Extend Technology Acceptance Model To Explain CRM Adoption In China's Banking Industry

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by

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Abstract

Banking industry in China is witnessing a soaring development, which has also led to fierce competitions within the market. Customer relationship management (CRM) provides with competitive advantage through a firm and long-term relationship with customers. This article aims to explain CRM system adoption among bank's salespeople by applying technology acceptance model (TAM). First, prior TAM researches are concluded and presented to serve as guidance as well as comparisons of this research. Second, results from a bank-based data collection and study indicate the influence of individual factors, social normative and organizational facilitators on the CRM adoption behaviour. Finally a conclusion of the study is made and practical implications are presented.
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Chapter 1. Introductions

1.1 Research Background

In the new business environment, consumers are more informed. Undoubtedly, they have become cleverer, more influential and more privileged to choose. The interaction between organizations and their customers are no longer like the way it was. Customers' needs must be satisfied by offering proper and value-added products. In the service industry, customer satisfaction has been perceived as the key factor of success (Shaw, 1993). As a result, a stable, long-term and win-win relationship with customer is strongly valued by organizations. However, more competitive managerial approaches have to be sought to achieve the goal and then customer relationship management (CRM) came to identify itself as that proper approach, (Winer, 2001). By using the powerful information technology, organizations are able to integrate resources, establish knowledge databases, automate and optimize business process. A shift from being product-oriented to being customer-oriented was brought by CRM. (Anton, 1996). Nevertheless, it is not that easy to rein this powerful weapon. In fact, many companies suffered failures in the implementation of CRM, and a lot of them claimed they spent huge investment in CRM but did not receive what is expected to return (King & Burgess, 2007; Crosby & Johnson, 2000). Some even claimed that they paid a fortune only to disturb daily work and to put their organizations in a mess.

Many scholars have tried to explain the reason behind such tragedies. Some pointed out that those organizations who had failed were blamed for not implementing the qualified system (Davenport, 1998). Some other scholars blamed the poor system usage as the main factor of CRM failure. It is true that the very essence of CRM is based on information technology (Anton, 1996). Without adopting the CRM information system, CRM is nothing more but a word in the air. Hence, only the success in CRM system can bring the success of managing customer relationships. System adoption is one of the key issues of information system (in this case CRM system) success (Segars & Grover, 1998). The managerial expectations can hardly be
achieved if users reject to use the system. Thus, discovering the factors determining the actual use of CRM systems can give managers a chance to improve the effectiveness of introducing CRM.

Technology acceptance model (TAM) is the expert to explain information system adoption (Venkatesh et al, 2003). Though the early models are used to explain people's intention to use technologies such as computers and e-mails, it has now been extended to explain users’ adoption behaviour of a wide range of information technologies. TAM is capable of investigating individual's believes about one information technology's usefulness, ease of use and other variables that affecting his or her intention of using the system (Davis, 1989). An extended TAM framework will be used in this research as the basic research framework to explain CRM system usage.

1.2 Research Scope

The context of this research is set in the banking industries of China. Fierce competition has been existing within the major banks in China recently and banks have all tried to seek ways to maintain current positions and compete with each other. CRM corresponds to the banks’ needs and was on the way to form as a core marketing strategy in the management of those banks (Li et al, 2007). It is of great significance to investigate employees' attitude toward CRM system. We invited bank employees from local branches of the major Chinese banks to respond to our study. However, is TAM suitable for studying IS adoption in China? Some have examined the issue claiming that slight modifications be made on original TAM framework to fit for the situation (Calantone et al, 2006), they concluded that through modifying the framework, TAM is able to fit for various cultural context. Through investigation, we found that although the banks have already implemented several information systems to deal with daily business like customer tracking, it is far away from the CRM. As CRM is mainly a marketing strategy and its main users are salespersons, we will only be investigating the salespersons' acceptance of the system.
1.3 Research Aims and Questions

Similar to other TAM studies, this research tries to explain the adoption of new information technology. Particularly, the study focuses on the adoption of CRM systems in the context of Chinese banking industry. Our research is determined to examine some major variables which influence users' intention of using the particular system. Some of the variables to be examined were adopted directly from prior TAM studies. Naturally, we altered some to be put into the examination of CRM system while the original TAM is applied to general IT applications. Thus, our first aim is to discover determinants underpinning system usage by introducing TAM and develop a proper research framework. With this framework we hope to find some practical implications for practitioners to understand salespersons' perception of the CRM system and to assist them to achieve the implementation of a more successful CRM.

Though many researchers have applied to study the adoption of various IT either under an industrial circumstance or public service circumstance (Park et al, 2008), the researches on users' acceptance of CRM system are found to be limited (Avlonitis & Panagopoulos, 2004). Therefore, the second aim of this research is to enrich the research in this domain, contributing to a more abundant TAM study.

In such a research context, we are interested to find out if there is anything different from prior studies. More precisely, is there any of the variables (e.g. personal innovativeness) adopted in the previous studies has a stronger or weaker influence on the intention of use, or are there anything beyond the prior scale that would become a valid factor. When looking into the question, we asked if there is difference in system use between salespeople and their managers. We also believed some external conditions should be taken into consideration, which we have to explore. Hopefully, those questions are expected to be answered during the research.
Chapter 2. Literature Review

2.1 CRM and CRM systems

2.1.1 Concept and Function

To have a knowledge of customer relationship management and the systems is important before looking into CRM system adoption. In the 1980s and 1990s, traditional marketing management strategy was questioned. A call for altering into new marketing concept which focuses on collaborating with strategic partnership and maintaining strong relationship with customers was answered actively in the industry (Webster, 1992). As price and products were no longer the only critical differentiator, delivering superior values to customers became the way leading to customer satisfaction and customer loyalty (Stone et al, 1996).

New managerial approach kept emerging in the two decades commencing 1980. Boulding et al (2005) suggested that the birth of CRM is owed to the constant innovation and merging of marketing ideas, new technology and CRM organization forms. CRM was derived from those new marketing concepts such as "Relationship Marketing" (Jackson, 1985). Actually, some scholars even defined CRM as "information-enabled relationship marketing" (Ryals & Payne 2001:3). The term "customer relationship management" was first raised in the IT practitioner community and was defined differently by those practitioners according to their own perspectives. However, apart from the divarication, CRM is commonly viewed as advanced IT-based sales force automation technology (SFA). The reason why various perceptions exist is that practitioners (e.g. managers, management consultants) had inconsistent understanding of what constitutes, in fact many of them see CRM as a collaboration of separated functions (Payne & Frow, 2005). The two authors made a unified definition through revising former articles in the academic community as well as opinions from practitioners they interviewed. They considered CRM as an integration of "Relationship Marketing" and IT, which requires "a cross functional integration of processes, people, operations, and marketing capabilities that is enabled through information, technology, and application" (Payne & Frow,
The definition suggested that CRM as a strategic approach is supposed to improve shareholder's value by developing appropriate long-term relationships with customers and exploring new customers. The development of IT and e-commerce enabled new communication channels which changed the interaction between customers and vendors forever. Thusly, e-commerce has claimed its importance on CRM. Then eCRM made its debut as an advanced form of CRM which happens on the Internet. ECRM has brought superior benefit to organizations, Chandra and Strickland (2004) indicated the innovation of eCRM to be (1) adding customer contact channels to include the Internet and mobile; (2) equipping interfaces to other system such as ERP, combining separated systems to serve as one central system; (3) highly individualized customization and personalization based on individual audience needs; (4) the system more concentrates on customer's needs and is not limited to department or business units; (5) reducing time and cost due to an easier way of implementation and expansion and (6) cutting off system overhead by transferring it on browser. As Greenberg (2001) implied, eCRM is the future of CRM.

In general, CRM (refers to both CRM and eCRM) is a managerial tool based on IS to assist salespeople at daily work, helping the organization to acquire and retain customers. It puts emphasis on the improvement of product quality and marketing functions, and then stresses on cross-selling and providing product or services quickly and accurately. Basically, the functions of CRM can be concluded as three aspects: customer maintenance, customer churn warning and potential customer detection. Customer maintenance is perceived as a more critical function than the others as it is more efficient and cheaper to continue an existing relationship than to create a new one (Reichheld, 1996). Data mining and data warehouse act as the core technology to enable system activities such as customer tracking and customer segmentation. The design of CRM must consider all the interactive activities happening with customers. It is also suggested that CRM should possess the ability to interact with other IS in the organization, which reduces the risk of turning other systems into information isolated islands (Buttle & Turnbull, 2004). Wu and Wu
(2005) concluded that a complete CRM should include (1) Sales force automation solutions, (2) customer data storage and processing solutions and (3) integration of call center and net capabilities.

2.1.2 CRM in Financial Service Industry

CRM is applied in many industrial sectors, among which the financial service sector stand as a big consumer of CRM products. The reason lies in the type of the products and services provided by financial service companies (Johnson et al, 2008). Most of the products and services offered by financial service organizations can be transferred online, which provides a convenient condition for implementing CRM. In fact, most finance merchandise is delivered in digital form rather than in physical form. Another cause of adoption of CRM in financial service industry lies in rising of affluence and global aging population. Aging population brought the increasing the market size of retirement-related funds, together with a rising of world affluence caused the demand for financial service to be growing. This growth is accompanied by competition. In order to obtain more quality customer, many financial service firms have turned to CRM to maintain customer loyalty (Chen & Ching, 2006). In some articles, CRM is considered as the extraction of part of the enterprise resource planning (ERP) system to become a expert system in dealing with buyers, because ERP is claimed to be weak in that part (Payne & Frow, 2005). Many evidences have shown that CRM has the ability to bring benefit to financial service companies. A report revealed that banks in the United States who adopted a customer-relationship centric strategy have witnessed considerable growth in profits (Lamparello, 2000). Furthermore, a study in Taiwan claimed that banks in Taiwan who had adopted CRM performed much better than those had not (Liu, 2004). Similar to Taiwan, CRM is at the infant stage in the mainland of China's banking industry (Li et al, 2007).

CRM is not only perceived as a profit accelerator of banks, but also a instrument to keep sustained development within the organization. Gandy (2000) indicated that banks have more chances to maintain substantial competitiveness when adopting an appropriate customer relationship management. As a matter of fact, data mining
activities accompanied with CRM system give the banks a chance to discover intelligence, predict customer behaviour and carry out comprehensive analysis, all of which can be used to solve various problems in banking industries (Rygielski, Wang & Yen, 2002). Applications such as sales forecasting, database marketing, fraud detection and customer loyalty are described with overall concluding advice practitioners in the banking industry not to lose the chance.

Though in a constrained voice, there are also concerns about the adoption of CRM in the context of financial service industry. Despite the poor usage rate (the topic will be presented in detail subsequently), security issue came up to be a major problem that affecting the adoption of the system (Chen & Ching, 2005; Ma, Li & Wang, 2009). Some of the data in banks, securities and insurance companies remains highly confidential and need authorities to be accessed. Meanwhile, one of the main features of CRM is to collect and store customer data, which requires organizations to consider data privacy. As a result, conflicts cannot be avoided in striking a balance between ease of use of the system (e.g. less authority concerns) and information security features. Moreover, integrating and updating a good information security feature is both costly and time-consuming, which results in another obstacle (Seify, 2006). Lawler et al (2004) studied the website application of CRM technology in the financial service sectors, they also concerned that security issue may be too complex to be addressed.

2.1.3 CRM Failure and Success

Although practitioners and academic researchers all advocate of implementing CRM in industries, the result of practices are not so desirable. As a matter of fact, many related researches and reports have revealed one surprising but true secret that CRM practices failed in more than half companies who implemented it. Actually, information system failure especially the failure of SFA systems and CRM systems has long been concerned as a research domain in the last two decades. Early in the year of 1996, Block and his colleagues reported a ratio of 61% organizations who had facilitated SFA systems did not get obvious outcomes in return (Block et al,
More Recently, a broader survey conducted by Giga Group (2001) estimated that 70% of companies would fail in the end if no changes in the implementation strategy was to be made. A survey showed that only 62 out of 202 CRM projects were successful to see a improvement in selling and satisfying customer (Dickie, 2000, as cited in Mendoza et al, 2006). Afterwards, many scholars have discovered the issue of system failure (Tanner & Shipp, 2004; Speier & Venkatesh, 2002; Robinson et al., 2004) while some others tried to discover the hidden reasons behind the phenomenon (Davenport, 1998; Mendoza et al, 2006; Ko et al, 2007; King & Burgess, 2008).

