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The Influence of Mass Customization on Customer Relationship Management Performance (Customer Perspective)

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ABSTRACT

Recently, the companies realize the importance of contribution with customers to provide a successful business. Customer relationship Management (CRM) is considered as a vital success factor for the companies. Gradually, some companies have started to present individualized products or services to their customers in conditions similar to Mass customization(MC).The purpose of this study is to investigate the efficacy of MC in relation to CRM. A model has been developed and empirically tested through survey data collected from 150 customers of three Malaysian companies. The results indicate deploying mass customization have had a significant positive effect on CRM effectiveness. Collaborative customization, Adaptive customization, Cosmetic customization and Transparent customization are four type of MC that we proposed would affect CRM performance. SmartPLS is using for examining the relation and analyzing the data. The instrument and comprehensive model in this paper would be valuable and beneficial both for future researchers and practitioners interested in understanding CRM and customization effects. This paper contributes to the existing literature by incorporating the dimensions of CRM with four types of Mass customization in the proposed model.

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INTRODUCTION

In recent years, enhanced developed technologies and information systems have made it probable for companies to rapidly develop and provide products to satisfy customers' specific needs. The new production paradigm of mass customization provide a range of customized products with cost, value, and delivery performance similar to that achieved by mass production. The appearance of Mass customization involves a fundamental transform in the way business is conducted.

Mass customization (MC) relates to the ability to provide high volume of product options for a relatively large marketplace that demands customization, without considerable trade-offs in cost, delivery, and quality (McCarthy 2004). For responding to the Mass customization trend it is necessary to develop an agility-based system to catch on the traits involved in MC (Wang 2009). Companies adopting MC strategies aim to provide an increasingly turbulent marketplace with customized products based on individual customer requirements with minimum loss of production efficiency. Gathering these conflicting demands provides a premium on organizational agility and flexibility (Liu *et al.* 2011).

The amount of customization can as well be determined dynamically depending on what a firm knows about a customer, or what the customer does while at its web site. Though, to successfully implement these types of technologies, the whole company may have to be reorganized around a new order generation as part of a customer-driven, integrated global supply chain, which in turn relates to the firms CRM (Customer Relationship Management) System. Successful CRM systems are increasingly connected to the company's "one to one" initiatives and present the customer opportunities to customize the content of the e-mails and other connections, products, services and offerings they obtain (Wind *et al.* 2001). While MC factors are indeed critical in promoting firms' performance, the significance of Customer Relationship Management practices in driving MC strategies are still a rarity. Gradually, companies realize the importance and necessity of participation with customers to provide an appropriate business with high volume of product options. Therefore, to successfully mass customize, a company must be able to accurately evaluate customer needs, change this understanding into product designs, and obtain suitable and accurate supplies for the timely produce and

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delivery of individualized product configurations (Zipkin 2001). As a result, successful implementation of a MC approach typically requires an information system to effectively manage customer relationship.

This paper attempts to critically review current literature on CRM systems, and MC to understand how MC can be used and improve CRM performance. In particular, we examine the mediating role of MC in the impact of CRM customer knowledge, customer interaction, customer satisfaction and customer value. Understanding how various factors relate to customer satisfaction can help managers to monitor and enhance firm performance. Mass customization effectively can initiatives those factors that directly affects customer value and satisfaction. Likewise, if customization has positive effects on CRM performance, then managers can focus directly on MC. In addition, the main goal of this paper is to develop a conceptual model that explains the relationship between MC and CRM performance; and empirically test and validate the model.

This paper contributes to the IT and business value research by explaining how customization engage with CRM to improve customers satisfaction and value. Further we contribute to the literature on IT and CRM by conceptualizing and empirically testing the MC-CRM performance relationship. The result will show the importance of using customization in CRM to improve the performance. Also, we contribute to IT sense making literature by explaining how firms can optimize customer satisfaction from already implemented IT. For practice the theoretical findings can guide management to better manage their investments on IT and realize benefits for the organizations.

