journal of Economic and Social Research*, 3(2), 1-34.

Perppers, D., & Rogers, M. (1999). *The one to one manager: Real-world lessons in customer relationship management*. New York: Doubleday.

Prasanna, M., Kumar, V. (2014). Information technology: Roles, advantages and disadvantages. *International Journal of Advanced Research in Computer Science and Software Engineering*, 10(4), 203-312.

Reid, A., & Catterall, M. (2002). Invisible DATA quality issues in a CRM

implementation. *Journal of Database Marketing and Customer Strategy Management,* 12(4), 305-314.

Rigby, D., Reichheld, F., & Schefter, P. (2002). Avoid the four perils of CRM. *Harvard Business Review*, 80(2), 101-109.

Simns, J. (2003). *How Can Value of CRM Activity be Measured, Marketing*. London: Hypermarket.

Stefanou, C., Christos, S., & Amalia, S. (2003). CRM and customer-centric knowledge management: An empirical research. *Business Process Management Journal*, 9(5), 617-634.

Stone, M., & Foss, B. (2001). Defining CRM and assessing its quality. *Successful customer relationship marketing* (pp. 3-20). London, United Kingdom: Kogan.

Swift, R. (2001). *Accelerating customer relationships: Using CRM and relationship technologies*. Upper Saddle River New Jersey: Prentice Hall Professional.

Tsapelas, I., Fisher, H., & Aron, A. (2010). Infidelity: When, where, why. In: W. R. Cupach & B. H. Spitzberg (Eds.), *The dark side of close relationships II* (pp. 175-196). New York: Routledge.

Venelin, T., & Vanya, B. (2017). Customer Relationship Management. Vol. 17. (pp. 25-28). 13th International Scientific Conference, the Teacher of the Future, Budva, Montenegro: ISC.

Viljoen, M., Bennett, J. A., Berndt, A. D., & Vanzyl, C. R. (2005). *The use of technology in customer relationship management (CRM)* (pp. 106-116). South Africa: University of Johannesburg.

Yamane, T. (1973). *Statistics: An introductory analysis*. 3rd ed. New York: Harper and Row.

Zablah, R., Bellenger, D., & Johnston, W. (2004). An Evaluation of divergent perspective on customer relationship management: Toward a common understanding of an emerging phenomenon. *Industrial Marketing Management,* 33(6), 475-489.