From an organizational and managerial perspective, the failure lies in the inconsistence between the organization and the particular CRM application. Davenport (1998) examined the factors in the above aspect and claimed that the biggest problem is not within the technical challenges of system implementation; it is the inappropriate match of business needs of the organization and enterprise system that turned down the success.

Many investigated the issue in the front-end use. Salespeople are the core of information exchange with customer (Morgan & Hunt, 1994) and thus play a critical role in the formation and retention of customer relationships (Turnbull & Buttle, 2004). Study shows that salesperson's diffusion of new IT has a strong association with CRM failure. The organizational context is one of the determinants of IS success (Ein-Dor & Segev, 1978), which is also considered as success factors in CRM projects (Saeed et al., 2011). Their research confirmed the necessity of top management support as an organizational intervention of the successful implementation of CRM. Bose (2002) reviewed the perspective of IT and CRM success by studying the system development lifecycle (planning, research, system analysis, design, construction, implementation, maintenance and documentation and adaption). He suggested that the most important factors of IT success lie in the first two phrases.

Others have examined the problem in a synthesized way. The results of Giga survey presented that the poor CRM adoption owes to three main reasons: the
underestimation of the complexity of CRM, the lack of explicit organizational goals and the tendency of inappropriate (too much or insufficient) investment in CRM software package (Giga Group, 2001). Another consulting institution investigated the perception of CRM among the two thousand most established enterprises worldwide. Results suggested that although most of them speak highly of CRM, the poor knowledge of CRM leads them to confusion when facing CRM practically (Meta Group, 2000, as cited in Liu, 2004). Garnter Group (2001) blamed organization practitioners to take CRM for granted, not paying enough attention to the complexity.

In addition to the outcomes from consultancy groups, researchers as well have contributed to the synthesized study. CRM is concerned with people, business process and technology within an organization, to build a good CRM should start from understanding the three aspects (Chen & Popovich, 2003). Mendoza et al. (2006) studied the critical success factors (CSFs) of CRM and constructed a model to be organizations’ guidance of implementation and diagnosis of CRM. They confirmed the people, process and technology perspective and proposed three categories of thirteen CSFs based on a combination of their own findings and former works (see table 1). From their point of view, failure in any of the categories can lead to the failure of the whole CRM project, and failure in any of the factor reduces the quality of CRM implementation. King and Burgess (2008) compared CSFs of CRM and ERP, pointing out that top management support and interdepartmental coordination to be two common top CSFs. However, knowledge management and the change of culture to customer-orientation organization are two unique factors of CRM success.
Table 1. Categorized critical success factors of CRM. Adapted from (Mendoza et al., 2006:921)

<table>
<thead>
<tr>
<th>ID</th>
<th>CSF</th>
<th>Human factor</th>
<th>Processes</th>
<th>Technology</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Senior management commitment</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Creation of a multidisciplinary team</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Objectives definition</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Inter-departmental integration</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Communication of the CRM strategy to the staff</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Staff commitment</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Customer information management</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Customer service</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Sales automation</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Marketing automation</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Support for operational management</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>12</td>
<td>Customers contacts management</td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>13</td>
<td>Information systems integration</td>
<td>X</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2.2 IS Success and TAM

2.2.1 Information System Success

Bakos and Treacy (1986) stated that successful IS implementation can enhance corporative competency, on the contrary, it could be a disaster that organizations only paid to get into chaos. Information system (IS) success has been regarded as one essential domain in the information system studies as IS experts have been devoting themselves to finding out the determinants of IS success (DeLone & McLean 1992; DeLone & McLean, 2003). The first International Conference on Information System held at the beginning of 1980s, called for researches into management information systems (MIS). During the following ten years a lot of researches have been done examining various variables that determine the success of MIS (Bailey & Pearson, 1983; King & Epstein, 1983; DeBrabander & Thiers, 1984; Green & Huges, 1986). However, none of those researches achieved to include the analysis of a complete set of variables. DeLone and McLean (1992) summarized the previous studies and raised the "DeLone & McLean Model of Information System Success (D&M IS success model, see figure 1)". The study put all the variables those former studies examined into six categories: system quality, information quality, use, user satisfaction, individual impact and organizational impact. The model suggested a logical association among the six categories of variables. According to the model both system quality and information quality act as a joint element to influence the
system use and user satisfaction while the two latter variables affect each other either positively or negatively. Additionally, user satisfaction and use both has a direct impress on individual impact and eventually organizational impact derives from individual impact. The model and classification introduced in the study presented an integrated view of IS success factors. The model was testified later and was accepted by the academic world (DeLone & McLean, 2003).

Figure 1. D&M IS Success Model. Adapted from (DeLone & McLean, 1992:84)

2.2.2 TAM and Theory Development
Technology acceptance model is another fundamental theoretical framework of explaining system success. TAM (in general term, not restricted a specific TAM model) has long been regarded as the basis of analyzing the linkage between IS adoption and user behavioral intention (Mahmood, 2005). TAM was originated from Theory of Reasoned Action (TRA), which suggested that a person's attitude toward a behavior decides the likelihood of acting it (Ajzen & Fishbein, 1980). According to Bagozzi and Warshaw (1992), the complexity and uncertainty of introducing new technology such as information system make people intend to learn the technology first rather than use it immediately; when they learn, they seek information about the object. Before Davis, many measures of users' acceptance were not very much related to the use of information systems (Srinivasan, 1985).
Davis (1989) endued the variables of the acceptance of information technology with two major aspects: perceived ease of use (PEOU) and perceived usefulness (PU). It is important to understand PEOU and PU in order to perceive the factors of technology acceptance. PU reveals that the more an individual believe in the capability of obtaining better work performance by using new information technologies, the more likely he/she will get involved in system adoption. If someone thinks it difficult to use the system, the less likely the person is going to accept and use the technology. The effect of PU and PEOU is consistent with the findings of Bagozzi and Warshaw (1992) that if it is the negative information about the system that users are provided, they would feel uncomfortable or unconfident with this technology.

Findings of the study of the first TAM model conducted by Davis (1989) implicated that perceived usefulness is not solely decided by the external variables but also influenced by perceived ease of use. The findings also showed that perceived usefulness outweighs perceived ease of use in the correlation with information system usage and behavioral intention is the determinant of actual use of information technology. With the development of the theory, many turned to admit that PEOU is not as significant as PU in impacting actual usage (Davis, 1996; Venkatesh & Davis, 1996; Hendrickson & Collins, 1996). Some indicated that PEOU has strong effect on PU but the direct impact on actual usage is week. Adams et al. (1992) replicated Davis's work, they conducted two studies: study one reinforced the concept that PU overweighs PEOU in actual usage, however, study two illustrated both variables are important. They concluded that the effectiveness of PU and PEOU varies from different use cases.

There had been many debates about the determinants of PU and PEOU since Davis introduced the two phrases. Some authors including Davis himself have questioned the integrity of TAM and suggested either to modify the model (Malhotra & Galletta, 1999; Venkatesh, 2000; Venkatesh & Davis, 2000). The following decade since the debut of TAM witnessed a merge of various TAM-based models. Agarwal and Prasad (1999) extended the model by introducing individual differences as crucial
variables of system usage, they even denied the models which did not take individual differences into consideration. Venketash and Morris (2000) studied gender and social influence in affecting acceptance, finding that men's usage is more subjected to perceived usefulness while women's are more impacted by perceived ease of use. Besides, Venkatesh (2000) made further research and attributed three new determinants to the user acceptance: control, intrinsic motivation and emotion. His studies revealed that system-independent constructs should be paid more attention than system-user interactions.

In 2000, Davis and Venkatesh (2000) proposed TAM2 as the new model to analysis user acceptance of information technology. TAM2 made a great progress in explicating and forecasting user acceptance of information technology at work. The main improvement of TAM2 is to "include additional key determinants of TAM's perceived usefulness and usage intention constructs, and to understand how the effects of these determinants change with increasing user experience over time with the target system" (Venkatesh & Davis, 2000:187). The additional key determinants they obtain includes the social influence processes (SIP) and cognitive instrumental processes (CIP). SIP includes three aspects: subjective norm refers to the perceived social convention to perform a behaviour or not (Ajzen & Fishbein, 1975); Voluntariness refers to how users react to a system that is not mandated by organizations (Hartwick & Barki, 1994); Image refers to users' perception of what positive images they will obtain when they accept a new technology (Venkatesh & Davis, 2000).

It is indicated that the cognition of matching work goals with outcomes of using information systems to achieve those goals. Four factors are applied to CIP: job relevance refers to the degree of system's supportiveness to job tasks; output quality is about how well systems will perform job tasks, it is usually positive; result demonstrability reveals the attribution of information systems to the better performance (Venkatesh & Davis, 2000). Findings of studies on TAM2 suggested there are two sides to enhance acceptance. On the social influence side, social information should be released to increase the prestige associated with system use.
On the instrumental side, systems should be built sting to work tasks, should be able to improve output of effort and should be simplified for use; in addition, it is also important to increase result demonstrability (Venketash & Davis, 2000; Venketash et al., 2003).

Later on, Venkatesh et al. (2003) proposed a unified approach called Unified Theory of Acceptance and Use of Technology (UTAUT), which integrated the main existing models. It is said to explain 70% of variance in behavioral intention, which is considered to make an impressive progress than the original TAM. The theory combined all the previous studies altogether containing TRA, TAM, Motivational Model, Theory of Planned Behaviour (TPB), a combination of TAM and TPB, Innovation Diffusion Theory, Social Cognitive Theory and Personal Computer Utilization Model and eight prior TAM models. The unified view suggested four areas of user acceptance, which are performance expectancy, effort expectancy, social influence and facilitating conditions, inviting new elements such as gender, culture, and age as variables to predict usage.

2.2.3 TAM and IS Success
TAM investigates system adoption via understanding user acceptance of the system, which can be perceived as testing the "USE" construct of IS success model. Some authors have studied the success of IS based on the combination of the two models. Posterior studies made further tests on the impact of the six constructs of D&M model. Seddon (1997) modified the D&M model by incorporating PU from TAM as a construct to the model. He regarded system use construct as a matter of reaction that using the system is beneficial, which is considered as a factor attributing to PU in TAM theory (Davis 1989). Rai et al. (2002) found that factors such as improved productivity of individuals in PU are also an element in individual impact in the D&M model. As a result, they viewed that there is a relation between PU and individual impact while associations between PU and user satisfaction and between user satisfaction and system use do not necessarily exist, the relationship might depend on other factors. Sabherwal et al. (2006) studied the individual and
organizational aspects, their findings questioned some of the commonly agreed views. They supported Rai et al.'s (2002) findings claiming that the association between PU and user satisfaction, between user satisfaction and system use is not testified, but new relations between system quality and system use is perceived. The change in IS success model reflects that TAM and extended TAM (e.g. UTAUT) has made impacts on the model. When D&M model is updated to include intention of use (via perceived usefulness), user attitude toward ISs, net benefit, facilitating conditions and service quality as new constructs (Seddon, 1997; Rai et al., 2002; DeLone & McLean, 2003; Sabherwal et al., 2006), an obvious linkage between the two models are perceived. For instance, the system quality construct of IS success model can be explained by PU and PEOU in TAM and effort expectancy in UTAUT (Davis, 1989; Venkatesh et al., 2003).

2.2.4 Applying TAM to explain CRM adoption
Practically, TAM has been being used as an application of investigating user acceptance in industries. However, the earlier period of research on TAM is much focused on simple IT software or applications (Davis, 1993). Later on, with the development of IT and fast growth of investment in IS, the model began to be used in a organizational context and multiple areas (Venkatesh & Davis, 1996). The trend was to practically apply to specified fields including electronic courseware (Park et al., 2008), telemedicine (Hu et al., 1999), Digital Library (Davies, 1997) and E-Commerce (Pavlou, 2003). It tends to emphasize on prediction of usage and to concentrate more on the personal-level acceptance with respect to individual differences (Igbaria & Tan, 1997).

