Measuring CRM Effectiveness in Indian Stock Broking Services

Shiv Ratan Agrawal, Department of Management Studies, Sri Sri University, Cuttack, India Divya Mittal, Department of Management Studies, Sri Sri University, Cuttack, India

ABSTRACT

The article tried to develop a multi-item scale for analyzing CRM effectiveness (CRME) from the customer perspective in the Indian stock broking context. The results revealed that customer satisfaction could be improved through to build customer trust and customer involvement substantially by focusing on the CRM system which further influences customer retention and ultimately, customer loyalty within stockbroking services. The findings of the article will help stockbrokers and their managers for a tactical decision making of CRM system implementation and practices for customer perspective. Despite the huge investment in CRM systems by the stockbrokers, critics have remained unconvinced about the effectiveness of CRM for meeting desired business outcomes. The reason being that broking firms often perceive CRM systems as a specific technology solution rather than integrating customer needs with the firm's strategy, people and business process which generates a parallel need to develop a scale to measures CRM effectiveness in Indian stock broking services from the customer perspective.

KEYWORDS

CRM, Customer Involvement, Customer Loyalty, Customer Retention, Customer Satisfaction, Trust

1. INTRODUCTION

In the past decade, the global share broking environment has undergone a remarkable transformation. The changing regulatory framework, structural and technological factors have produced a level of competition in the share broking industry across the world. The Indian stock broking sector is no exception to this changing landscape and facing unprecedented challenges. Creating long-lasting relationships with high-value customers is usually viewed as the key to profitability in an increasingly dynamic business environment (Lee et al., 2010). CRM system is one of the primary strategic initiatives in today's business world. Indian broking firms have also invested heavily in CRM systems to develop and nurture a long-term mutually benefiting relationship with the customers. Despite the huge investment in CRM systems by the stockbrokers, critics have remained unconvinced about the effectiveness of CRM for meeting desired business outcomes. The reason being that broking companies often perceive CRM systems as a specific technology solution rather than integrating customer needs with the firm's strategy, people and business process (Sharma and Goyal, 2011). Understanding the customer perspective is crucial for a firm since an effective CRM requires the business process and technology-focused towards the customer (Padmavathy et al., 2012). Therefore, it is imperative to measure CRM effectiveness in the Indian stock broking services. Additionally, there is a lack of agreement on the impact of CRM systems on the main customer responses in stockbroking services. Consequently, there is a parallel need to develop a scale that systematically and psychometrically measures CRME, serving as a measurement foundation for customers' perspective. Thus, the present study tries to develop a multi-item scale for analyzing CRME from customers' perspective in the Indian stock broking context.

DOI: 10.4018/JGIM.2019010108

This article, originally published under IGI Global's copyright on September 14, 2018 will proceed with publication as an Open Access article starting on January 13, 2021 in the gold Open Access journal, Journal of Global Information Management (converted to gold Open Access January 1, 2021), and will be distributed under the terms of the Creative Commons Attribution License (http://creativecommons.org/licenses/by/4.0/) which permits unrestricted use, distribution, and production in any medium, provided the author of the original work and original publication source are properly credited.

2. THEORETICAL BACKGROUND OF THE STUDY

2.1. Concept of Customer Relationship Management

Customer relationship management (CRM) refers to a set of relational practices that firms adopt to enhance customer relationships (Padmavathy et al., 2012). CRM is viewed as a systematic process to manage the customer relationship initiation, maintenance, and termination across all customer contact points (Kevork and Vrechopoulos, 2009). In addition, it is viewed as the strategic use of information, processes, technology, and people to manage the customer's relationship with a firm (Lin et al., 2010). Some firms view CRM primarily as an investment in technology and software, whereas others treat CRM more expansively and are aggressive in developing productive relationships with customers (Smith and Chang, 2010). Moreover, the implementation of customer-related strategies is a critical factor in successful CRM programs. The previous studies showed that there is a great relationship between the technology perspective of CRM and customer-related strategies (Hillebrand et al., 2011).

2.2. Components of CRM

In the relationship marketing literature, researchers proposed some CRM mechanisms for the successful implementation and evaluation of CRM strategies. The present study focuses on the three most popular CRM dimensions are included customer-centric, knowledge sharing and information processing:

2.2.1. Customer-Centric

It emphasizes the delivery of superior service and adding value to customers through customized offerings (Wang, 2013). It can enable the firm to be truly customer-centric is to adopt a cross-functional approach that delivers value to its customers (Oztaysi et al., 2011). Webster (2002) studied that cross-functional processes and capabilities represent a key means of linking the firm to its customers. These processes should be guided and driven by key performance objectives based on customer needs (Payne and Frow, 2006). But the challenge for customer-centric firms is to design and manage customer-centric IT applications that are flexible, easy to maintain and quickly integrated into existing systems for better services (Lin et al., 2010).

2.2.2. Knowledge Sharing

It addresses the creation, transfer, and application of knowledge to serve customers (Wang, 2013). Knowledge creation and knowledge utilization are the two most important behavioral dimensions of knowledge sharing that often describe the knowledge-based view of the firm (Chow, 2011). Such functions are strongly reflected in essential CRM activities that include capturing customer information about their needs and preferences both directly and indirectly (Sin et al., 2005). These events correspond to knowledge learning and generation, knowledge dissemination and sharing, and knowledge responsiveness respectively (Vega-Vazquez et al., 2013). It is built on acquiring and analyzing information obtained from the customer and transforming that information into useful knowledge that can be exploited in ways that enhance business performance (Yi and Gong, 2013).

2.2.3. Information Processing

It refers to the sharing and exchange of essential and exclusive information through interactive activities between firms and its customers (Parvatiyar and Sheth, 2001). Information technology and systems play an important role in the information processing (Kincaid, 2003). The study represents an enabling and facilitating role in providing an infrastructural basis, which supports the CRM effort inside the firm, by managing the data required to understand customers (Saarijarvi et al., 2013). The supportive role of IT includes maintaining a database as well as an accompanying software and hardware capability that can well enable the organization to serve its customers in an effective manner (Akroush et al., 2011).

Volume 27 • Issue 1 • January-March 2019

Although CRM has become an essential business strategy for the Indian stock broking firms, limited research has been conducted to evaluate its effectiveness. Thus, the present study tries to propose an instrument for measuring the effectiveness of CRM in Indian stock broking services.

2.3. CRM and Key Customer Responses

The rapid growth of IT and the Internet have given an opportunity to build better relationships with customers that were not previously possible in the offline world (Lin et al., 2010). The stockbrokers have a greater ability today to establish, nurture and sustain long-term customer relationships than ever before (Kushwaha and Agrawal, 2014). Stockbrokers can evolve new approaches, and innovative products to keep pace with growing expectations. On the other hand, customer preferences are kept on changing at rapid speed, and their demands are turned insatiable (Yap et al., 2012). It has become a challenging and tough job for brokers to build customer trust and involvement in firm's services (Kushwaha and Agrawal, 2014). To achieve this challenging task, brokers are turning toward technology-based CRM system in stockbroking services (Kushwaha and Agrawal, 2015). CRM helps them to use technology and human resources to gain insight into the behavior of customers and the value of those customers. CRM has emerged in a couple of years as the convergence of some key customer responses. Pan (2005) examined the CRM from a customer perspective and suggested that it helps to the establishment of customer trust and involvement in firm's CRM systems. Several studies have identified that trust and customer involvement as central constructs for successful CRM (Parish and Holloway, 2010). Thus, the study states that:

H1: CRM system has a positive and significant effect on trust.

H2: CRM system has a positive and significant effect on customer involvement.

