

CRM and Firm Performance through Moderation of Top Management Support and Innovative Culture

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Abstract

Customer relationship management (CRM) is the widely accepted approach for gathering, examining, understanding, and translating the information related to customer into the managerial action. CRM is mostly reviewed in terms of existing products. The role played by customer relationship management in new product performance is not studied in much detail. Therefore, customer relationship management is investigated in context of new products performance. Customer relationship management can enhance the new product performance and firm performance. This study proposes a research framework is to model customer relationship management in association to the new product performance, top management support, innovative culture, and the firm performance. This study is to investigate the impact of customer relationship management on new product performance through the moderation of top management support and innovative culture as well as the impact of customer relationship management on firm performance through the mediation of new product performance. This study delivers insights to the managers and academicians about the role of customer relationship management in enhancing the new product performance and improving firm performance. This study has surveyed the pertinent literature from top journals of industrial marketing such as: Industrial Marketing Management, Marketing Intelligence & Planning, Journal of Marketing, Journal of Business & Industrial Marketing, Journal of marketing Research, Industrial Management & Data Systems, and Journal of Business & Industrial Marketing. Findings of this study suggest that customer relationship management positively affects the new product performance; however, this effect can be moderated by top management support and innovative culture. Findings also suggest that new product performance can positively mediate the relationship between customer relationship management and new product performance. CRM process play an important role in enhancing performance of the product and performance of the firm. Overall findings of this study suggest that there is direct relationship between CRM, NPP and firm performance. In this time of intense competition, it is very important for a firm to manage its relationship with customers to improve firm performance. These findings have significant implications for the practitioner and academics.

Keywords: customer relationship management, new product development, new product performance, top management support, innovative culture

Introduction

For a firm success it is very important to continually innovate and introduce new products in the market. Launching a new product into a market creates many new growth opportunities; however, there are few risks like product failure and poor product performance associated with the new product. Business firms operate within a network of interdependencies that entails the business landscape (Ford & Håkansson, 2013), firms try to minimize the risk with the interdependencies and try to enhance firm performance. An effective strategy that can be used to reduce the risk associated with new product success and performance is to align the new product development (NPD) process with market and customer requirements in a business market. In other words it can reduce risk and create satisfactory behavior of the buying firm in association of cooperation between buyer and supplier (Turnbull, Ford, & Cunningham, 1996). New product performance (NPP) is the performance of a new product against certain pre defined measures of a firm. It can be described as an output of the new product development process. NPP can be described as degree to which a new product is supposed to achieve its sales growth, market share, sales growth, profit objectives, and customer growth (Atuahene-Gima & Ko, 2001). Moreover, literature suggests that customers can adept at coordinating

and exploiting the capabilities of their immediate suppliers (Johnsen & Ford, 2007) to improve their own product performance.

Several studies report that market orientation affect new product development process positively (Henard & Szymanski, 2001; Joshi & Sharma, 2004; Lilien, Morrison, Searls, Sonnack, & Hippel, 2002). CRM is very effective in collecting, translating and analyzing customer information, this can be helpful to managers for decision making (Ernst, Hoyer, Krafft, & Krieger, 2011). CRM involves integration and evolution of new marketing ideas and new available technologies. CRM concentrates on maintaining and establishing long term successful relationships with customers (Nguyen & Mutum, 2012). From the conceptual point of view CRM can be used to acquire information about customers that can be useful for NPD process to design the product according to customer requirements (Reinartz, Krafft, & Hoyer, 2004).

CRM plays an important role in maintenance and performance enhancement of existing product as well as it facilitates in development of new products. Through CRM during NPD process firms can collect information about customers' need and expectation. This information is useful in phases of new product development to enhance its performance (Wu & Chen, 2012). By using information collected through CRM, risk associated with the new product performance can be reduced. Innovation in the products and processes improve firm performance such as increased profits, productivity, and market share (Carbonell & Rodríguez Escudero, 2010).

Innovation refers to creation of the new value to a company, customers and stakeholders. An invention or idea becomes the innovation when its economic value is realized. Invention is technical solution while innovation process includes extensive range of technological, scientific, marketing activities, financial and organizational to understand its potential. Therefore, innovation is a process that converts knowledge to values through implementation of improved new products, systems, and processes (Ferraresi, Quandt, dos Santos, & Frega, 2012).

Innovativeness indicates the novelty (Garcia & Calantone, 2002) and the rate of adoption of new things and change by the organization or people (Hurt, Joseph, & Cook, 1977). Innovativeness indicates the firm's capacity to introduce new idea, process, and product (Hult, Hurley, & Knight, 2004). Thus, firm innovativeness is firm willingness to change like openness and to adopt new ideas as a feature of the firm's culture (Hurley & Hult, 1998). Firm's innovative culture is its ability and capacity to adopt change and innovate, while necessary capabilities, knowledge and skills are available to take the advantage of the opportunities (Lynch, Walsh, & Harrington, 2010). Main element of innovation is firm's culture which encourages introduction of new products, ideas and processes and its tendency to innovate is associated with the organizational performance improvement (Tajeddini, 2011). Firms need to innovate products to make product performance better and according to customers' requirements (Healy, Ledwith, & O'Dwyer, 2014).

Top management in the firm has to create alliance portfolios, hire employees, and oversee all activities which enhances firm performance. Top management plays an important role in decision making about new products as well (Eisenhardt, 2013). Top management is always concerned about the firm's strategies to maintain its competitive position in the market (I. J. Chen & Paulraj, 2004). Top management must commit financial resources and time to support relationship development to improve firm performance (Zu, Fredendall, & Douglas, 2008). An important role of top management is to influence organizational culture to encourage the collaboration and achieve pre specified goals (Feng & Zhao, 2014). Committed top management is essential for successful innovative culture. Role of top management is to control, direct employees, and resources to achieve desired goals. Good management involves people at different relationship and interaction levels (H. Soken & Kim Barnes, 2014).

Continuous development and introduction of new products is an important element to sustain a firm performance. Launching a new product into market creates many new growth opportunities but there

are some risks such as: product failure and poor product performance associated with the new product. Firms try to minimize this risk to enhance company performance and maximize its profits. An effective strategy that can be used to reduce the risk associated with the NPP is to align the production process with the CRM (Ernst, 2002).

Previous studies mostly focused on the role of CRM in enhancing the existing product performance (Boulding, Staelin, Ehret, & Johnston, 2005). Some studies investigated a positive effect of customer orientation on the new product success (Gruner & Homburg, 2000; Im & Workman Jr, 2004; Joshi & Sharma, 2004). While, studies identified particular aspects of the customer integration like integration of the lead users as an antecedent of the NPP (Lilien et al., 2002). These studies increase our understanding about effect of certain aspects of the customer orientation on the NPP. These studies represent a beginning of developing a systematic and integrated organizational framework for using customer knowledge to create the successful new products with better performance.

