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Customer relationship management and customer loyalty: Examining the mediating role of business process management

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ABSTRACT

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The purpose of this study is to investigate the impact of customer relationship management on customer loyalty (CL) at Jordan Telecommunication Company through business process management. The researcher uses the descriptive analytical method to scan members' opinions. The random sample includes (367) workers from different sectors all over the country. The results show that customer relation management (CRM) has a dramatic impact on customer loyalty and business process management (BPM). Besides, BPM plays a vital role between CRM and CL. This study appears to be the first study in Jordan which empirically examines the indirect relationship between customer relation management and customer loyalty via business process management.

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1. Introduction

The Jordanian telecommunications sector is considered as one of the most effective sectors, which has recently witnessed a rapid development, in order to follow the global changes in the communication technology, so the telecommunications companies do their best to develop their services and achieve customer's loyalty (Nazal, 2019). The competition of Business organizations is a very important motive for companies to distinguish them from others. Therefore, the customers are considered the cornerstone which can build and develop any institution. At the same time the successful institution should manage its relations with customers, which automatically leads to having a permanent and loyal customer. Customer relationship management (CRM) emerged as a strategic solution for modern business problems, and it is based on the philosophy that all business activities should revolve around, so the core of business has changed from product orientation to customer orientation (Hamad, 2020).

The customer's main concern has evolved in marketing thought and given a new direction to meet his needs and aspirations and take a strategic position within the institution's interests. Consumer behavior has become a subject for research in order to understand the factors affecting it (Alrubaiee, 2013). Customer relationship management is concerned with achieving a continuous relationship with customers rather than traditional reciprocal marketing. The competition between institutions has increased dramatically and the customers' awareness of the level of relations with the institution has increased. Thus, institutions must achieve integration between the various marketing activities within the framework of a comprehensive strategy directed to serve its customers and ensure their loyalty to the institution (Adikaram & Khatibi, 2016).

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Customer loyalty is one of the main issues of the organizations because it is related to market share and long-term customer retention (Galeb & Alabadi, 2010). Customer relationship management affects Customer loyalty directly. Customer loyalty is an important concept because of its significant impact on increasing the organizations' profits and sales. Business process management (BPM) is considered as one of the new subjects in management field, and it is mainly connected to the knowledge of the current processes, so it revised in a way that decreases the wasted effort and raises the efficiency, where it mixes between the information technology and the processes management structure for the aim of improvement, where the effective management of processes are critical to maximize the firm's value (Trkman, 2010; Abdulkader et al., 2020). As a result, to adapt to ever-changing customer needs and satisfy them, good business process management (BPM) in the Jordan telecommunication company is essential. Moreover, developing business processes performance can improve the level of customer loyalty.

In the literature, most of the papers deal with determining the direct effect between relationship management and customer's loyalty (e.g., Seddik & Younsi, 2020; Harahsheh, 2014; Nazal, 2019). Other researchers explore the effect of customer satisfaction between customer relations management and customer's loyalty (Lezghed & Bersali, 2021; Seddik & Younsi, 2020; Yousef, 2017; Leninkumar, 2017). On the other hand, it has been noted that there is a significant lack of literature regarding the link between the business processes management and CRM and customer loyalty. Thus, this study is used to fill a gap in (CRM) literature in the telecommunication sector, in which empirical studies on the relationship between customer relationship management, customer loyalty and business process management have been inadequate until now.

2. Literature review and hypotheses development

2.1 Customer Relationship Management (CRM)

Kotler and Keller (2009) study define CRM as: A process that includes collecting relevant information about each customer, in order to achieve customer's loyalty (Kotler et al., 2009). Sadeq defines CRM as: A high-value business-oriented philosophy that includes marketing and service combined with information technology related to building long-term relationships with the customers in order to increase customers value, to gain their loyalty and retain them (Sadek, 2012). There has been a development in the concept of CRM. First, it is a marketing activity aimed at the relationship with the customer through an electronic program that organizes the operations, data and customer information. Second, it is a marketing relationship with customers and an important marketing function mainly based on marketing databases. At last, the strategic view sees the customer relationship management as an integrated strategy that seeks to provide electronic relationships and satisfy customers to reach a permanent loyalty stage to organization's products (Parthasarathy & Ramasamy, 2015; Agbaje, 2014). Customer relationship management (CRM) aims to achieve many goals such as achieving customer satisfaction, increasing revenue growth, reducing the cost of sales and distribution and reducing the cost of customer support (Gray & Byun, 2001).