2.3.1. Trust

The past studies suggest that trust has resulted in various contexts. There is a common notion that trust is an essential component of commitment and involvement (Ballester and Aleman, 2001). Morgan and Hunt's (1994) defined trust as a customer's confidence in a firm's reliability and integrity. Trust exists when there is sufficient confidence in customers that the seller will stand by their word and fulfill the promises (Palmatier et al., 2006). It is one of the most important and accepted customer outcomes in firm's CRM context too (Yap et al., 2012). Trust was found to have a significant effect on the development of long-term business relationships (Sivaraks et al., 2011). Askool and Nakata (2011) stated that trust is one of the essential variables which play key roles in build and maintain business relationships. In fact, if customers likely to be more trust in the service provider, they tend to view that firm is honest and truthful with them (Odekerken-Schroder et al., 2003). Further, if customers trust on their service provider, they feel that their firm is trustworthy to serve better than others even after a service failure because of their higher levels of trust (Hedrick et al., 2007). Wong and Sohal (2002) mentioned that trust influences overall relationship stability and quality. It is also important in the development of customer satisfaction (Chenet et al., 2010; Gronroons, 1990). Kassim and Abdulla (2006) studied that customer trust is a good outcome indicator of CRME, which also has a significant impact on customer involvement. Even some researchers suggested that trust is more significant than customer satisfaction in ensuring customer loyalty (Caceras and Paparoidamis, 2007). The study seeks to build if a firm's CRM system is associated with trust than how it impacts on customer involvement and customer satisfaction in stockbroking services. Thus, the study states that:

H3: Trust has a positive and significant effect on customer involvement.

H4: Trust has a positive and significant effect on customer satisfaction.

2.3.2. Customer Involvement

Customer involvement is related to customer participation in service development process (Sin et al., 2005). It is a well-known fact that productions and consumptions are simultaneous in services (Howcroft et al., 2007). It involves personal interaction between a firm and its customer. Customer involvement through personal connections and enjoyable interactions are crucial for customer satisfaction and long-term service relationships for the firm (Prenshaw et al., 2006). It is indispensable for satisfactory service encounters (Fatima and Razzaque, 2013). Wulf et al. (2001) studied and confirmed the necessity of customer involvement for a sound service provider-customer relationship. Therefore, firms need to be keen on the point of service encounter (Baker et al., 2009). It may be triggered at any time when customers interact with the firm's employees (e.g., face-to-face interactions, e-mail, SMS, phone/mobile calls, online pop-ups, etc.). When customers think themselves as a part of the firm they more likely to involve with other activities of the firm (e.g., providing suggestion/ feedback for quality improvement, follow firm's investment advises, cooperate and support the staff, share personal information, etc.). High customer willingness to involve the firm has a positive impact on their attitude to maintain long-lasting relationships (Varki and Wong, 2003). This involvement may, in turn, have more overall satisfaction than those customers who are less involved with their firms (Prenshaw et al., 2006). In the service marketing literature, the mediating role of customer involvement has been investigated in prior studies which successfully generate the customer satisfaction (Fatima and Razzaque, 2013). But satisfying customers in the context of stockbroking services are quite different. It becomes more challenging and complex for share brokers due to the presence of the risk element inherent in the stockbroking services (Howcroft et al., 2007). In such case, customer involvement can also be an effective tool for developing customer satisfaction. Hence, it is important as well as interesting to examine the impact of customer involvement on customer satisfaction in stockbroking services. Thus, the study states that:

H5: Customer involvement has a positive and significant effect on customer satisfaction.

2.3.3. Customer Satisfaction

Customer satisfaction is described as the feeling of a customer towards a product/service after it has been consumed (Oliver, 1980). It is an individual's feeling of pleasure or disappointment resulting from comparing a product's/service's perceived performance about his expectations (Brady and Robertson, 2001). It is one of the key outcome variables that affect other customer responses such as customer retention and loyalty (Oztaysi et al., 2011). It serves to link repurchase intention, crossbuying behavior, brand loyalty and word-of-mouth intention of a satisfied customer (Gupta and Dev, 2012). Many researchers have widely proved that there is a strong association between customer satisfaction and behavioral outcomes such as customer retention and customer loyalty (Fathollahzadeh et al., 2011). Also, it helps firms to maintain a long-lasting relationship with their clients that result in better financial performance (Chi and Gursoy, 2009). It can be assumed that customer satisfaction is a strong predictor of other customer behavioral outcomes such as customer retention and loyalty (Guenzi and Pelloni, 2004). Due to the complex nature of services involved in stock broking services, it is crucial to satisfying and retaining the existing customers (Kushwaha and Agrawal, 2015). Thus, the present study tries to measure the same which would enable the stockbrokers to enhance their performance through customer lifetime value. Thus,

H6: Customer satisfaction has a positive and significant effect on customer retention.

H7: Customer satisfaction has a positive and significant effect on customer loyalty.

2.3.4. Customer Retention

Customer intention to remain with the firm in future is defined as customer retention (Parish and Holloway, 2010). It is viewed as a customer's likelihood of continuing to use the products/services of the firm (Tohidinia and Haghighi, 2011). It refers to a customer engaging in a long-term relationship with the firm that includes repeat patronage (Trasorras et al., 2009). Similarly, Price and Arnould (1999) defined customer retention as the degree to which a customer exhibits repeat purchasing with price tolerance to a service firm. In this regard, it has frequently been operationalized as a customer's price tolerance behavior to a service provider and possesses a positive attitudinal disposition (Edward and Sahadev, 2011). Moreover, customer retention was frequently defined as observed behavior (Gupta and Dev, 2012). It is determined as an important determinant of market share and profitability of a firm (Gruca and Rego, 2005). It is also a major issue in the context of stockbroking services where deregulation has given more options customers to opt their brokers (Kushwaha and Agrawal, 2015). To avoid higher costs and improving profitability in the competitive world, it is crucial to retaining the customer rather than recruiting new ones (Reichheld and Sasser, 1990). It was evident that the cost of customer retention is substantially less than the relative cost of customer acquisition (Yap et al., 2012). It not only shows customer satisfaction but also indicates about customer loyalty that enables firms to maximize their market share through customer lifetime value (Lin and Wu, 2011). Thus,

H8: Customer retention has a positive and significant effect on customer loyalty.

2.3.5. Customer Loyalty

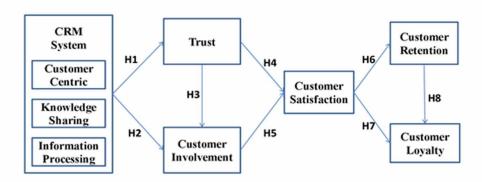
Ehigie (2006) defined customer loyalty as a feeling of commitment to a product, service or brand of the firm. It includes a customer's intention to recommend the service provider to others (Bendall-Lyon and Powers, 2003). It shows a customer's willingness to recommend the firm's products/services to their friends and relatives and intentions to continue patronizing (Ranaweera and Menon, 2013). Several previous studies have claimed that customer satisfaction is a leading factor in determining customer loyalty (Yap et al., 2012). When a customer is not satisfied, he/she is less likely to continue with the existing firm as well as tends to negative word-of-mouth (Vera and Trujillo, 2013). Further, their study suggested that this customer defection has a stronger negative impact on the firm's financial performance. Customer loyalty has been recognized as the key success factor in a firm's success in this competitive environment (Tohidinia and Haghighi, 2011). It may help firms to reduce their costs and increase profitability, as we know that the cost of acquiring a new customer is five times more than the cost of retaining an existing one (Yap et al., 2012). It is also an important aspect for stock brokers.

