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# Organizational Capital as an antecedent to CRM Technology use : A study of the pharmaceutical sector in India



Waseem John<sup>1</sup>

*Customer Relationship Management has been researched extensively in past decade and there are ample evidence that it improves the organizational performance in terms of customer retention, customer satisfaction, and customer value development. However, not every organization has been able to use the technology associated with CRM and due to this lack of proper usage of CRM systems, poor performances have slo been reported. One of the ways to facilitate the use of CRM technology in an organization could be to support the CRM implementation with proper employee training, customer relationship orientation, support from top management, and improved organizational incentive and reward system. All these factors are summed up in a multidimensional construct i.e., Organizational Capital. This paper examines the importance of Organizational Capital as an antecedant of CRM technology use. The results of this study depict that Organizational Capital positively influence the CRM technology use in an organization and thus is a antecedant to CRM technology use. Further, the implications for managers are also presented.*

*Keywords : Customer Relationship, CRM technology, Organizational incentive, Organizational Capital.*

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## Introduction and objectives

In recent years, researchers and academicians have tried to identify antecedents and consequences on overall CRM performance. Except a few studies (e.g.Chang, Park, &Chaiy, 2010), there is a scarcity of studies that have tried to look into the antecedents of the actual usage and variety of CRM technology in an organization. The extant literature on antecedents mainly comes from the TAM (Technology Acceptance Model). But, there are several other factors that could contribute to the better usage and implementation of CRM technology and Organizational Capital seems to be one of them. Consequently the main objective of this study is to examine the impact of Organizational Capital on the CRM Technology use.

## Literature Review and Conceptual Framework

One of the primary motive for the study is that there are a little evidence indicating satisfactory performance from CRM implementation and this may be attributed to the fact that such implementations are done without the appropriate organizational transformations (Hunter & Perreault Jr, 2007) and it may be also due to lack of understanding about CRM (Payne and Frow, 2005). The top management support, proper training of employees and suitable changes in organizational reward systems are the organizational changes that can help in achieving successful CRM outcomes and these transformations are usually evident in the belief and value systems of the organization (Boulding et al. 2005; Payne & Frow 2005). Some studies in recent past may have included the top management support, reward systems, and employee training as the possible predictors of the CRM technology

use; however one of the important dimensions that hold its importance in this regard is Customer Relationship Orientation. Though it is not quite different but it differs from the other dimensions with respect to the approach and attitude depicted by organizations when it comes to handling the customer relationships. Thus it has been added to the Organizational Capital construct to further understand its peculiarities in an emerging market. Also, the research related to Customer relationship Orientation in the relationship marketing literature is very sparse. It reflects the belief and attitude of the organization towards the importance of the customer relationships. In other words training and rewards are practical oriented organizational transformations whereas CRO is an enduring policy that is latent and should always be present in an organization. Investing in high cost CRM technology without having a customer oriented culture is a mere waste of financial resources (Ryals & Knox, 2001). The Customer Relationship Orientation as a belief system emphasizes the importance of customer relationships and thus motivates the organizations to deploy precious resources to attain this objective, thus it acts as a guiding force in successful implementation and use of CRM technology use (Day, 2003). Since investment in CRM technology use done to enhance the customer relationship, it can be suggested that Customer Relationship Orientation could be a potential antecedent to CRM technology implementation (Jayachandran, Sharma, Kaufman & Raman, 2005) and thus the current study postulates that organizations which are highly oriented towards the customer relationships and focus

more on their customer relationships than their functional aspects are more likely to invest in CRM technology use on a larger scale. Therefore, based on this belief that Organizational Capital as a whole can significantly contribute towards the successful implementation of CRM Technology use and consequently aid in enhancing the firm performance it is hypothesized that:

H1 : The Organizational Capital positively associated with the use of CRM technology use.

Primary research hypothesis with respect to antecedents of CRM technology use intends to examine the impact of Organizational Capital on CRM Technology use as a whole. In order to know the individual impact of each sub-construct of Organizational Capital on the CRM Technology use sub-hypothesis were developed and the conceptual framework is presented in figure 1. . Testing of these hypotheses will provide deeper insights with respect to the individual effect of these components on CRM Technology use and whether all of them are significant at their individual level or not. Based on this idea following sub-hypothesis have been developed.