In the current study, we define key MC types as operant intention that enables improving CRM performance. We introduce a hypotheses in building a conceptual model that links mass customization with CRM. This model is then examined empirically using survey data from 150 customers of three company in South East Asia through structural equation modeling. In the ensuing section, the paper develops the research model, advancing our research hypotheses. Next, we describe study methods and analysis, followed by a summary of the results. Finally, the paper concludes with a discussion of the implications of our findings, acknowledgement of study limitations, and suggestions for future research opportunities.

Literature Review & Hypothesis Development:

Organizations are going through great changes to construct environments where everybody can do their best, where customer needs are not only met but exceeded and where efficiency, value, productivity, quality, customer satisfaction and competitiveness are happen seriously as significant success factors. The aim of MC strategies is to effectively and efficiently balance the needs of these diversified target market. A key concern in achieving this goal is to make sure that firm offerings are customizable on attributes that truly match to the customer. This entails a strong customer focus in the way of designing products. Customer focused design is widely regarded as a cornerstone of total quality management (Liu *et al.* 2011; Sousa 2003).

According to Gensheng (Liu *et al.* 2011) MC capability refers to a firm's ability to design, produce, and deliver a high range of differentiated products that gather specific customer requirements on time at close to mass-production prices (Tu *et al.* 2001). It can be noticed that how well the firm determines current and emerging customer expectations, prepares effective customer relationship management, and provide customer satisfaction. Customer focused practices contain building strong customer relationships, involving customers in new product advance, gathering and maintaining customer demand information, disseminating customer information within the company, and answering to the information (Sousa 2003).

Thus, MC provides a new standard for industries to offer products and services that best serve customer needs as maintaining near-mass production efficiency (Tseng *et al.* 2008). Users make out more satisfaction and value with a MC interface opposed to a more typical shopping interface, mostly in a task of moderate complexity (Arnold Kamis *et al.* 2008). As well, it should be considered that satisfying the needs of each individual customer's can be translated into higher value. Therefore it can be considered that customization would significantly impact on firm performance.

Current scientific knowledge on the outcomes of customization is rare and mixed (Coelho *et al.* 2012). One reason or this may be that scholars mostly devoted their consideration to customization from a supply side perspective. Up to now, only some studies have investigated the mechanism by which customization influences consumers' decision processes (Coelho *et al.* 2012; Tam *et al.* 2005). According to Coelho (2012) some empirical confirmation for a positive influence of customization on customer relationships stems from research derived from the American Customer Satisfaction Index model (Fornell *et al.* 1996) :one quality indicator measuring the "[e] valuation of customization experience, or how well the product fit the customer's personal requirements (postpurchase)" plays a vital role when predicting customer satisfaction. As well, it should be considered that satisfying the needs of each individual customer's can be translated into higher value.

It is clear that without proper knowledge and information of the customer expectations it is almost impossible to improve the satisfaction of the customers (Anwar *et al.* 2011). Since a salient benefit of CRM is to provide appropriate customer knowledge and intelligence, it is predicted that using CRM in customization will improve performance. CRM is a customer-focused business strategy with the purpose to increase firm agility that lead to customer satisfaction and customer value (Roberts *et al.* 2012). Through CRM organization respond

to customer needs by presenting more responsive and customized services (Croteau *et al.* 2003). They are reacting to dynamic customer demand by being agile through customization. Deploying CRM will help companies and organizations to become closer to their customers, understand their needs, and especially comprehends the implied needs (Lin *et al.* 2006). According to Rabahah (2011) knowing the customers well will enable companies to serve them better and keep them loyal forever. While CRM has a critical role in acquiring the appropriate knowledge about customers, it can satisfy customers through enabling the company to respond to their needs based on their purchasing behavior and suitable services. CRM will also provide an opportunity to have a closer approach to customers throughout any given interaction (Buttle 2004). Coltman *et al.*, (2011) have examined the impact of CRM on firm performance using a hierarchical construct models and demonstrated how CRM relates to firm performance. Yet, none to date discussed how MC could be used in CRM to achieve greater performance, agility and sustained competitive advantage through superior customer satisfaction and value.