Though not many, there were still some authors have done TAM studies on SFA/CRM adoption. As salesperson is the main user of the system, the perception of salespersons on the new technology must be examined. Some have conducted researches on sales personnel's perception toward SFA/CRM systems (Speier & Ventakesh, 2002). The implications of their research suggested that personal characteristics together with age and sex of sale persons have a strong impact on the
acceptance. Schillewaert et al. (2004) also explained salesperson's adoption of CRM systems, their study regarded social influence, individual characteristics and organizational facilitators as three perspectives determining users-perceived usefulness and ease of use. Their results suggested that system design and implementation should "target those salespeople with innovative predispositions toward information technology", and a good training can probably change salesperson's computer self-efficacy, turning which into a positive factor. Schillewaert at al. (2004) have done research focused on the contribution of user training and support to the relationship between system adoption and salesperson performance. The research sample and data they obtained implicated that user training and support has a significant impact on the success of sales force automation technologies. An 8% increase in adoption is claimed when users received high-quality training. Buehrer et al. (2004) reinforced Aheame's results, their findings showed that lack of management and technical support is the main obstacle of system adoption and the most effective way to tackle it is through training. Robinson et al. (2004) stated that human resource sector can help to increase use rate by assessing skills of relevant information technologies in recruitment and selection as well as rewarding outstanding performers who are much involved in system use.
Chapter 3. Theoretical Framework and Research Model

3.1 Replication of Prior Models

The original model provided a prototype for TAM research; however, modification of the model is needed to employ TAM practices to a particular technology or system (Davies, 1997; Pavlou, 2003). The model used in this study is an extended TAM model derived mainly from two prior studies of Schillewaert et al. (2004) and Avlonitis and Panagopoulos (2004). Why do we use those models? Because both of the studies aimed to explain information technology adoption in sale force of organizations with a slight difference in the investigated information system, which throws light on the same target we want to study. The target system for the first study is sales automation systems whereas the second is CRM system. Though there is slightly different in target systems, the target respondents are the same - salespeople and sales managers. Moreover, it is said that under most circumstances, the term SFA and CRM is interchangeable (Payne & Frow, 2005). The two models are presented in figure 3 and figure 4.

Basically, the two models share the same category of external variables, which are individual factors, organizational facilitators and social influence. Notably, user satisfaction construct and salesperson performance in Avlonitis and Panagopoulos's (2004) model will not be considered in our research. As is stated in the literature, the user satisfaction construct is adapted from the D&M IS success model which is not included in most TAM studies. The salesperson performance construct is to test how the acceptance of CRM technology can improve salesperson's performance, which is not the purpose of this research.

In social influence construct, they both involved influence from supervisor, peer and competitor while Schillewaert et al.’s (2004) study considered an extra factor which is customer interest. The reason is that customer will gain more satisfaction if they are served by this new technology (Campbell, 1999). Nevertheless, this customer factor is more referred to customer's satisfaction of IS than a focus of CRM user acceptance. Hence, the factor is excluded from our model.
In the individual influence construct, both studies have included personal innovativeness and computer self-efficacy. Computer experience is also considered as a factor in the construct in Avlonitis and Panagopoulos's (2004) study. In addition, our research has included CRM experience as a factor consists of the individual perception construct. The reason is, if one user has some experience of using the system, he or she will surely has either a positive or a negative perception of CRM which affects his perceived usefulness and ease of use.

The latter study has put user participation which refers to the design related activities performed by target users in the system development process as a factor in the organizational facilitator construct (Hartwick & Barki, 1994). We excluded accurate expectation factor in the second stem model because the definition of the factor is vague and the authors have not well justified it.

![Figure 2. Original TAM model. Adapted from (Park et al., 2008:166)](image-url)
3.2 Model Description

Our research is an investigation of the CRM system adoption in China's bank corporations, which is basically guided by the TAM framework. The proposed conceptual model for this study is illustrated in Figure 5.
Figure 5. Conceptual Model

Organizational Facilitators
- Training (H2-a, b)
- User Participation (H2-c, d)
- Technical Support (H2-e)
- IT Infrastructure (H2-f)

Social Influence
- Competitor Utilization (H3-a)
- Peer Influence (H3-b, c)
- Supervisor Support (H3-d, e)

Individual Influence
- CRM experience
- Computer Self-efficacy
- Personal Innovativeness

Perceived Ease of Use
H1-a
H1-b
H1-c

Perceived Usefulness

System Use

Figure 5. Conceptual Model
3.2.1 Intrinsic Factors

The original TAM model (see figure 2) illustrated the logics among observed constructs that external variables have a impact on both perceived usefulness and perceived ease of use, and both of the two user-perceived concepts affect their attitude toward using the technology. The actual use or not use of the system is determined by users' behavioral intention which is determined by attitude as well as PU. It is obvious to see from the logical chain that PEOU and PU which directly determine intention of use are the critical constructs. The two constructs are well defined by previous studies in IS and psychology (Doll & Ajzen 1992; Davis et al. 1989). Perceived Usefulness indicates that to what extent a person believes the adoption of information systems can improve his/her work efficiency and effectiveness. Perceived Ease of Use is an individual's believes about how much effort he/she will spend to master the new technology. The positive influence of PU and PEOU on intention of use is backed by expectancy theory (ET) and innovation diffusion theory (IDT) respectively (Venkatesh et al., 2003). TAM also suggests that the perceived ease of use has an impact on perceived usefulness. Indeed, an easy-to-use system reduces the time to complete one task, thus productivity and efficiency is promoted (Davis et al., 1989). Viewing from the above, we hypothesize as follows:

**Hypothesis 1-a.** Perceived usefulness of CRM system has a positive influence on system use

**Hypothesis 1-b.** Perceived ease of use has a positive influence on system use

**Hypothesis 1-c.** Perceived ease of use has a positive influence on perceived usefulness

3.2.2 Organizational Facilitators

As marketing researches pointed out, the number of organizational factors can be considerable and each of them can affect salesperson's perception of the system
(Singh et al., 1996). To be specific, it is stated that training will greatly enhance PEOU and PU of a system (Igbaria & Guimaraes, 1995; Pulling et al., 2002). Training enables potential users to understand CRM and practise the system operation, it usually teaches users to apply the technology for specified work processes. Training lets users to keep in mind that they can benefit from using the system and then usefulness will be perceived by users (Davis et al., 1989). Furthermore, salespersons are among those who less use computers in the organization, so the impact of training on them could be more obvious than others (Avlonitis & Panagopoulos 2004). Third, salespeople are more likely to use the system after training; otherwise the time and effort they spent in training may be wasted.

Technical support in this case means the quantity and quality of operational support perceived by users. Technical support suppresses users' fear of using the system, and with more practices done, users' operational skills will reach or even exceed the required level. Thus, technical support strengthens perceived ease of use.

Some studies have included the factor of user participation (participating in the process of system design) because it is believed to have positive impact on intention to use the system if user participates in the design process (Doll & Torkzadeh, 1989; Speier & Venkatesh, 2002). It is tested to be contributing to users' understanding of the system, increasing acceptance of change, and increasing voluntary of use (McKeen et al., 1994).

In the interactions with target respondents, we found that some complained indirectly about desktop conditions. They felt worried that the computers would be too old to run the system well. Indeed, even if a system is designed well, the human-computer interface (HCI) is easy and clear, it cannot run on a shabby desktop. Even if users advocate using the system, a slow and unstable operation will affect their passion which will certainly add to the difficulty of use. So, at last, we hypothesize that the conditions of IT infrastructure is another factor.

Thus, we conclude the hypothesis for organizational factors
Hypothesis 2-a. User Training has a positive impact on PU
Hypothesis 2-b. User Training has a positive impact on PEOU
Hypothesis 2-c. User Participation has a positive impact on PU
Hypothesis 2-d. User Participation has a positive impact on PEOU
Hypothesis 2-e. Technical Support has a positive impact on PEOU
Hypothesis 2-f. IT Infrastructure has a positive impact on PEOU

3.2.3 Social Influence

As was stated in the literature review, system use is also affected by social influence processes (SIP). Psychologists have defined SIP or social norms as people's internalization of his or her reference(s) and particular interpersonal agreements with others that made in certain social situations (Triandis, 1989). In fact, this social norm is a nature lies in individuals, which can be interpreted by subjective norm in theory of reasoned actions. "Subjective norms reflect the normative beliefs of important others and allow the focal individual to learn about technology and adapt his/her own belief structure" (Schillewaert et al., 2004:327, as cited in Fishbein & Ajzen, 1975). It is an influence generated in everyday interactions and communications within employees that recipients learn about innovations and eventually adopt them. The sources of social influence may be inside the organizations or outside. In the context of sales force, the internal social factors are created by peers and sales supervisors while the external factors stem from competitors and customers (Pulling et al., 2002)

The impact of peer usage is can be viewed as influencing individual's beliefs and actions by information (e.g. the effectiveness of using the system) supplied from colleagues. Second, it will be easier for one to use the system if he or she can ask experienced peers about how to operate the system. Third, peer usage can also be taken as an opportunity cost that motivates the focal salespersons to use the system as they may discover their performance are falling behind the users.

Competitor Utilization refers to how focal salespersons think of salespeople from competitor organizations voluntarily apply sales system in their job.
is a natural personality that spurs salespeople to beat their competitors (Brewer, 1994), which may presented in the adoption of new technology when competitors have already adopted. Therefore, competitor utilization is considered as a factor directly stimulates focal salespersons to adopt CRM to keep competitive advantage. Supervisor acts as an essential role in salespersons' adoption of IS. Sales supervisor support indicates the extent to which supervisors advocate the use of new system and explicitly encourage subordinate's use of the system. Many marketing researches have highlighted that supervisor support and feedback would guide sales rep's intention toward behaviour (Singh, 1993). More specific, supervisors influence their subordinates' use of IS through self-usage or other convictive behaviours (Igbaria et al., 1996). Sales supervisors will probably raise CRM as standard sales approach, which stresses the usefulness while neglect the difficulty to use. Hence, the hypotheses for organizational facilitators are:

**Hypothesis 3-a.** Competitor Utilization has a positive impact on system use  
**Hypothesis 3-b.** Peer Influence has a positive impact on PU  
**Hypothesis 3-c.** Peer Influence has a positive impact on PEOU  
**Hypothesis 3-d.** Supervisor Support has a positive impact on PU  
**Hypothesis 3-e.** Supervisor Support has a positive impact on system use

### 3.2.4 Individual Influence

Salesperson might share the same knowledge in their job, but they can hardly share the same personal characteristics. So, different perceptions will occur when salespeople are confronted with the same system. Personal characteristics will have an effect on system adoption via influencing individual's belief about the system. In terms of system adoption, personal innovativeness was defined as the attitude formed by cognition toward the adoption of the new information system (Schillewaert et al., 2004). Judged from that using a new system could be risky (e.g. disturbing normal work procedure), only those who are innovative enough to take the risks will positively face the using of new technologies (Agarwal & Prasad,
In other words, innovative individuals perceive less risk in using the system than others do, which increases optimism in their perceived ease of use. On the other hand, as for the less innovative, mandatory CRM use will put more stress and complexity on their job.

Computer self-efficacy refers to individual's perception on his or her ability to use a computer and computer programs. The term is grounded and derived from Bandura's (1986) self-efficacy. Compeau and Higgins (1995) defined the term as "individual’s perceptions of his/her ability to use computer (software) in the accomplishment of a task" (P. 191). Prior research findings have suggested that self-efficacy theory can be applied to investigate individual's self-belief about their computer skills (Speier & Venkatesh, 2002). Researchers also found that there is a strong relationship between users' perception of a particular technology and his/her computer self-efficacy. It is hypothesized that individuals will judge the usability of a system depending on their own computer abilities. Hence, Venkatesh and Davis (1996) introduced computer self-efficacy as a factor affecting perceived ease of use.