Based on the discussed literature, the current study presents the following conceptual model of the research (Figure 1):

3. METHODOLOGY

3.1. Measurement Instrument

The measurement instrument was developed with multi-item measures for each construct based on an extensive review of the past literature. A preliminary version of the survey instrument was developed in both languages, English and Hindi. A draft of the questionnaire was examined by an academic experienced in questionnaire design. The questionnaire was subsequently piloted with 30 different active share traders/investors to assess the terminology, clarity of instructions and response format. Minor amendments were made based feedback from the experts and pilot survey. The final set of 38 observable items was selected for six latent variables. The details of all constructs presented in Table 4 in Appendix A. The questionnaire consisted of two sections. In the first section, 38 questions were related to stockbroking services towards customers. The last section contained questions regarding



demographic characteristics of the participants such as gender, age, education, profession and city name with the state. Participants were also asked about one of the stockbroking firm name that is operated by them frequently and duration of demat and trading account operation in years. The survey instrument consisted of close-ended questions that the respondent has to answer in a set format. All the items were put on a five-point Likert scale where a value of 1 expresses strongly disagree, and value of 5 expresses strongly agree. Participants were asked to indicate their level of agreement with each statement.

3.2. Sample Size and Data Collection

Testing the suggested research hypotheses through structural equation modeling (SEM) needs to set a prior sample size based on the latent and observed variables in the study (Westland, 2010). It was obtained online through Daniel Soper's apriori sample size calculator for SEM. The minimum sample size recommended was 256 to detect the effects of the study model based on six latent and 38 observed variables with a probability level of 0.05.

The current study adopted descriptive research design based on survey method for developing a multi-item scale for analyzing CRM effectiveness from customers' perspective in the Indian stock broking context. A cross-sectional research design with non-probability judgemental and snowball sampling methods was conducted in the study. To avoid possible biases, the sample was collected from different demographical characteristics and geographical locations of India. A survey of this kind is a rather difficult exercise; especially participants were reluctant to disclose their data to outsiders. Even, some of them did not mention their names and their stockbroker names in the questionnaire. The study has tried to overcome this problem by informing the respondents that the present research is purely for academic purpose and wholly focused on promoting the ordinary investors' interest and strengthening their protection. For generating valid results, questionnaires were personally distributed to the customers of different share broker offices of five main cities of Madhya Pradesh (MP), India, namely, Bhopal, Gwalior, Indore, Jabalpur, and Ujjain. They were contacted outside of the brokers' offices during the stock market hours. They were assured complete anonymity of responses and were insisted on returning the filled questionnaires within 5 to 10 minutes. Also, they were asked about the references of other active share traders/investors for the same task. Additionally, the researcher also had some working experience in stockbroking industry which was used as judgemental sampling for data collection. The online generated link of the survey instrument (in the English version) was prepared and sent to selected share traders/investors through their e-mail and requested to fill it and forward it to other traders/investors to whom they know. The online participants were contacted thrice within a month through email for filling the questionnaire. A total of 583 questionnaires was received, out of which 550 were found to be completely and accurately filled, the rest 33 were discarded due to incomplete information. The study obtained a final sample size of 550 responses, for a response rate of 94.3 percent. Moreover, out of 550 valid responses, 350 were collected from an online survey, and the rest 200 were from the personal survey. The detailed profile of the respondents is presented in Table 1.

4. DATA ANALYSIS AND RESULTS

4.1. Scale Validity and Reliability

The measurement scales were refined and validated by exploratory factor analysis (EFA) and confirmatory factor analysis (CFA) in the study. Before inputting the data to factor analysis, it was confirmed that the assumptions of normality, linearity, and homoscedasticity were not violated using the Kaiser-Meyer-Olkin (KMO) index accompanied by Bartlett's test was applied to examine if data are inter-correlated. The KMO test has to have a value higher than 0.5, and Bartlett's test has to be significant at the level of P < 0.05 (Hair et al., 1998). The study found that KMO index is 0.927 with Bartlett's test (Chi-square = 473.08, the degree of freedom = 203; p = 0.000), indicating that the sample size was adequate for applying factor analysis.

4.1.1. Factor Analysis

An exploratory factor analysis (EFA) has been conducted using principal components analysis with varimax rotation on the all 38 items of six measurement scales in the study, under the restriction that the eigenvalues of each generated factor were more than one. As shown in Table 2, of the 38 original items, one item was excluded due to low factor loading (< 0.50).

4.1.2. Confirmatory Factor Analysis

After identifying 37 apparent factors, a confirmatory factor analysis was conducted to assess the construct validity of each latent construct of study model (Hair et al., 1998). Construct validity is examined through convergent validity and discriminant validity (Bagozzi and Edwards, 1998). As shown in Table 2, factor loadings range from 0.513 to 0.904 and AVE ranges from 0.539 to 0.694, both exceed the recommended threshold criterion of 0.50 (Hair et al., 2006). Additionally, it was found that composite reliability (CR) and internal reliability (Cronbach's alpha) of all the latent variables are greater than the acceptable limit of 0.70 (Carmines and Zeller, 1988). It can be concluded that data is reliable enough to be processed. Furthermore, discriminant validity has been assessed using the Fornell and Larcker, (1981) criterion. Table 3 shows the values of the square root of the AVE are all greater than the inter-construct correlations. Thus, measurement model reflects good construct validity and reliability.

4.2. Assessment of Model Fit

It is a comprehensive statistical tool for examining relations between observed and latent constructs (Bollen, 1989). As SmartPLS software does not provide a traditional assessment of overall model fit (Chin, 1998), the study tested the theoretical model using the structural equation modeling (SEM) approach with analysis of moment structures (AMOS) 22.0 software (Byrne, 2001). Model estimation results in a good fit between the model and data: chi-square (x^2) = 1486.6; p = 0.000; degree of freedom (df) = 658; (x^2 /df) = 2.26; goodness-of-fit index (GFI) = 0.901; adjusted goodness-of-fit index (AGFI) = 0.763; comparative fit index (CFI) = 0.912; root mean square error of approximation (RMSEA) = 0.069. All the values fulfill the acceptable limit (Byrne, 2010), which indicates an excellent global model fit with the data collected.

Table 1. Profile of the Respondents

Demographic Characteristics	Data	Frequency (n = 550)	Percentage
Gender	Male	484	88
	Female	66	12
Age	Less than 20 Years	0	0
	20 – 30 Years	60	11
	30 – 40 Years	131	23.8
	40 – 50 Years	201	36.5
	50 Years & Above	158	28.7
Education	Undergraduate	38	7
	Graduate	150	27.2
	Postgraduate	329	59.8
	Doctorate	33	6
Occupation	Service	238	43.2
	Professional	60	11
	Businessman	101	18.3
	Self-employed	46	8.3
	Students	30	5.5
	Housewife	16	3
	Pensioner	51	9.2
	Agriculturist	8	1.5
Duration of Account Operation	Less than 1 Year	23	4.2
	1 – 3 Years	114	20.7
	3 – 5 Years	95	17.3
	5 – 7 Years	114	20.7
	7 – 9 Years	84	15.3
	9 Years & Above	120	21.8