There is a steady recognition of the importance of customers' requirements that shifts the companies to investigate on customer focused IT such as CRM systems. Gradually companies realize the importance and necessity of CRM intention for obtaining benefits and competitive advantages in the long run by maintaining intimate and mutually beneficial relationship with profitable customers. Therefore, firms have begun employing CRM systems to understand customer demands and requirements (Overby *et al.* 2006; Roberts *et al.* 2012a; Roberts *et al.* 2012b). Contemporary organizations must affiliate themselves with changing environments in order to become more innovative in replying to the variety of customers' demands (Atapattu *et al.* 2013; Prabhaker 2001). Thus, Companies are shifting from product-based service to customer-centric. CRM has a vital role in this shifting, which is underpinned by information and communication (Ryals *et al.* 2001). Since all people are different and do not exhibit the same behavior, customer relations are in need of more than the usual marketing. Therefore, companies should be capable of modifying their products and services based on customer taste in the CRM (Yaghoubi *et al.* 2011). MC could have an important role to enable companies present individualized products or services to their customers according to their different taste and attributes. Even though a firm has the potential to gain a wealth of knowledge on individual customers, constantly shifting needs and wants through a CRM system and respond to them with customized offerings, such practices are still a rarity. This is no doubt due to the implicit assumption that deploying in MC in service and products should lead directly to improving business value. These efforts have enabled us to have a survey on examining CRM performance after deploying MC and examine the impact of this relationship on Customer satisfaction and value.

The efficacy of a mass customization strategy depends upon the technological skills and resources at the firm's disposal that enable it to harness a vast amount of information about customers, tailor market offerings to the needs of individual customers, and deliver customized products and services (Kalaignanam and Varadarajan, 2004). Therefore, focusing on the operational benefits of CRM such as customer interaction and customer knowledge will enhance the efficiency of mass customization. It is clear that use of customization could generate business value in CRM performance. Based on this reasoning, we hypothesize: H1: Deploying Mass customization in CRM positively affects CRM Performance

Crm Performance Measurement:

While the demand for transformation of companies from product-centric to customer-centric is happening fast but for measuring the performance of CRM, as result of Mass customization capability, still, there is no any well accepted set of metrics or a measurement system.

Meyer (2002) states that the performance refers simultaneously to the action, the result of the action and to achievement of the result compared to some benchmark. According to Öztayşi (2011) by performance evaluation companies can look ahead, look back, motivate and compensate people. While look ahead and look back aim at gauging the economic performance and past accomplishments of the company as a whole, motivate and compensate, at the individual level, motivate and drive the compensation of individual people

Balanced Scorecard (BSC) is a widely used corporate performance management system (Kaplan *et al.* 1992). In BSC, the performance of a company is proposed to be evaluated not only financial viewpoint but also other perspectives that result ifinancial part. These four dimensions are known as finance, customer, process and learning and development. Scholars propose that the firm should build a strategy map in order to recognize the relationship between these dimensions and the criteria under each dimension (Kaplan *et al.* 2004).

As a subset of the Balanced Scorecard (BSC), Kim *et al.* (2003a) suggested a customer centric BSC consisting of customer knowledge, customer interaction, customer satisfaction, and customer value perspectives, and emphasized that the four distinct types should be systematically linked when evaluating the effectiveness of corporate CRM initiatives. Customer value, satisfaction and loyalty (Ko *et al.* 2008; Zandi *et al.* 2011) are the key terms that CRM aims at improving. In this study, the results of deploying MC impact on CRM are handled in the customer dimension. We synthesize the four phases of CRM dimensions from prior literature by Kim

(2003b); these phases ultimately form dimensions of our CRM performance construct. Each of the phases is argued as below.

Customer Knowledge (CK):

Customer knowledge can be known as, namely: collecting and gathering suitable customer information, analyzing customer's data, finding new customers, enhancing the skills of workers, increasing CRM technique, and protected service (Yaghoubi *et al.* 2011) which can be maintained in structure to a customer information file. According to Kim (2003b) various needs and preferences of customers make it complicated to categorize customers into a great homogenous population by which to expand marketing strategies. Customer Knowledge Management will help to categorize the information of the customer's knowledge to improve the efficiency of customizing the information based on diverse categories. This information allows the company to customize its services and products according to the information gained about the customers, and also to provide higher service probability. Use of this knowledge would be helpful to improve customer satisfaction. (Menguc *et al.* 2013; Rajagopalan 2013; Zablah *et al.* 2012).