In some studies computer experience is included as a factor which has a positive impact on perceived ease of use in individual construct. (Avlonitis & Panagopoulos, 2004; Igbaria & Guimaraes, 1995). However, we beg to differ. Computer experience is the perception of individuals on his or her experience of using computers, which is a vague concept. Furthermore, computer experience can be reflected by individual's perceived computer self-efficacy. As a result, it can be involved in the self-efficacy factor and there is no need to investigate it separately. Therefore, computer experience will not be included in our survey questions.

Finally, as we stated earlier that CRM experience would be an extra factor in this study. It is safe to draw the conclusion that a normal user gained confidence from previous adoption experience. His or her perception of ease-of-use the system is enhanced thusly. So the hypotheses for individual influence construct are:

**Hypothesis 4-a.** CRM Experience has a positive impact on PEOU

**Hypothesis 4-b.** Computer Self-efficacy has a positive impact on PEOU

**Hypothesis 4-c.** Personal Innovativeness has a positive impact on PEOU
Chapter 4. Methodology

4.1 Research Approach

4.1.1 A deductive approach

There are two kinds of research approach - deductive approach and inductive approach. Inductive approach is commonly construed as a form of reasoning that makes generalizations based on individual instances (Holland et al., 1989). Deductive reasoning is the attempt to show that conclusion necessarily follows from a set of premises or hypotheses. As for academic researches, a deductive approach is to "develop a theory and hypothesis (or hypotheses) and design a research strategy to test the hypothesis" (Saunders, et al., 2007). A deductive approach should go through the five stages: (1) inferring a hypothesis which can be tested as the relationship between two or more concepts or variables (2) explaining the way that variables are measured and propose the association between certain concepts or variables (3) testing the hypothesis (4) examining the outcome to see if it confirms the theory or suggest a need of modification and (5) justifying the model according to the findings when necessary (Robson, 2002). Undoubtedly, this TAM study uses a deductive research approach as the other TAM studies do. The procedures of this study are consistent with the above five stages. First we deduce hypothesis based on the review of TAM application in general and the application of the theory in our proposed research domain, then we indicate how to evaluate the variables affecting users' acceptance of system use. Third, conduct statistical analysis using analysis tool such as SPSS. An examination of statistical results and hypothesis is done right after the testing and finally, make some changes to the inferred hypothesis or model if necessary. To conclude, TAM and other related theories or findings such as the TAM/CRM model will be serving as existing conceptual framework to deduct tacit implications in other subjects, which in the case, is the user acceptance of CRM systems in bank corporations in China.

4.1.2 Quantitative and Quantitative Analysis
The choice between a quantitative analysis and a qualitative analysis is determined by the research objective (Silverman, 2002). Quantitative is used to obtain statistical results from a particular research object (Bryman, 1988). The result of quantitative analysis is depending on scientific analysis, which is believed to be objectively value-free. On the contrary, the outcome of qualitative analysis can be more or less affected by researcher's personal value (Silverman, 2002). Gorman and Clayton (2005) defined qualitative research as:

"Qualitative research is a process of enquiry that draws data from the context in which events occur, in an attempt to describe these occurrences...using induction to derive possible explanations based on observed phenomena"

To put the two analysis approach in plain explanation, quantitative data reveals what exactly is happening while qualitative data implicates the reason why it happened. However, although the two methods seem to be contradicting, they are actually interdependent in research practices. This research uses quantitative analysis to measure the relationship between observed variables and by doing this, we can discover not only what variables are making impact but also to what extent does the variable affect each other.

4.2 Methods of Investigation

The investigation methods involved in this study include: literature review, interview and survey (via questionnaire).

4.2.1 Literature Review and Interview

Before conducting field research, it is critical to review the related literature (Saunders et al., 2007). Literature review provides the basis of this study as (1) it offers a theoretical background and reviews the prior TAM work and findings; (2) literature review provides an essential awareness of the topic being researched, assisting survey design. Our study is initialized with extensive reviewing of TAM,
CRM, CRM system adoption and other related literatures (e.g. Social psychological literatures on TRA).

The next step is interviews. Saunders et al. (2007) stated that interviews can help you gather valid data which helps to answer your research questions, or it can be used to construct your research questions when you are not having one. In order to get an initial sense of the conceptual model and draft items, we conducted six interviews with the focal 5 sales reps as well as one sales manager. In the interviews we asked them to imagine that an unfamiliar system is confronted with them, will they use it or not and what is the reason behind. We also asked them to give suggestions on what can be done to enhance their "interests" in using the system. Due to constraints on time and location, the interview is conducted via telecommunication. After this, an initial draft questionnaire was built based on the combined analysis into literatures and interviews.

4.2.2 Survey Design and Distribution

The aim of conducting a survey is to collect quantitative data for future analysis. Survey is carried out in the format of questionnaire. Saunders et al. (2007) suggested using questionnaire to collect data for descriptive research and explanatory research. They indicated that questionnaire has metrics in collecting quantitative data, reaching a large sample and allowing huge data collection within limited budget. As the core objective of collecting data in this article is to observe relationships between variables, to explain respondent perception of an unfamiliar new information system and to predict the adoption of the system, this research falls into the explanatory research category.

In order to get first-hand data, this research applied questionnaire as primary data collection method and managed to collected valid data from the targeted respondents. Questionnaire is carried out in the format of hard copy. We asked one sales manager to distribute the survey questionnaires to his subordinates and colleagues (vice sales managers are also counted as sales managers). Questionnaires were distributed to the target respondents whom are asked to read through carefully and answer when it is
Appendix A lists all the items being examined along with their sources. Notably, the questionnaire was translated into Chinese before presenting to the respondents. This is because 1) some respondents may not be able to read English and 2) even to those who can read English a Chinese version is more accurate in terms of understanding. However, we still give out two versions to allow respondents to choose which one is more suitable for them.

All the items in the questionnaire adapt a five point scale, ranging from strongly agree to strongly disagree. The measure of adoption could be a little tricky. It is suggested that a two-source measurement should be adapted in measuring user's adoption (Schillewaert et al., 2004). The most commonly used measurement is directly ask respondents about their adoption, which might be biased to be overly positive. The second source of measurement is to turn to the focal sales reps' supervisor for reference. Managers are knowledgeable informants for a sales rep's adoption behavior because they use the system and it is their duty to evaluate sales rep's performance with the system (Kumar, Stern, & Anderson, 1993). Unfortunately, this study did not use the second source of measures due to inconvenience of communication with the other side. The adoption criterion is perceived from salespersons' (including sales manager who explained self-usage only) direct responses. The item is structured as "I will use CRM system intensively as long as it is facilitated". Those who answered four or five were considered users while those who answered three and below were considered non-users.

We did not introduce education background as a division of sample as many prior studies did. The reason is that education background concern the privacy of people, especially in the context of China, where very few people had a chance to attend a university or college twenty years ago. Those who are in their forties or fifties may be sensitive to the question. Besides, we did not expect to examine the relationship between education level and adoption.

4.2.3 Sampling Strategy
The research data are collected from the sales force of four major commercial banks in China: Bank of China (BC), Industrial and Commercial Bank of China (ICBC), Agricultural Bank of China (ABC) and China Construction Bank (CCB), each of them is considered as a very established bank in the banking industry of China. We asked not only sales reps but also several sales managers to be the respondents. The reason why we choose such a sample is stated as follows. Although they have introduced some computer software packages which have some simple functions like tracking customer transaction or updating customer portfolio, it is not sufficient to be seen as an up-to-date CRM system. Based on the fact that targeted respondents do not have a deep understanding of what CRM is, we added a brief introduction of CRM, explaining its definition, managerial level of CRM benefits and specific functions involved in daily work. By adding this introduction, we hope that respondents have a better understanding of what is asked in the questionnaire and make their answers more meaningful.

4.3 Data Analysis Technique

For statistical data analysis, we use the SPSS software package. SPSS is an IMB product expertise in text analytics, statistical analysis, and collaboration and deployment. The descriptive (e.g. standard deviation) analysis and crosstabs (e.g. Chi-Square test) analysis features provided by SPSS are used to investigate the primary data. Standard multiple regression is used to test research hypotheses. The computer program was found to be useful and easy to use.

4.4 Ethical Issue

Ethical issue is a very important aspect of academic research especially in social science when the research is concerned with individual's behaviour. Researchers must try to avoid the ethical risk as much as possible. This study investigates users' behavioral intention and attitude toward a particular information technology in a
certain circumstance. Moreover, some of the survey questions may be involved with personality. Therefore, though not considered to be significant, the study is concerned with using private data, which has a risk in the ethical issues. To address it, we would like to apply several basic principles in the research. First of all, there is no doubt that the anonymous questionnaire will be used. Second, potential respondents have the right to be informed the data process procedure and potential risks. Third, respondents are completely free to withdraw the research. By doing this we hope to reduce the ethical risks to an acceptable limit. Last, we tried to avoid asking questions which have more chances to be offensive.
Chapter 5. Data Analysis and Results

In this Chapter we will present the data analysis and statistical results. Before data analysis, a reliability test is given to test the validity of used scale and the item within them. Data analysis will start with a descriptive analysis of samples, factors (constructs) to have a overview of the data, and then followed by a bivariate multivariate analysis to examine the relationship among variables. Finally a confirmatory fact analysis is used to test the hypothesis.

5.1 Scale Reliability Test

Prior TAM studies suggested doing reliability test before progressing to data analysis so that unreliable items or scales can be neglected. It saves time and effort from analyzing invalid data. The scales in this study are inherited from a refined select from previous TAM literatures. Among the various aspects of testing reliability, one of the main determinants is the internal consistency, which measures the "contribution" of items to make the same underlying construct (Pallant, 2007). This study uses the Cronbach's Alpha Coefficient to indicate the reliability as it is the most common one suggested in academic researches (Pallant, 2007).

5.1.1 Results Demonstration

There are five scales in total in the study: perceived usefulness (PU), perceived ease of use (PEOU), organizational facilitators (ORG), individual influence (IND) and social influence (SOC). The overall Cronbach's Alpha scores are showed in table 3. As can be seen from the table that all Cronbach's Alpha values exceed .7 (.8 is the optimal score according to De Vellis), which meets the basic requirement of research. Scale PEOU and ORG failed to reach the optimal standard. The reason may lies in limited items. In fact, the alpha value is sensitive to the number of item of each scale; scales with items less than ten may receive a low value (Pallant, 2007). Besides, Bagozzi (1994) suggested that in TAM studies a score of .6 can be taken as basic required alpha value. Thus, the values we received from the reliability test prove all
the scales are valid for further research.

