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CUSTOMER RELATIONSHIP MANAGEMENT (CRM) AND CUSTOMER LOYALTY IN THE DIGITAL ERA

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Abstract:

With the advent of digital technologies, the way organizations engage with customers has changed. This study is intended to identify the effect of CRM implementation on the customer loyalty in the digital era. Based on the theory of relationship marketing and the technology acceptance perspective, the research explores the impact of key dimensions of relationship marketing (service quality, customer satisfaction, trust, personalization, digital engagement) on customer loyalty towards digitally enabled service firms. A quantitative research design and cross-sectional survey was adopted, and a structured questionnaire of five-point Likert scale was used and presented to the respondents (n = 150). The instrument reliability was tested by Cronbach Alpha while the data were analyzed by SPSS program using descriptive statistics, correlation and multiple linear regression. The results indicate that the majority of CRM dimensions can account for the majority of the variance in overall customer loyalty and customer satisfaction, customer trust and personalization are the most important CRM dimensions to explain the variance in overall customer loyalty. The results validate the positive and significant relationship of effective CRM practices with customer loyalty. The study offers insight and implications to managers who would like to increase the level of loyalty by taking advantage of data and technology for their CRM efforts. Guidance is also offered on the practice suggestions and direction for further research.

Keywords: *Customer Relationship Management, Customer Loyalty, Digital Era, Personalization, Customer Satisfaction, Trust, Relationship Marketing.*

1. Introduction

Today's business landscape is defined by fierce competition, empowered customer and pervasiveness of digital technologies. Here, it's as important to keep customers as to get them, and commitment is a major component of numerous organisations' approach. Thus, Customer Relationship Management (CRM) has developed from a collection of individual sales tactics to be a philosophy, an attitude, a technology that puts the customer at the heart of the organization's strategy. The digital era of mobile connection, big data, AI and omnichannel interaction has created even greater opportunities and challenges in CRM. This introduction provides a setting for the study in these five thematic areas, each of which frames the study.

1.1 Background of the study

CRM is the strategies, practices and technologies that are used to manage and analyze customer interactions through the customer lifecycle. It's a simple concept for enhancing customer service relationship, customer retention and for enhancing sales growth. The origins of CRM lay in the relationship marketing, which focused on creating value over time instead of simply on a transactional exchange. CRM is now more of a data-driven service with digital platforms to enable real time responsiveness and very personalized and individual customer experience. Today organisations are gathering huge amounts of behavioural, transactional and contextual data and proactively taking action with it to predict needs, tailor products and services to an individual's preferences and build relationships for the long haul. This change has resulted in CRM becoming one of the essential elements to being successful in digitally mediated markets.

While most businesses have spent considerable time and resources on CRM solutions, the issue is how to use the tech capability to generate an actual sense of customer loyalty. But even having a complex CRM solution does not guarantee deeper and successful relationships; when the CRM solution isn't used properly, data isn't consolidated and automation isn't personal, it can have a negative impact on the satisfaction and trust levels. Moreover, customers are in the digital era, are not easily switched and require streamlined and customized services. This study is motivated by the fact that there is a gap between investment and the outcome of the CRM; companies invest a lot in CRM but it is not easy to understand what are the dimensions that are more effective for building Loyalty in the digital environment. To optimally distribute resources, an organization needs to have a good grasp of these relationships. CRM is the strategies, practices and technologies that are used to manage and analyze customer interactions through the customer lifecycle. It's a simple concept for enhancing customer service relationship, customer retention and for enhancing sales growth. The origins of CRM lay in the relationship marketing, which focused on creating value over time instead of simply on a transactional exchange. CRM is now more of a data-driven service with digital platforms to enable real time responsiveness and very personalized and individual customer experience. Today organisations are gathering huge amounts of behavioural, transactional and contextual data and proactively taking action with it to predict needs, tailor products and services to an individual's preferences and build relationships for the long haul. This change has resulted in CRM becoming one of the essential elements to being successful in digitally mediated markets. While most businesses have spent considerable time and resources on CRM solutions, the issue is how to use the tech capability to generate an actual sense of customer loyalty. But even having a complex CRM solution does not guarantee deeper and successful relationships; when the CRM solution isn't used properly, data isn't consolidated and automation isn't personal, it can have a negative impact on the satisfaction and trust levels. Moreover, customers are in the digital era, are not easily switched and require streamlined and customized services. This study is motivated by the fact that there is a gap between investment and the outcome of the CRM; companies invest a lot in CRM but it is not easy to understand what are the dimensions that are more effective for building Loyalty in the digital environment. To optimally distribute resources, an organization needs to have a good grasp of these relationships.