4.3. Testing of Hypotheses

The paper used SmartPLS 2.0 to test the associated hypotheses, which provides more information including t-statistics for concluding from the data (Chin, 2001). Standardized path coefficients (β), t-statistics, and associated significance levels for all relationships in the study model have presented in Figure 2. The study used two-tailed t-test with a significance level of 5%, the path coefficient will be significant if the t-value is larger than 1.96. The results indicated that all the paths are significant except third (H3), which implies that trust has not a positive and significant effect on customer involvement (β = -0.013; t = 0.085; p > 0.05). However, it was found that CRM has a significant effect on trust (β = 0.695; t = 10.771; p < 0.05) and customer involvement (β = 0.553; t = 4.024; p < 0.05), thus supporting H1 and H2. Also, H4 which implies that trust had a significant effect on customer satisfaction (β = 0.707; t = 10.637; p < 0.05), and H5, which implies customer involvement had a significant effect on customer satisfaction has a significant effect on customer retention (β = 0.763; t = 14.824;

Table 2. Measurement Model Summary

Construct	Items	Factor Loading	AVE	CR	Cronbach's α
CRM:			0.539	0.910	0.893
(Customer Centric) CC	CC-1	0.623			
	CC-2	0.725			
	CC-3	0.606			
	CC-4	0.664			
(Knowledge Sharing) KS	KS-1	0.758			
	KS-2	0.623			
	KS-3	0.680			
	KS-4	0.660			
	KS-5	0.681			
(Information Processing) IP	IP-1	0.615			
-	IP-2	0.513			
	IP-3	0.699			
	IP-4	0.729			
Trust (T)			0.689	0.917	0.887
. ,	T-1	0.848			
	T-2	0.864			
	T-3	0.814			
	T-4	0.782			
	T-5	0.841			
Customer Involvement (CI)			0.577	0.816	0.727
. ,	CI-1	0.636			
	CI-2	0.477			
		(Eliminated)			
	CI-3	0.780			
	CI-4	0.711			
	CI-5	0.799			
Customer Satisfaction (CS)			0.576	0.904	0.876
	CS-1	0.639			
	CS-2	0.739			
	CS-3	0.775			
	CS-4	0.710			
	CS-5	0.802			
	CS-6	0.775			
	CS-7	0.857			
Customer Retention (CR)			0.628	0.869	0.802
	CR-1	0.870			
	CR-2	0.642			
	CR-3	0.904			
	CR-4	0.725			
Customer Loyalty (CL)			0.694	0.901	0.853
	CL-1	0.841			
	CL-2	0.794			
	CL-3	0.878			
	CL-4	0.818			

Note: AVE = average variance extracted, CR = composite reliability

p < 0.05) and customer loyalty ($\beta = 0.289$; t = 2.673; p < 0.05), thus supporting H6 and H7. At last, customer retention had also a significant effect on customer loyalty ($\beta = 0.580$; t = 5.614; p < 0.05). Thus, H1, H2, H4, H5, H6, H7, and H8 were accepted, while H3 was rejected.

Table 3. D	iscriminant	Validity	of Latent	Constructs

DIMENSIONS	CRM	Т	CI	CS	CR	CL
CRM	0.734*					
T	0.695	0.830*				
CI	0.544	0.372	0.760*			
CS	0.650	0.580	0.459	0.759*		
CR	0.570	0.664	0.307	0.663	0.792*	
CL	0.580	0.624	0.361	0.531	0.601	0.833*

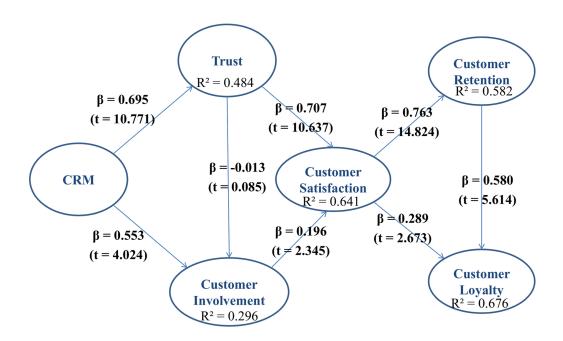
Note: *Square roots of AVE shown on diagonal.

The study model has a high predictive power regarding customer loyalty, customer satisfaction, and customer retention; it explains 67.6%, 64.1% and 58.2% of the construct's variance respectively (Figure 2). Additionally, the model explained 48.4% of the construct's variance in trust and 29.6% in customer involvement. The amount of variance explained by the study model is good enough, which adds support to the theoretical soundness (Awwad, 2012).

5. DISCUSSION AND CONCLUSION

Several studies have recognized the importance of CRM system into the financial sector and found its significant influence on the key customer response variables (Padmavathy et al., 2012; Akroush et al., 2011). Among of these, it has been observed that many of them are limited to banking, insurance, mutual funds and loans in the existing literature. Specifically, research attention is relatively little of

Figure 2. Structural Model



CRM effectiveness in stockbroking services. Thus, the present study tried to develop a multi-item scale for analyzing the CRM effectiveness in Indian stock broking services and its relationship with key customer responses. In addition, the study identified the key new issues of interest within this domain from a customer perspective that requires managerial and further research attention. It was found that CRM is the strongest predictor of trust and followed by customer involvement. It means that adoption of CRM system in stockbroking services is capable enough to build customer trust and then customer involvement. Surprisingly, the study revealed that customer's trust does not predict customer involvement in the context of stockbroking services. It may be possible that customers trust on their broking firms but proactively do not involve in its services. Also, employees do not take the enough initiatives to involve customers in services. As we are aware that service is a process that requires employee-customer involvement (Bennett and Durkin, 2002). Without it, service cannot be accomplished. On the other side, the study indicated that trust and customer involvement influence customer satisfaction significantly. It can be said that proper practicing of CRM system in stockbroking firms positively improves customer trust and involvement which results in high customer satisfaction. Although there is no direct link between trust and customer involvement in stock broking services, both predict greater customer satisfaction. Further, the research disclosed that this customer satisfaction significantly influences customer retention and loyalty that is the main motive of every firm to get a loyal customer. In addition, the study indicated that there is a significant relationship between customer retention to customer loyalty. It is interesting to emphasize that if a customer is satisfied with a stockbroking services it leads to making him a long-lasting relationship with that firm and become a loyal customer for its products and services. Therefore, it seems reasonable to conclude that customer satisfaction can be improved through to build customer trust and customer involvement substantially by focusing on the CRM system which further influences customer retention and ultimately, customer loyalty within stockbroking services. Interestingly, it was found that customer involvement is not a result of trust in CRM system, but customer trust and involvement both are predicting customer satisfaction strongly in stockbroking services. Previous research studies have well established the fact that trust has a positive impact on customer commitment and involvement (Pesamaa and Hair, 2007) but the present study is unique which states that merely trust on firm and its CRM system is not enough to engage customers in the service process. There is a parallel need to focus on customer trust and involvement to enhance customer satisfaction in stockbroking services. These findings were also supported by the predictive power of the study model.