H2 : Employee training is positively associated with the use of CRM applications.

H3 : Customer centric management system management is positively associated with the use of CRM applications.

H4 : Customer Relationship Orientation is positively associated with the use of CRM

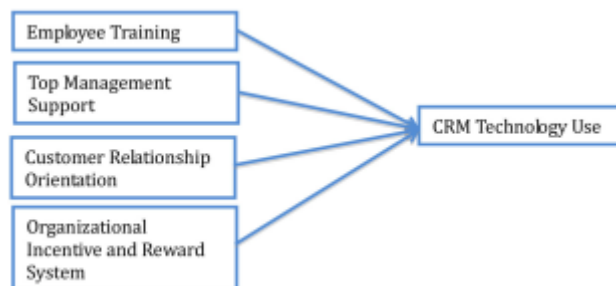


Figure 1. Organizational Capital – CRM Technology use conceptual framework.

#### Methods

##### Data

The data was collected from sales and marketing managers of 155 firms from pharmaceutical industry with the help of self administered questionnaire. The list of companies was obtained from BSE (Bombay Stock Exchange) official website. The list includes a combination of both top and low level companies in terms of market share.

##### Measures

##### Organizational Capital

Organizational Capital construct was measured by 10 item scale, which includes its three subdimensions i.e., Employee training, Customer Centric Management system, and Customer Relationship Orientation (John, 2017).

##### CRM Technology use

In order to measure the CRM technology use, an index originally developed by Jayachanderan et.al., 2005 was used. The index was initially refined with the help of Confirmatory Factor Analysis. The results of the measurement model are presented in table 1.

Overall Model Fit

$\chi^2$	611.19, $p < .000$
$\chi^2/df$ ratio	3.617
GFI	0.844
CFI	0.936
DELTA2	0.936
RMSEA	0.092

Table -1 : Model fit indices for CRM technology use

The ideal  $\chi^2/df$  ratio lies between 1-5, whereas GFI values approaching .9 indicate a good fit. Similarly the CFI value in this particular model is well above the cut off level of .9 indicating a good fit. Looking at the different model fit indices in table above it can be inferred that a three factor model of CRM technology use best fits the data.

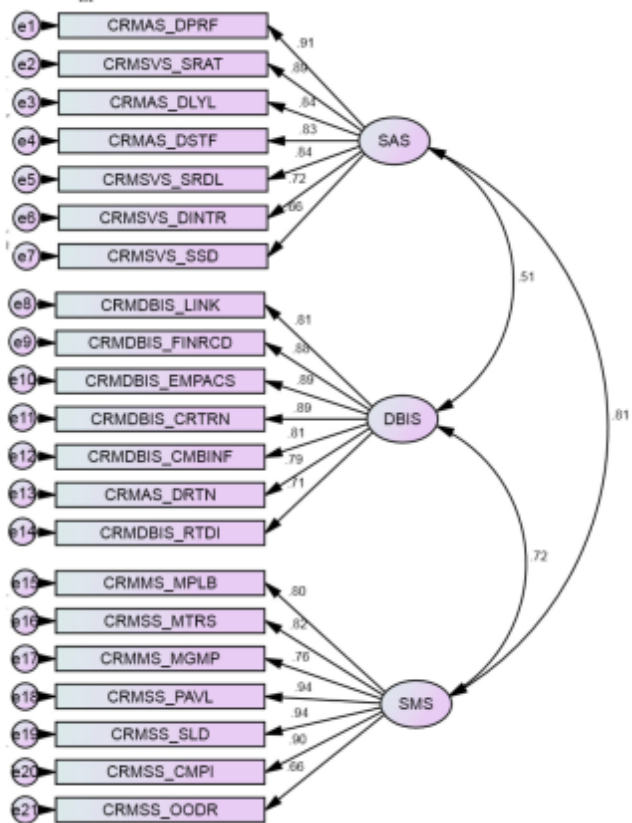


Figure. 2. Confirmatory factor analysis of CRM Applications

**Path Analysis**

**Organizational Capital-CRM Technology use Structural model**

First structural model was run on constructs of Organizational Capital and CRM technology use in order to assess whether higher deployment of Organizational Capital leads to the subsequent higher use of CRM Applications. In line with the suggestions of Anderson and Gerbing (1988), the model fit indices of the model were also checked for in order to determine the overall fit of the structural model. The model fit indices of the Organizational Capital-CRM Technology use structural model indicate that it is a sufficiently good fitting model. The model fit indices of the OC-CRMA structural model are presented in table 6.19. Figure 6.12 presents the overall model path structure. This initial structural model consisted of second-order constructs and has been labelled as OC-CRMA model A.

