



## **Factors Affecting Company Performance and New Product Performance**

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### **Abstract**

Customer relationship management (CRM) is a key factor that affects company performance and acting as back-bone for companies in 21<sup>st</sup> Century. CRM helps an organization to improve not only its existing products, services and procedures but also enables it to develop better and novel new products. However, the antecedents of CRM have only been explored in the context of existing products but CRM's potential to support in future new product development (NPD) has been ignored. The aim of this paper is to develop and test a model for factors affecting company performance and new product performance. This study develops a theoretical framework with multiple aspects of CRM having links with new product performance and company performance. The results from the analysis of 233 responses suggest that when a firm employs more of its CRM processes in an NPD context, the higher is firm's new product performance. On the other hand, data does not support for any significant influence of CRM technology on new product development and new product performance. In addition to this, the application of CRM reward systems does not play a

facilitating role in new product performance.

Keywords: customer relationship management, new product development, new product performance, Pakistan

## **INTRODUCTION**

Customer Relationship Management (CRM) is a blend of people and processes. It influences the processes prevailing in the organizations through people and technology. It pursues to recognize a company's customers in order to gain the relationship valued for the organization (Boulding et. al., 2005). CRM is an in-sequence information system industrial term for methodologies, software, and usually Internet facilities. It helps organizations to manage customer relationships in an organized and efficient manner. CRM integrally used for the existing products, and to maintain the status quo of the organization while no attention was paid on CRM in creating the new product development and its performance. CRM can enhance the performance of organizations like wise it enables efficient productive customer interactions. It improves infrastructure of channels, facilitate web collaboration to reduce customer service costs, assimilate call centers enabling multi-channel personal customer interaction and integrates examination of the customer while interaction at the transaction level (DeSarbo et. al., 2001). Hence, CRM is the common terminology used to describe organization to forecast all the way through the entire transaction process.

CRM is frequently a complete data system that can either be maneuver such as an index card system or a computerized system. Customer Relationship

Management is one of the most recent novelty innovations in customer service and help-oriented way to get more and more satisfied customers (Sadeghi and Farokhian, 2011). CRM is a widely-implemented strategy for administrating the company's communications with customers, clients and sales projection. It grips using technology to organize, mechanize, and synchronize business strategies and processes principally sales activities, but also those for marketing, customer service, and technical support (Sivakumar et al. 2010). The general goals are usually to find, attract, and victory of new clients, nurture and retain those the company already has, entice former clients back into the fold, and reduce the costs of marketing and client services. A CRM system finally appeared as containing of company information's which is shown sophisticatedly to upsurge business profit and increase customer satisfaction and loyalty, on the same hand decreases business cost and investment. CRM have key characteristics on new product development and its planning cycle, placing and promotions. Its meticulous stress on marketing management issues and activities accompany the key phases through the usage of technologies (Sadeghi and Farokhian, 2011). It involved in developing, testing, initiation a new product, service, or other marketing innovation and developing unique and sole branding propositions for the retention of customer and to attract more and more new customers towards new products.

This study is an effort for the development of a theoretical framework in which multiple facets of CRM are linked with new product and company performance.

This study helps to elaborate the implementation of CRM as a wide-ranging approach which present seamless integration of every area of business in the organization. The development of new products touches the customer loyalty and hence enhances the organizational profitability. CRM is a business strategy that aims to recognize, foresee and manage the needs of an organization's current and potential customers, especially for the development of new product. As CRM is an expedition of strategic, process, organizational and technical change. It necessitates attaining and organizing knowledge about one's customers and using this information for the sake of organizational success. The study analyzes the significance of CRM mediating with the NPD in Pakistani Organizations. CRM is an interactive process for accomplishing the optimum balance between corporate investments and the satisfaction of customer needs to generate the maximum profit from the development of new products. As since one view of CRM is the application of customer related information, and knowledge management to bring applicable products or services to customers which shows that basic purpose is joined with development of products which was still unaddressed in Pakistani Context.