The results of the study revealed that the CRM effectiveness multi-item scale conceptualized and developed were both reliable and valid. It has thirty-seven precise constructs covering six latent dimensions namely, CRM system, trust, customer involvement, customer satisfaction, customer retention, and loyalty. The study provides insights into the CRM system in today's changed scenario of stockbroking industry and using it as a weapon for competitive differentiation. The critical dimensions of customer-centric for CRM system identified in the study show that stockbroking customers preferred customized investment products/services from brokers and followed by their concern on maximum return on customer's portfolio investment. Customers appreciate the broking firm if it makes an effort to find out their specific investment need and then provide value-added investment products and services accordingly. In the case of knowledge sharing scale for CRM system, customers prefer those brokers who generate and disseminate proper investment advice for its clients. Customers expect willing to help attitude from broker's employees. They feel that firm's employees should be knowledgeable enough to understand and solve their problems with the prompt response. After that, the study indicated that they want accuracy in all trading transactions done by the staff members of the broker with updated investment information and market calls. Among the information processing components of CRM, the study suggested that customers prefer the two-way interactive communication from the broker. Additionally, they prefer a broking firm who continuously manages and shares real-time information with clients such as, stock market information, trade confirmation, account statement, etc. It can be achieved if a firm has the right technological infrastructure (software and hardware) to share information on all customers' point such as telephone, mobile, SMS, email, face-to-face communication, etc. as the study disclosed. Moreover, customer's trust can be built if he feels that his firm is honest and truthful to provide reliable services to him. If it is so, he feels that his stockbroker is trustworthy to serve better than others. Also, the study disclosed that firms should keep its promises towards customers in any situation and maintain consistent service standards to enhance customers' trust on firms' services. The study indicated that most of the customers are involved with their broking firm and its employees. They normally cooperate and support in-service process and actively share their information with the firm. It has come to the light that customers usually follow the firm's investment advice but do not give regular feedback to improve services. Further, most of the participants mentioned that they are overall satisfied with their existing broking firm. Also, feel safe and secure during the transactions. Interestingly, many respondents equally admitted that they prefer those stockbroking firms which attends customer complaints promptly and meets their unique specifications for investment need which do not offer by other brokers. It is interesting to emphasize that firm's technology-based investment products and services fit well into their lifestyle. It means that customers expect quick responses to their investment-related problems. In this regard, the study findings suggested that the firms' staff should respond efficiently to customer's concerns about investment products and services. However, the study indicated that broker's technology-based investment products and services are easy to use for customers. In the context of key variables of customer retention, it was found that customers select the existing broker to repurchase the similar investment products/services and intend to maintain long-lasting relationships. Even they prefer cross-buying of other investment products from the existing firm such as mutual funds, insurance, etc. Surprisingly, the study found that they will not mind or switch to another firm if the existing firm charges higher prices for its investment products and services. It is important to note that if a customer is satisfied, he does not think to switch to another firm even the existing firm charges higher prices for its services. They continue to have repurchase intention with the same firm if they are satisfied. At last, the key variables of customer loyalty construct indicated that most of the participants consider existing share broking firm as their first choice. They also say positive words about the firm and its products and services to other people. The study found that they are committed towards the firm and its investment products/services and often recommend to others. The findings provided insight into the dimensions that contribute to the acceptance of CRM system in stockbroking services from customers' perspective.

The study provides some key recommendations based on the findings and informal discussion with participants during the survey. Most of the respondents revealed that they do not give regular feedback to improve firm's products and services. Stockbrokers should promote to install the feedback boxes in their offices. Additionally, they must encourage their employees to talk to their customers in this regard. The study data revealed that trust does not drive the involvement of customers in stockbroking services. It may be possible that firm's staff and services are not capable of building enough trust to involve customers in the service process. The majority of participants had also complained that stockbrokers initially take a personal interest in customer care during the time of customer acquisition but later started to ignore them. It can be one of the reasons for customer dissatisfaction that can affect customer retention and loyalty. As consumer behavior is changing rapidly, there is a need to cultivate customers' trust with innovative ways (Ganguli and Roy, 2011). A most important issue has come to light during the discussion with participants that although they get the investment calls and advice by their firm but do not follow the same. They invest based on their market knowledge and expertise and suffer losses. It is important to conduct investment awareness programs for customers by stockbrokers frequently. Additionally, the demographic classification of the study data revealed that most of the elder people belonged to service, and business class category and admitted that they do not get the time for offline investment or trading but want to do the through online. Simultaneously, they revealed their lack of knowledge and confidence on online process. Here, the brokers' role is important to educate them with a proper demonstration of the online trading platform of their firms in drawing more business. Moreover, the study revealed that most of the respondents were male. Typically, Indian women believe on savings. Mostly, they do not prefer investment due to risk factor associated with the stock market (Sahi, 2013). Additionally, investment decisions are still dominated by males in the Indian society (Paluri and Mehra, 2016). Of course, the situation is changing, but it will take more time to aware and motivate Indian women for investment in stock market. As we are aware that risk is the inevitable part of the investment, identified CRM dimensions would help managers to generate more trust in customers. It can be an opportunity for stockbrokers to motivate and educate Indian females to participate in investment and trading activities. It will improve the market capitalization and ultimately financial performance of the stockbroking firms.

6. MANAGERIAL IMPLICATION

The phenomenon of declining customer satisfaction, retention and customer loyalty becomes the major concern of the stockbrokers that determine financial performance of them (Kushwaha and Agrawal, 2015). The focus on key customer variables is important in a financial industry where deregulation has given more options to customers (Levesque and McDougall, 1996). The stockbroking industry is also not an exception and passing through a phase of customer market. In stockbroking sector, customer satisfaction is quite a complex issue and also responsible for customer retention and loyalty. Increasing expectations of customers from share broking services have led firms and their managers to become customer-centric, which has been resulted in the introduction of CRM practices to improve the quality of services (Kushwaha and Agrawal, 2014). The present study suggested several implications for stock brokers and contributed to the existing literature based on empirical investigations. The study indicated that the proper implementation of CRM system could build more customer trust and involvement in the service process which triggers enough satisfaction for the customers. As previous studies have suggested that customer satisfaction is a key construct to affect customer retention and loyalty (Luo and Homburg, 2007), the findings of the present study also follow the same trend. The study shows that customer satisfaction strongly drives customer retention and customer loyalty. Moreover, it was found that customer retention is also the significant predictor of customer loyalty in the context of stockbroking services.

The expectation of getting good returns on investments attracts many investors toward the stock market. But they forget the fact that risk is associated with return and the stock market is not an exception. Mostly, it has been observed that stockbrokers do not properly guide their customers about the current market scenario or customers do not follow the investment advice which they get from their brokers. Ultimately, customers suffer losses and start avoiding investment in future which impact on financial performance of stockbrokers. The findings of the present study will be useful for the stockbroking firms to formulate appropriate business strategies for building customer loyalty.

7. LIMITATIONS AND FUTURE RESEARCH DIRECTION

All the constructs in the study were measured at one point in time. It may be worthwhile to study customer variables over time in order to be able to take into account the dynamics of consumer behavioral patterns. The present study only emphasized on the customer's side than on the firm's side. Future research should also recruit stockbroking firm's employees and managers to generate results more applicable. The findings of the study can serve as a guide towards further research in same as well as in different fields. To confirm its applicability in other financial services like banking, insurance, mutual funds, loans, etc., the same study should be replicated. As stockbroking firms have always tried to keep its format standard in it's all national operations, the scope of the study may not be limited to a geographical location and will guide the stock brokers and managers to understand customer behavior to attract and retain them. Although there were more male participants in the study, it would not affect to generalize the results. Majority of Indian women are known for savings

(Paluri and Mehra, 2016). Especially, in the case of the stock market, they keep distance due to the risk factor (Sahi, 2013). Future studies can be conducted to know that how CRM system can help to reduce the risk factor in the stock market. The present study would play an essential role in this regard. However, irrespective of limitations, the current research has contributed towards the existing literature on CRM effectiveness from a customer perspective in the stockbroking services and opens a channel of research on multiple unexamined matters concerning the CRM effectiveness and its impact on key customer variables.

REFERENCES

Akroush, M. N., Dahiyat, S. E., Gharaibeh, H. S., & Abu-Lail, B. N. (2011). Customer relationship management implementation: An investigation of a scale's generalisability and its relationship with business performance in a developing country context. *International Journal of Commerce and Management*, 21(2), 158–191. doi:10.1108/10569211111144355

Askool, S., & Nakata, K. (2011). A conceptual model for acceptance of social CRM systems based on a scoping study. *Artificial Intelligence & Society*, 26, 205–220.