2.1.1 Customer relationship management (CRM) dimensions

2.1.1.1 Customer acquisition

The process of customer acquisition is one of the basic operations in (CRM). Actually, organizations take care of searching for means to obtain customers, and trying seriously to obtain new customers (Valmohammadi, 2017). Attracting new customers is one of the challenges facing the organization. Thus, companies should think of marketing strategies to acquire and attract customers and use new technologies to strengthen relationships with customers. Companies should study the different ways of communication between the old and new means in the sales process, whether through the Internet or traditional methods in order to build suitable strategies and technologies (Altit, 2015).

2.1.1.2 Customer Retention

Organizations seek to maintain customer loyalty for their products, and retain customers for a long period, where loyal customers are a source of information for potential and new customers (Lenka et al., 2009). This issue often focuses on marketing the relationship as a high-level customer-centric marketing method, whereby the modern knowledge of the customer is benefited, included in the product design process to inform the customer of that through interactive communications (Alsayani, 2014). Organizations can convert new customers into permanent customers, and then gradually transforming them into loyal customers who act as defenders of the organization and its services, results from the intimate relationships between the organization and customers, and these relationships are based on providing products that meet the customers' desire and exceed their expectations (Kotler & Keller, 2006).

2.1.1.3 Service quality

Seddik and Younsi (2020) define customer service quality as a criterion for matching the actual performance of the service with customers' expectations. Nazal (2019) defines service as an activity accompanied by a number of intangible elements

that include interaction with customers with the feature of ownership. The company customer service considers the key that determines the company's ability to maintain its loyal customers. Customer's service takes care of loyal customer's inquiries and guides them to sell services, their prices and benefits. The organization's ability to complete the service is pledged to provide to the beneficiaries, the response speed, and the company's employee's skills to convince customers of the service provided (Nader, 2005; Deng et al., 2015).

2.2 Customer loyalty

Kotler and Keller (2006) define customer loyalty as the sincere commitment by the customer to repurchase the preferred product in the future despite situational influences (Kotler & Keller, 2006). Najm (2015) expresses customer loyalty as a measure of repurchase degree of a certain brand by the customer. There are three types of customer loyalty. First, cognitive loyalty which refers to information availability to the customer, and this information expresses the preference of a particular brand over others. This type of loyalty is based on the information that the individual wishes to provide from various sources, whether from previous experiences or from others, as this information expresses a certain level of product performance and quality compared to other similar products (Seddik & Younsi, 2020; Kumar et al., 2008).

Second, emotional loyalty arises because of admiration for the product or the brand, as this entails consolidating the emotional feeling of preferring a product over others. Actually, to maintain this type of loyalty, the individual's behavior must be studied to know the determinants of a customer's emotional commitment (Lezghed & Bersali, 2021). Third, transaction loyalty expresses the customer's behavior, by making the purchase accompanied by a strong desire to overcome the obstacles that prevent this behavior. And when the behavior is repeated, the customer reaches what is known as self-disposition stage, which means repurchasing the product on a regular basis (Seddik & Younsi, 2020).

2.3 Business Process Management (BPM)

Pradabwong et al. (2017) define business process management (BPM) as a managerial method that concentrates on the processes and contains four elements: strategic alignment, information technology, employee's involvement, and processes development. Rosemann and Brocke (2010) see that BPM dimensions are: strategic alignment, governance, methods, information technology, individuals, and culture. Organizations can design a customer-based process and control process implementation during service delivery. Therefore, a well-organized service process leads to a higher level of customer satisfaction and loyalty (Zhang et al., 2018).