**Table-2: Model fit indices of OC-CRMA structural model A Overall Model Fit**

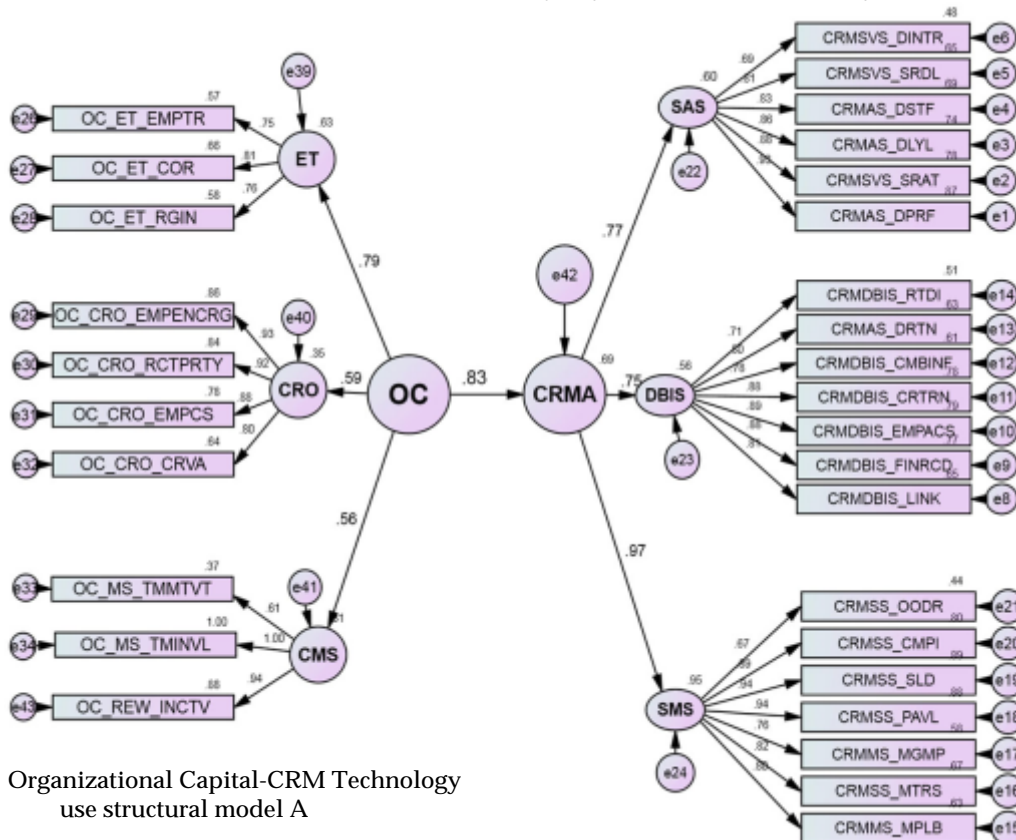
$\chi^2$	1126.26, p<.000
$\chi^2/df$ ratio	2.90
GFI	0.803
CFI	0.921
DELTA2	0.921
RMSEA	0.078

On examination of the regression path from Organizational Capital to the CRM Technology use construct, it can be seen that there is a very strong and significant impact of the Organizational Capital on the CRM Applications. The standardized estimate or standardized regression coefficient between these two constructs is 0.828. Moreover, looking at the standard multiple correlation coefficient/ coefficient of determination (R<sup>2</sup>) it can be seen that it is as high as 0.69 suggesting that Organizational Capital on Capital explains 69 per cent of the variation in the CRM Technology use variable. The results of the path analysis are presented in table 6.20.