Awwad, M. S. (2012). An application of the American customer satisfaction index (ACSI) in the Jordanian mobile phone sector. *The TOM Journal*, 24(6), 529–541. doi:10.1108/17542731211270098

Bagozzi, R. P., & Edwards, J. F. (1998). A general approach to construct validation in organisational psychology: Application to the measurement of work values. *Organizational Research Methods*, 1, 45–87. doi:10.1177/109442819800100104

Baker, T. L., Joseph, C., & Hopkins, C. D. (2009). The impact of involvement on key service relationships. *Journal of Services Marketing*, 23(2), 115–124. doi:10.1108/08876040910946378

Ballester, E. D., & Aleman, J. L. M. (2001). Brand trust in the context of consumer loyalty. *European Journal of Marketing*, 35(11/12), 1238–1258. doi:10.1108/EUM0000000006475

Battor, M., & Battour, M. (2013). Can organisational learning foster customer relationships? Implications for performance. *The Learning Organization*, 20(4/5), 279–290. doi:10.1108/TLO-11-2012-0073

Bendall-Lyon, D., & Powers, T. L. (2003). The influence of mass communication and time on satisfaction and loyalty. *Journal of Services Marketing*, 17(6), 589–608. doi:10.1108/08876040310495627

Bennett, H., & Durkin, M. G. (2002). Developing relationship-led cultures – A case study in retail banking. *International Journal of Bank Marketing*, 20(5), 200–211. doi:10.1108/02652320210437652

Bollen, K. A. (1989). Structural Equations with Latent Variables. New York, NY: Wiley. doi:10.1002/9781118619179

Brady, M. K., & Robertson, C. J. (2001). Searching for a consensus on the antecedent role of service quality and satisfaction: An exploratory cross-national study. *Journal of Business Research*, *51*(1), 53–60. doi:10.1016/S0148-2963(99)00041-7

Byrne, B. M. (2001). Structural Equation Modeling with AMOS, Basic Concepts, Applications and Programming. Mahwah, NJ: Lawrence Erlbaum Associates Publishers.

Byrne, B. M. (2010). *Structural Equation Modeling with AMOS; Basic Concepts, Application and Programming* (2nd ed.). New York: Routledge Taylor and Francis Group.

Caceras, R. C., & Paparoidamis, N. G. (2007). Service quality, relationship satisfaction, trust, commitment and business-to-business loyalty. *European Journal of Marketing*, 41(7/8), 836–867. doi:10.1108/03090560710752429

Carmines, E. G., & Zeller, R. A. (1988). Reliability and Validity Assessment. Beverly Hills, CA: Sage.

Chan, A. L.-C., & Wang, W.-Y. (2012). The causal relationships between aspects of customer capital. *Industrial Management & Data Systems*, 112(6), 848–865. doi:10.1108/02635571211238482

Chenet, P., Dagger, T. S., & O'Sullivan, D. (2010). Service quality, trust, commitment and service differentiation in business relationships. *Journal of Services Marketing*, 24(5), 336–346. doi:10.1108/08876041011060440

Chi, C. G., & Gursoy, D. (2009). Employee satisfaction, customer satisfaction and financial performance: An empirical examination. *International Journal of Hospitality Management*, 28(2), 245–253. doi:10.1016/j. ijhm.2008.08.003

Chin, W. (2001). PLS-Graph User's Guide. PLS-Graph User's Guide Version 3.0. Houston, TX: Soft Modeling Inc.

Chin, W. W. (1998). The partial least squares approach to structural equation modeling. In G. A. Marcoulides (Ed.), *Modern business research methods* (pp. 295–336). Mahwah, NJ: Lawrence Erlbaum Associates.

Chow, N.-K. (2011). Factors affecting usage of information technology in support of knowledge sharing: A multiple case study of service organizations in Hong Kong. *Journal of Global Information Management*, 19(2), 45–66. doi:10.4018/jgim.2011040103

Coenen, C., Waldburger, D., & Felten, D. V. (2013). FM servicebarometer: Monitoring customer perception of service performance. *Journal of Facilities Management*, 11(3), 266–278. doi:10.1108/JFM-06-2012-0024

Delcourt, C., Gremler, D. D., Van Riel, A. C. R., & Van Birgelen, M. (2013). Effects of perceived employee emotional competence on customer satisfaction and loyalty – The mediating role of rapport. *Journal of Service Management*, 24(1), 5–24. doi:10.1108/09564231311304161

Edward, M., & Sahadev, S. (2011). Role of switching costs in the service quality, perceived value, customer satisfaction and customer retention linkage. *Asia Pacific Journal of Marketing and Logistics*, 23(3), 327–345. doi:10.1108/13555851111143240

Ehigie, B. O. (2006). Correlates of customer loyalty to their bank: A case study in Nigeria. *International Journal of Bank Marketing*, 24(7), 494–508. doi:10.1108/02652320610712102

Fathollahzadeh, M., Hashemi, A., & Kahreh, M. S. (2011). Designing a new model for determining customer value satisfaction and loyalty towards banking sector of Iran. European Journal of Economics. *Finance and Administrative Sciences*, 28(1), 126–138.

Fatima, J. K., & Razzaque, M. A. (2013). Roles of customer involvement in rapport and satisfaction. *Asia Pacific Journal of Marketing and Logistics*, 25(3), 452–471. doi:10.1108/APJML-09-2012-0092

Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *JMR*, *Journal of Marketing Research*, *18*(1), 39–50. doi:10.2307/3151312

Ganguli, S., & Roy, S. K. (2011). Generic technology-based service quality dimensions in banking, impact on customer satisfaction and loyalty. *International Journal of Bank Marketing*, 29(2), 168–189. doi:10.1108/02652321111107648

Gronroos, C. (1990). Service Management and Marketing: Managing the Moments of Truth in Service Competition. Lexington, Mass: Lexington Books.

Gruca, T. S., & Rego, R. L. (2005). Customer satisfaction, cash flow, and shareholder value. *Journal of Marketing*, 69(3), 115–130. doi:10.1509/jmkg.69.3.115.66364

Guchait, P., Namasivayam, K., & Lei, P.-W. (2011). Knowledge management in service encounters: Impact on customers' satisfaction evaluations. *Journal of Knowledge Management*, 15(3), 513–527. doi:10.1108/13673271111137466

Guenzi, P., & Pelloni, O. (2004). The impact of interpersonal relationships on customer satisfaction and loyalty to the service provider. *International Journal of Service Industry Management*, 15(4), 365–384. doi:10.1108/09564230410552059

Gupta, A., & Dev, S. (2012). Client satisfaction in Indian banks: An empirical study. *Management Research Review*, 35(7), 617–363. doi:10.1108/01409171211238839

Hair, J. F. Jr, Anderson, E. R., Tatham, L. R., & Black, C. W. (1998). *Multivariate Data Analysis* (5th ed.). London: Prentice-Hall.

Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. L. (2006). *Multivariate Data Analysis* (6th ed.). Englewood Cliffs, NJ: Pearson Prentice-Hall.