This study proposes that CRM is an approach which can deliver such workable framework to improve performance. CRM involves integration, evolution of organizational forms, marketing ideas, new available data, focuses on creating and managing long term successful relationships with the customers (Boulding et al., 2005). Thus, CRM puts customers in the main focus of different organizational activities. CRM can be employed to use the customer related information in new product development to reduce the risk of new product poor performance and improve firm performance. Previous studies revealed contradictory findings of the CRM on firm performance (Boulding et al., 2005; Reinartz et al., 2004). A possible reason of these contradictory empirical findings is the lack of the understanding of mechanism which can link CRM with the firm performance. This study proposes that the NPP can be the missing link between CRM and firm performance. Therefore, this study proposes NPP as a mediator for CRM and firm performance. Moreover, there are two important factors top management support and innovative culture to make the new product successful (Ernst et al., 2011). So far, however, there has been little discussion about the impact of CRM on existing product performance (Boulding et al., 2005; Reinartz et al., 2004). There has been no detailed investigation of the impact of CRM in the context of new product performance. Therefore, this study tries to fill the knowledge gap through proposing a research framework integrating the CRM to new product performance, top management support, innovative culture, firm performance (Ernst et al., 2011). It is an endeavor to add the comprehensiveness and richness in literature of CRM by enhancing the understanding regarding the relationship between CRM and firm performance through mediation of NPP. Particularly this study investigates the following research questions.

1. Does CRM affect firm performance?
2. Does NPP mediate the relationship of CRM and firm performance?
3. Does top management support moderate the relationship of CRM with NPP?
4. Does innovative culture moderate the relationship of CRM with NPP?

Literature review

Customer relationship management

CRM is defined as a holistic approach for managing the customer relationships to create shareholder value (Ernst et al., 2011). Initially economists introduced a concept named value maximization where a company maximizes its profits. Now we have a concept of CRM in which theorist focus on customer value and company performance (Boulding et al., 2005). CRM originates from three different concepts of marketing management which are customer orientation, database marketing, and relationship marketing. With the technological advancement of communication and information, these marketing concepts come together in paradigm of CRM. CRM focuses on customers, building relationships with them, collecting and analyzing data about them. It integrates all these activities in the firm and links these activities to the customers (Boulding et al., 2005).

Knowledge about customer is an important asset, sharing, managing, and gathering this knowledge can become valuable competitive activity for an organization (Winer, 2001). Within the vast domain of the knowledge management customer knowledge gets little attention. Customer knowledge can be broadly categorized as knowledge for the customers such as knowledge provided to the customers to satisfy their demands and needs, knowledge about the customer, knowledge from the customer. That is the information possessed by the customer and it can be acquired through interacting with customers (Khodakarami & Chan, 2014).

Firm's ability to create the knowledge is based on its skills, capabilities, how it combines and converts the knowledge obtained from different sources. According to the organization knowledge creation theory (Gable, Sedera, & Chan, 2008), knowledge is developed and expanded in following four stage process, socialization (sharing the information among people through social interaction); externalization (formulating knowledge into explicit knowledge which can be shared in the organization); combination (combining various explicit knowledge sources to create new knowledge); and internalization (understanding the knowledge and use it business) (Gable et al., 2008). Successful creation of customer knowledge is based on organization structure, personal skills, processes, and information system which can support and speed up the knowledge creation process (Khalifa, Yan Yu, & Ning Shen, 2008; Petter, DeLone, & McLean, 2008).

CRM is a process through which organization can collect data and use it easily. CRM falls into three categories such as: operational system (used to increase CRM process efficiency); analytical system (used to analyze customer knowledge and data); and the collaborative system (used to integrate and manage communication channels). CRM is a process for creating the value for both customers and firms by appropriate use of technology and customer knowledge. This process requires investment, training, and focus in the new technology through which CRM process can be improved. CRM brings technology, people, and firm capabilities together to ensure the connectivity between firm, its customers, and the collaborating firms (Jain, Chauhan, & Sharma, 2014). To perform efficiently, firm requires customer information. Customer knowledge is divided into three categories. Knowledge for the customers, knowledge provided to the customers about product. Second is knowledge about the customers, knowledge about customer's preferences, needs, and backgrounds. Third is knowledge from the customers, knowledge about different products, competitors and services possessed by customers. Organizations can acquire this information through various CRM processes (Khodakarami & Chan, 2014). CRM is a process that helps companies to contact various customers, deliver different services to them, gather and store information related to customers, and use the gathered information for developing better products and delivering better services to customers (Khodakarami & Chan, 2014).

CRM implementation can improve services related to customers in addition to help firm to achieve high profits, high market share by increasing loyalty and satisfaction of customers as well as to enhance business performance (Wu & Chen, 2012). It is a proven fact that companies can achieve more profits by retaining existing consumers than attracting new consumers. Attracting new consumers is more expensive and it is easy to sell products to the current customers. CRM suffers when this process is improperly applied, poorly understood, not correctly managed, and measured. To create the superior CRM capability a combination of technology and business capabilities are required. When data collected from customer is incorrect or not properly used in making decisions about the products then this process suffers (Saini, Grewal, & Johnson, 2008). Johnson (2004) described that it is very important to maintain long term good relationships with customers. CRM is a strategy used by firms for maintaining and developing marketing relationships and locating important customers for generating high profit and high market share (Wu & Lu, 2012). It improves firm's profits by developing long term relationships with customers. CRM is main organizational process which focuses on maintaining, enhancing, and establishing long term relationships with customers. CRM activities are integrated according to overall company operations. Different companies have different capabilities. CRM activities have effect on basis of context that is when and where these are implemented (Boulding et al., 2005). Due to rapid technological changes it becomes easy to perform

any task and now-a-days CRM technology is widely used to maintain relationships with customers in business to business market. Most of the firms use CRM technology to maintain relationships with customers. But it depends on context when, where and which technology or activity is used. (Jayachandran, Sharma, Kaufman, & Raman, 2005).

CRM technology is one of the organizational resources which is used as input into CRM process and it enhances company's ability to build and maintain a good relationship with customers. CRM technology categorized according to different organizational functions. More specifically different CRM tools are designed to support marketing, sales, and services (Zablah, Bellenger, & Johnston, 2004). Four factors are identified relevant to CRM, collaboration management, customer profitability, relationship management, and market environment. Collaborative management can be defined as considering customers opinion in product development, different functions related to supply chain and quality management. Customer profitability is defined as identification of customers with high profit potential and maintaining successful long term relationship with them. Relationship management includes managing and planning relationship with customers and building trust. Market environment includes getting knowledge about laws, competitor's activities, technological changes, and the effect on relationship with customers (Saini, Grewal, & Johnson, 2010).

How CRM process can be used for acquiring knowledge about customers and maintaining long term relationships with them. Four different factors are suggested in literature. First, by managing and building strong relationships with customers, companies can achieve greater market share. The new economics approaches use different economic theories for explaining firm customer relationships. Like transaction cost theory explains how companies can reduce cost of managing and building relationships with customers and how companies can receive maximum returns (Rindfleisch & Heide, 1997).