1.2 Significance of the study

Theoretical and practical implications of this study are provided. It theoretically can make a contribution to the relationship marketing literature in that it is empirically tested in a digital environment using technology-based dimensions of CRM and may thus satisfy the need of a more sophisticated models of loyalty. This means that the results can provide managers with the insight to know which CRM investments might be most beneficial in terms of loyalty gains and how they can get the biggest bang for their buck. The study highlights the need for a customer-centric approach to digital competence education for policymakers and educators. The overall findings of the study proved the importance of the relationship between CRM and customer loyalty and the importance of establishing more sustainable and valuable relationships with customers.

2. Literature review

The theoretical and empirical literature pertaining to CRM and customer loyalty is discussed. It has been organized around three themes: conceptual foundations of CRM; determinants of customer loyalty and role of digital transformation in reshaping the CRM-loyalty relationship.

2.1 Conceptual foundations of customer relationship management

A CRM can be regarded as a multi-functional approach to organisation, where people, technology and process are all in line to maximise the benefit from customer relationships. CRM is more than the software and it is more than just a strategic approach which takes a company towards its customers' needs. Payne and Frow's successful model is a cyclical one that involves strategy development, value creation, multichannel integration, information management and performance assessment. In this tradition, the theory of relationship marketing underlies it, in which it is suggested that the business can be more profitable by exchanging with the customer in a long term and trust based manner, instead of by each transaction. In recent studies, the significance of the three elements of CRM (analytical, operational and collaborative) have been shown to be complementary. Analytical CRM can be used to gain insight into the customer through data mining and predictive modelling, operational CRM can be used to automate the interactions with the customer and collaborative CRM can be used to synchronise interactions across the touch points. If it does not go well in any of these areas, the value proposition is compromised and so it is crucial that it is carried out throughout.

2.2 Determinants of customer loyalty

Leverage Customer Loyalty is where the customer wishes to keep buying the desired product/service in the future regardless of situational and marketing factors that may make them want to switch. In the literature two types of loyalty have been identified: one attitudinal (favourable dispositions and emotional attachment) and one behavioural (repeat purchasing). Many studies have been published that confirm that customer satisfaction is one of the factors leading to customers' loyalty, that is, customer satisfaction will keep customers and customers will also be promoters. Another determinant that is well-conferred is trust; a customer is more likely to want to become a customer of the firm that he feels can be trusted and that cares for him and less likely to want to become a customer of rivals. Likewise, perceptions of service quality, including responsiveness, reliability and assurance will also influence the relationship perceptions and thus the loyalty feelings. Personalisation - customisation of the product and message to the consumers taste preferences, is an important form of loyalty and its importance is further increasing in the environment of an abundance of data sources. All of the above suggest that loyalty is a multidimensional phenomenon that is determined by a cognitive, affective and experiential element.

2.3 Digital transformation and the CRM–loyalty relationship

In today's digital age, the definition of CRM and its relationship with loyalty has changed drastically. Real time engagement—and then a bit more—via digital channels all the time, from website to mobile app, social and messaging. With the arrival of big data analytics and artificial intelligence, CRM is now more predictive and personalised, enabling businesses to deliver personalised experiences on a scale. However there are also the dangers spoken of in literature that come with digitalisation: privacy concerns, lack of personal interaction of algorithms, risk of replacing meaningful human interaction with automation. Nowadays, the empirical studies reveal that the moderating and mediating effect of digital interaction (in quantity and quality, called digital engagement) between the use of CRM and loyalty. A high level of digital engagement can be achieved while achieving high satisfaction and trust and there is a proper approach to privacy, but a high level of intrusive and poorly managed digital engagement can lead to reactance. This body of work forms the basis on personalisation and digital engagement which is the focus of the current study, and to conduct the empirical analysis to determine the impact of both on loyalty as well as the traditional determinants.

