

mCRM's New Opportunities of Customer Satisfaction

Cheng Fang Hsu, and Shinn-Jong Lin

Abstract—This paper aims at a new challenge of customer satisfaction on mobile customer relationship management. In this paper presents a conceptualization of mCRM on its unique characteristics of customer satisfaction. Also, this paper develops an empirical framework in conception of customer satisfaction in mCRM. A single-case study is applied as the methodology. In order to gain an overall view of the empirical case, this paper accesses to invisible and important information of company in this investigation. Interview is the key data source form the main informants of the company through which the issues are identified and the proposed framework is built. It supports the development of customer satisfaction in mCRM; links this theoretical framework into practice; and provides the direction for future research. Therefore, this paper is very useful for the industries as it helps them to understand how customer satisfaction changes the mCRM structure and increase the business competitive advantage. Finally, this paper provides a contribution in practice by linking a theoretical framework in conception of customer satisfaction in mCRM for companies to a practical real case.

Keywords—Customer Satisfaction; mCRM; Mobile Communication.

I. INTRODUCTION

NOWADAYS, customer relationship management (CRM) helps increase business profit for enterprises. Enterprises usually utilizes CRM to know the customers and provide personalized products and services according to increase customer satisfaction for stable and long term relationship [21]. The essence of CRM for a company is to provide a valued relationship and to communicate continuously with customers on an individual basis. That is why CRM is affirmed from in many industries. [20] Through CRM activities, customers have more interests in interacting with the company.

However, CRM is extremely difficult to implement well. With proliferation of technology-based systems development, enterprises have more interactions with customers by CRM system. [1], [25] Recent years, the mobile channel becomes a very effective instrument and new to reach customers anywhere and anytime for building customer relationship management. Mobile phone almost always keeps in the customer's pocket due

to it is easy to use and to communicate with people and it also supports interactive applications for business or leisure. [1], [10] In practice, many industries has started utilizing the mobile medium to promote CRM activities in Taiwan, such as bank, retail stores and telecom etc. To illustrate this situation, E-Sun Bank (www.esunbank.com.tw) in Taiwan is one of the enterprises to operate a mobile phone service for their loyal credit card holders that enables customers to reconfirm for their spending at the same time via short message service (SMS). By this service, the advantage for the card holders is that they can confirm and control immediately to their spending to avoid wrong transactions or charlatanism on the mobile phone and are accessible whenever and wherever needed.

Recent years, customers using mobile phone have presented a very fast growing on value added services, such as games, ring-tones, stocks, GPS, MSN mobile, and information services. It shows a chance for enterprises that mobile channel is a new opportunity to deliver more complete services to consumers, to increase corporate brand image and to supplement company products.[17] There are little researches in the literature about mCRM but few articles have been deep discussing customer satisfaction in mobile customer relationship management [9], [28]. Though the mobile medium access to manage customer relationship, it brings not only new transactions possibilities but also new challenges. To operate a successful mCRM, a stable technological infrastructure is necessary. Therefore, mCRM is integrated to the existing customers and CRM activities so it is supported by the technological infrastructure of the mobile medium system.

This paper aims at an in-depth exploration of the applications customer satisfaction in mCRM and to develop an understanding of the related impacts inside companies. In other words, the purpose of this paper is to assess the challenges facing enterprises when applying customer satisfaction towards mCRM. This paper argued that the existing theories do not explain the phenomenon in depth. Hence, a framework identifies issues in conceptualization of customer satisfaction in mCRM that is a necessary prerequisite for related discussions about a phenomenon. Following a literature review, this paper builds a theoretical framework in conception of customer satisfaction in mCRM, which is completed with the aid of a single-case study. This paper analyzes the phenomenon from the companies' point of view and discusses the implications of the results for both theory and practice.