Table 3. Cronbach's Alpha Coefficient value of each scale

<table>
<thead>
<tr>
<th>Scale</th>
<th>Cronbach's Alpha on Standardized Items</th>
<th>N of Items</th>
<th>Scale Mean</th>
<th>Scale Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>PU</td>
<td>.817</td>
<td>5</td>
<td>19.2889</td>
<td>3.62831</td>
</tr>
<tr>
<td>PEOU</td>
<td>.795</td>
<td>4</td>
<td>15.8444</td>
<td>3.05224</td>
</tr>
<tr>
<td>ORG</td>
<td>.707</td>
<td>5</td>
<td>18.4444</td>
<td>3.52624</td>
</tr>
<tr>
<td>IND</td>
<td>.858</td>
<td>12</td>
<td>41.2222</td>
<td>7.89675</td>
</tr>
<tr>
<td>SOC</td>
<td>.812</td>
<td>5</td>
<td>19.8667</td>
<td>4.04857</td>
</tr>
</tbody>
</table>

According to Pallant (2007) and De Vellis (2003), if one item's the value of corrected item total correlation is too low (e.g. lower than .3) and the overall alpha value is also low, then the item is in high risk of unreliable. Second, if alpha value is considerably higher than origin when a particular item is deleted, the item may also in high risk of unreliable. Viewing from the results, we eliminated item IND-9 and IND-12 who both have a low corrected correlation, and the IND scale reliability is increased if the two items are deleted. As a result, item IND-9 and IND-12 will not be included in further analysis. The new scale alpha coefficient value is .866, which is higher than before (.858). The results of each scale items are presented in the following tables.
### Table 4. Reliability test results - Scale PU

<table>
<thead>
<tr>
<th>Overall Alpha: .817</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Corrected Item Total Correlation</th>
<th>Cronbach's Alpha if Item Deleted</th>
</tr>
</thead>
<tbody>
<tr>
<td>PU-1</td>
<td>4.1556</td>
<td>.82450</td>
<td>.571</td>
<td>.792</td>
</tr>
<tr>
<td>PU-2</td>
<td>3.4889</td>
<td>.94441</td>
<td>.630</td>
<td>.774</td>
</tr>
<tr>
<td>PU-3</td>
<td>3.9333</td>
<td>.91453</td>
<td>.655</td>
<td>.767</td>
</tr>
<tr>
<td>PU-4</td>
<td>3.9111</td>
<td>.92496</td>
<td>.633</td>
<td>.773</td>
</tr>
<tr>
<td>PU-5</td>
<td>3.8000</td>
<td>1.14018</td>
<td>.576</td>
<td>.797</td>
</tr>
</tbody>
</table>

### Table 5. Reliability test results - Scale PEOU

<table>
<thead>
<tr>
<th>Overall Alpha: .795</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Corrected Item Total Correlation</th>
<th>Cronbach's Alpha if Item Deleted</th>
</tr>
</thead>
<tbody>
<tr>
<td>PEOU-1</td>
<td>3.7778</td>
<td>1.12591</td>
<td>.613</td>
<td>.748</td>
</tr>
<tr>
<td>PEOU-2</td>
<td>4.0444</td>
<td>.76739</td>
<td>.495</td>
<td>.796</td>
</tr>
<tr>
<td>PEOU-3</td>
<td>3.8222</td>
<td>1.05073</td>
<td>.665</td>
<td>.714</td>
</tr>
<tr>
<td>PEOU-4</td>
<td>4.2000</td>
<td>.89443</td>
<td>.689</td>
<td>.707</td>
</tr>
</tbody>
</table>

### Table 6. Reliability test results - Scale ORG

<table>
<thead>
<tr>
<th>Overall Alpha: .707</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Corrected Item Total Correlation</th>
<th>Cronbach's Alpha if Item Deleted</th>
</tr>
</thead>
<tbody>
<tr>
<td>ORG-1</td>
<td>3.8889</td>
<td>.91010</td>
<td>.472</td>
<td>.657</td>
</tr>
<tr>
<td>ORG-2</td>
<td>3.9778</td>
<td>.89160</td>
<td>.629</td>
<td>.601</td>
</tr>
<tr>
<td>ORG-3</td>
<td>3.8444</td>
<td>.95240</td>
<td>.570</td>
<td>.618</td>
</tr>
<tr>
<td>ORG-4</td>
<td>3.8667</td>
<td>1.15994</td>
<td>.587</td>
<td>.601</td>
</tr>
<tr>
<td>ORG-5</td>
<td>2.8667</td>
<td>1.23583</td>
<td>.482</td>
<td>.701</td>
</tr>
</tbody>
</table>
5.2 Descriptive Analysis

The valid sample consists of 45 salespersons altogether including 7 sales manager and the rest 38 sales reps. There 24 females and 21 males, the rate of female and
male nearly reached equilibrium with 53.3% and 46.7% respectively. Ages of respondents range from 23 to 52 with an average of 34.2 (see figure 6).

5.2.1 Respondents' Personal Innovativeness

Question 1, 3 and 4 asked respondents to indicate their personality in the aspect of innovativeness. The total sample reported a mean value of 3.98, 3.82 and 3.51. An average of 4.22 based on the three questions, which implies that the sample share a relatively innovative characteristic. The results are showed in figure 7, 8 and 9.

5.2.2 Sample's CRM Experience

Question 5 asked respondents about their experience in CRM systems, those who answered five and four are regarded to have experience in CRM while those who answered one, two and three are perceived as no experience in CRM. As can be seen from table 9, most respondents (71.1%) are reported to have no experience in CRM. Therefore, the sample can be seen as in lack of CRM experience.

5.2.3 Sample's Age Distribution

We use age group to distinguish people from different stage of life. Results (see table 2) showed that 19 respondents are in their thirties, 16 in twenties, 9 in forties and only one in his fifties. 12 (26.7%) in the sample admitted they do not want to use the system, among which one third is male. On the other hand, there are 17 men who are willing to use taking up 51.5% in the 33 users and 81% in male respondents while 66.7% female expressed a intention to use.

---

\* It is important to note that all the scores are based on an five points scale.
Table 2. Age Group

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21-30</td>
<td>16</td>
<td>35.6</td>
<td>35.6</td>
<td>35.6</td>
</tr>
<tr>
<td>31-40</td>
<td>19</td>
<td>42.2</td>
<td>42.2</td>
<td>77.8</td>
</tr>
<tr>
<td>41-50</td>
<td>9</td>
<td>20.0</td>
<td>20.0</td>
<td>97.8</td>
</tr>
<tr>
<td>51-60</td>
<td>1</td>
<td>2.2</td>
<td>2.2</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>45</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

Table 2. Age group frequency.

Figure 6. Histogram of Age
Table 9. CRM Experience

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.00</td>
<td>10</td>
<td>22.2</td>
<td>22.2</td>
</tr>
<tr>
<td>2.00</td>
<td>12</td>
<td>26.7</td>
<td>48.9</td>
</tr>
<tr>
<td>3.00</td>
<td>10</td>
<td>22.2</td>
<td>71.1</td>
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<td>4.00</td>
<td>7</td>
<td>15.6</td>
<td>86.7</td>
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<td>5.00</td>
<td>6</td>
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</tr>
<tr>
<td>Total</td>
<td>45</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Figure 7. Histogram of Personal Innovativeness 1
Figure 8. Histogram of Personal Innovativeness 2.

Figure 9. Histogram of Personal Innovativeness 3.
5.3 Relationships Among Variables

5.3.1 Correlation

The result is of correlation is presented below (see table 12). Correlation is used to investigate the relationship between two continuous variables. It indicates both the direction and strength of the relationship. Before performing the correlation test, we have checked that recoded all the data used and reversed those negative items. And no violation of the assumptions is obtained. The N of the sample is 45 and no missing data is found in the data set (N = 45 in all cells). We use Pearson correlation coefficient to indicate the strength of relationship with the interpretation of Cohen (1988):

- Small  $r=.10$ to $.29$
- Medium  $r=.30$ to $.49$
- Strong  $r=.50$ to $1.0$

Figure 10. Histogram of CRM Experience
The analysis is applied on all the variables used to test out conceptual. All the pairwise associations are positively related with one another. The results have indicated that a strong positive relationship exists between PU and PEOU ($r=.706$, $P<.01$). This result fits the previous statement of PU and PEOU that higher levels of PEOU are associated with higher levels of PU. A strong correlation between organizational IT infrastructure and PEOU is also perceived ($r=.534$, $P<.01$). In conclusion, among all the hypothesized variable relations, PEOU is strongly related to technical support ($r=.552$, $p<.01$), Training ($r=.506$, $p<.01$), personal innovativeness ($r=.494$, $p<.01$), peer influence ($r=.571$), PU and IT infrastructure; On the other hand, PU is strongly related to user participation ($r=.440$, $p<.01$), training ($r=.432$, $p<.01$), supervisor influence ($r=.658$, $p<.01$), peer influence ($r=.657$, $p<.01$) and PEOU. However, the correlations between CRM experience and PEOU ($r=.244$, $p=.106$) and between user participation and PEOU ($r=.223$, $P=.140$) are not significant, which is not expecting the same results as it is supposed to be.

5.3.2 Chi-Square Test: Age and Gender

Chi-square test for independence demonstrates whether two categorical variables are related via comparing the frequency of cases. This study uses Chi-Square test to investigate the strengths of link between certain variables. First of all, we would like to test if there is significant difference of system adoption between male and female. As can be seen from table 10, the value is .28 which exceeds the .05 criteria of significance. The two-by-two Chi-square test for independence (with Yates Continuity Correction) indicates no significant association between system use and gender. There are also guesses about usage and age as people tend to believe older people are less like to adopt a new system. Going through the same procedure, the results from a Chi-square test between usage and age groups (see table 11). Again it indicates that no strong relation is perceived between age group and usage. We also tested usage and occupation (job title) and found no association between the two variables.
### Table 10. Chi-Square Tests for Gender and Usage

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>df</th>
<th>Asymp. Sig. (2-sided)</th>
<th>Exact Sig. (2-sided)</th>
<th>Exact Sig. (1-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>1.169</td>
<td>1</td>
<td>.280</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Continuity Correction</td>
<td>.552</td>
<td>1</td>
<td>.457</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Likelihood Ratio</td>
<td>1.189</td>
<td>1</td>
<td>.275</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fisher's Exact Test</td>
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<td></td>
<td></td>
<td>.329</td>
<td>.230</td>
</tr>
<tr>
<td>N of Valid Cases</td>
<td>45</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 5.60.
b. Computed only for a 2x2 table

### Table 11. Chi-Square Tests for Age and Usage

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>df</th>
<th>Asymp. Sig. (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>4.951</td>
<td>3</td>
<td>.175</td>
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<tr>
<td>Likelihood Ratio</td>
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<td>3</td>
<td>.178</td>
</tr>
<tr>
<td>Linear-by-Linear Association</td>
<td>.078</td>
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<td>.780</td>
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<tr>
<td>N of Valid Cases</td>
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<tr>
<td>Correlation</td>
<td>CRM reference</td>
<td>Operational Performance</td>
<td>Oppositional Support</td>
</tr>
<tr>
<td>-----------------------------------</td>
<td>---------------</td>
<td>-------------------------</td>
<td>----------------------</td>
</tr>
<tr>
<td>Use of CRM</td>
<td>45</td>
<td>45</td>
<td>45</td>
</tr>
<tr>
<td>CRM reference</td>
<td>45</td>
<td>45</td>
<td>45</td>
</tr>
<tr>
<td>Oppositional Support</td>
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<td>45</td>
<td>45</td>
</tr>
<tr>
<td>Social Influence</td>
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<td>45</td>
<td>45</td>
</tr>
<tr>
<td>Collaborative Leadership</td>
<td>45</td>
<td>45</td>
<td>45</td>
</tr>
<tr>
<td>Control</td>
<td>45</td>
<td>45</td>
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</tr>
<tr>
<td>Training</td>
<td>45</td>
<td>45</td>
<td>45</td>
</tr>
<tr>
<td>Information State</td>
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<td>45</td>
<td>45</td>
</tr>
<tr>
<td>Part Usage State</td>
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<td>45</td>
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</tr>
<tr>
<td>EPC</td>
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<td>45</td>
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</tr>
<tr>
<td>EPC</td>
<td>45</td>
<td>45</td>
<td>45</td>
</tr>
</tbody>
</table>

Table 12. Correlation Matrix
5.4 Hypothesis Test

5.4.1 Regression Specification

This study used multiple regressions to analyze model paths and testify the hypothesis. The regression analyses were performed in a standard regression method. We extracted two variables: perceived usefulness and perceived ease of use from TAM to be the first two dependent variables. The third dependent variable is system use as we wish to test if PU, PEOU, competitor utilization and supervisor support can directly lead to the adoption of CRM system.

The Pearson correlation coefficient now can be used as a check point for potential multicollinearity problems. Table 12 illustrates that except for the correlation of PU and PEOU ($r=.706, P<.01$) all the other R values are under .7, which is consistent with the discriminant validity (Pallant, 2007).

5.4.2 Regression Result

Table 13 shows the results of the first regression (PU as dependent variable) including unstandardized coefficients, standardized coefficients, t statistic, adjusted R square (indicated in the brackets after each variable name) and p (sig.) for each independent variable and the adjusted R square value for this regression.