Customer Interaction (CI):

Interaction with customers is one of the important steps of business activity towards CRM (Knox *et al.* 2012; Lehmann *et al.* 2013). There are some channels by which each company can contact and communicate with its customers. Effective management of the multichannel communication ways to interact with customers is necessary since it will lead to pleasing the customers (Neslin *et al.* 2009).

To control various communication channels competently, managers should check and observe the business processes (Kim *et al.* 2003a; Mohammadhossein *et al.* 2013). Some important procedures required to measure and analyze customer interaction are namely: marketing campaigns, prices for promotion, content's updates, payment, reply channels, and so on (Kim *et al.* 2003b). Hence, the availability of ways to manage and segment interactions with customers can directly impact on customer satisfaction and increase the impact of customer interaction.

Customer Satisfaction (CS):

Customer satisfaction is an indicator of the future financial success of the company (Kotler 2000). It also shows the level of satisfaction obtained by products or services. According to Kim (2003b) customer satisfaction is a reaction that a product or service can provide based on customer needs, and determines if the purchaser becomes a stable customer or not. Customer satisfaction is a very significant ability of a service supplier by which to construct a high degree of satisfaction for product differentiation and develop a tough relationship with customers in today's business world (Deng 2009). Organizing and customizing the requirements of the customer to a specific group could help to focus upon their needs, which will impact on customer satisfaction (Buttle 2012). Thus, customer satisfaction could be considered as the most important stage for this study.

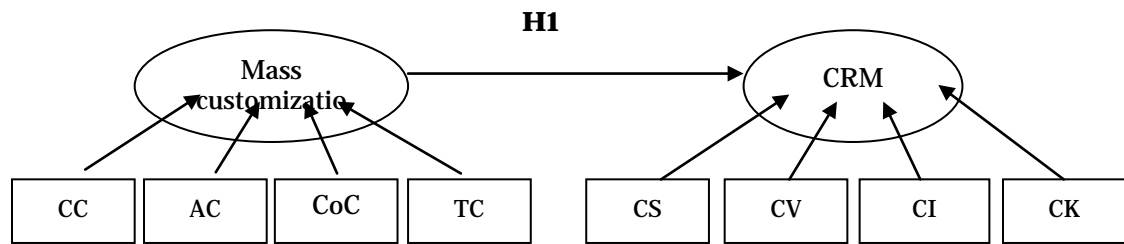
Customer Value (CV):

Recognizing and calculating the accurate value of customers is an important stage of CRM. According to Su-Yeon Kim (2006), marketing management can be implemented for targeted profitable customers, in order to promote customers' full profit perspectives. The value and profitability of customers and clients should be calculated and used as a guideline to compare to the value of new customers. Several companies have already attempted to measure and use customer value in their management actions to grow the full profit potential of customers (Verhoef *et al.* 2001). Su-Yeon Kim (2006) suggest a framework for measuring customer value and segmenting customers based upon their value.

The Research Model:

The research model includes two constructs: (i) mass customization, (ii) CRM, with MC as the main independent variable, leading to CRM performance. MC has reshaped the background of many industries such that rapid response to individual customer needs, coupled with high construction efficiency, is fundamental for a firm's business success (Helo *et al.*, 2010). Glimore and Pine (1997) introduced four types of customization namely: Collaborative customization, Adaptive customization, Cosmetic customization and Transparent customization. In Collaborative customizer a discussion with individual customers to help them articulate their wants, make out the accurate offering to satisfy those needs, and to construct customized products based on them. Adaptive customizers presents one standard, but customizable. In this type of customization product is designed but users can change it themselves. Cosmetic customization is where a standard product is presented differently to diverse customers. Transparent customizers offer individual customers with single products or services but the customers do not recognize explicitly that those goods and services have been customized for them. In this study we use these types of MC as variables to measure MC. Next, we use the CRM performance

measurements as discussed earlier, Kim (2003) identified 4 types of measurements (customer interaction and customer knowledge). Thus, we build a conceptual underpinning of how CRM performance increase through MC (Thomas *et al.*, 2004; Jones *et al.*, 2005). Figure 1 depicts the research model, illustrating the hypothesized relationship between CRM and MC “the higher the level of MC impact on CRM ,the higher will be the level of CRM performance”.