2.4 Customer relationship management, customer loyalty and business process management

Lezghed and Bersali (2021) focus on the effect of customer satisfaction underlying the relationship between social customer relationship management and customer loyalty. The study reveals that social customer relationship management has a direct effect on the satisfaction and loyalty of mobile phone services customers. Moreover, the obtained results show that customer satisfaction mediates the effect of social customer relationship management on customer's loyalty. Yousef and Gareeb (2017) concentrate on the mediating effect of customer satisfaction underlying the relationship between corporate social responsibility and customer loyalty. The study reveals that corporate social responsibility has a direct effect on customer's loyalty. Besides, the obtained results show that customer satisfaction mediates the effect between corporate social responsibility and customer loyalty.

Seddik and Younsi (2020) investigate the effect of CRM in achieving customer loyalty; the study reveals that social customer relationship management had a statistically significant effect on customer loyalty. Hamad (2020) attempts to examine the impact of E-CRM on the E-Brand reputation through the customer's satisfaction of Jordanian free market. The study reveals that corporate electronic customer relationship management has a direct effect on electronic brand reputation. Besides, the obtained results show that customer satisfaction mediates the effect of E-CRM on E-Brand reputation. Nazal (2019) revealed that customer relationship management had a direct effect in developing customer services of Jordanian telecommunication companies.

Harahsheh (2014) reveals that CRM has an impact on customer loyalty on Jordan Telecommunication Company. Zahar et al. (2022) reveal that improving the performance of the observed business processes can improve the level of customer satisfaction. Ibrahim et al. (2019) reveal that CRM improves customers' loyalty and service-oriented architecture (SOA) mediates the relationship between CRM and customer loyalty. Raja et al. (2013) reveal that there are relationships between service quality, customer satisfaction and loyalty programs with the level of customer loyalty In the Telecommunication sector of Pakistan.

Khan et al. (2022) report that company reputation and customer relationship management have a positive effect on customer loyalty. Moreover, customer satisfaction mediates the relationship among customer relationship management, company reputation and customer loyalty. Keshavarz and Jamshidi (2018) conduct a study at five-star hotels in Kuala Lumpur focused on relationships between process quality and outcome quality as independent variables with customer loyalty as dependent

variable and perceived value and tourist satisfaction as moderator variables. The results show that process quality and outcome quality do not have a direct effect on tourist loyalty. Moreover, the perceived value and tourist satisfaction mediate the relationship between independent and dependent variables. From the previous debate the researcher hypothesized the following hypotheses.

H₁: There is a statistically significant impact of customer relationship management on customer loyalty in Jordan Telecommunication Company.

H₂: There is statistically significant impact of customer relationship management on business process management in Jordan Telecommunication Company.

H₃: There is statistically significant business process management on customer loyalty in Jordan Telecommunication Company.

H₄: Business process management mediates the relation between customer relationship management and customer loyalty in Jordan Telecommunication Company.

3. Study model

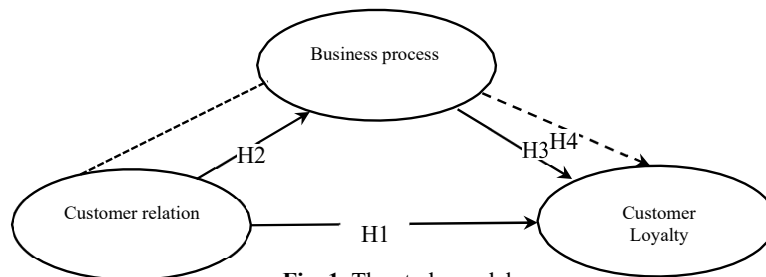


Fig. 1. The study model

4. Methodology

Population and sample selection

The study population implies 3900 workers in the hierarchical levels in Jordan Telecommunication Company. A random sample includes (367), who were chosen from different sectors all over the country. The researcher reviews the theoretical background and previous studies about CRM and customer loyalty. The researcher also reviews many questionnaires that were used in the previous studies (Nazal, 2019; Harahsheh, 2014; Lezghed & Bersali, 2021), so he designed the one which reflects CRM and customer loyalty.