The third hypothesis we made was that perceived ease of use has a positive influence on perceived usefulness (H1-c). This is very well supported by the test ($\beta=.434$, $t=3.625$, $p<.01$). Peer influence is also tested to have a positive impact on perceived usefulness ($\beta=.208$, $t=1.357$, $p<.05$). Complying with the hypothesis H3-d, supervisor influence has a significant influence over perceived usefulness ($\beta=.211$, $t=1.457$, $p<.05$). User participation in the design and implementation of CRM system is proved to be positively affecting CRM perceived usefulness ($\beta=.24$, $t=2.507$, $p<.05$). The only insignificant impact is between training and perceived usefulness ($\beta=-.035$, $t=-.31$, $p=.758$). Thus, the first regression test supported hypothesis H1-c, H2-c, H3-b and H3-d, while H2-a are not supported.
Table 13: First Regression

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>PEOU (.498)</td>
<td>.516</td>
<td>.142</td>
<td>.434</td>
<td>3.625</td>
</tr>
<tr>
<td>Supervisor Influence (.433)</td>
<td>.463</td>
<td>.318</td>
<td>.211</td>
<td>1.457</td>
</tr>
<tr>
<td>Peer Influence (.432)</td>
<td>.411</td>
<td>.303</td>
<td>.208</td>
<td>1.357</td>
</tr>
<tr>
<td>Training (.187)</td>
<td>-.080</td>
<td>.258</td>
<td>-.035</td>
<td>-.310</td>
</tr>
<tr>
<td>User Participation (.194)</td>
<td>.705</td>
<td>.281</td>
<td>.240</td>
<td>2.507</td>
</tr>
</tbody>
</table>

a. Dependent Variable: PU

Table 14 shows the results of the second regression (PEOU as dependent variable) including unstandardized coefficients, standardized coefficients, t statistic, adjusted R square (indicated in the brackets after each variable name) and p (sig.) for each independent variable and the adjusted R square value for this regression.

In the case of peer usage and personal innovativeness, they are proved to be strong predictors of perceived ease of use ($\beta=.353$, $t=2.571$, $p<.05$ for peer influence; $\beta=.359$, $t=2.577$, $p<.05$ for personal innovativeness). Three significant predictors on perceived ease of use in the organizational facilitator construct are revealed. IT infrastructure and technical support are relatively more strongly support by the test ($\beta=.397$, $t=3.204$, $p<.01$ for IT infrastructure; $\beta=.221$, $t=1.440$, $p<.01$ for technical support) than training, which is marginally significant ($\beta=.111$, $t=1.680$, $p<.05$). CRM experience is tested to have a moderately significant impact on perceived ease of use ($\beta=.148$, $t=1.932$, $p<.05$). On the other hand, two independent variables failed to show affirmative results to support the hypothesis. Computer self-efficacy and user participation have no significant impact on perceived ease of use ($\beta=-.005$, $t=-.029$, $p=.132$ for computer self-efficacy; $\beta=.021$, $t=.188$, $p=.852$ for user participation). To conclude, hypothesis H2-b, H2-e, H2-f, H3-c and H4-c are supported while H2-d and H4-b are to the contrary.
Table 15 shows the results of the third regression (System Use as dependent variable) including unstandardized coefficients, standardized coefficients, t statistic, adjusted R square (indicated in the brackets after each variable name) and p (sig.) for each independent variable and the adjusted R square value for this regression.

This time we are using two previous dependent variables (PU and PEOU) as independent variable to test if they have positive impact on the intention system use. Quite unsurprisingly the results fit the hypotheses well just as TAM indicates, which is, PU has a very strong impact on system use ($\beta=.505$, $t=3.525$, $p<.01$) while PEOU has a relatively weak impact ($\beta=.172$, $t=1.325$, $p<.01$). As hypothesized before, except for PU and PEOU we put supervisor influence and competitor usage into this regression test as well. The results have confirmed the significant impact of both variables on system use ($\beta=.153$, $t=1.158$, $p<.05$ for supervisor influence; $\beta=.159$, $t=1.473$, $p<.05$ for competitor usage). Hence, Hypothesis H1-a, H1-b, H3-a and H3-e are all well supported.

Table 14. Second Regression•

<table>
<thead>
<tr>
<th>Model</th>
<th>Adjusted R Square: .526</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Peer Influence (.326)</td>
<td>.587</td>
<td>.228</td>
<td>.353</td>
<td>2.571</td>
</tr>
<tr>
<td></td>
<td>Personal Innovativeness (.244)</td>
<td>.433</td>
<td>.168</td>
<td>.339</td>
<td>2.577</td>
</tr>
<tr>
<td></td>
<td>Training (.256)</td>
<td>.210</td>
<td>.309</td>
<td>.111</td>
<td>1.680</td>
</tr>
<tr>
<td></td>
<td>Computer Self-efficacy (.484)</td>
<td>-.004</td>
<td>.124</td>
<td>-.005</td>
<td>.029</td>
</tr>
<tr>
<td></td>
<td>IT infrastructure (.285)</td>
<td>.631</td>
<td>.440</td>
<td>.397</td>
<td>3.024</td>
</tr>
<tr>
<td></td>
<td>Technical Support (.272)</td>
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<td>.221</td>
<td>1.440</td>
</tr>
<tr>
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<td>User Participation (.05)</td>
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<td>.282</td>
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<td>.188</td>
</tr>
<tr>
<td></td>
<td>CRM experience (.06)</td>
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<td>.361</td>
<td>.148</td>
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</tbody>
</table>

a. Dependent Variable: PEOU
### Table 15. Third Regression

<table>
<thead>
<tr>
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<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
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<td>.172, 1.325, .009</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>PU (.604)</td>
<td>.062, .018</td>
<td>.505, 3.525, .001</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Supervisor Influence (.429)</td>
<td>.041, .036</td>
<td>.153, 1.158, .040</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Competitor Utilization (.187)</td>
<td>.061, .035</td>
<td>.159, 1.473, .021</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Dependent Variable: System Use*

### 5.4.3 Conclusion for Conceptual Model

With all the regression results presented and interpreted, we can draw a summary of the hypothesized model. In order to make a clear overview of the modeled hypotheses, table 16 is designed to provide an integrated version of regression test with most useful indicators presented (in this case, unstandardized coefficients are removed, all the other value is retained whereas adjusted R square is presented in a new column). It is important to note that all the "+" variables record a sig. at least at .05 level.

In conclusion, hypotheses H1-a (.505), H1-b (.172), H1-c (.434), H2-b (.111), H2-c (.240), H2-e (.221), H2-f (.397), H3-a (.159), H3-b (.208), H3-c (.353), H3-d (.211), H3-e (.153), H4-a (.148) and H4-c (.339) are supported; Hypotheses H2-a (-.035), H2-d (.021) and H4-b (-.005) are not supported.

The conceptual model is also redesigned to mark the paths among hypothesized variables. Figure 11 visualized the hypotheses on the conceptual model.
Table 16. Integrated Regression Results

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>Hypothesis Supported</th>
<th>Independent Variable</th>
<th>R square</th>
<th>β</th>
<th>T</th>
</tr>
</thead>
<tbody>
<tr>
<td>PU</td>
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<td>PEOU</td>
<td>.498</td>
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<td>3.625</td>
</tr>
<tr>
<td></td>
<td>[+]</td>
<td>Supervisor Influence</td>
<td>.433</td>
<td>.211</td>
<td>1.457</td>
</tr>
<tr>
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<td>[+]</td>
<td>Peer Influence</td>
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<td>.208</td>
<td>1.357</td>
</tr>
<tr>
<td></td>
<td>[-]</td>
<td>Training</td>
<td>.187</td>
<td>-.035</td>
<td>-.310</td>
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<tr>
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<td>.240</td>
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<td>Personal Innovative</td>
<td>.244</td>
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<tr>
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<td>Training</td>
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<td></td>
<td>[-]</td>
<td>Computer Self-efficacy</td>
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<td>.285</td>
<td>.397</td>
<td>3.024</td>
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<td>Technical Support</td>
<td>.272</td>
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<td>Supervisor Influence</td>
<td>Competitor Utilization</td>
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<td>3.525</td>
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<td>1.473</td>
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</tr>
</tbody>
</table>

**Diagram:**

- **Perceived Ease of Use**
  - IT Infrastructure
  - CRM Experience
  - Peer Influence
  - Personal Innovation
  - Technical Support
  - Participation

- **Perceived Usefulness**
  - Supervisor Influence

- **System Use**
  - .505

- **Supervisor Influence**
  - .434

- **Competitor Utilization**
  - .434

- **IT Infrastructure**
  - .397

- **CRM Experience**
  - .148

- **Peer Influence**
  - .208

- **Personal Innovation**
  - .339

- **Technical Support**
  - .221

- **Participation**
  - .111

- **Supervisor Influence**
  - .153

- **Perceived Usefulness**
  - .505

- **Perceived Ease of Use**
  - .172
Figure 11. Conceptual Model with Paths\(^2\)

\(^2\) Dashed lines indicate that the paths are not supported.
6. Discussions and Findings

This chapter discusses what can be interpreted from the results of the survey. By comparing the findings of this research and the conclusions of prior literatures, we hope to highlight the consistency as well as the divarication. We also hope to answer the research questions raised in the introduction chapter. The content will be presented in parts corresponding to the divided constructs of the research model.

6.1 TAM: PU and PEOU

Our study reinforced the role of perceived ease of use and perceived usefulness. The data analysis and hypothesis test have proved that though both perceived usefulness and ease of use directly affect individual's intention to use a technology, the impact of usefulness is more fundamental than ease of use. It may be a little surprising when the results came out that the beta value for PEOU on system use is only 0.172, which is much lower than the value recorded by PU. Indeed, as many TAM studies suggested, compared with perceived usefulness, perceived ease of use is a secondary factor that drives the system adoption (Davis, 1989; Davis et al., 1989; Venkatesh & Davis, 2000). Why is this happening? Provided that the system can achieve some critical functions which cannot be accomplished without using the system, salesperson may somehow overlook the difficulty of using the system. The reason may also lies in the effective and efficiency the system offers that even it is difficult to use the technology, the time spent on overcoming the difficulty will be no much longer than handling the task in the old way and meanwhile the outcome is more significant. In one word, the perceived usefulness compensates for the perceived difficulty. The guessing of reasons are in line with the survey question we asked. Those who expressed the willingness of adopting the system also rated high at "work innovation" and "work effectiveness" items in PU scale. Seeing from a behavioral perspective, it can be explained as "performance goals strongly motivate the work behavior of salespeople" (Sujan et al., 1994:44).

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3 See item 9.2 and 9.5
This research also supported the hypothesis that perceived ease of use has a positive impact on perceived usefulness. The results are more grounded on psychology and empirical study. It is suggested that technologies that are difficult to use are also difficult to reach a one hundred percent performance by its users. TAM and earlier empirical findings indicated that something is easier to use is obviously perceived more useful by individuals, thus perceived ease of use should have have driving force to perceived usefulness (Karahanna & Straub, 1999). Park et al. (2008) claimed that "perceived ease of use was channeled into actual system use through perceived usefulness (P.177)" which is an appropriate statement of the relationship among perceived ease of use, perceived usefulness and intention to use.

6.2 Individual Factors

6.2.1 Personal Innovativeness

There are not many studies on salesperson's innovativeness. In fact, there are many people who were born with a prejudice against changes. So, the factor of personal characteristics on innovation is strongly recommended in explaining system adoption as the adoption of CRM brings along with changes in everyday activities. It is of great importance to include the factor in a TAM study in sales forces as CRM brings too much that beyond the traditional technology in organizations, which leads to great impact on salesperson's attitude.

The first TAM study to include such a variable is Schillewaert et al.'s (2004) study on the salesperson's SFA system adoption. From then on, salesperson's innovativeness is embedded in TAM study. Survey question one, four and three have asked respondents to indicate if they are innovative persons in everyday life. Test on the hypothesis found out that personal innovativeness has a direct positive affect on respondents' perceived ease of use. That is to say a person who is more adapted to change, who is the earlier users of a new technology and even who is more willing to try new ways of cook have a bigger chance to overcome difficulty of use and finally adopt the system.
Some researches (e.g. Wu & Wu, 2005; Schillewaert et al, 2004) indicated a direct link between personal innovativeness\(^4\) and intention to use, which is not supported by this study. Their reason is that when a new technology is confronted with a innovative person, he/she will try to be the first to use it as it is a desire inside him/herself to master it. However, such a situation is too ideal for the real life (Triandis, 1989). As a result, our research has rejected to test the path directly between personal innovativeness and intention to use, which can lead to a too "ideal" result.