Different theoretical approaches in relationship marketing suggest that relationship building process is helpful to improve firm performance. Second factor is relationship development in different phases, means CRM is longitudinal process. The relationship evolution process can be terminated at different points because of different customer preferences. Third is, company needs to interact with customers in different ways at various stages of product development. Fourth factor is recognition that how important the relationship is for company (Reinartz et al., 2004). Previous studies in management observed that degree to which the firm will grow is dependent on extent to which firm possess resources and capabilities that can be used to enhance business competitiveness. Several empirical studies in CRM have sought to examine the connection between CRM and firm performance. However, the findings of these studies are mixed. Some studies report there exist a direct positive link between CRM and firm performance (Wu & Chen, 2012); while some studies report a negative link between CRM and firm performance (Jain et al., 2014). Three different dimensions of CRM in context of new product development were identified which are as: customer information management, customer segment value management, and multichannel management (Ernst et al., 2011).

Customer information management includes all activities that are used to identify customers and their needs. First identify the potential customers then access their needs and wants and try to gather complete information about customers (Boulding et al., 2005). This collected information is used to develop new products according to customer's requirements and to modify the existing product according to their requirements (Jayachandran et al., 2005). Different customers have different requirements. In customer segment value management customers are divided into different segments according to their needs and preferences. It involves customer evaluation and collecting information about them. This collected information is used by firms in different processes. Information is also used in designing products (Parvatiyar & Sheth, 2000; Ryals, 2005). Multichannel management means offering different methods of communication and using different channels for product distribution. It involves integration of different traditional and new electronic means of communication to maintain contact with customers. In NPD different channels offer different ways to

contact customers for launching and generating new products (Ernst et al., 2011). Current views about CRM emphasize on integration of multiple processes.

Above mentioned three customer centered approaches needs to be integrated for effective execution of CRM strategy and improvement of new product performance (Boulding et al., 2005). Firstly, company needs to comprehend and use the collected information about customers to improve product quality and its performance. Secondly, on the basis of available information customers are divided into different segments according to their requirements. Thirdly, companies can collect information, communicate by using different channels and communicate with potential customers in different ways. Thus, all these dimensions contribute to the effective implementation of CRM in NPP in the context of firm performance as well (Ernst et al., 2011).

Innovative culture

Innovative culture is internally focused and seeks competitive advantage, and boosts openness to the new ideas and supports internal capabilities to adopt new processes and ideas (O'Cass & Viet Ngo, 2007). Innovative culture enhances the formation and implementation of creative new ideas and methods of doing work in organizations (Amabile & Conti, 1999). Culture of an organization has strong impact on organization effectiveness (Deshpande & Farley, 1999). Concept of organizational culture is defined in several ways (Hofstede, 1998; Kilmann, Saxton, & Serpa, 1985; Trice & Beyer, 1993; Uttal, 1983). But there appears to be a harmony on organization culture literature; which offers underlying dimensions of organization culture; reflecting the concept of culture (Deshpandé & Farley, 1998). Organizational culture is as the pattern of shared values and beliefs that help individuals understand organizational functioning and thus provide them with norms for behavior in the organization. On the basis of two main dimensions, internal, external, mechanistic, and organic organizational culture is categorized in four different types such as clan, market, hierarchy, and adhocracy. In adhocracy type of the culture external positioning and organic process is encouraged. Organizations in which adhocracy culture is dominant have foster creativity, entrepreneurship, adaptability of employees and risk taking and also facilitate spontaneity and flexibility. Such adhocracy/innovative culture support organization's capacity of innovation that enables organization to be market driving (Carrillat, Jaramillo, & Locander, 2004). Therefore, there exist a potential for innovative culture which makes opportunities via driving market with innovative offerings to drive the product performance at higher level. Organizations with strong innovative culture, encourages creativity and newness to make their product unique and better from rest of the market competitors, this newness encourages buyer to purchase the product.

Through innovation in products, processes, firm performance, sales, market share, performance, and productivity can be increased (Carbonell & Rodríguez Escudero, 2010). Concept of innovative culture refers to creation of the new value to the firm, customers and its stakeholders (Ferraresi et al., 2012). Term innovativeness refers to degree of newness (Garcia & Calantone, 2002) and how early a firm adopts net process and changes (Hurt et al., 1977). From firm perspective innovative culture is firm's ability to encourage new ideas, processes and products (Hult et al., 2004). Firm innovativeness is willingness to change that is accepting new ideas as a feature of firm's culture (Hurley & Hult, 1998). Firm innovative culture is made of ability and capacity to innovate, when necessary capabilities, knowledge and skills are available to get advantage of market opportunities, ahead of competition (Lynch et al., 2010). Main element of innovativeness is organization culture which supports introduction of new ideas, products, and processes (Tajeddini, 2011). Firm needs to frequently innovate products to make the performance better and meet customer requirements (Healy et al., 2014). Organizations which have strong innovative culture can build successful products with better performance. So, organizations with a strong innovative culture may be aware that to build a successful product is not always dependent on interpretation of the feedback received from the current competitors or customers despite on the organization's ability to develop innovatively unique means of delivering the superior value to the customer (O'Cass & Viet Ngo, 2007). Firms can innovate their products in different ways which includes new positioning concepts, new technology, new channels of

distribution, and targeting new marketing segments (Doyle, 1989). That is why successful organizations need to be innovative. Innovative culture is a factor that plays an important role in enhancing the performance of new product (Deshpandé, Farley, & Webster Jr, 1993).

It is very important to continually innovate for success of an organization. Innovative culture is a factor that plays an important role in enhancing the performance of new product (Deshpandé et al., 1993). Organizations with innovative culture have following characteristics, focus on continuous innovation, rapidly adopt and use its own and the foreign innovations, supports innovation, complements its own knowledge with other's knowledge, aiming to create synergies and improving work behavior, value the creative members, entrepreneurial conditions are designed for work, all members understand the need and importance of innovation, and high level of the innovative capacity of all members especially management (Cingula, Nedelko, & Potocan, 2013).

There are some problems and obstacles that an organization faces when it adopts innovative culture. These problems are as follows, lack of the innovative culture (Potočan et al., 2007) has negative attitude towards risk taking, limit innovativeness to only technology, immature public administration and service sector, low investment in the research and development, weak connection between research institutions and the organizations and management do not think that entrepreneurial activities can become a source of organizational development (Cingula et al., 2013). Through perceived support of top management, a firm innovative culture can be enhanced. Innovative culture is an important factor which plays significant role in increasing performance of new product (Deshpandé et al., 1993). Innovative culture is a kind of environment which supports creative ideas, innovative thinking and insert more efforts to get social and economic value from the knowledge and in doing this develop new improved products, process or services (H. Soken & Kim Barnes, 2014). Product innovation is defined as introducing a new product, new range, and variety of existing products in the market to satisfy customer demands. Product innovation has two dimensions such as launching a new product and make innovations in existing product. Product innovation has such dimensions as: product should be new to firm from firm's perspective, new to the customers from customer's perspective, and product modification refers to the existing products of firm (Minguela-Rata, Fernández-Menéndez, & Fossas-Olalla, 2014). Firms innovate existing products to fulfill customers changing needs and demands. Product innovation is a key factor that contributes to the firm success (Löfsten, 2014). Successful product innovation has positive influence on the firms with innovative culture, by providing firms higher market power for longer time period. Firms' successful innovation can broaden space of the existing technological opportunities and increases profitability (Scellato & Ughetto, 2010). Successful innovation of products reduces financial constraints of the innovating firm by increasing market power.