**Table-3 : Results of hypothesis testing from OC-CRM Technology Use structural model A**

Hypothesis	Relationship path	Estimate	S.E	C.R.	Significance level (p)	Result
H2	OC → CRMA	.828	.155	8.342	0.000	Supported

The results of this structural model analysis clearly suggest that Organizational Capital has a strong and significant relationship with the use of CRM Applications. Thus, the first major hypothesis (H1) of this study is supported.



**Figure 4. Organizational Capital-CRM Technology use structural model A**

### 3.3.2. Revision and testing of sub-hypothesis

In order to check the impact of the individual dimensions of Organizational Capital, i.e. Employee training (ET), Customer centric management system (CMS), and Customer Relationship Orientation (CRO) on CRM Technology use the first structural model was revised and Organizational Capital dimensions were incorporated in the in their first-order nature whereas the CRM

Technology use construct was retained in its second-order form in order to simplify the interpretation of the results and avoid unnecessary complexity in the model. This model was labelled as OC-CRMA structural model B. Fit indices of the model are presented in the table 4.

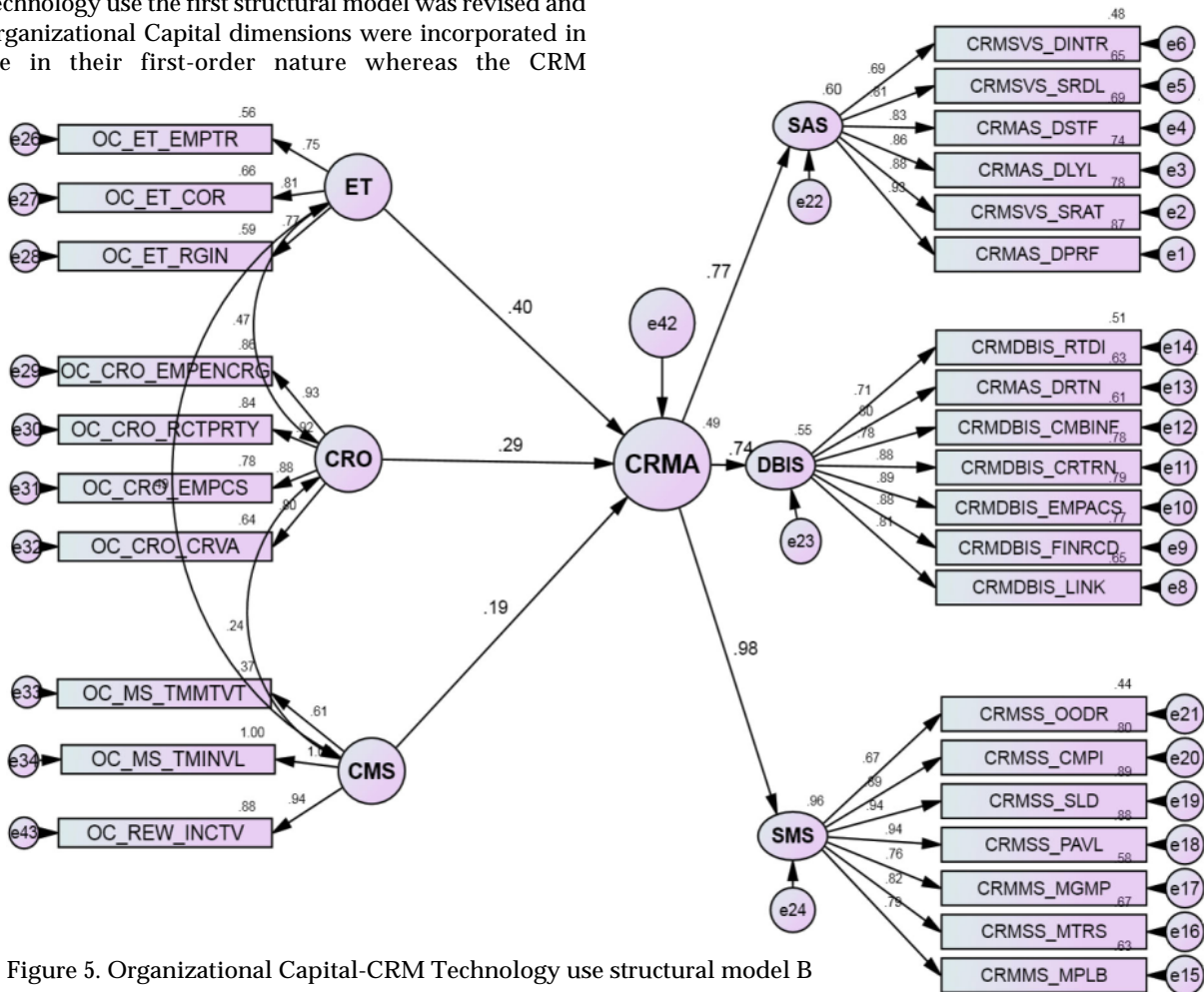


Figure 5. Organizational Capital-CRM Technology use structural model B

Table 4 Model fit indices of OC-CRMA structural model B  
Overall Model Fit

$\chi^2$	117.41, p<.000
$\chi^2/df$ ratio	2.89
GFI	0.806
CFI	0.922
DELTA2	0.922
RMSEA	0.078

The results of this model indicate that there is not much change in the values as for as the fit indices are concerned and the model exhibited a suitable fit like its earlier version. The model shows that all the three paths between three dimensions of Organizational Capital and CRM Technology use construct are significant with positive

standardized regression coefficients indicating that all of them positively predict the use of CRM Applications. Among the three dimensions Employee training turned out to be the strongest predictors of the CRM Technology use with an estimate of almost .40, whereas Customer relationship orientation and Customer centric management system fell second and third in the order with estimates of .29 and .19 respectively. Thus it can be seen that all three components of Organizational Capital predict the use CRM Technology use in an organization and are equally important. However, the Employee training is the most important dimension among the three. Another important result obtained from these two structural models is that both the models behaved suitably well in their first order and second order nature. The overall results of the model are presented in table 6.22.

Table-5 : Results of sub-hypothesis testing from OC-CRMA revised structural model

Hypothesis	Relationship path	Estimate	S.E	C.R	Significance level (p)	Result