CC= Collaborative Customization , AC= Adaptive Customization, CoC= Cosmetic Customization, TC= Transparent Customization, CS= Customers Satisfaction , CV= Customer Value , CK= Customer Knowledge , CI= Customer Interaction

Fig. 1: The research model: MC influence on CRM performance

As per the Petter *et al.* (2007) guidelines for identifying formative variables, measures of construct; (i) need not co-vary, (ii) are not interchangeable, (iii) cause the core-construct as opposed to being caused by it (arrowpoint in), and (iv) may have different antecedents and consequences in potentially quite different nomological nets.

Since each variable of CRM makes unique contribution to CRM, the research model conceives the phases as dimensions ‘forming’ CRM. CRM is thus conceived and operationalised as a hierarchical, formative index. The MC construct is conceptualized also as a formative, multidimensional index comprised of the four dimensions – Collaborative-Adaptive, Cosmetic, and Transparent.

Method:

The structured questionnaire adopted as being the most suitable quantitative research method. It is adopted because this is the most appropriate way to collect relevant primary data from a high proportion of the customers in the busy leading companies. We operationalise our questionnaire by using a survey. The Questionnaire is comprised of three different sections. The first part relate to personal information of the respondents. The next section includes statements indicating the efficiency of MC types. The last section comprised the statements that measured the MC influence on CRM performance.

Following our literature review, we used customer knowledge, customer interaction, customer satisfaction and customer value as measurements for CRM, statements measuring the 4 MC types, namely: Collaborative customization, Adaptive customization, Cosmetic customization, and Transparent customization. Respondents were asked to fill out their degrees of agreement via a five-point Likert scale (with 5 = completely agree, to 1 = completely disagree). To establish the content validity of the questionnaire, questions regarding measuring of the dimensions were posed during an interview with two practitioners in CRM and marketing area to change, reduce and refine those items that are not valid. Pre-testing and pilot testing of the actions were done by choosing users from the CRM field, in addition to experts in the area.

In this study the research respondents should be selected from customer’s of organizations who used CRM applications for their transactions and also they are using some of customization types in their transaction with customers. Therefore, three companies in South East Asia were selected as the locations for this study. The main reasons for this selection were the limitation of time and access to study in the wider research area. Therefore, 150 questionnaires have been randomly disseminated between customers of these companies.

Analysis:

Prior to model testing, we first assess the validity of each of the two formative constructs CRM and MC employing identification through measurement relations (Petter *et al.*, 2007) and observing outer model weights and loadings from Partial Least Squares (PLS) procedures (Wold, 1989). Subsequently, the magnitude of the relationship between MC and CRM performance is estimated using Partial Least Squares (PLS) for structural model testing. Lastly, we again consider the validity of the model constructs employing ‘identification through structural relations’.

As per formative construct validation procedures described by Diamantopoulos and Winklhofer (2001), Variance Inflation Factors (VIF) were first computed separately for each of the 4 CRM measures to assess the

possible existence of multicollinearity between formative measures. The VIF of all ten measures were below the common threshold of 10^{10} (Kleinbaum, 2007). Similarly, all 4 MC measures also had VIF scores less than 10.

The study model is next tested using the Partial Least Squares (PLS) procedure (Wold, 1989), and employing the SmartPLS software. PLS facilitates concurrent analysis of (1) the relationship between dimensions and their corresponding constructs and (2) the empirical relationships among model constructs. The significance of all model paths was tested with the bootstrap re-sampling procedure (Petter *et al.*, 2007). Table 1 shows the outer model weights, outer model loadings, standard t-statistic errors, and t-statistics.