6.2.2 Computer Self-Efficacy

Computer self-efficacy was introduced as a predictor of adoption since Venkatesh and Davis (1996) proposed their research model since when computer self-efficacy has long been regarded as a critical individual factor to affect user's perception on the ease of use of the system. In this study, we proposed eight questions (two items were deleted due to the failure in reliability test) to explain respondent's self-recognition on his or her computer skills. The survey showed a fair ability in using computer of the sample. However, our research results have not reinforced the prior findings that computer self-efficacy is closely related to PEOU. There is no significant relationship between computer self-efficacy and perceived ease of use in this research. To penetrate into the surprising result, it may due to the distinguishing difference between generally using a computer and using a CRM system. Actually, during the interviews we conducted, respondents have realized that CRM system is not merely a computer program. Even they are good at operating computers, there will still be difficulty in how to fully exploit a CRM system. Hence, a high computer self-efficacy does not necessarily equal a high self-efficacy in using a CRM system.

6.2.3 CRM experience

There is no surprise that previous experience on CRM or similar systems enhances user's belief that the system is not difficult to use. The antecedents were structured

\(^4\) The phrase may be rebuild and presented in other terms
by eight questions (two of them were excluded for data analysis according to reliability test). Frequency analysis made an initial proof that the higher rate recorded in computer self-efficacy, the more likelihood the respondent is to adopt. The regression results finally supported that a significant positive path exists between the factor and PEOU. However, some have proposed a direct linkage between IT experience and system adoption (Robinson et al., 2004). They claimed that IT experience can provide users with positive image of the system both on the easiness to use and its usefulness. Nevertheless, their test did not show a significant statistic relation. The reason may be that though they had experience in other information technologies, CRM is a complex concept that they feel ambiguous about the actual sense of the technology. Moreover, an experienced user may not consider the system to be useful or easy to use.

6.3 Social Influence

6.3.1 Supervisor Support
Results show that supervisor support has two dimensions of influence over system adoption, which flatters the prior results. First, supervisor support act as a direct force which drives his/her subordinates to adopt CRM technology; Second, supervisor support helps sales reps to perceive more utilities (e.g. better performance and work efficiency) from using the system. Indeed, the position and power provides them the ability to make their subordinates comply with their persuasions and motivate their work behaviour (Kohli, 1985). However, it must be emphasized that precondition for the positive impact from supervisors is that they should actively use the system and advocate the adoption of the system in front of subordinates. Unfortunately, this negative impact cannot be tested in the study as the question sentences are all positively structured. We asked respondents to rate the statement "my supervisor(s) encourage the use of system" and "my supervisor(s) advocate the implementation of CRM system". Apparently, most of those who rated above four for the two items also expressed the intention to adopt the system.
To explore beyond our results, it is notable to tell that supervisor influence may also result in a opposite outcome. Malhotra and Galleta (1999) suggested that when such influence is perceived by individuals as a compliance, it seems to have a negative impact on individuals' behavioral intention. They proposed and tested the hypothesis that "when social influences generate a feeling of internalization and identification on the part of the user, they have a positive influence on the attitude toward the acceptance and use of the new system" (Malhotra & Galleta, 1999:8). However, our research was not to tell such a division of social influence (especially supervisor influence) as our research hypothesis is only conditioned as supervisor support which only has a positive impact on salesperson.

6.3.2 Peer Influence

Peer influence is believed to have an important and consistent impact on perceived ease of use as well as on perceived usefulness. We investigated both dimensions and obtained supportive results for both dimensions from data analysis. The finding is important as it reveals that current system users can be viewed as positive image in the banks to persuade others to adopt the system.

The role of peer influence can be complex. Organization is like a dye vat and employees form the colorings in it. It is natural that salespeople in the firm will be subjected to his or her surroundings where his partners, supervisors and subordinates play a variety of roles. For individuals, the comparison of their own work performance with others is ubiquitous. When they see someone significantly improves work effectiveness and efficiency after fully adopting the system, they will start to trust the functions of the system. In this way, the extent of perceived usefulness is leveled up.

The similarity of job tasks of sales co-workers provided the conditions that one can learn to use the system from peers through interpersonal contact or observation the use of others. We tested this by asking respondents if they feel that they can learn to use the system from colleagues who use it. Findings are quite supportive for the already observed positive effect of peer usage on perceived ease of use.
6.3.3 Competitor Utilization

Competitor utilization is tested to have a direct influence on adoption in this research. It is a unique involved in system adoption in the industrial context. Therefore, not many studies have taken this into consideration. Some studies that do have investigated the influence of competitor usage toward system use claimed that only ambiguous relation was found (Schillewaert et al., 2004). However, a good support is found in our study, the reason may lies in the unique culture in Chinese banking firms. As was mentioned in the introduction chapter, Chinese banks are facing fierce competitions in enlarging market share. For those banks, sales and marketing processes are critical in gaining competitive advantage. It is salesperson's awareness of potential perils that motivates them to adopt new technology.

6.4 Organizational Facilitators

6.4.1 Training

Results demonstrated that training has a consistent influence toward perceived ease of use while the impact on perceived usefulness is not obvious. The finding that training has positive impact on perceived ease of use is generally acceptable as many prior researches have admitted this linkage (Venkatesh et al., 2003; Ahearne et al., 2004). It is relatively easier to explain why perceived ease of use is enhanced after training. Basically, user training is very much focused on the practical usability of the system and its aim is to make salesperson accustomed to using the system in their daily work.

Why user training is not having an impact on perceived usefulness? It was believed that CRM training will impart the message to the trainees that CRM benefits both the organization and users (Avlonitis & Panagopoulos, 2004). Now it seems that the belief was taken for granted. The same results was obtained in Schillewaert et al.'s (2004) study as they found that the impact of training on perceived usefulness is fully depended on the mediation of its impact on perceived ease of use. This can be explained by the results of our interviews with bank salespeople. They expressed an
anticipation of receiving CRM training to help them adopt the system. However, they thought that training is only to teach them how to operate the system, they did not care if training gives them better understanding of the managerial expectations of CRM. To some extent they have regarded training and technical support to equal. This explains why training increases perceived ease of use other than perceived usefulness.

6.4.2 Technical Support
Technical support is also included in many researches to predict system adoption behaviour (Davis & Venkatesh, 1996; Venkatesh et al., 2003). All those literatures suggested a positive influence of technical support on perceived ease of use. It will not be surprising that our data presented a direct positive correlation between technical support and perceived ease of use. This impact is not just observed from data analysis, in fact, it is strongly expressed in the interviews that technical support will be "around the corner" when they met any problems. Indeed, fixing technical problems and giving support and guidance for the salesperson who are supposed to be less skilled in IT will have a great chance to enhance their perceived ease of use of the system.

6.4.3 IT Infrastructure
Our research is among the first to include IT infrastructure conditions with the organization as a predictor of system adoption. It is not uncommon that a good IT infrastructure conditions will enhance user's perception of the ease of use of a particular software program that runs on it. Updated computer hardware can assure that the CRM system runs influent with no a fast speed; a capable and compatible operation system can make sure that the software runs with no bugs or errors. Indeed, in the interviews we conducted, most interviewees expressed that they are more willing to use the system because they think that it will be much easier to use when the desktops in the bank can be updated and in a good condition. It also can be perceived through the interviews that on the contrary, a poor IT infrastructure
condition will make users feel intense and anxious. This anxiety will result in the fact that no matter how useful and how easy it is to use the system, the users will have a biased resist to it.

Finally, our data analysis made a further statistical support to the positive relationship between ease of use and organizational IT infrastructure. Therefore, it is safe to draw the conclusion that organizational IT infrastructure has a positive impact on perceived ease of use.

6.4.4 User Participation

User participation has been considered to have the ability to increase user satisfaction (Doll & Torkzadeh, 1989), to improve user's perception of system usefulness (Speier & Venkatesh, 2002) and to ease user's fear of difficulty of using the system (Hartwick & Barki, 1994). This research, however, only supports the impact of user participation on perceived usefulness. If a salesperson participates in the design of CRM system in the implementation stage, he/she will understand or even have an influence over its functionality. Such functionality is closely related to the salesperson's daily sales practices, which will surely enhance his/her perceived usefulness. However in the design stage, no outcomes are presented to the participator. Thus, the participator knew what the system can do rather than how to do.

6.5 Other Factors

Other factors refer to those non-cognitive and non-normative factors such as age and gender. Venkatesh and Morris (2000) implied that differences do exist in the level of perceived usefulness toward a certain information technology, which leads to the unequal adoption rate of the two genders. A very recent study was conducted by Dong and Zhang (2011) aiming to explore gender impact on system adoption in China. They suggested that "male users were more thoroughly thoughtful than female users in their decision-making to accept information systems" (Dong &
Zhang, 2011:389). Their study sample is take from both universities and organizations, which partly explains the same situation in our study. Contradictory to their findings, the current study did not find a significant impact of gender difference on system use behavior. Nonetheless, this research discovered that males are more subjected to social norms, which is consistent with Dong and Zhang’s (2011) discovery.

6.6 Summary

We have discussed and discovered In general, the results are quite optimistic as for the prediction of system adoption. Most disagreement in findings against prior researches can be attributing to the difference of investigated information technologies. In this study, all the hypotheses in social influence constructs are supported with a relatively higher coefficient score. Hence, in the context of explaining CRM system adoption in China's banking industry, social factors are considered as the most distinguishing ones that predict the adoption behaviour either directly or indirectly.
7. Conclusion

This article is set out to enhance our understanding of the antecedents of CRM acceptance in the China banking industries and thus offer some useful and practical guidelines for the banks wishing to successfully implement CRM systems. Thus in the first part of this chapter we would like to talk about the practical implications for a better implementation of the system. Second, limitations of this research will be highlighted and suggestions for future research will be made.

7.1 Practical Implications

Though not many, the current research has managed to offer some implications for bank managers in terms of CRM implementation. We have proposed eighteen hypotheses altogether and three of them turned out to be incorrectly hypothesized in the data analysis process. Some implications can be derived from those invalid hypotheses as well as those valid ones.

7.1.1 User Participation

One of the invalid hypotheses is that user participation has a positive impact on perceived ease of use, which suggests that the banks have to think twice whether to introduce this practice in their CRM implementation. In fact, the question will not be that easy. The hypothesis that tested the positive effect of user participation on perceived usefulness is supported. This may put practitioners into a dilemma in terms of whether to introduce the practice or not.

We suggest not adopting this idea. The reason is explained in the following. To participate, salesperson will commit their time and effort to the system developer which will probably delay their normal work. User participation in system design is too ideal to practise as it requires considerable extra time and costs in system implementation. Though user participation in the design of CRM system can enhance their perception of system usefulness, managers should evaluate if it can make up to the extra costs.
7.1.2 Training

Similar to user participation, one hypothesis on training is supported while the other one is not. This study does not fully advocate using training as an organizational practice to improve salesperson's perceived usefulness and easiness of the incoming CRM system. Training can also be expensive and time consuming. The fact is that it takes more time to actualize complete user training on CRM than to practise user participation. Moreover, the results of the interviews reflected a resistance to training among the salespersons as they regard training a waste of time to some extent. Fortunately, except for user training, there are many other alternatives that enhance perceived ease of use available for bank managers to choose. However, it is still worth to try user training if the training process can be designed to impart CRM's usefulness to trainees. Training serves as a channel through which organizations can inform salesperson with positive image on adoption. An effective user training should not only teaches salespersons to use a system, but also emphasize the following arguments: (1) CRM fits the sales practices (2) it enhances job performance (3) competitor intensively uses the technology and (4) the system is easy to use.

7.1.3 Technical Support

Technical support greatly enhances users' perception of ease of use of CRM system. It is strongly recommended to be introduced in banks' CRM implementation practices. Technical support can act as a replacement of user training as the two practices can both increase perceived ease of use. It is mentioned before that focal salesperson perceived little difference in the effect of the two practices while technical support is much cheaper and easier to achieve. Hence, it is necessary for banks to facilitate technical support as a permanent organizational practice to enhance CRM system adoption.