Innovation is a process in a way to improve the organization efficiency. A firm can purchase new machines, reorganize the process, adopt latest technologies, and train employees to make the process innovation. Innovation in products is implementation of new production processes or the delivery methods (Nieto & Rodríguez, 2011). Through process innovation delivery cost or unit production cost can be decreased. It involves introduction of new production methods and includes new methods of handling services or products commercially. Goal of process innovation is to decrease per unit cost and improve quality of the products produced. When a new product is introduced, it may require innovation in process; as sometimes it is not possible to produce the new product by using old process (Löfsten, 2014). Market innovation is opening of the new markets. Market innovation helps firms to rejuvenate its position in the market. A firm can penetrate in market and increase its sales revenues. It can be defined as implementing new methods which involves significant changes in the pricing, product promotion, product placement, packaging or product design (Gunday, Ulusoy, Kilic, & Alpkan, 2011). Market innovation open new markets, reposition products, fulfill customer needs and increase sales. It consists on developing new marketing and sales techniques. Firm's which support innovative culture quickly respond to the changes in the market and innovate their process, products and marketing methods to survive in the market and enhance firm performance (Minguela-Rata et al., 2014).

Top management support

The term top management can be defined as set of people at the top of organization who are responsible for organization strategic decisions which affect performance, operation, and direction of the firm (C. E. Helfat, Harris, & Wolfson, 2006). Senior managers are key members of the organizational change (Cole, Harris, & Bernerth, 2006) and beliefs of the management about change effect staff's perspective (Moore, Konrad, & Hunt, 2010). Top management leads such activities like creating alliance portfolios, creating new products, hiring new employees, and oversees all activities that improve firm performance. Top management and executives see their role mainly focused on controlling and directing resources and people to attain desired performance goals. Their role consists on to determine policy, vision, solve problem, drive organization to grow, survive, and decision making. Top management considers innovation a way to the long term success (H. Soken & Kim Barnes, 2014). Top management of any firm is the most aware of firm's strategic imperatives to remain competitive in the market place and have better understanding of firm affairs. Top management should commit financial resources, time, and personnel in development of relationships with customers. With a good relationship they can get accurate information about customers and this information can be used in product development. So, product can be accurately designed according to customer requirements. Major function of top management and executives is to influence management culture to boost collaboration and attain sustained competitive advantage (Zu et al., 2008). According to attention based theory, managerial attention is most valuable resource inside organization (Ocasio, 1997). To improve the relationships with customers and degree of customer involvement, firm's top management needs to focus their mindfulness, effort and energy on some activities such as to encourage innovative culture, focus on CRM and encourage the efforts in product development (Feng & Zhao, 2014; Laursen & Salter, 2006). Top management plays an important part in shaping the firm. Studies on the strategy implementation recommend that firm strategies reflect interests and characteristics of firm's top management (Hambrick & Mason, 1984). Top management support plays an important role in design, review and implementation of processes related to new product. Top management active involvement in development of a product is considered very important for product performance.

It is very important for top management to consider the new ideas about product and review all related process. Napolitano (1997) reports that involvement of the top management is most important indicator of success. Two important roles are played by top management as top management support and top management commitment. Top management support (TMS) is the extent to which the top management involves and participates in development of new product, design, process, and implementation should be overviewed by the senior management. One main role of senior management is contribution in decision making (Homburg, Workman Jr, & Jensen, 2002). Senior management involvement must include meetings with the senior personnel in customer premises which indicates customer status and improves responsiveness to their needs. Top management must make sure that product development process obtains necessary resources from the organization (Tzempelikos, 2015).

Top management involvement is very important and required in almost all processes of service as well as manufacturing firms. Top management commitment is demonstration of senior management's beliefs in importance of different issues related to new product. Top management support and commitment is required to reduce inter departmental conflicts. Senior management should make sure that everyone performs its job well and fulfill their all responsibilities (Tzempelikos, 2015).

Both top management support and top management commitment play very important role in running successfully all the processes of a firm. For successful product development, customer involvement is very important and TMS plays an important role in building successful long term relationship with the customers. Building good relationships with the customers is very important for manufacturing firm. Through long term good relation they can get information about the customers that what they need and what they expect from the firm. This information helps firm in designing new product or making

changes in existing products. They design the product according to customer requirements so it performs well and fulfill their needs. So, developing strong relationship plays very important role in successful product development and performance, and in managing good relationship with the customers, TMS plays an important role (Tzempelikos, 2015).

Significant role of TMS for all kind of firms initiatives is well known (Fernandez & Rainey, 2006). Sincere support from management is very important for successful implementation of diversity related initiatives (Powell & Butterfield, 2003). Top management stresses some values like equal employment opportunities, fairness and practice these values, it helps firms to gain employee's commitment. Several studies examined TMS in the different contexts. According to market orientation literature emphasis of top management is positively related to market orientation (Jaworski & Kohli, 1993). Importance of the top management in handling customer relationships is also recognized in key account management literature (Workman, Homburg, & Jensen, 2003). Without top management commitment, support, knowledge, and capabilities it is not possible for the firm to run its different processes like production employee management control risk and many more (Bowling & Rieger, 2005; Mat & Razak, 2011). In some studies TMS is also discussed as a moderator between firm risk management and firm performance (Aebi, Sabato, & Schmid, 2012). Manab and Kassim (2012) find out a positive relationship between TMS, risk management, and firm performance.

TMS enhances the relationship with customers and suppliers, relationship with the customers enhances customer involvement and relationship with the suppliers increases supplier involvement. TMS increases customer involvement directly. TMS does not improve the supplier involvement directly. Relationship with suppliers mediates the relationship between TMS and supplier involvement. Positive relationship between TMS and customers indicate that firms with high TMS level can develop strong relationship with customers. NPD and NPP are very important for the manufacturing firms to compete in the market. Especially it is very important in transition economies, where dynamic markets and changes in technology require firms to co-create the value with suppliers and customers. Getting support and appreciation from top management and developing strong relationships with supplier and customer generates the value co-creation.

New product performance

It's very difficult to create a good image of new product in customers mind. All depends on its performance and features that how well this new product satisfies consumer's needs. So while developing a new product it is very important to identify existing market products and consumer's needs (Haon, Gotteland, & Fornerino, 2009). Basically NPP depends on NPD like performance of the new product depends on its development that is how well it is developed. First of all, firm needs to collect, understand and use the information to improve the NPP. Second, on the basis of information, divide customers into segments according to value they deliver to firm with regard to NPD. In NPD context, value can involve opinion leadership, informational, relationship quality or economic value to the firm (Grönroos, 2000; Gruner & Homburg, 2000; Sawhney & Prandelli, 2000).