Table 1 results establish convergent and discriminant validity of the model constructs. Convergent validity of the model constructs is supported by heuristics of (Gefen and Straub, 2005), where all t-values of the Outer Model Loadings exceed 1.96 cut-off levels significant at 0.05 alpha protection level.

Moreover, construct reliability is assessed by examining the loadings of the manifest variables with their respective dimension. A minimum loading cut-off often employed is to accept dimensions with loadings of 0.70 or more, which implies that there is more shared variance between the dimension and its manifest variable than error variance (Dwivedi *et al.*, 2006). From Table 1 it is observed that loadings are generally large and positive, with each dimension contributing significantly to the formation of each construct.

Table 1: PLS statistics.

Constructs	Outer weights				Outer loadings			
	Weights	Std. dev.	Std. err	t-Stat.	Loadings	Std. dev.	Std. err.	t-Stat.
MC								
Collaborative Customization	0.355	0.127	0.127	2.775	0.944	0.021	0.021	43.657
Adaptive Customization	0.180	0.138	0.138	1.344	0.921	0.030	0.030	30.337
Cosmetic Customization	0.275	0.159	0.159	1.797	0.940	0.023	0.023	39.682
Transparent Customization	0.244	0.155	0.155	1.498	0.925	0.029	0.029	31.866
CRM								
Customer Knowledge	0.162	0.111	0.111	1.401	0.721	0.084	0.084	8.512
Customer Interaction	0.192	0.104	0.104	1.801	0.706	0.086	0.086	8.139
Customer Satisfaction	0.563	0.137	0.137	4.167	0.935	0.036	0.036	26.084
Customer Value	0.251	0.105	0.105	2.491	0.814	0.045	0.045	18.157

The results of the hypothesis test are summarized in Figure 2, which shows the results of the proposed relationships. Hypothesis and moderating effects are tested by examining the standardized beta coefficient (std. β). Moreover, the squared multiple correlation coefficient (R^2) in the model is assessed as an implication of the overall predictive power of the proposed model. Figure 2 depicts the structural model with path coefficient (β) and between MC and CRM performance, t-values and path loadings for both constructs.

Not only do the results in Figure 2 evidence the existence of a strong, positive relationship between Mass CRM performance as hypothesized, they further evidence the validity of all constructs; put simply, if either construct is not valid we are unlikely to see the relationship (Diamantopoulos and Winklhofer, 2001). This further evidence of construct validity is sometimes referred to as ‘identification through structural relations’(Jarvis *et al.*, 2003).

A post-hoc analysis was conducted to observe the direct effect of the four MC types on the CRM construct. It revealed strong and significant path coefficients (β at $p < 0.005$ confidence level) for all MC types.

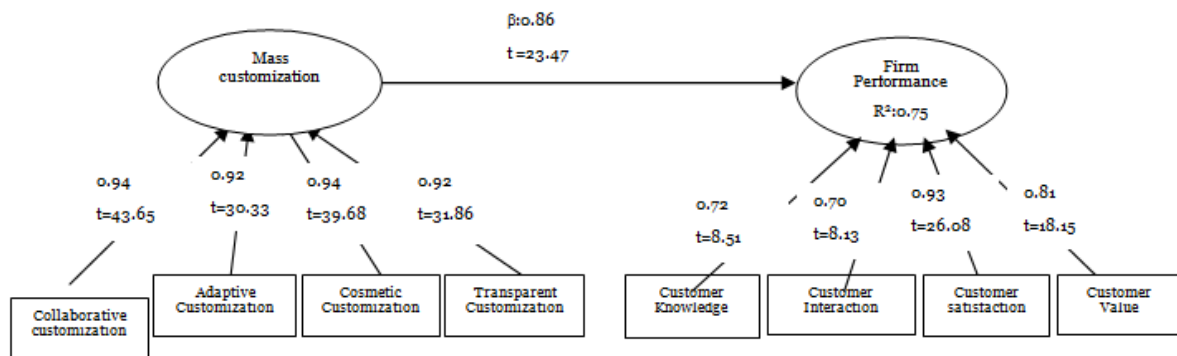


Fig. 2: Structural model.