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II. LITERATURE: MCRM AND CUSTOMER SATISFACTION

Before carrying out a deep research exploration about mCRM applications, it is necessary to identify a clear definition of CRM. Following the results of CRM literature review, it produced a definition of mCRM. CRM is an effect of the continuing evolution and integration of markets, enterprises and industries with individual customers [5]. CRM helps the company to create and maintain a relationship with customers and provides a process of linking customers' knowledge and management. Because different customers have different needs and prefers, they should be treated differently and personally. Hence, CRM is the active process of the knowledge about customers extending, so that enterprises could use that knowledge to personalize the business and strategies in order to satisfy every customer individual need. [19], [21], [27]

CRM not only collects customers' data. It is a complex strategy to strengthen the relationship with customers. CRM is customer-oriented. Enterprises must know their customers and appreciates to the new opportunities given by new information and communication technologies, to build a long-term customer relationship by CRM system. [15] CRM is a corporate strategy and systematic approach based on relationship and one-to-one marketing that aims to integrate management of personalized relationships with customers and to continue customers' value in the long term and to maximize value creation for companies. Furthermore, there are more and more channels to reach customers. It becomes a new challenge to stand on the leader position by accessing the most appropriate media and strategies to use to communicate with customers for companies. [6], [10]

Moreover, internet application is fast developed. It outcomes eCRM has attracted significant attention in many industries [2], [25], [26]. A structured method by which mobile business can be introduced to the CRM field with more and more mobile phone users. So that mCRM has been concentrated seriously [25], [28]. The mCRM integrates wireless technologies into existing operations and strategies on customers. Consequently, mCRM is a corporate strategy and systematic approach realized by a mobile device (such as a mobile phone or PDA). Through mobile value added, the perception of customer satisfaction is promoted on strengthening a long-term customer relationship.

Satisfaction is the consumer's fulfillment response. It is a judgment for products or services they received and it provides a pleasurable term of retained relationship fulfillment [15]. In other words, it is the overall level of contentment with a service/product experience. Hence, the importance of customer satisfaction to the success of customer relationship [16] and to benefits of enterprises [7] has been well documented. In addition, Customer satisfaction is regarded as a primary determining factor of consumer retention. There is the greater the degree apparent that customers show a higher retained relationship with a better consumer experiences satisfaction [29]. The role of customer satisfaction has generally focused on expectations, perceived performance, and satisfaction as modeled within a confirmation/disconfirmation paradigm [13].

Likewise, the comparison of expectations and perceived performance leads to either confirmation or disconfirmation [11].

Customer satisfaction is the process of comparing expectations with perceived performance, hence, is believed to be comprised of a cognitive process within a consumer's conscious control, and an affective process outside of conscious control [14], [24]. When satisfaction becomes an important element, CRM affects retention not only independently but also collaboratively. Moreover, while the main effects of CRM is conspicuous for retention, customer satisfaction is a highly complex and multi-dimensional phenomenon. [11] Most about customer satisfaction research has focused primarily on the "disconfirmation of expectations" model, which states that feelings of satisfaction arise when consumers' compare their perceptions of a product's performance to their expectations. As per the marketing concept, any product should be considered as a "total product" that includes core benefits from the product as well as auxiliary dimensions associated with that product. The customer is satisfied when he/she feels that the product's performance is equal to or more than what was expected (confirmation). Hence, customers have higher retained wills to communicate with enterprises and to develop a future relationship. Customer satisfaction should therefore be understood as relationship specific and individualized [11].

While the concept of customer satisfaction is deeply inset with technology as is the case with mCRM. Customer satisfaction helps enterprises on creating new customer relationships, acquiring or maintaining retained customers by the mobile medium and enterprises delivery their information to customers by wireless networks. Moreover, mCRM also supports enterprises on marketing strategies through understanding customers' needs and improves the service process through the feedback from satisfied customers. The mCRM is not only the critical role of communication in establishing but also aims at maintaining profitable and satisfied customer relationships through mobile communication medium. Therefore, mobile communication sits at a very important position to increase the degree of customer satisfaction in mCRM.