## **LITERATURE REVIEW**

Sivakumar, Roy, Zhu and Hanvanich (2010) examined about the global innovation generation and financial performance in business-to-business relationships and it was in context of case of cross-border alliances in the pharmaceutical industry. As Crawford and Dibenedetto (1991) examined the

performance of organization through mediating role of the performance of new launches and products. In manufacturing “Innovate or die” is the new battle cry of the business world. Around the world, the message is out: either you succeed at new product development and launch, or face a slow downward spiral into oblivion. Cooper (1986) examined the techniques used for obtaining customer inputs in the previous ages; during the concept generation and exploration stages were primarily qualitative that was basic concepts of CRM. Even though the companies in the study still did not focus consistently on customer subject during the technical development and design and developmental stages, the less discontinuous projects did use such traditional quantitative techniques (Veryzer, 1998). Agile and lean companies are competent of operating profitably in competitive surroundings of continually random and changing customer instances (Jacobs, Droge, Vickery, & Calantone, 2011).

Some manufacturers appear to have been able to challenge that, as compared to their competitors, they have better quality through the systematic usage of CRM, are more dependable, and respond faster to changing market conditions. In spite of all that, they attain lower costs and good performance of organization. Sadeghi and Farokhian (2011) discussed about the products and services which retain satisfied customer acts, as publicity loudspeaker of presented by organizations. These were considered as the results of company and attract everybody towards products or of creative minds, those who bring about and flourished the ideas of new products for their customers. Ferdows and Meyer (1990) discussed the

involvement of CRM as it is the procedure of collecting and coordinating information on customers. Their trends, behaviors, competitors, and other important market influencers all are used in building value for the retention and satisfaction of the customers. Celsi and Gilly (2010) analyzed the Ad campaigns target consumers with information about the company that how advertising affects employees' customer focus its products. Langerak, Hultink and Robben (2004) discussed that some researchers have investigated recently that a market-oriented culture guides to greater performance because of the new products that are developed and are brought to the market. Some have shatterproof this wisdom by informative.

A market-oriented culture augmented organizational innovativeness, inventions to get the more and more customers. Through the new product and new product success, both of which in turn improve organizational performance which until and unless give the retention of the customers. As Sivakumar et al. (2010) examined about the global innovation generation and financial performance in business-to-business relationships. It was in context of case of cross-border alliances in the pharmaceutical industry. In the past few decades have witnessed an important increase in the number of cross-border strategic associations among firms. In this context they focused on the role of alliance expertise which is in actual alliance experience and diversity of partners and alliance governance which is horizontal vs. vertical alliances and joint venture vs. other alliances in global innovation generation. This study is effort for the development of a

theoretical framework in which multiple facets of CRM are linked to new product and company performance.

## **CONCEPTUAL FRAMEWORK AND HYPOTHESIS DEVELOPMENT**

### ***CRM Process***

It is a combined tactic and methodology to manage as well as to enhance dealings by focusing on customer retention and holding relationship development. Customers have progressed by advances in information technology, developments and organizational changes in customer-centric processes. The potential of CRM has been examined only in the context of existing products. CRM's potential to assist in upcoming new product development (NPD) has been neglected. Boulding, Staelin, Ehret and Johnston (2005) reviewed existing literature on CRM and identified potential pitfalls and unknowns in CRM implementation. It is extensively recognized as an actual tactics and methods for gathering, examining, and interpreting valued customers' information into managerial action. The customer process basically involves the Customer Information Management; the important action of identifying customers and their demands and needs that necessary to be accomplished by methodically collecting, distributing and disseminating customer information. This database knowledge can be used to grow new products that are associated with customer requirements, demands and needs, and create value for the firms and organizations. Customer segment value management; also it is needed to customer information management, distinguishing CRM activities amongst customers based on their preferences and

value contribution to the company is a key concept of CRM (DeSarbo, Jedidi, & Sinha, 2001). The customers have high levels of satisfaction, conviction, and commitment are characteristics of high-quality, long-term customer relationships (Smith, 1998). Meanwhile the loyal, satisfied and committed customers are more willing to share their product knowledge, and create the harmony between customers and organization in order to gain a good relationship with customers further upsurges the prospect that firms and customers repeatedly work together in developing new product ideas and generate the more satisfied customers, which creates joint learning for the organizations. Multi-channel management usually contributes other resources of communication and channels of distribution, these are also recognized as an important CRM process and includes the systematic integration of multiple old-style and somewhat traditional and new electronic communication channels to manage the dialog and dealings with customers. That is consider the launch and success of New Product Development, Multi-channel Management offers numerous customs and way to interrelate and interact with customers for the determination of generating and launching new products which throughout transform the relationship of organizational performance in different phases of product development.