Measurement instrument

The study instrument consists of three parts. First, the background information includes (Gender, level of education, job title, and experience). Second, the independent variable CRM dimensions includes 21 criteria for evaluating (customer acquisition, customer retention, and service quality). Third, the dependent variable includes 9 criteria for evaluating customer loyalty. The participants were asked to identify the degree of their agreement with each item in the second and the third section of the study, using a five-point Likert scale.

5. Findings

5.1 Reliability and validity

Content validity

The researcher uses Content Validity through sending the study instrument to a pilot sample of 12 workers from various managerial levels to assess the clearness of the questionnaire. Moreover, the questionnaire was reviewed by 7 referees among the faculty members at Jordanian universities, and some statements were modified based on their recommendations.

Construct validity: including both convergent and discriminant validity was assessed by using Average variance extracted (AVE) and by examining the correlations between the variables. Table 1 shows the correlation of the constructs used in this study that is below the threshold of 0.70. Convergent validity was tested by the composite reliability (CR) and average variance extracted (AVE) by each construct. Table 1 shows that all the indicators were statistically significant for the proposed constructs, thereby providing strong evidence for convergent validity (Fornell & Larcker, 1981).

Instrument reliability

The currently applied Cronbach's Alpha measures the reliability of measurement in similar research. Reliability was measured using Cronbach's alpha (α) Value of such tests should be greater than 0.70. The results in Table 1 show that alpha coefficients and CR values were higher than 0.70, which means that the current constructs are reliable.

Table 1
The Results of reliability and validity tests

Constructs	1	2	3	4	5
1. customer acquisition	0.815				
2. customer retention	0.437	0.798			
3. service quality	0.305	0.414	0.707		
4. customer loyalty	0.446	0.444	0.424	0.824	
5. business process management	0.532	0.337	0.343	0.421	0.815
VIF	2.822	2.863	2.865	2.784	2.168
Loadings range	0.523-0.634	0.503-0.714	0.541-0.663	0.571-0.714	0.544-0.869
AVE	0.608	0.638	0.628	0.648	0.633
Internal consistency (α)	0.863	0.832	0.810	0.891	0.868
Composite reliability (CR)	0.932	0.865	0.803	0.9013	0.905

Note: all correlations have a significance level less than 0.05

Multicollinearity

This occurs when any single predictor variable is highly correlated with another set of predictor variables. Table 1 shows that variance inflation factor (VIF) values are less than 5, which means that the current data is free from multicollinearity. (Hair et al., 2017).

5.2 Structural model

Fig 1 portrays the structural model, which demonstrates a graph of research hypotheses testing. The results are presented in Table 1 indicate that probability (p)= 0.000, (CMIN/DF)=2.784, Goodness of fit index(GFI)=0.913, (CFI)=0.921, RMR=0.004 and RMSEA=0.073. Therefore, the model fits the data very well.

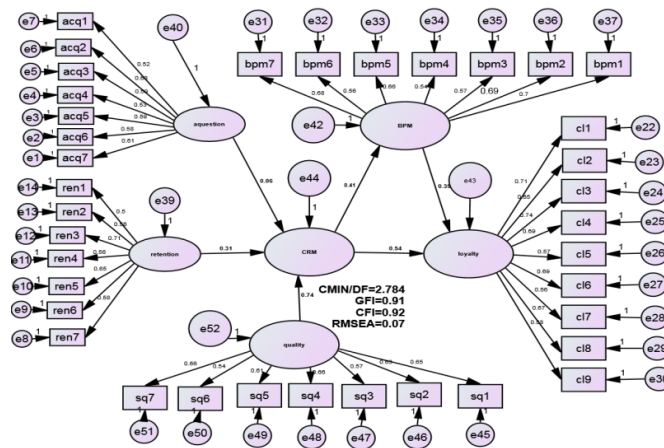


Fig. 1. Research structural model

Structural equation modeling (SEM) is used to validate the findings of testing study hypotheses, and the results are presented in Table 2.