Performance of a new product depends on its development as NPP can be discussed in NPD context (Ernst et al., 2011). NPD can be termed as lifeblood of growing economy and the company. It plays very important role in company's growth and survival (Akhilesh, 2014). NPD is a complete process in which a new product is introduced in market. Products are intangible as well as tangible. Tangible products include products that exist physically that can be touched. Intangible product includes services (C.-M. Chen, Chou, Hsiao, & Wu, 2009). NPD is a major source in increasing sales volume and improving profit margins. Such activities are directed to growing and new industries, as it plays very important role in increasing sales volume. By definition many mature markets face stopped or slowed growth in their demand (Woodcock, Mosey, & Wood, 2000). It involves market research, idea generation, and market analysis and product design. NPD is very important for a company's growth and survival. It's very risky and expensive process (Jensen & Harmsen, 2001). NPD includes wide range of activities like identification of opportunities like idea generation, transformation of idea into

product such as development, design, and commercialization of product that includes product delivery, production, and sales (Akhilesh, 2014). Firms try to improve success and use line extensions, which is developing similar products but they are different from successful products. Firms try to improve NPD process to make it more accurate and reliable (Pitta & Pitta, 2012). Product design is very important that attracts customers. It influences and attracts the customer (Goffin & New, 2001).

NPD is a very risky process so companies need to identify the factors that help in reducing risk level associated with new product development. It is very important to identify the factors that play important role in new product development success. Following six factors were identified. Management of NPD, new product diffusion modeling and its development, design of product, attributes of the product, models of NPD, and product evaluation (Henry, Henry, Menasco, & Takada, 1989). Evaluation of new product incorporates very complex decisions and needs to consider different factors such as what new features will be introduced in existing product, what customer requirements are, and how better this new product will perform as compared to existing products in the market (Lu et al., 2008).

Developing an innovative product is not sufficient. There must be an effective manufacturing strategy for production of new product. Manufacturing is final phase in the NPD process; any delays in it, can cause many problems for firms. Product launch dates are mostly fixed, in sense that firm has to match markets requirements like seasonal availability. So manufacturing department must try to avoid such delay (Woodcock et al., 2000). During different new product development stages, the development processes have uncertainty, and there is no guarantee that development process will lead towards success. To increase chances of success firm can use multiple approaches at the different NPD stages. It is a challenge for management to choose a right strategy (Ding & Eliashberg, 2002). New product involves web communications between different external and internal parties (Brown & Eisenhardt, 1995).

NPD process is a main strategy that plays very important role in company's survival in highly competitive global market. Manufacturers must realize that for global competition, they need to develop and launch new products in the market with better performance as compared to existing products. Good product performance leads towards customer satisfaction (González, Guerra-Zubiaga, & Contero, 2007). Firms believe that following departments play very important role in new product development, R&D, technical, and marketing department. R&D department design products according to customer requirements such as what customers require in a specific product and design a new product according to these requirements or modify the existing product to fulfill customer needs. Technical department plays important role in product manufacturing and marketing department play very important role in sales and promotional activates (Jensen & Harmsen, 2001).

Successful new products are made by a combination of existing company's capabilities, resources, and skills. Synergy consists on technology and marketing synergy. Marketing synergy defined as project with company's existing skills, resources, distribution, promotion skills, marketing, and sales force. Technical synergy is defined as project fit with company's existing resources, technical skills, R&D and production skills (Lee & Wong, 2011). NPD is a time consuming and complex process. Companies devote great efforts, time and energy for new product creation. Because through successful new products companies can get competitive advantage and can generate high profits (Chandra & Neelankavil, 2008). Introduction of new product in today's high technology markets carries high risk. Failure of new product may be low as one out of three products or high as ninety percent of new product. Increased demands for profit, new technologies, short life cycle of products and better communications increased the competition so it is necessary to introduce new products quickly to the market. Initial entry of products will result in development of new market and market dominance (Yelkur & Herbig, 1996). If firm do not respond to the competition by launching new products at right time they may face decrease in market share and profits (Jackson & Cooper, 1988).

Development of new product at right time is very important in today's high competitive global market. Firms need to respond quickly to changes in the markets and needs of potential customers. Fulfill customer's needs with right product at the right time (Yelkur & Herbig, 1996). Time dimensions in NPD are classified in three different categories, which are as follows: timeliness, time to market and cycle time. Time to market can be defined as time between product ideas to product availability. Cycle time can be defined as time between target identification to manufacturing. Timeliness can be defined as schedule according to which project has to be completed (Lee & Wong, 2011). NPD process has different stages so it is very important to select a right approach. Firms need to understand importance of different approaches, and fund different approaches for one business opportunity and they may face the problem of overspending. Managers who do not understand, sometimes they need to fund only some approaches and invest the money somewhere else. So it is managers' responsibility to develop a new product with a better performance that captures customer's attention and satisfaction (Ding & Eliashberg, 2002). Success of new product consists on right people, top management, working environment and introducing the right product at the right time (McDonald & Eastlack Jr, 1971).

Success of a product is related to five factors: understanding customer's needs, developing product efficiently, using different technology and communication tools effectively, and manager's authority and seniority that are responsible for development of the new product (Zirger & Maidique, 1990). Some other factors are also identified that play important role in product success, management of NPD, design is very important part of product development, product attributes, and consumers behavior (Yli-Renko & Janakiraman, 2008). For successful new product development a firm needs to fulfill the two objectives maximizing the fit with customer needs, and minimizing time to market (Schilling & Hill, 1998). Historically, innovation and development of new successful product is considered strength of the company. Companies through acquisitions, merger and R&D can develop new products that can be marketed globally. Such innovative and new products attract customers and with good and better performance satisfy consumers (Chandra & Neelankavil, 2008). It is very important to understand that what is new in NPD. The word new creates confusion in readers mind. The term new does not mean that product is new in absolute sense, but may be in relative sense. If firm introduce a product that is an exact copy of already existing product and firm did so to enter into competitors market. Now question is the word new can be used for such a product. Yes this product can be called new because it's new for that firm (Trott, 2008). If a firm or market considers a product new, the word new can be used for it (Neal, Griffin, & Hart, 2000). Companies can also offer some already existing products with some additional benefits which perform better than already existing product and price charged according to target customers. This is called value innovation and companies can attract customers by using this approach (Chandra & Neelankavil, 2008). New products can be classified in following two categories. New to the world, in this category those products are included that are new to the world, not a replica of an already existing product. New to the firm include all those products that are new for the firm but not for the market, may be similar to an existing product (Akhilesh, 2014). Some companies develop new products successfully by focusing on customers as starting point. Instead of focusing on internally made R&D product innovations, some companies choose attractive segments and try to develop a product that solves the problems of these identified segments (Chandra & Neelankavil, 2008). Customer relationship plays very important role in development of new product. Of all the relationships company has with different organizations may be channel exchange or formal alliances customer relationship is most important and plays an important role in high profit generation and getting high market share (Gupta, Lehmann, & Stuart, 2004).