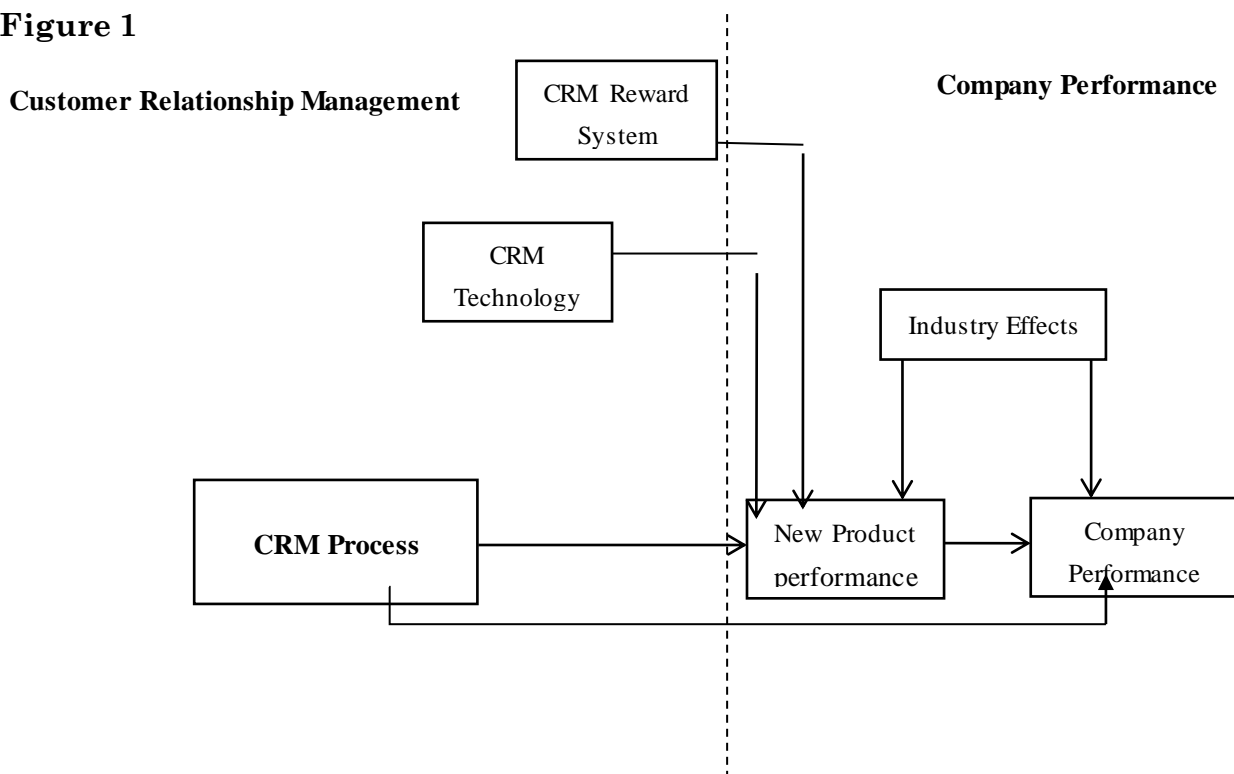
#### *New Product Performance Link: CRM technology and CRM Reward Systems*

Technology is the need of the era as the world boundaries for the research and business hurdles have eliminated and dealings occur in all over the world. The CRM technologies are related with the employees, who are going to use these



technologies for the retention of customers and hence being the part of organization performance along with launches of new product development (Payne & Frow, 2005). Not only it is necessary for the successful CRM that involve the integration of processes and technologies, but it also entails the support of individual members of the organization. In other words, CRM can fail if only a limited number of employees are committed to the initiative; it can only be successful in the organization if and only if when all the members of the system are adapting the CRM functions. CRM success perhaps is contingent on critical mediating effects. New product performance may represent such a link between CRM and firm performance which is further discussed.