Table 2
The Results of hypothesis testing

Relationship	Direct effect		Indirect effect		Total effect	
	B	p value	B	p value	β	t value
CRM \square CL	0.541***	0.000			0.541***	14.222
CRM \square BPM	0.413**	0.000			0.413**	12.446
BPM \square CL	0.352***	0.010			0.352***	10.008
CRM \square BPM \square CL	0.541***	0.002	0.145*	0.000	0.686*	18.332

Note: CRM: Customer Relation Management.CL: Customer Loyalty, ORC: BRP, Business Process Management* p<0.05, ** p<0.01, *** p<0.001.

The results in Table 2 show significant positive direct effects of customer relation management (CRM) on customer loyalty (CL) ($\beta = 0.541$, $P = 0.000$), and business process management (BPM) ($\beta = 0.413$, $P = 0.001$). BPM, also, showed a significant direct effect on CL ($\beta = 0.352$, $P = 0.000$). These results supported that H1, H2, and H3 were accepted. The results showed also that CR, had a significant indirect effect on CL through BPM ($\beta = 0.145$, $P = 0.002$), which means that H4 was accepted. Based on these results, it is confirmed that BPR mediates the effect of CRM on CL.

6. Discussions

This study presents various hypotheses to examine the direct effect of customer relation and business process management on customer loyalty. Besides, examine the indirect effect of BPM in the relation between CRM and customer loyalty.

First, customer relation management affects customer loyalty positively, (e.g., Lezghed & Berrali, 2021, Yousef, 2017, Seddik & Younsi, 2020, Harahsheh, 2014). This shows that CRM has an essential role in a company because it maintains customers and wins their loyalty to the company. And this is one of the great targets of the company. In fact, the strategy of keeping the customer value has become a cornerstone of customer orientation. Therefore, Jordan Telecommunication Company should adopt different strategies in order to achieve a prominent position in the market by adopting a new approach through managing the relationship with the customer.

Second, customer relation management affects business process management consistent with the study of (Zahar et al., 2022) and contradicts with the study of (Keshavarz & Jamshidi, 2018). This indicates that the Jordanian telecommunication company should identify, analyze, and control its processes in connecting with customer experience and considering customer's needs. Jordan Telecommunication Company should build a strong database in order to know the customer needs and enhance his loyalty.

Third, business process management mediates the relation between CRM and customer loyalty because it is very important to improve their business processes, which leads to improved customer loyalty. Furthermore, managers of the Jordan telecommunication company should adopt flexible processes that meet customer's needs and adapt a feedback system that enables the company to identify the customer's reaction to its products and raise the customer's confidence in the organization.

Fourth, business process management affects customer loyalty positively consistent with past studies (Ibrahim et al, 2019). This leads to achieving customer loyalty and excellent business processes. Matching between CRM and BPM could be beneficial to the company though designing business processes that match customer expectations fulfillment and services development that are needed by the customers. Jordan Telecommunication Company should formulate business strategies that understand the customer needs deeply so this will lead to a strong relation between the customer and the organization, which enhances the customer loyalty.

7. Recommendations

Jordan Telecommunication Company should pay more attention to customers' values through customer relationship management and aligning the marketing strategy to the customer relationship management dimensions to produce a united strategy whose major purpose is to achieve customer loyalty towards the organizations' products.

Actually, Jordan Telecommunication Company should formulate and implement CRM as a business strategy which aims to understand, anticipate and manage the needs of the organizational current and potential customers.

Jordan Telecommunication Company can implement a customer relationship management approach and establish a customer satisfaction center that collects and updates data and information about the company subscribers. Therefore, the company will succeed in adopting correct CRM decisions, and contribute to raising the level of customer's loyalty.

Jordan Telecommunication Company can implement loyalty programs that create a good image of the company all over the country e.g., they can grant lower prices to loyal customers. In general, the aim of these programs is to create a higher level of customer retention.

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