The mCRM promotes satisfaction to customers through the mobile medium on communication, either one-way or interactive, which is related to sales, marketing, and customer service activities conducted. [3], [8] Therefore, the mobile medium provides essentially the same function as any other channel within CRM system. The mCRM has the most important difference that enterprises and customers are connected through the mobile medium and customer satisfaction is also promoted to customers through the mobile medium. Thus, the personalized communication strengthens the relationship between enterprises and customers. This also shows that personalization plays a very important role to promote satisfaction and push up customer relationship. In order to provide a personalized service through the mobile medium, enterprises send a relevant communication to targeted

customers who always result in a significantly higher satisfaction than inaccurately targeted customers. [8], [18]

However, enterprises face a new challenge how communicates with customers, promotes satisfaction to customers and builds a long term relationship with customers by the mobile medium. The mobile medium allows access to an individual anytime and anywhere, whereas all other channels within CRM are restrictive in this respect because customers always carry mobile phone with them. Therefore, to succeed in personalization, enterprises must know what customers want, and need. This understanding offers enterprises a new interaction opportunity by the mobile medium like time and location flexible which are highly valued by customers [4], [12]. Consequently, the mobile medium offers a flexible communication, it increase satisfaction with individual services and deepen customer relationships.

III. THEORETICAL FRAMEWORK

According to the foregoing literature studies, customer satisfaction in mCRM is the essential to promote successful CRM activities. However, enterprises should face some challenges first before taking satisfaction within mCRM. The mobile medium has some limitations like small screen size, limited bandwidth and device diversity. The mobile medium needs to provide a complete range of activities for the companies, so it needs to be integrated with other traditional channels to win a competitive position. [12] First, enterprises must consider how to manage and regulate constraints on customers' personal information which provides the utilization to mobile marketing. The mobile infrastructure influences on mCRM, because of the technology-related. The mCRM cannot delivery activities or services to customers without a stable and valid mobile network.

With a technological in wireless networks development, 3G is a part of life and 4G is coming in the near future. A well mobile infrastructure is implemented through the mobile medium to increase customer satisfaction and build mCRM. By the development and maturation of mobile network system, there are more opportunities and challenges on mCRM. For this reason, communication through the mobile medium is becoming more complex as the content has to attract and encourage customers to be connected.

Moreover, the mCRM system must integrate overall CRM system to communicate with customers through the mobile medium which is a new channel for CRM activities. An integrated mCRM system is necessary for achieving effective management of the interactions across, and information coordination between, different customer communication contacts such as mobile phone, email or internet. Moreover, the mCRM must have the ability to solve all customers' problems. Due to mCRM need customers' information, a customer database is essential for any communication conducted by the mobile medium. To have a communication with customers, basically, customer database must provide customers' mobile phone numbers. [12], [22] Hence, enterprises must attach

importance to this new challenge how to avoid irritating customers without the acceptance by mobile phone contacting. Enterprises should get customers accepting in for the mCRM activities and after providing the information required to push customers to communicate with them. Therefore, enterprises also create a new opportunity to attract customers' attention and to initiate customers and to create a dialogue over the mobile medium.

IV. METHODOLOGY

As mentioned in the introduction of this paper, a single-case study is applied as the methodology to have a deep exploration on understanding of customer satisfaction on mCRM. Additionally, the case-study is considered particularly capable of providing new insights into a phenomenon of which very little is known [23]. In order to gain an overall view of the empirical case, data collection was to get rich primary data on the phenomenon is this paper. Interview is the key data source form the main informants of the company through which the issues are identified and the proposed framework is built.

The interview-structured of the main data source from the issues were identified and the framework was built. Thus, the interviewees were encouraged to tell how they see the main challenges and issues underlying customer satisfaction on mCRM. This paper took a deep look at the technological engineer offered the information on the technology-related issues and the marketing strategy-related issues, while the person in charge of e-commerce. Finally, to validate the findings obtained from the interviews and the results are discussed in the next section.