**Figure 1**



*Effects of CRM Processes on New Product Performance*

Customer Relationship Management has increased to the program of many

organizational strategies and policies. CRM includes the achievement and retention of customer and gathering information and its dissemination within the organization and outside the organization as well as the organization-wide responsiveness towards the performance of new product development (Jaworski & Kohli, 1993). Customer relationship management processes as an advanced concept consisting of three sub-dimensions: customer information management, customer segment value management, and multi-channel management (Madhavan & Grover, 1998). To improve the constructs, the guidelines of (Diamantopoulos & Winklhofer, 2001) followed. Customer relationship management processes as an advanced concept consisting of three sub-dimensions: customer information management, customer segment value management, and multi-channel management (Madhavan & Grover, 1998).

**H<sub>1</sub>:** The more a firm implements its CRM processes the higher the firm's new product performance.

Customer Relationship Management has increased to the program of many organizational strategies and policies. CRM is explicitly, it includes the achievement and retention of customer and gathering information and its dissemination within the organization and outside the organization as well as the organization-wide responsiveness towards the performance of new product development (Jaworski & Kohli, 1993).

**H<sub>2</sub>:** The CRM technology have positive link with new product performance.

CRM technologies recover and enhanced the process of gathering, disseminating and managing data from customers. CRM expertise and technology facilitates interpersonal information processes between a firm and its customers. Better relational information processes principal and lead to more and better information about a firm's customers, and hence supporting the customer information management process as part of a firm's general CRM process (Liu, Wang, & Pan, 2011).

**H<sub>3</sub>:** The CRM rewards systems have positive link with new product performance.

Customer relationship management is one of the fastest rising business practices in today's business environment (Raman, Wittmann, & Rauseo, 2006). It has been credited with considerable improvements in improving the effectiveness of sales forces through reward systems. It is ever observed that successful CRM entails the synchronization and incentivization of employees in the system prevailing of an organization (Boulding et al., 2005). CRM processes and their impact on performance, have little known about how firms so that they can make sure that employees actually adopt and engage in these processes for the performance of new product. Hence, CRM technology, readjust your organization and processes to appropriate your customer strategy, and then select the

appropriate technology for the system prevailing in the organization (Rigby, Reichheld, & Dawson, 2003).

#### *Effects of New Product Performance on Company Performance*

The incessant development and launch of new products is a significant foundation of competitive advantage. Empirical researches have confirmed that the successful and effective development and launching of new products is an imperative driver of company performance. Innovations ever create new markets and helped to differentiate the firms' offerings from competitors. There-fore, new products can lead firms to grow faster and to charge higher prices than their competitors that expect to give high revenue to organization.

**H<sub>4</sub>:** The higher a firm's new product performance, the higher is its overall company performance.

The literature suggests that the suitable arrangement of functional importance of NPP in any organization is possible through resource allocations. The high levels of company performance are pretentious by the type of grand policies pursued by the firm and the firm's industry type in which it is prevailing. Customer Relationship Management have greater effects on firm performance might be unclear for the understandings the concepts of CRM, there is need to develop expertise that enhance the organizational overall performance (Castillo, Jimenez, & Aleman, 2011).

The new product performance might be the missing link between CRM processes and overall firm performance (Wang, Lo, Chi, & Yang, 2004). Hence customer-centred age, customer value is a planned defense in attracting and retaining customers. Bringing superior customer worth has develop a matter of continuing apprehension in structure and sustaining competitive advantage by energetic customer-relationship-management (CRM) performance and new product development.

**H<sub>5</sub>:** New product performance positively mediates the relationship between CRM processes and overall company performance.