H2	ET → CRMA	.398	.09	5.52	.008	Supported
H3	CCMS → CRMA	.193	.086	3.43	.000	Supported
H4	CRO → CRMA	.285	.04	5.06	.000	Supported

Note : S.E= Standard error of estimate, C.R. = Critical ratio

#### Findings and Conclusion

The results from the first structural model clearly indicated that all the three components of Organizational Capital i.e., Customer centric management system, Customer Relationship Orientation and Employee training together are strong predictors of higher use of CRM Technology use within an organization. This suggests that Organizational Capital is the essential organizational transformation, which predicts the use of CRM technology in an organization. It also shows that a firm should work on all three components of Organizational Capital simultaneously if it intends to encourage its employees to use the CRM Technology use and also make the overall CRM technology work with greater benefits. These results are in line with the previous research which suggest that customer oriented organizations are more likely use CRM technology on a higher end and benefit from it consequently (Chang, Park & Chaiky, 2009; Day, 2003). These results show that while organizations try to make the CRM implementations a success, all three factors need to be managed equally. The organizations need to foster a culture that recognizes customer relationships as valuable assets. As expected, the results also indicated that Employee training was the strongest predictor of use of CRM Technology use and its role in successful implementation and use of CRM is quite evident. Thus, apart from these intangible resources the organizations also need make some investments in training the employees so that the CRM related tasks can be understood and performed by the employees in a smooth manner. Developing incentive schemes to attract the customer relationships will keep the employees motivated to be engaged in CRM programs.

#### Limitations and directions for future research

This study provides some useful insights despite some limitations. One of the limitations is that the data has been taken from Indian pharmaceutical industry. The future researchers may include samples from various industries in order to generalize the results. Further, some more factors may be included in the Organizational capital construct as the research related to this construct is very sparse. The CRM technology as such has evolved a lot during last few years and therefore CRM technology use index used in this study may not be a comprehensive index in terms of functionality aspects of CRM. The future

research may focus on making this index more comprehensive and complete in order to measure the actual picture of CRM technology in an organization at a particular point in time.

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