Firm performance

Firm performance can be defined as how well an organization achieves its market-oriented goals and financial goals (Yamin, Gunasekaran, & Mavondo, 1999). Firm performance refers to the firm's financial and market performance (Slater & Narver, 1994). According to previous studies firm performance is multi-dimensional and a complex construct (Carton & Hofer, 2010; Dvir, Segev, &

Shenhar, 1993). Firm performance has been classified in different types (Dvir et al., 1993); that firm performance can be measured by market or sales growth, financial outcomes as well as customer satisfaction. Carton and Hofer (2010) describes that financial performance itself is multidimensional construct. Venkatraman and Ramanujam (1987) identified profitability and growth components of performance. Performance of a firm is reflected from perceived benefits that estimated from integration of environmental management in business operation. Firm performance concept is very important to management research because explaining variation in performance is an enduring theme in the study of organizations (E. Helfat & Peteraf, 2003). It is a multidimensional construct which contains different aspects like organizational survival, corporate reputation and operation effectiveness (Richard, Devinney, Yip, & Johnson, 2009). One of most important and extensively studied area is financial component which is attainment or achievement of economic goals of the firm (J. B. Barney, 2002). To measure financial performance, firms mostly use measures based on accounting like return on equity (ROE) return on sales (ROS) and return on asset (ROA) (Gentry & Shen, 2010). Stock based measures are also used like market return (Shook, 2005). Both market based and accounting based measures are mostly accepted as authenticated indicators of financial performance of the firm (Richard et al., 2009).

According to researchers market measures reflect long term future financial performance and accounting measures reflect short term or past financial performance (Hoskisson, Johnson, & Moesel, 1994; Keats & Hitt, 1988). Firm performance can be estimated subjectively or objectively according to the financial or non-financial data. Objective measures can be made through quantitative data and subjective measures can be achieved through qualitative data. In objective measures of performance financial indicators like increase in the sales, investment, rates achieved from the sales and profitability are included while in non-financial performance measures subjective indicators like number of the products launched in the market share, marketing activity, technological activity and product quality is discussed. Firm performance can be measured objectively that is financial measures or subjective that is non-financial measures (Örnek & Ayas, 2015).

Due to rapid changes in today's business environment firm's quick actions are required to respond to the changes in the environment. According to Salomon and Martin (2008) firms that quickly respond to the customers, business environment changing needs, adapt, and encourages innovation can enjoy permanent competitive advantage in the fast changing competitive industries. So it is very important to maintain firm performance to continually innovate to make their products better than the rest of the market. If firms do not respond to changes in customer needs, customers may not like their products anymore and switch to other firms products which can affect firms profits and ultimately affects firm performance (Chang & Rhee, 2011). Firm's ability to exploit its resources through some operational capabilities is very important to firm's market success. Operational capabilities are more important than possession of the resources (O'Cass & Sok, 2012). It means simply that by possessing some resources, firms cannot achieve specific marketplace objectives in the competitive markets without the aligned capabilities. Firm may own non substitutable, valuable, imitable and rare resources, but can fully realize this potential through its superior operational and marketing resource deployment capabilities (O'Cass, Ngo, & Siahtiri, 2015). Performance measurement of a firm plays a very important role in observation, development and implementation of a strategic plan. It helps managers in evaluation of firm's objectives whether they are achieved or not and firm is moving in same direction they want it to proceed (Teeratansirikool, Siengthai, Badir, & Charoenngam, 2013). There exist a strong relationship between firm resources and firm performance. According to resource based view (RBV) on the basis of some unique resources firm can compete with other firms (Wefald, Katz, Downey, & Rust, 2010). The question is which resources enhance the firm performance? Some theorists said that firm resources that cannot be easily replaced by the competitors will increase firm success and enhance its performance (Wernerfelt, 1995). According to J. Barney (1991) competitive advantage can be generated from the resources if they contain such attributes, inimitability, value, non-substitutability, and rarity. Teece (2007) reports that processes used by a firm can directly affect the firm performance. According to RBV firm performance depends on how well organizational resources are used (Wefald et al., 2010). However, firms not only concentrate on growth and

profitability in the present but also focus on its future position. That is how firm can compete in the future on basis of these resources and it can enhance its performance. Hamel and Prahalad (1994) highlighted the importance of competing for future as an ignored dimension of firm performance. To sustain a firm success and performance and to make sure that it will also perform well in the future. It is very important to continually innovate and develop new strategies with unique resources and more good products that will help to sustain the firm performance (Hart, 1995). It is very important for a firm to realize the importance of innovation for its success. Firm must consider the customer's requirements and try to fulfill these requirements. Customer requirements change quickly so it is very important to communicate with the customers and try to understand their requirements and try to fulfill these requirements earlier than the competitors. To sustain firm performance it is very important to understand customer changing needs with time and try to satisfy these needs. When a newly introduced product in the market is according to customer need, customer will love to purchase and use that product. Customer satisfaction with the new product performance increases product sales that ultimately enhances firm performance (Jain et al., 2014). Previous studies support the positive relationship between new product performance and firm performance (Blankson, Motwani, & Levenburg, 2006; Healy et al., 2014; Pelham, 2000; Verhees & Meulenberg, 2004). Ledwith and O'Dwyer (2009) reports NPP to be a strong predictor of firm performance.

Performance of a firm is a concept that includes different dimensions of operational, competitive, and management excellence of the firm. Except its financial performance, there are non-financial performance indicators like market performance and customer satisfaction. Firm overall performance can be measured through these financial and non-financial indicators (S.-C. Chen & Quester, 2006). One of the most important and extensively studied area is financial component which is attainment of economic goals of a firm (J. B. Barney, 2002). Financial performance assesses fulfillment of firm's economic goals (J. B. Barney, 2002; Hult et al., 2008; Richard et al., 2009; Shook, 2005). In the early years, because of industrial organization economics accounting based measures like return on sales, return on equity, and return on asset was used to measure financial performance (Hoskisson, Hitt, Wan, & Yiu, 1999). In mid 1980s market based measures of performance and finance theories were introduced in management research (Bromiley, 1990; Lubatkin & Shrieves, 1986). In late 1980s and early 1990s with rise of the shareholder activism many firms adopted shareholders value maximization as a stated objective and used it in the executive compensation. Due to this change, market based performance measures are adopted and use of market based performance measures increased in early 1990s (Hoskisson et al., 1999). In 1980s, performance measurement of firm moved from financial focus to non-financial performance like customer satisfaction, customer retention, number of newly developed products, and employee turnover (Haldma et al., 2012). However, financial and non-financial measures are equally important to measure firm performance (Kihn, 2010).