## METHODOLOGY

### *Data Collection and Sampling*

The research study carried through the analysis of an assessment questionnaire. The assessment questionnaire instrument provided statements relating to the Customer Relationship Management, company performance and New Product Performance. CRM process is distributed into three segments Customer information management, customer segment value management and Multi-channel Management (i.e., phone, mail/fax, internet, e-mail) all items will be measured on a 7-point scale ranging from “strongly disagree” (= 1) to “strongly agree” (= 7) which are designated in questionnaire (Ernst, Hoyer, Krafft, & Krieger, 2010). Then the two main effecting variables the CRM Technology and

CRM reward system is measured on the same 7 point likert scale ranging from “strongly disagree” (= 1) to “strongly agree” (= 7).

New product performance was measured with four items. The evaluation of new product performance will be carried out for the firm’s entire portfolio of new products launched in the previous three years. The items will measure on a 7-point scale ranging from “very weak” (= 1) to “very strong” (= 7).

To assess company performance, managers were asked to compare their own performance to competitors in terms of current profitability, growth, market share, and attracting new customers. The 7-point scale ranged from “much worse” (= 1), “same level as competitor” (= 4), to “much better” (= 7).

Data was collected from two hundred and thirty-three employees from 17 manufacturing organizations in Pakistan. Initially, the names of manufacturing organizations were taken from the list of KSE 100-index listed companies and the assessment questionnaires were sent through electronic mail to all the manufacturing companies for the sake of responses. The total responses accumulated was two hundred and thirty-three in which 222 (95.3%) were male respondent and 11 (4.7%) were female respondents. There were 103 (44.2%) education level of masters and above, 89 (38.2%) were graduates and 41 (17.6%) were under graduate respondents. 67 responses (28.8%) were from textile and garment product manufacturers. 17 (5.6%), responses were from chemical & pharmaceutical, 103 (44.2%) from household, food & FMCG, 18 (7.7%) from automobile sector and 32 (13.7%) from IT, telecommunication & technological

product manufacturers.

## DATA ANALYSIS

For the testing of the hypotheses, we used path analysis in Structural Equation Modeling (SEM) through AMOS. SEM is an influential and flexible analytic technique that plays a critically important part in many empirical applications in social science research. It is dispersal free and compares favorably to structural equation modeling because of its strengths in forecasting about the hypothetical model (Flora & Curran, 2004).

### *Evaluation of external validity*

For testing external validity, the procedure of confirmatory factor analysis (CFA) is used which suggests the validity including reflective indicators of key construct. CFA is a member of the more general family of structural equation models (SEMs) and offers an influential method for testing a variety of hypotheses about a set of measured variables (Flora & Curran, 2004). The results of confirmatory factor analysis, as presented in table-1 Regression weights was considered as good when greater than 0.30 (Bernard, 1998).

The variance inflation factor (VIF) computes the inflexibility of multi-collinearity in an ordinary least squares regression analysis, here the Path Analysis used which is also supported by regression (Duncan, 1966) so that it provided guidance to measures how much the variance of an assessed regression coefficient that increased because of collinearity hence the variance inflation factor (VIF) quantifies the severity of multi-collinearity in analysis and provided an index

that measures how much the variance of an estimated regression coefficient is increased because of collinearity. A variance inflation factor exceeding 10 is viewed as indicating serious multi-collinearity, and values greater than 4.0 may be a cause for concern (Hayashi et al., 2004). The VIF of each item ranges from 1.028-2.353.

### *Evaluation of the measurement models*

The Path coefficients are restricted to the assortment  $-1$  and  $+1$  and suggest a positive relationship with a positive value (Ernst et al., 2010). To test for reliability of these scale items, Cronbach's alphas were calculated for each of the measurement (Churchill, 1979). Cronbach's alphas are shown in Table for each construct measurement. To ensure that measures loaded on the constructs as expected, confirmatory factor analysis was conducted with result. Indicator variables correctly and significantly loaded on the factors as predicted, providing evidence reliability. The model fit the data well by suggested criteria goodness-of-fit index (GFI) was 0.90, (NFI) normed-fit-index was 0.90 (Venkatesh, Challagalla, & Kohli, 2001), and the model's comparative- fit-index (CFI) = 0.932, and goodness-of-fit index (GFI)=0.934 showed the fitness of mode .