Hau, L. N., & Ngo, L. V. (2012). Relationship marketing in Vietnam: An empirical study. *Asia Pacific Journal of Marketing and Logistics*, 24(2), 222–235. doi:10.1108/13555851211218039

Hedrick, N., Beverland, M., & Minahan, S. (2007). An exploration of relational customers' response to service failure. *Journal of Services Marketing*, 21(1), 64–72. doi:10.1108/08876040710726301

Hillebrand, B., Nijholt, J. J., & Nijssen, E. J. (2011). Exploring CRM effectiveness: An institutional theory perspective. *Journal of the Academy of Marketing Science*, 39(4), 592–608. doi:10.1007/s11747-011-0248-3

Howcroft, B., Hamilton, R., & Hewer, P. (2007). Customer involvement and interaction in retail banking: An examination of risk and confidence in the purchase of financial products. *Journal of Services Marketing*, 21(7), 481–491. doi:10.1108/08876040710824843

Kassim, N. M., & Abdulla, A. K. M. A. (2006). The influence of attraction on internet banking: An extension to the trust-relationship commitment model. *International Journal of Bank Marketing*, 24(6), 424–442. doi:10.1108/02652320610701744

Kevork, E. K., & Vrechopoulos, A. P. (2009). CRM literature: Conceptual and functional insights by keyword analysis. *Marketing Intelligence & Planning*, 27(1), 48–85. doi:10.1108/02634500910928362

Kincaid, J. W. (2003). Customer Relationship Management: Getting It Right. Upper Saddle River, NJ: Prentice-Hall PTR.

Kushwaha, G. S., & Agrawal, S. R. (2014). Customer satisfaction via service quality dimensions: An empirical research on stock broking services. *International Journal of Customer Relationship Marketing and Management*, 5(3), 32–48. doi:10.4018/ijcrmm.2014070103

Kushwaha, G. S., & Agrawal, S. R. (2015). Customer management practices: Multiple case studies in stock broking services. *International Journal of Customer Relationship Marketing and Management*, 6(2), 1–14. doi:10.4018/IJCRMM.2015040101

Lee, C.-H., Huang, S. Y., Barnes, F. B., & Kao, L. (2010). Business performance and customer relationship management: The effect of IT, organisational contingency and business process on Taiwanese manufacturers. *Total Quality Management*, 21(1), 43–65. doi:10.1080/14783360903492595

Levesque, T., & McDougall, G. H. G. (1996). Determinant of customer satisfaction in retail banking. *International Journal of Bank Marketing*, 14(7), 12–20. doi:10.1108/02652329610151340

Lin, J.-S. C., & Wu, C.-Y. (2011). The role of expected future use in relationship-based service retention. *Managing Service Quality*, 21(5), 535–551. doi:10.1108/09604521111159816

Lin, R.-J., Chen, R.-H., & Chiu, K. K.-S. (2010). Customer relationship management and innovation capability: An empirical study. *Industrial Management & Data Systems*, 110(1), 111–133. doi:10.1108/02635571011008434

Luo, X., & Homburg, C. (2007). Neglected outcomes of customer satisfaction. *Journal of Marketing*, 71(2), 133–149. doi:10.1509/jmkg.71.2.133

Morgan, R. M., & Hunt, S. D. (1994). The commitment-trust theory of relationship marketing. *Journal of Marketing*, 58(3), 20–38. doi:10.2307/1252308

Odekerken-Schroder, G., De Wulf, K., & Schumacher, P. (2003). Strengthening outcomes of retailer-consumer relationships: The dual impact of relationship marketing tactics and consumer personality. *Journal of Business Research*, 56(3), 177–190. doi:10.1016/S0148-2963(01)00219-3

Oliver, R. L. (1980). A cognitive model of the antecedents and consequences of satisfaction decisions. *JMR*, *Journal of Marketing Research*, 17(4), 460–469. doi:10.2307/3150499

Oztaysi, B., Sezgin, S., & Ozok, A. F. (2011). A measurement tool for customer relationship management processes. *Industrial Management & Data Systems*, 111(6), 943–960. doi:10.1108/02635571111144982

Padmavathy, C., Balaji, M. S., & Sivakumar, V. J. (2012). Measuring effectiveness of customer relationship management in Indian retail banks. *International Journal of Bank Marketing*, 30(4), 246–266. doi:10.1108/02652321211236888

Palmatier, R. W., Dant, R. P., Grewal, D., & Evans, K. R. (2006). Factors influencing the effectiveness of relationship marketing: A meta-analysis. *Journal of Marketing*, 70(4), 136–153. doi:10.1509/jmkg.70.4.136

Paluri, R. A., & Mehra, S. (2016). Financial attitude based segmentation of women in India: An exploratory study. *International Journal of Bank Marketing*, 34(5), 670–689. doi:10.1108/IJBM-05-2015-0073

Pan, S. L. (2005). Customer perspective of CRM systems: A focus group study. *International Journal of Enterprise Information Systems*, *I*(1), 65–88. doi:10.4018/jeis.2005010105

Parish, F. T., & Holloway, B. B. (2010). Consumer relationship proneness: A re-examination and extension across service exchanges. *Journal of Services Marketing*, 24(1), 61–73. doi:10.1108/08876041011017899

Parvatiyar, A., & Sheth, J. N. (2001). Conceptual framework of customer relationship management. In J. N. Sheth, A. Parvatiyar, & G. Shainesh (Eds.), *Customer relationship management: Emerging concepts, tools, and applications* (pp. 3–25). New Delhi: Tata McGraw-Hill.

Payne, A., & Frow, P. (2006). Customer relationship management: From strategy to implementation. *Journal of Marketing Management*, 22(1-2), 135–168. doi:10.1362/026725706776022272

Pesamaa, O., & Hair, J. F. (2007). More than friendship is required: An empirical test of cooperative firm strategies. *Management Decision*, 45(3), 602–615. doi:10.1108/00251740710745142

Prenshaw, P. F., Kovar, S. E., & Burke, K. G. (2006). The impact of involvement on satisfaction for new, non-traditional, credence-based service offerings. *Journal of Services Marketing*, 20(7), 439–452. doi:10.1108/08876040610704874

Price, L., & Arnould, E. (1999). Commercial friendships: Service provider-client relationships in context. *Journal of Marketing*, 63(4), 38–65. doi:10.2307/1251973

Ranaweera, C., & Menon, K. (2013). For better or for worse? Adverse effects of relationship age and continuance commitment on positive and negative word of mouth. *European Journal of Marketing*, 47(10), 1598–1621. doi:10.1108/EJM-06-2011-0295

Reichheld, F., & Sasser, W. E. (1990). Zero defections: Quality comes to services. *Harvard Business Review*, 68, 105–111. PMID:10107082

Saarijarvi, H., Karjaluoto, H., & Kuusela, H. (2013). Customer relationship management: The evolving role of customer data. *Marketing Intelligence & Planning*, 31(6), 584–600. doi:10.1108/MIP-05-2012-0055

Sahi, S. K. (2013). Demographic and social-economic determinants of financial satisfaction: A study of SEC-A segment of individual investors in India. *International Journal of Social Economics*, 40(2), 127–150. doi:10.1108/03068291311283607

Sharma, S., & Goyal, D. P. (2011). Critical success factors for CRM implementation: A study on Indian banks. In S. Dua, S. Sahni, & D. P. Goyal (Eds.), *Information intelligence, systems, technology and management, communications in computer and information science* (pp. 32–40). Dordrecht, London and New York, NY: Springer Heidelberg. doi:10.1007/978-3-642-19423-8_4

Sin, L. Y. M., Tse, A. C. B., & Yim, F. H. K. (2005). CRM: Conceptualization and scale development. *European Journal of Marketing*, 39(11/12), 1264–1290. doi:10.1108/03090560510623253

Sivaraks, P., Krairit, D., & Tang, J. C. S. (2011). Effects of e-CRM on customer-bank relationship quality and outcomes: The case of Thailand. *The Journal of High Technology Management Research*, 22(2), 141–157. doi:10.1016/j.hitech.2011.09.006