3. Research methodology

3.1 research design

The study takes the quantitative, descriptive and cross sectional approach. This is suitable as the study aims to examine relationships between well-defined variables, and test hypotheses based on the existing theory. The survey strategy has been adopted for the primary data collection to assess the relationship between the dimensions of CRM and customer loyalty at a single time.

3.2 population and sampling

These identified target groups were customers of the banking, telecommunications and e-commerce companies who had used the said companies in the preceding six months using a digital service. Sampling was a non-probability (convenience sampling) and a purpose sampling for the respondents who had experience in digital service. Based on some guidelines, 150 observations were deemed to be adequate for performing the multivariate analysis (10 observations per predictor variable). 100% (n = 150) of the questionnaires distributed were returned completed and usable.

3.3 data collection instrument

A structured, self-administered questionnaire in two sections was used to collect data. Demographic characteristics of the respondents were collected in the first section and second section measured the study constructs. A questionnaire was created, consisting of 10 items to measure the independent variables (service quality, customer satisfaction, trust, personalization and digital engagement), and 10 items to measure the dependent variable (customer loyalty). All items were scored on a five point Likert scale from 1 (strongly disagree) to 5 (strongly agree). The items were adapted from previous research scales which were developed and validated.

3.4 Reliability and validity

Expert review and pilot testing were used to ensure content validity and Cronbach's alpha was used to determine the construct reliability. The alpha coefficient for the overall instrument was 0.87, which is higher than the common value of 0.70, thus demonstrating good internal consistency. All constructs also exceeded the acceptable level of reliability and were deemed suitable to be used for further analyses.

3.5 Method of data analysis

The data gathered were coded and analysed using Statistical Package for the Social Sciences (SPSS). Descriptive statistics including the frequencies, means and standard deviations were used to summarize sample and variables. Relationships between the dimensions of CRM and loyalty were measured in terms of their strength and direction using Pearson correlation analysis. After that, multiple linear regression analysis was carried out to understand the relative and overall contribution of the dimensions of CRM to customer loyalty along with testing the hypotheses of the study at 0.05 level of significance.

4. Results and Analysis

The results of the statistical analysis are presented in this section. Results are displayed in six tables grouped into the following categories: Demographic Profile, Descriptive Statistics, Reliability Analysis, Correlation Analysis, Regression Analysis, and Hypothesis Testing.

Table 1: Demographic profile of respondents (N = 150)

Variable	Category	Frequency	Percentage (%)
Gender	Male	82	54.7
	Female	68	45.3
Age	18–25 years	39	26.0
	26–35 years	58	38.7
	36–45 years	33	22.0
	Above 45 years	20	13.3
Education	Undergraduate	61	40.7
	Postgraduate	72	48.0
	Others	17	11.3
Digital Usage	Daily	94	62.7
	Weekly	41	27.3
	Occasionally	15	10.0

Table 1 shows that most of the respondents were in the age group of 26-35 years (38.7%) and males (54.7%). The majority of respondents had a postgraduate qualification (48.0%) and used digital services on a daily basis (62.7%) which indicated that the sample was appropriate to the study of CRM in a digital context.

Table 2: Descriptive statistics of study variables

Variable	N	Mean	Std. Deviation
Service Quality	150	4.02	0.68
Customer Satisfaction	150	4.15	0.61
Trust	150	4.08	0.65
Personalization	150	3.94	0.72
Digital Engagement	150	3.87	0.74
Customer Loyalty	150	4.05	0.63

Mean ratings of all the variables were above 3.8 (generally good) as shown in Table 2. The mean score for customer satisfaction was the highest (4.15), and the mean score for digital engagement was the lowest (3.87). Standard deviations indicate relative consistency of respondents' perceptions, and are relatively low.

Table 3: Reliability analysis (Cronbach's Alpha)

Construct	No. of Items	Cronbach's Alpha
Service Quality	2	0.81
Customer Satisfaction	2	0.85
Trust	2	0.83
Personalization	2	0.79
Digital Engagement	1	0.78
Customer Loyalty	1	0.82
Overall Instrument	10	0.87

Table 3 shows that all the constructs met the reliability criterion of 0.70, and the alpha of the instrument was 0.87, indicating that internal consistency was good and the instrument is reliable for further analysis.