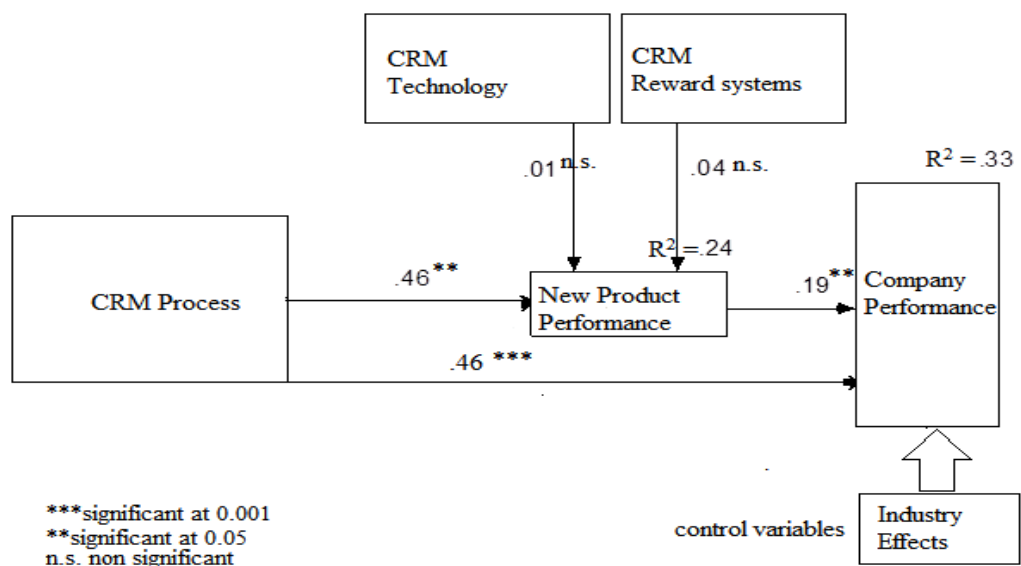
## **RESULTS**

### *CRM processes*

H<sub>1</sub> describes about the when a firm implements more of its CRM processes of customer information management, customer segment value management, and multi-channel management in an NPD context, the higher the firm's new product



performance so the testing of it shows that it is suggesting a positive relationship between CRM processes and new product performance. The outcome is reinforced because the path coefficient of  $.46$   $p \leq .005$ . Also it can be stated as the higher level of the CRM process implementation in an NPD perspective, the better the new product performance. It is cleared from figure 2 that all three subdivisions are positively related to CRM processes. Although, customer segment value management and customer information management have the dimensions with the strongest influence.



### *Effect of CRM Technology*

Hypothesis<sub>2</sub> describes that The CRM technology have positive link with new product performance. This hypothesis was not reinforced the path coefficient of  $0.006$  (n.s.) suggesting that CRM technology does not has the positive association with new product performance. In fact the relationship was in a slightly negative direction.

*Effect of CRM Reward Systems*

Hypothesis<sub>3</sub>, the CRM rewards systems have positive link with new product performance was rejected, proposing a negative effect of CRM reward systems on new product performance but statistically insignificant. This hypothesis is supported by the path coefficient=.037 (n.s). Therefore, the application of CRM reward systems has not a facilitating on new product performance.

*Company Performance*

New product performance exposes a significant robust positive influence on company performance (path coefficient of .191;  $p \leq .005$ ,  $R^2 = 33\%$ ). Hypothesis<sub>4</sub> the higher a firm's new product performance, the higher is its overall company performance is therefore proven. Thus, the introductions of successful new products ever have a strong influence on improving company performance. One of the great qualities of structural equation models is that they permit the quantification of causal and non-causal sources of statistical direct and indirect relationships (Fox, 1980).