7.1.4 IT Infrastructure

It is common in many organizations (especially in less developed countries) that IT
infrastructures are in poor conditions due to the contempt for information technology. Some bank employees also reported dissatisfaction with their desktops or servers (Anandarajan et al., 2000). Depending on the fact that organizational IT infrastructure positively impact salesperson's perceived ease of use, we recommend that bank practitioners pay more attentions to both hardware and software conditions in the offices. Buying new computers and updating operation systems may cost a fortune, but the future return they will gain in the strengthened customer relationship is absolutely worth the investment.

7.1.5 Individual Factors
Organizations are hardly able to control social and individual variables as they deeply root in personal beliefs. Some suggested that although it is impossible to change the personality of a person, organizations can filter out the undesirable personalities through recruitment, which means companies could signal their commitment to IS implementation by "incorporating it in human resource practices" (Schillewaert et al., 2004:331; Avlonitis & Panagopoulos, 2004). For instance, HR managers can put innovative characteristic as one basic requirement in recruiting and selecting salespersons. Those innovative salespersons accept CRM more thoroughly and they spur the intra firm adoption process (Agarwal & Prasad, 1998). It could be an effective way to control individual factors for newly established and fast developing firms. Banks in China, as mentioned before, are at a rapid developing stage nowadays. Hence, we suggest the HR function be adopted in order to obtain a expected advantage in individuals.

7.1.6 Social Factors
Social influence attributes much to the culture of the organization. In order to build an IT-friendly social environment throughout a firm, the support of top management must be committed (Mendoza et al., 2006). Indeed, the positive impact of supervisor is only to take place when managers advocate CRM and its utilization, otherwise positive impacts may turn into negative ones. Peer influence is related to individual
factors and it can be amplified by setting examples of the excellent system adopters in front of the public.

7.2 Research Limitations and Suggestions

7.2.1 Limitations in Survey
One critical limitation of the current research is that the sample sizes are very small. There are certain constrains in the sampling process for this study: (1) respondents work in a Chinese bank which must be representative in China's banking industries (2) the chosen banks should be anticipating CRM and (3) respondents have to be working as sales reps or sales managers in the banks. Great efforts were made but forty five is the best we could do. The small sample increases the risk of inaccurate results in data analysis. In order to ease the risks, we conducted interviews to gain some qualitative data to help compensate for the small sample.

7.2.2 Limitations in Data Analysis
This research used multiple regressions to test the hypotheses, which is suggested in some literatures (Park et al., 2008; Pallant, 2007). However, as is suggested by many prior TAM studies, the main stream method to test hypotheses in TAM study is to do confirmative factor analysis (CFA) and following up by structural equation modeling (SEM), which is not supported by SPSS.

7.2.3 Recommendations for Future Research
Honestly, no single research is able to investigate all the aspects of system adoption. For future research, it would be appreciated to discover and explain more external variables that affecting perceived ease of use, perceived usefulness and system adoption behaviour in salesperson in China's banking industry. It would also be interesting to explore the impact of CRM adoption on salesperson's practical performance when CRM is actualized in banks in the near future, which could be an examination of whether the IS is successfully implemented.
World Count: 15,707
Reference


Appendix

Appendix 1. Survey Questionnaire

个人信息

<table>
<thead>
<tr>
<th>银行：</th>
<th>职位：</th>
<th>年龄：</th>
<th>性别：</th>
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背景介绍

客户关系管理（CRM）是指企业用CRM来管理与客户之间的关系。CRM是选择和管理有价值客户及其关系的一种商业策略。CRM的实现需要依靠对应的信息系统（CRM系统），系统可以帮助使用者完善其工作。通常包含由每位顾客的基本数据及交互历史记录集合成的客户群数据库，而系统的用户尚需使用数据挖掘以有效整理出有价值的数据，让经授权的前线销售人员、市场分析员、客户服务主任等跟客户交往时，可以参考CRM系统内的客户记录，以加强对彼此的了解，使服务更个人化。

说明：请用数字1-5打分，写在问题后面的括号里。

问卷均匿名填写，数据仅为论文用，绝不公开

谢谢您的支持！

完全不同意 1 2 3 4 完全同意

Q1. 我是一个勇于尝试新鲜事物的人...........................................( )

Q2. CRM系统实施后我会立即使用...........................................( )

Q3. 我对于电脑的使用是很有经验的.................................( )

Q4. 我了解信息技术，并且对它的运用颇有经验............( )

Q5. 我了解CRM，并且有使用经验.................................( )

Q6. 试想一下有这样一个软件/系统，你从未使用过这个软件，不要管这个软件的具体功能，它可以在某些方面帮助你的工作，使你工作简单化且更有效率。那么在下面给出的条件下，你有没有信心运用这个你不熟悉的软件帮助你完成工作？（同样的，1 代表完全没有信心，5 代表非常有信心）

Q6.1 你从未用过与其类似的软件...........................................( )

Q6.2 我周围没人会告诉我怎么用...........................................( )
Q6.3 只有使用手册（软件说明书）可以作为参考........................................( )
Q6.4 在我自己尝试之前，我见到过别人操作该软件.............................................( )
Q6.5 我可以找人帮助我，如果在使用中遇到不顺............................................( )
Q6.6 有人可以在使用的开始阶段帮助我.................................................................( )
Q6.7 我有很多时间来摸索该软件的使用方法，不用担心工作进度.............( )
Q6.8 我之前用过类似的软件.......................................................................................( )

Q7. 如下条件会影响我对系统的使用（1 代表影响很小，5 代表影响很大）
Q7.1 公司的硬件设施很好（电脑），能够流畅的运行系统对我的使用很重要.............( )
Q7.2 公司会重视并给予我们很好的 CRM 培训.......................................................( )
Q7.3 经过培训我不仅知道如何操作，而且对 CRM 带来的竞争优势表示赞同.............( )
Q7.4 在使用 CRM 时，我们能够得到很好的技术支持.............................................( )
Q7.5 我们参与系统的设计...............................................................................................( )

Q8. 如下条件会影响我对系统的使用（1 代表影响很小，5 代表影响很大）
Q8.1 我的同事们都用.................................................................................................( )
Q8.2 使用 CRM 的同事们的工作效率都得到了提升.............................................( )
Q8.3 我的上司鼓励我使用系统.......................................................................................( )
Q8.4 我的上司清楚CRM 的意义，并且支持系统的实施.............................................( )
Q8.5 我们的竞争对手（其他银行）都实施并有效运用了 CRM 系统.............( )

Q9. 多大程度上你觉得 CRM 系统能够为你做到以下几点：
完全不同意 → 2 → 3 → 4 → 完全同意
Q9.1 缩短完成一项工作需要的时间...........................................................................( )
Q9.2 能够完成一些没有系统时做不到的事情.........................................................( )
Q9.3 提高日常工作质量.................................................................................................( )
Q9.4 提高生产效率........................................................................................................( )
Q9.5 让我的工作更有条理...............................................................................................( )
Q9.6 使我更了解我所负责的客户群中的客户.................................................................( )

Q10. 如下条件会影响我对系统的使用（1 代表影响很小，5 代表影响很大）()
Q10.1 我与系统的交互方式清楚并且易于理解.........................................................( )
Q10.2 系统的使用十分简单...............................................................................................( )
Q10.3 用户界面简单，我可以在第一时间找到我需要的功能按钮...........................( )
Q10.4 系统运行稳定，响应快，不易出现停顿等情况...............................................( )
Dear Sir/Madam
This is a questionnaire regarding my post-graduate dissertation. The data will only be using in the dissertation and all will be anonymous. Before you begin to answer, you may want to read the introduction below if you are not familiar with CRM or CRM systems.
Thanks for your participation and hope you have a nice day!
Best Regards
Chenzhi Wang

Brief introduction of CRM:
Customer relationship management (CRM) is a widely-implemented strategy for managing a company's interactions with customers and sales prospects. The overall goals are to find, attract, and win new clients, nurture and retain those the company already has, entice former clients back into the fold, and reduce the costs of marketing and client service. CRM systems are information systems help to achieve those goals. Especially in a bank, CRM systems contain functions like storing and updating customer data, customer transaction data, customer data mining, decision support and sales automation (e.g. reminders of sales calls)
Personal Information

<table>
<thead>
<tr>
<th>Bank:</th>
<th>Job Title:</th>
<th>Age:</th>
<th>Sex:</th>
</tr>
</thead>
</table>

Definitely Disagree ← ← ← ← ← Definitely Agree

(Personal innovativeness & experience)
1. I’m very well adapted to new things and changes
2. I will use CRM system intensively as long as it is facilitated
3. I feel no obstacle in using a computer program, even it is complicated
4. My colleagues, friends and relatives say that I am a innovative person
5. I’m very experienced in using CRM system

6. Imagine there is a system to help you to simplify and optimize your work, but you have never used it before. Then, under the certain conditions below, how much confidence do you have to complete your work using the system? (Technology self-efficacy)

Not Confident at all ← ← ← ← ← Very Confident

6.1 If I had never used a package like it before
6.2 There is nothing to help me
6.3 There is only user manual to be my guide
6.4 I have seen someone used it before my try
6.5 There is someone to tend to when I get stuck
6.6 Someone have helped me to get started
6.7 I have plenty of time to learn to use, no worry to finish my work in time
6.8 I have used similar systems before

7. Can you indicate the how important are the conditions below for you if your bank are implementing the CRM system? (Organizational facilitators)

Not important at all ← ← ← ← ← Very important

7.1 IT infrastructures are good, packages can run well on company's computers
7.2 My bank will have intensive training on how to operate CRM
7.3 Training will give me some understanding of managerial expectations of CRM
7.4 We will get good technology support when working with CRM
7.5 We participate in the design of the system

8. Under the conditions below, to what extent do you agree that your usage will be affected? (Social influence)
8.1 Most of my colleagues are using the system and I can learn to use from them
8.2 Those who use the system obtain a progress in their job
8.3 My supervisor(s) encourage the use of system
8.4 My supervisor(s) advocate the implementation of CRM system
8.5 Other banks have introduced CRM and their sales reps are all using the system

9. To what extent do you agree that CRM system can achieve the goals below?(PU)
9.1 Decrease the time needed to conduct your activities
9.2 Work out something that could not be accomplished without the system
9.3 System is suitable for my daily work process
9.4 Satisfy my customers (my customers think it is beneficial to get involved in the system)
9.5 Bring my work to a more efficient and effective level
9.6 Giving me a better analysis of my customers in my assigned territory

10. Can you indicate that how important are the conditions below for you if you are to use the CRM system? (PEOU)

<table>
<thead>
<tr>
<th>Not important at all</th>
<th>Very important</th>
</tr>
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10.1 My interaction with the system is clear and understandable
10.2 Using the system will not take too much my effort
10.3 Information security are guaranteed
10.4 The system run without bugs, halts and the reaction is quick
Appendix 2. Interview Questions

1. Participation
1.1 What do you think of participating in the designing of CRM systems?
1.2 Do you agree that CRM system will be easier to use when you have participated in the design?
1.3 Do you agree that CRM system will be more useful when you have participated in the design?
1.4 Will you commit yourself to participation even it spends your time?

2. IT infrastructure
2.1 Is your desktop and OS in good condition?
2.2 Do you enjoy using the current business softwares on your desktop?
2.2 What will you do if your desktop cannot run well?

3. Technical support
3.1 Do you think technical support is necessary to help you in using the system?
3.2 What will you do when something wrong happens while no technical support is available?

4. Training
4.1 Do you need training to help you to learn how to operate the system?
4.2 Do you wish to know more about CRM expectations in training?
4.3 Is training necessary for you to adopt the system?

5. Peer usage
5.1 Would you feel left out if you do not use CRM while your colleagues have adopted it?
5.2 Is it important for you to learn to use the system from already-adopted colleagues?

6. Supervisor
6.1 Supervisor's support on system adoption is very important to you?
6.2 will you feel motivated if your supervisor uses the system and advocates system use?

7. Competitor
Do you perceive competitors' system adoption a threat for you and your bank?