V. RESULT AND ANALYSIS

The results indicate that efficiency, convenience and personalization are the most important desired of mobile customers determining the differences in customer satisfaction perceptions both on technology and marketing service through mCRM. First at all, there is no denying that technology provides mCRM communication on implementation through the mobile medium. Enterprises operate mCRM server to access of handling such as sending, receiving and storing of SMS or MMS messages for targeted customers. To implement mCRM well, enterprises must consider that build an in-house system for using a managed or cooperate with a partner for a hosted solution. Therefore, a stable technology condition on a hosted mobile marketing platform provides enterprises more competitive advantages in mCRM applications market.

Moreover, enterprises must consider reaching the target customers by picking them who's the number directs SMS messages from mobile phones to the mCRM server. The target customers are touched through all major networks of given by every CRM activities. In Taiwan, many enterprises have a group to manage on mobile service system because the complexity of connecting to each network directly is significant. Mobile connecting takes small cost and offers a connection with target customers for accessing all networks.

However, in order to increase customer satisfaction effectively, the mCRM should be fully recognized by companies. The mCRM plays a messaging interface to send and receive SMS or MMS messages between mobile customers and companies' information systems. However, mCRM still has some limitation. First is setting cost. To set up a whole function mCRM is very high and each mobile connection charges are paid individually. Nevertheless, technology condition reduces the cost of mCRM with the service connection to the messaging network. Consequently, enterprises can communicate with target customers by SMS dialogue.

Additionally, enterprises should separate target customers in mCRM into logic group by their characteristics such as age, gender, jobs, habits, favors and so on. Hence, mCRM can work effectively and also promote customer more satisfied through mobile communications. A Well-designed mCRM process includes everything from the beginning of messages sent to a customer to the return message received from a customer. Of course, mCRM collect a variety of valuable data on the communication with customers to store and analyze for future personalized marketing reference. Hence, enterprises basically provide an efficiency of mCRM by a stable technology system which is built in-house system or a hosted solution with partners.

With an implemented technology facility, the coming challenge of mCRM is how to increase customer satisfaction by marketing strategies. First, enterprises have to attract customers' interest and to initiate them communication with companies. Through marketing activities, enterprises should attract existing interested customers and the potential customers. Once they are interested, they will feedback by the mobile medium in communication while they are touched by the promoted mCRM activities. Enterprises target customers to establish the purpose of communication and design the context of message by taking an applicable medium to delivery. Thus, mCRM is integrated not only concept but also activities into whole marketing strategy. National communication commission issued that 101.6% mobile users in 2006 in Taiwan. This proves the mobile medium is the most effective and efficient method. For the purpose of increasing customer satisfaction and managing customer relationships, customers to whom messages will be sent must have already registered or otherwise given their permission beforehand. Enterprises can communicate with them through the mobile medium and delivery messages. Hence, most enterprises plan to develop their own customer database after purchasing or renting database from providers. Permission is the validity of the customer's permission which is depends on the service provided [26].

Therefore, permissions should be updated successively to collect the more valuable customer information. Enterprises can send the special offers via SMS for whom giving permission from their customer database. To aim at the targeted customers for their special needs, wants or preferences, enterprises should consider integrating of mobile marketing into CRM overall activities in marketing mix through customer

database system.

VI. CONCLUSION

With the mobile technology development, many enterprises have already utilized the mobile medium to promote CRM activities. The theoretical implications in this paper are presented as following. First, building on extant literature on mCRM, this paper advances a conceptualization of customer satisfaction in mCRM. The challenge in mCRM is to ensure that the right messages are sent in the right way to the right people who comes with a positive perception on customer satisfaction. However, message may be missed or re-sent with the wrong medium at the wrong time by traditional CRM. [26], [27] Customers give permission to receive messages by the mobile medium of their preferences and the utilization of the mobile medium has to overcome these problems. According to the case study, this paper indicates that mCRM is based on several technology- and marketing strategy-related issues to promote their customer satisfaction. With the consumer consciousness rising, customers have more and more choices which channel they use for communicating with companies. The channel is the new and big opportunity for enterprises to create business and retain customers. Hence, enterprises approach mCRM to increase customer satisfaction by utilizing the mobile medium effectively.

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