**Table-4***Standardized Direct, Indirect and Total Effects of CRM Process(b)*

	Direct	Indirect	Total
New Product Performance	0.459	-----	0.459
Company Performance	0.459	0.064	0.546
CRM Reward System	-----	-----	-----
CRM Technology	-----	-----	-----

The table-4 representing standardized direct (unmediated) effect of CRM Process on New Product Performance was 0.459. That is, due to the direct (unmediated) effect of CRM Process on New Product Performance, whenever CRM Process goes up by 1 standard deviation, it goes up by 0.459 standard deviations. Also the direct effect of CRM Process on Company performance is 0.459 and mediated or indirect effect is 0.064 and the total resulted effect is 0.564 that is describing whenever the CRM Process will increases by one standard deviation the Company performance will upsurge by 0.564 standard deviations.

Table-5 represents the Standardized Direct, Indirect and Total Effects of New Product Performance. The direct (unmediated) effect of new product performance on Company performance is 0.195. That is, due to the direct (unmediated) effect of New Product Performance on Company performance, when of New Product Performance goes up by 1, Company performance drives up by 0.195.

**Table-5** *Standardized Direct, Indirect and Total Effects of New Product Performance*

	Direct	Indirect	Total
Company Performance	0.191	-----	0.191
CRM Reward System	0.006	-----	0.006
CRM Technology	0.037	-----	0.037

In addition to this the industry effect is taken as control variables. Also the

influence of Customer Relationship Management processes on new product performance is significant irrespective of the industry. Although, the company performance diverges across industries, the consequences of new product performance on company performance is significantly stronger than the industry consequences.

## DISCUSSIONS AND CONCLUSION

The objective of the presented research is to observe the influences of CRM processes, technology, and reward systems in new product performance. The study formed numerous remarkable results which add the knowledge in this extent. As well as it provides customer satisfaction and determining the customer's demands and requirements in long term design and manufacture of products can lead to upsurge of loyalty and success of Pakistani organizations.

The model described a comparatively high extent of NPD performance. So the CRM has a much stronger consequences on NPD performance than single features of customer integration. Customer Relationship Management commonly observed as a way to assimilate sales, marketing and service strategies in the direction to increase customer benefits and enhance business-customer relationship in the long term relation but the framework and the results showed the excellence when it is used along with the new product links and contribute at high degree of success in the organizations.

In the CRM-NPD context it is strong evidence that CRM can be leveraged to deliver important customer information which can be used to advance New

Product Performance. Since the new product failure rate has continued high over the years. CRM provides companies with a talented way to attack this serious problem. Multiple CRM processes such as information management, customer segment value management and multi-channel management, and CRM reward systems need to be well-thought-out. In other words, firms need to gather information from CRM processes, use it to classify and understand valued customers (such as lead users and opinion leaders), and use multiple channels to acquire input into NPD that eventually enhance organizations overall performance. CRM reward systems directly affect the CRM-NPD performance link. Thus, having a CRM compatible rewards system can strengthen the impact of CRM on new product performance. CRM technology, on the other hand, has less sway on NPD performance. Third, new product performance has a very strong impact on company performance. In a separate test of mediation, it's also able to expose a significant mediation effect of new product performance. The findings demonstrated that new product performance is an important mediator of the Customer Relationship Management and company performance link. These findings have a number of important managerial implications for science and practice.

The study represents a first step in examining the utility of customer relationship management processes as a contribution into the new product development process. There are several limitations and areas for upcoming researches. First, some of the constructs were measured at a rather broad level. For example, our

CRM technology measure evaluated the implementation of technology on an overall level. It is conceivable that more refined and precise distinctions need to be made. Additionally, despite the detail that the measures demonstrated external validity, it would have been more ideal to have a more extensive pretest of new items. These issues need to be explored in future studies.

Second, as the research was conducted at the SBU (strategic business units) levels and not addressed important project-level aspects of business fields. It has been usually expected that CRM-driven new products tend towards the “incremental” end of the range. If this is so, this could possibly limit the development of “breakthrough” products and true modest advantage. However, this hypothesis could only be tested by a project level study design that takes the level of product novelty and newness openly into account. This may be an important avenue for upcoming researches.

Third, research is desirable to inspect how Customer relationship management may progress new product development at different phases of the NPD. It is likely that different contributions are needed at each of these stages. As well as, information from different types of customers may be useful at different stages. For example, “lead users” might deliver more useful new product thoughts and ideas at initial phases of the process, while opinion leaders may be more useful at advanced phases.

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