Conceptual research framework

Payne and Frow (2005) defined CRM in three perspectives such as wide ranging technology, technology solution, and the customer centric. This shows a continuous change in understanding the concept of CRM. In start CRM was considered as information technology which helps in solving problems related to customers. Now CRM is viewed as a holistic approach to manage customer relationships to create shareholder value. It includes developing and maintaining relationships with the key customers. To do so CRM contains relationship marketing strategies and other relevant technologies to develop and maintain long term, profitable relationships with the customers (Payne & Frow, 2005). By using CRM process, firms can get and use the customer information which helps in understanding them. A critical feature of CRM is that, it includes the strategic processes held between a firm and its customers (Jayachandran et al., 2005). This study suggests a CRM research framework that focuses on the important processes that includes CRM initiation, CRM maintenance, and CRM termination (Reinartz et al., 2004). These three processes need to be integrated for effective execution of CRM process. Firstly, a firm needs to initiate the CRM process such as: start to collect, understand and use customer information to improve performance of new product. Secondly, maintain this CRM

process such as continually collect information about customers through reliable resources. Lastly, its execution, that is to use the collected information through CRM in new product development. This research framework proposes NPP as a mediator between CRM and the firm performance. Overall performance effects of CRM are very important as this study proposes that CRM contributes to increase firm performance (Payne & Frow, 2005). Investigating this issue may clarify the CRM performance implications and the mechanism which link CRM with firm performance. This research framework proposes, there is a positive effect of CRM on NPP, CRM on firm performance, and NPP positively mediates the relationship between CRM and firm performance. In addition, this research framework proposes that there are two moderators on relationship of CRM with NPP such as TMS and innovative culture. TMS and innovative culture are identified as new product success factors (Ernst, 2002). Knowledge about customer is an important asset for the firm; therefore, sharing, managing, and gathering this knowledge can become valuable competitive advantage for the organization (Winer, 2001). However, within the domain of knowledge management, customer knowledge attracts little attention. Customer knowledge can be broadly categorized as: knowledge for the customers; knowledge provided to the customers to satisfy their demands and needs; knowledge about the customer; knowledge from the customer; that is information possessed by the customer; a firm can acquire it by interacting with the customers (Khodakarami & Chan, 2014). Through CRM process, knowledge can be gathered about the customers, this knowledge will help in understanding the customer needs and requirements. Therefore, firms can use this knowledge to design a product for the customers according to their requirements which will attract more customers. Information collected through CRM helps in enhancing the performance of the new product. It leads to first proposition:

P1: There is a positive effect of CRM on NPP.

Consistent product development and launch of the new product is very important to compete in the market (Porter, 1985). Previous research has proven that successful development and launch of the new products is key driver of the firm performance (Sorescu & Spanjol, 2008; Zhou, Yim, & Tse, 2005). Innovation helps the firms to differentiate its offerings from its competitor. Therefore, new products enable companies to grow at a faster rate than the competitors and earn more profits. A better product and different from the rest of the market attracts more customers. Thus, with a better product a firm can retain its existing customers and this can attract more customers. A good product can help firms in competing within the market and attracting more customers. According to the resource based view theory, resources not only extends to the assets of the firms but also includes its capabilities (Henderson & Cockburn, 1994). Resource refers to the input or an asset (intangible or tangible) owned or controlled by the firm. Firm capabilities refer to the firm's ability to perform synchronized set of tasks using organizational resources for achieving the specified end results. Capabilities and resources both change and evolve over the time. Capabilities may be operational and dynamic. Operational capabilities are a high level routine that together with its implementing input flows, confers upon an organization's management a set of decision options for producing significant outputs of a particular type (Winter, 2000). Routine means activities those are performed in a repetitive pattern (Winter & Nelson, 1982). Operational capabilities involve performing activities like manufacturing a product, coordinating and executing variety of the tasks which are required to perform an activity. Dynamic capabilities refer to the activities that does not include the production of the goods and delivery of the marketable service (Teece, Pisano, & Shuen, 1997). Dynamic capabilities do not affect directly the firm output, that can contribute indirectly in the output of the firm (Zollo & Winter, 2002). These resources and capabilities are used to produce the products. With a better new product a firm can earn more profits which ultimately increase the firm performance. This argument leads to second proposition:

P2: There is a positive effect of NPP on firm performance.

Customer relationship is considered as an investment from the investors point of view (Dorsch, Carlson, Raymond, & Ranson, 2001). Resource is a commodity that is transferred by the interpersonal

behavior (like business transactions among firm and the customers (Foa & Foa, 1974). Resources represent social and economic investments can be classified into the six categories such as: status, love (commitment), goods, services, money, and information. When firms maintain relationship with the customers; in return they get customer loyalty and commitment. Main role of CRM is to distinguish the customer segments and customize all marketing activities according to these segments. In context of the existing products, it involves segmenting the customers with respect to their sales and profit potential (Reinartz et al., 2004). In context of the new product, this feature of CRM needs to extend. Here main objective is to identify and interact with most valuable and important segment of the customers with respect to data collection which can be used in enhancing new product performance. This study investigates CRM in three steps such as initiation, maintenance, and termination. CRM initiation includes activities like identify, acquire, and regain customers. To identify the customers, it is very important to divide customers into different segments according to their interests. Some customer segments are important in collecting information which can be used to improve new product performance. First segment includes the customers who can provide useful information and that information helps the firm in developing the new product. Lead user is an example of this type of customers. Lead users are the customers who want new solutions earlier than the other customers and want to have benefits from the new product (Von Hippel, 1986). They have also information about the future market trends and needs (Von Hippel, 1994). Thus, they can provide valuable information for new product. Previous research shows that the new products created jointly with the lead users are commercially more effective and successful than the new products developed without them (Lilien et al., 2002). Second segment includes the customers who are economically valuable. There are the customers who can buy large amount of new products and they are willing to pay premium prices. This information enables firms to target the economically attractive segments of the market with their new products. Prior studies suggest that align the NPD process with valuable customer requirements to enhance NPP (Gruner & Homburg, 2000). Third segment of the customers is opinion leaders. Opinion leaders occupy a central position in a relevant social network (Childers, 1986; King & Summers, 1970). This segment includes the customers who share their experience first in their all social networks, and it helps in building customer knowledge related to new product. This activity plays an important role in new product success, it increases the new product diffusion rate in the market (Sawhney & Prandelli, 2000). Quality of the relationship between the customer and the firm can affect the NPP (Yli-Renko & Janakiraman, 2008). Increased amount of trust, commitment, and satisfaction are the attributes of long term and high quality relationships with the customers (Grönroos, 2000). Loyal and committed customers are always willing to give their product knowledge (Jayachandran et al., 2005). Strong relationship with the customers further enhances probability. A firm and the customer constantly work together in developing the ideas about new product which makes joint learning. So information related to the customers help in dividing the customers into segments according to value they deliver to firm with respect to the NPP. Therefore, accurate information helps firm in developing a successful relationship. A better and successful new product increases firm profitability. So it enhances a firm performance. This discussion leads to the third proposition:

P3: There is a positive effect of CRM on firm performance.

Furthermore, this research framework suggests that the NPP mediates the relationship between CRM process and the firm performance. In context of the existing product, CRM succeeds in creating the value for the customers but not necessarily for firm. Customers receive benefits from the loyalty programs products with good quality at a reasonable price. In other words, when customers are satisfied with the firm products and positive effects of CRM activities, but many of these products fail to achieve the financial performance required by the firm. If the firm can use the CRM process effectively to develop new products successfully, it will be able to achieve the high economic returns. Dual creation of value can be achieved if the new product can deliver value both to the customers and the financial value to firm (Boulding et al., 2005). In this way NPD can be a missing link between the CRM process and the overall performance of the firm. This directs to fourth proposition:

P4: NPP positively mediates the relationship of CRM with firm performance.