Smith, M., & Chang, C. (2010). Improving customer outcomes through the implementation of customer relationship management, evidence from Taiwan. *Asian Review of Accounting*, 18(3), 260–285. doi:10.1108/13217341011089658

Tohidinia, Z., & Haghighi, M. (2011). Predictors and outcomes of relationship quality: A guide for customer-oriented strategies. *Business Strategy Series*, 12(5), 242–256. doi:10.1108/17515631111166889

Trasorras, R., Weinstein, A., & Abratt, R. (2009). Value, satisfaction, loyalty and retention in professional services. *Marketing Intelligence & Planning*, 27(5), 615–632. doi:10.1108/02634500910977854

Varki, S., & Wong, S. (2003). Consumer involvement in relationship marketing of services. *Journal of Service Research*, 6(1), 83–91. doi:10.1177/1094670503254287

Vega-Vazquez, M., Revilla-Camacho, M. A., & Cossio-Silva, F. J. (2013). The value co-creation process as a determinant of customer satisfaction. *Management Decision*, 51(10), 1945–1953. doi:10.1108/MD-04-2013-0227

Vella, J., & Caruana, A. (2012). Encouraging CRM systems usage: A study among bank managers. *Management Research Review*, 35(2), 121–133. doi:10.1108/01409171211195152

Journal of Global Information Management

Volume 27 • Issue 1 • January-March 2019

Vella, J., Caruana, A., & Pitt, L. (2013). Organisational commitment and users' perception of ease of use: A study among bank managers. *Journal of Management Development*, 32(4), 351–362. doi:10.1108/02621711311326356

Wang, M.-L. (2013). Implementing CRM in nursing homes: The effects on resident satisfaction. *Managing Service Quality*, 23(5), 388–409. doi:10.1108/MSQ-08-2012-0086

Webster, F. E. (2002). Marketing management in changing times. *Marketing Management*, 11(January/February), 1–17.

Westland, J. C. (2010). Lower bounds on sample size in structural equation modeling. *Electronic Commerce Research and Applications*, 9(6), 476–487. doi:10.1016/j.elerap.2010.07.003

Wong, A., & Sohal, A. (2002). An examination of the relationship between trust, commitment and relationship quality. *International Journal of Retail & Distribution Management*, 30(1), 34–50. doi:10.1108/09590550210415248

Wulf, K. D., Odekerken-Schroder, G., & Lacobucci, D. (2001). Investments in consumer relationships: A cross-country and cross-industry exploration. *Journal of Marketing*, 65(4), 33–50. doi:10.1509/jmkg.65.4.33.18386

Yang, Y.-F. (2012). Service capabilities and customer relationship management: An investigation of the banks in Taiwan. *Service Industries Journal*, 32(6), 937–960. doi:10.1080/02642069.2010.545394

Yap, B. W., Ramayah, T., & Shahidan, W. N. W. (2012). Satisfaction and trust on customer loyalty: A PLS approach. *Business Strategy Series*, 13(4), 154–167. doi:10.1108/17515631211246221

Yi, Y., & Gong, T. (2013). Customer value co-creation behavior: Scale development and validation. *Journal of Business Research*, 66(9), 1279–1284. doi:10.1016/j.jbusres.2012.02.026

Zeynep, A. U., & Toker, A. (2012). The effect of customer relationship management adoption in business-to-business markets. *Journal of Business and Industrial Marketing*, 27(6), 497–507. doi:10.1108/08858621211251497

APPENDIX A

Table 4. List of scale items

Latent variables	Observable variables	Citation
CRM Dimensions		
I. Customer Centric (CC)	Specific investment needs (CC-1)	Yap et al. (2012)
	Customized investment products/services (CC-2)	Battor and Battour (2013)
	Value-added investment products/services (CC-3)	Zeynep and Toker (2012)
	Maximum return on portfolio investment (CC-4)	Lin et al. (2010)
II. Knowledge Sharing (KS)	Generate and disseminate investment advice (KS-1)	Zeynep and Toker (2012)
	Updated investment information & calls (KS-2)	Zeynep and Toker (2012)
	Employee knowledge (KS-3)	Gupta and Dev (2012)
	Accurate trading transactions (KS-4)	Yap et al. (2012)
	Willing to help (KS-5)	Akroush et al. (2011)
III. Information Processing	Technological infrastructure (IP-1)	Zeynep and Toker (2012)
(IP)	Share information across all contact points (IP-2)	Battor and Battour (2013)
	Manage and share real-time information (IP-3)	Battor and Battour (2013)
	Two-way communication (IP-4)	Lin et al. (2010)
Trust (T)	Reliable services (T-1)	Chenet et al. (2010)
	Honest and truthful (T-2)	Yap et al. (2012)
	Keep promises (T-3)	Tohidinia and Haghighi (2011)
	Consistent service standards (T-4)	Padmavathy et al. (2012)
	Trustworthy (T-5)	Tohidinia and Haghighi (2011)
Customer Involvement (CI)	Follow investment advice (CI-1)	Parish and Holloway (2010)
	Regular feedback (CI-2)	Gupta and Dev (2012)
	Cooperate and support (CI-3)	Yang (2012)
	Sharing personal information (CI-4)	Hau and Ngo (2012)
	Involved (CI-5)	Fatima and Razzaque (2013)
Customer Satisfaction (CS)	Easy to use (CS-1)	Vella and Caruana (2012)
	Fit well (CS-2)	Vella et al. (2013)
	Customer complaints (CS-3)	Smith and Chang (2010)
	Efficiently responses (CS-4)	Akroush et al. (2011)
	Safe and secure (CS-5)	Vera and Trujillo (2013)
	Meet unique specifications (CS-6)	Yap et al. (2012)
	Overall satisfied (CS-7)	Gupta and Dev (2012)
Customer Retention (CR)	Long-lasting relationships (CR-1)	Hillebrand et al. (2011)
	Higher prices (CR-2)	Coenen et al. (2013)
	Repurchase (CR-3)	Smith and Chang (2010)
	Cross-buying (CR-4)	Chan and Wang (2012)
Customer Loyalty (CL)	Say positive words (CL-1)	Delcourt et al. (2013)
	Recommend products/services (CL-2)	Oztaysi et al. (2011)
	First choice (CL-3)	Delcourt et al. (2013)
	Committed (CL-4)	Parish and Holloway (2010)

Journal of Global Information Management Volume 27 • Issue 1 • January-March 2019

Shiv Ratan Agrawal is an Assistant Professor in the Department of Management Studies, Sri Sri University, Cuttack, Odisha, India. He has been awarded Ph.D. in Management by National Institute of Technology (MANIT), Bhopal (MP), India. His doctoral dissertation focused on CRM. He has spent three years in industry and five and half years in education sector. He has worked in one of the premier B-Schools like Indian Institute of Management (IIM), Bangalore, India. He has published research papers in Journal of Retailing and Consumer Services (Elsevier Publication), International Journal of Bank Marketing (Emerald Group Publishing Limited), Journal of Research in Interactive Marketing (Emerald Group Publishing Limited), International Journal of Environment and Waste Management (Inderscience Enterprises Ltd.), and International Journal of Customer Relationship Marketing and Management (IGI Global).

Divya Mittal is an Assistant Professor in the Department of Management Studies, Sri Sri University, Cuttack, Odisha, India. Her doctoral dissertation focused on mutual funds. She has a nine years teaching experience. Her research interest includes financial services, waste management, retailing, and services marketing. She has published, among research papers. She has published research papers in Journal of Retailing and Consumer Services (Elsevier Publication), International Journal of Bank Marketing (Emerald Group Publishing Limited), and International Journal of Environment and Waste Management (Inderscience Enterprises Ltd.).