Discussion and Conclusion:

This section summarizes key findings, possible future extensions, and study limitations. The aim of this study was to test the relationship between deploying Masscustomization and CRM performance. Formative construct validation test results support our conceptualization of CRM as a formative index comprised of the four dimension: Customer Knowledge, Customer Interaction, Customer Satisfaction and Customer Value. Further, the study conceptualizes, operationalises and validates the notion of MC as a formative construct comprised of four types : collaborative, cosmetic, adaptive and transparent.

The goal of H1 was to statistically test the implicit, positive relationship between using types of MC and CRM performance, the hypothesis being the higher the level of MC impact on CRM ,the higher will be the level of CRM performance.

The research presents quantitative, empirical evidence of a significant, positive relationship between MC and CRM. As predicted by H1, a significant relationship between using types of MC and CRM performance ($\beta = 0.86$, $t=23.47$, $p < 0.05$) is found. The results of the study showed that the relationship between the these two construct which was suggested in earlier studies (Amoako *et al.* 2011; Croteau *et al.* 2003; Jones *et al.* 2005; Sedera *et al.* 2009; Thomas JS 2004) is proven. The path coefficient for the CRM and MC indicates the powerful relationship. Therefore, the companies and the managers can improve the efficiency of customizing services and products for customers through more emphasis on MC in their CRM implementation.

Findings of the pilot support the idea that use of MC in CRM supports organizations performance (Berndt *et al.*, 2005;Anwar *et al.*, 2011). Even though the findings demonstrate significant relationships among constructs, support our conceptualization of, our pilot analysis place enough confidence in the scales for us to proceed with the full-scale survey administration of the target sample.

Up until now the role of MC in CRM has never been featured in academic discussions. In Earlier research provides significant insights into the relationship between IT and firm agility (Nazir and Pinsonneault, 2012;Overby *et al.*, 2006;Sambamurthy *et al.*, 2003). A firm performance can also improve through implementing MC in CRM as mentioned in previous studies (Croteau and Li, 2003;Thomas JS, 2004;Jones *et al.*, 2005;Sedera and Wang, 2009;Amoako *et al.*, 2011). As Amoako (2011) asserts, ability of CRM for customization of services and products is one of the benefits of CRM for customer satisfaction. Conception of customization is diverse and many aspects of it can be studied in number of different domains. Whilst many aspects of MC agility can be studied, we conceptualized a research model that relates MC capabilities to the CRM in the context of CRM performance.

Our empirical testing of the aforementioned hypothesis would contribute to a theory-guided understanding of the role of customization process on CRM performance. Also this study extends current literature on customization to a new perspective by taking the CRM viewpoint. Moreover, we will be able to identify the factors influencing customers satisfaction and customer value, and be able to understand the way to improve firm performance. Additionally, the theoretical grounding will help to explain the impact of MC in key components of successful CRM implementation. This research contributes to the practice by highlighting the role of customization to CRM performance, importance of using MC on customer satisfaction and value.

According to the result of this study, it should be considered that with all studies, the results of this research are subject to certain limitations and these restrictions should be thought-out the explanation of the results. In addition, it should also be borne in mind that some of these limitations point to scopes for future research. Our limited scope limited our ability to fully understand firm's develop and leverage its overall ability to sense and respond to their advantage in delivering customer satisfaction and achieving superior CRM performance. The study was performed in three companies so the context limited our ability to fully understand overall ability of customization to in achieving superior CRM performance.

We believe that this study adds more detail to the CRM construct by introducing the MC to the extant body of literature. It reflects the importance of customization in today's hypercompetitive business environment. However, in order to understand this critical far more research is required on CRM and customization relationship. Now that we have investigated influence of customization on CRM firm, future research may extend this work to the other relevant areas such as firm performance, revenue and income to further investigate organizational view point of customization. For practice, as our empirical investigation suggests firm's should apply types of MC in order to achieve business benefits and sustained competitive advantage.

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