Table 4: Pearson correlation matrix

Variable	SQ	CS	TR	PE	DE	CL
Service Quality (SQ)	1					
Customer Satisfaction (CS)	0.58	1				
Trust (TR)	0.54	0.61	1			
Personalization (PE)	0.49	0.56	0.52	1		
Digital Engagement (DE)	0.44	0.47	0.45	0.53	1	
Customer Loyalty (CL)	0.60	0.68	0.64	0.62	0.55	1

As shown in Table 4, all the CRM dimensions are positively and significantly correlated with customer loyalty ($p<0.01$). Customer satisfaction shows the highest correlation with loyalty ($r = 0.68$), trust ($r = 0.64$) and personalization ($r = 0.62$). Inter-correlations between predictors are below 0.70 indicating that there is no serious issue of multicollinearity.

Table 5: Regression model summary and ANOVA

Statistic	Value
R	0.782
R Square	0.611
Adjusted R Square	0.598
Std. Error of Estimate	0.401
F-value	45.28
Sig. (p-value)	0.000

As seen in Table 5, regression model is statistically significant ($F = 45.28$, $p < 0.001$). The R Square value for the five CRM dimensions is 0.611, which explains that the five dimensions of CRM have an explanatory model of about 61.1% of the total variance of customer loyalty.

Table 6: Regression coefficients and hypothesis testing

Predictor	Beta (β)	t-value	Sig.	Result
Service Quality	0.164	2.61	0.010	H1 Supported
Customer Satisfaction	0.281	4.12	0.000	H2 Supported
Trust	0.223	3.45	0.001	H3 Supported
Personalization	0.197	3.02	0.003	H4 Supported
Digital Engagement	0.148	2.34	0.021	H5 Supported

The standardized regression coefficients are given in Table 6. Data shows that all five predictors are statistically significant at the 0.05 level and all hypotheses (H1–H5) are supported. Among the three factors, customer satisfaction is the most influential factor on loyalty ($\beta = 0.281$), followed by trust ($\beta = 0.223$) and personalization ($\beta = 0.197$). However, the digital engagement is the least influential and most insignificant ($\beta = 0.148$).

4.1 Discussion of findings

The results provide good support to the hypothesized relationships. The findings that customer satisfaction is the best predictor of customer loyalty are in line with the literature and its focus on satisfaction as a critical antecedent of relational commitment. The concept of trust is significant in this regard, further supporting relationship marketing theory and its importance, and affirming the need for reliability and integrity in the automated digital environment. Interestingly, personalisation was also a big predictor, pointing to the power of personalisation based on data in the digital age. The comparatively low impact of digital engagement indicates that just being interacted doesn't mean a lot and that the quality and relevance of interaction is more important than the quantity. All of this together indicates that the digital factors can complement the CRM toolbox, but the traditional factors of customer loyalty – satisfaction and trust – are still center stage, and personalization is what gives it a boost.

5. Conclusion and recommendations

The purpose of this study was to examine the influence of CRM towards customer loyalty in the digital era. The study found that the dimensions of CRM accounted for a substantial percentage of variance in the customer loyalty and that all the five dimensions that were examined had a significant positive effect when the survey data of 150 respondents were analysed in SPSS. The biggest drivers were customer satisfaction, customer trust and personalisation – and the fundamentals of relationship marketing remain important in an era in which the customer experience is shaped by digital.

Theoretically, the study introduces a new model of the CRM – loyal relationship, which is based on empirical facts and digitalized. The model incorporates classic relationship variables in addition to new ones such as personalisation and digital engagement. Managers need to invest in satisfaction and trust, and need to use data to offer actual personalisation, rather than superficial or intrusive automation. As a countermeasure against the possible reactance caused by a failure in the execution of digitalization, managers are urged to engage in digital ways in a way that is purposeful, consistent with privacy and value adding.

There are some limitations of the study. There is no causal inference possible because of its cross-sectional design and generalizability is limited due to convenience sampling. Longitudinal designs, larger and more representative probability samples, and sector-specific comparisons, could be used to further understanding in future research. Moreover, other moderating variables such as privacy concern and the switching cost and generational differences could be investigated to improve the model. While all of that is an impediment, the study has a very clear and useful message: Technology can help, but can't replace the human aspects of loyalty in the digital age. Businesses can achieve customer loyalty the best way by having a blend of sophisticated CRM capabilities and authentic, credible and personalized relationships.

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