This research framework suggests that TMS moderates the relationship between CRM and NPP. TMS is one of the success factors of new product performance (Ernst et al., 2011). Top management remains aware of the firm's strategic imperatives to remain competitive in the market place and have better understanding of firm affairs. Top management should commit financial resources, time and personnel in development of relationships with customers. With a good relationship they acquire valuable information about customers; this information is used in new product development. Thus, product can be accurately designed according to customer requirements. Therefore, it is very important for top management to develop good relationships with the firm's suppliers and customers. To improve the relationships with customers and degree of customer involvement firms top management needs to focus their mindfulness, effort, and energy on some activities like encourage innovative culture focus on CRM (Feng & Zhao, 2014; Laursen & Salter, 2006). This suggests fifth proposition:

P5: TMS positively moderates the relationship of CRM with NPP.

This study suggests that innovative culture moderates the relationship between CRM and NPP. Innovative culture enhances the formation and implementation of creative new ideas and methods of doing work in organizations (Amabile & Conti, 1999). Culture of an organization has strong impact on organizational effectiveness (Deshpande & Farley, 1999). There exist a potential for innovative culture which makes opportunities via driving market with innovative offerings to drive the product performance at higher level. Organizations with strong innovative culture encourage creativity and newness to make their product unique and better from rest of market offerings. Newness encourages buyer to purchase the product. Through innovation in products and processes; a firm performance, sales, market share performance, and productivity can be increased (Carbonell & Rodríguez Escudero, 2010). Therefore, sixth proposition can be stated as:

P6: Innovative culture positively moderates the relationship of CRM with NPP.

Discussion and conclusion

Due to intense competition in the business environment firms especially manufacturing firms need to innovate continually the new products and make improvements in the existing products to compete in the market. Ultimate goal of a firm is to enhance or increase firm financial performance to make it more profitable. So how firm can improve its performance? For a manufacturing firm main area of interest is its product. If product is not designed according to the customer requirements it may result in product failure. Due to intense competition every firm try to continually innovate and introduce a new and a better product in the market as compared to its competitors. So, a firm cannot compete in the market with old product, as customers always search for a better new product.

This study investigates the relationship between CRM and firm performance with the mediation of NPP. It proposes that firms which support CRM have further chances of enhancing firm performance. In other words, CRM positively affects the firm performance as well as performance of new product is enhanced through CRM. In a previous study relationship between CRM and NPP is also discussed and reported a positive relationship between CRM and NPP (Ernst et al., 2011). Second proposition suggests a positive effect of NPP on firm performance. Some previous studies report a positive relationship between NPP and firm performance (Blankson et al., 2006; Healy et al., 2014; Pelham, 2000; Verhees & Meulenber, 2004). Third proposition suggests a positive effect of CRM on firm performance. This is consistent with a previous study that reports a positive effect of CRM on NPP (Ernst et al., 2011). Furthermore, some other studies also supported the positive relationship between NPP and firm performance (Blankson et al., 2006; Healy et al., 2014; Pelham, 2000; Verhees & Meulenber, 2004) as well as CRM and firm performance (Chang & Rhee, 2011). Fourth proposition suggests that NPP positively mediates the relationship between CRM and firm performance, this

commemorates with a previous study (Ernst et al., 2011). Fifth proposition suggests that top management support positively moderates the relationship of CRM with NPP. Sixth proposition states that innovative culture positively moderates the relationship of CRM with NPP. It shows that CRM and NPP both affect the firm performance. CRM positively affect the performance of the firm, CRM also enhances the performance of the new product. Furthermore, mediation of NPP also enhances the firm performance, as performance of new product can be enhanced by CRM (information collected through CRM can enhance NPP) and better performance of new product enhances the firm performance. Findings of this study are consistent with the previous studies which show that CRM is positively related to firm performance (Ernst et al., 2011). Therefore, a good CRM process plays an important role in enhancing performance of the product and performance of the firm. Overall findings of this study suggest that there is direct relationship between CRM, NPP and firm performance. In this time of intense competition, it is very important for a firm to manage its relationship with customers to improve firm performance. This research framework provides valuable insights to the managers and academicians about the role of CRM and NPP to improve firm performance. Earlier CRM studies emphasize on adoption of CRM as mechanism for getting customer information and use it in development process of a product (Boulding et al., 2005; Payne & Frow, 2005). However, CRM ability to analyze, translate and collect customer information is only investigated in context of current products. This study has dealt with a research question that how CRM can be used to improve the performance of the new product (Boulding et al., 2005). This study contributed to conceptualize the CRM in development of a new product. It is suggested that CRM positively affect the NPP; thus, firms can improve performance by integrating the NPD efforts with CRM (Ernst et al., 2011). It is not only important to develop strong relationships with customers and forming customer value in short run for the existing products, it is also very important to use CRM for understanding and managing “future value creation process” by increasing innovation as an essential ingredient for attaining long term superior market performance. This study suggests that NPP represents strong link between CRM and firm performance. CRM can be very important for improving firm performance. NPP is an indicator for dual creation value as “win win state for both the customers and firm (Ernst et al., 2011). Therefore, through integrating CRM with NPD, CRM can play very important role in enhancing firm performance. Some managerial implications are followed from this study. CRM can be used to provide important information about the customers that can be used in enhancing performance of the new products that can reduce the failure rate of new product. CRM provides firms an effective way to reduce the product failure rate. To do so managers need to adopt CRM at a broader perspective not just as relationship management. Firms need to understand that linking the CRM to NPD is very important for enhancing firm performance. Firms can fail to satisfy customers and can miss future opportunities. By understanding the link of firm performance and CRM, firms can better understand the customers’ needs that enable to satisfy customer needs in a better way. Firm must understand the importance of top management support and innovative culture. Through top management support and encouraging innovative culture firms can make new product performance better. Finally, CRM plays a very important role in enhancing performance of the new product and firm performance. NPP is an important mediator between CRM and firm performance. This suggests CRM can be used to collect important information about the customers which can be further used to identify the customers and understand their needs. By identifying their needs firm can be able to design a products according to the customers’ desires and satisfy the customers. Future research can investigate the process, how CRM can improve NPD at various stages of new product development process. Like previous studies report that customer information is more important at the initial stages of new product development (Gruner & Homburg, 2000). Information from the different kinds of customers can be useful at different stages of NPD. Future research is required to relate the CRM with the more classical factors of new product success like NPD strategy, corporate culture, and the proficiency of the NPD process (Ernst et al., 2011). Conceptually it is possible that success factors of new product can empower impact of the CRM on success of new product. Existence of the proficient NPD process can either increase proficiency of the CRM which is aligned with these NPD processes, or more strengthen impact of the existing CRM on the performance. Future studies can solve these issues and empirically examine as these new product success factors moderate relationship between CRM process and the NPP.

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