

A Study of CRM Implementation in Financial Industry

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Abstract – This paper presents a project management model for customer relationship management projects for the financial service industry. Key findings from a survey of both financial institutes and software vendors are then presented. It is suggested that a good communication management can increase the success rate of CRM projects. The other important areas are scope management, quality management, time management and project planning, although their performance is below expectation.

Keywords: CRM, Project Management, Financial Service

1. Introduction

In the financial service sector, the deployment of customer-focus strategy to re-engineer the business operations is often through the development of the customer relationship management (CRM) system. With a good CRM system, a financial institute can understand customers better and is able to design and provide better services/products. A financial institute can then get more loyal and profitable customers, and earn more profit.

Recently, many retail banks in Hong Kong such as CitiBank and Standard Chartered Bank have started to develop different kinds of CRM systems such as sales force automation, marketing campaign system, internet banking and phone banking. However, implementing CRM system is not easy. Research studies of the Gartner Inc. [4] and Meta Group [8] indicate that 50% to 80% CRM implementations fail.

Our project aims to explore an effective software/CRM project management model for the financial service industry in Hong Kong. In the next section, we propose a software project management model for financial institutes. Section 3 focuses on the survey approach. Section 4 presents some key findings coming from the responses from the financial institutes and the software system vendors. It is expected that the research findings could give us a substantial understanding of the current Software/CRM project management practices, issues or

barriers as well as insights to improve the success rate of Software/CRM implementation in the financial industry. Financial institutes could then realize the project objectives in terms of lowest cost, on-time project completion, good quality system, minimum disturbance to the business, and a high return of investment.

2. A CRM project management model

In developing our model, we first review various CRM models [1, 2, 5, 7, 8] and the popular software project management models [3, 6, 9, 10, 12]. The implication of each model on software project management in financial industry is identified. In addition, after reviewing several case studies of CRM implementation [11], we identified some key success factors for software project management in the financial industry.

We then developed a Software/CRM Project Management model for financial institutes, as shown in Figure 1. Four primary business factors forming the software project management environment in financial service industry are identified as technology, CRM/IT strategy, customer requirements and organization culture & characteristics. Financial institutes that implement CRM project have to consider their existing technology level as well as the technology level that they are going to acquire in the future. The considerations of existing technology level include operational tools, analytical and collaboration systems, degree of process automation, the diversity or complexity of legacy systems and other hardware and software systems. However, the future technology acquired has to be in line with their CRM/IT strategy, at the same time, meeting the customer requirements. The organizational culture and characteristics affect all aspects of the project management. Organization of different size and complexity requires different system requirements. Quick decision making, agile to business changes, ability to take risk and keen for efficiency improvement are also some of the culture and characteristics that shape the behavior of the management and employees.

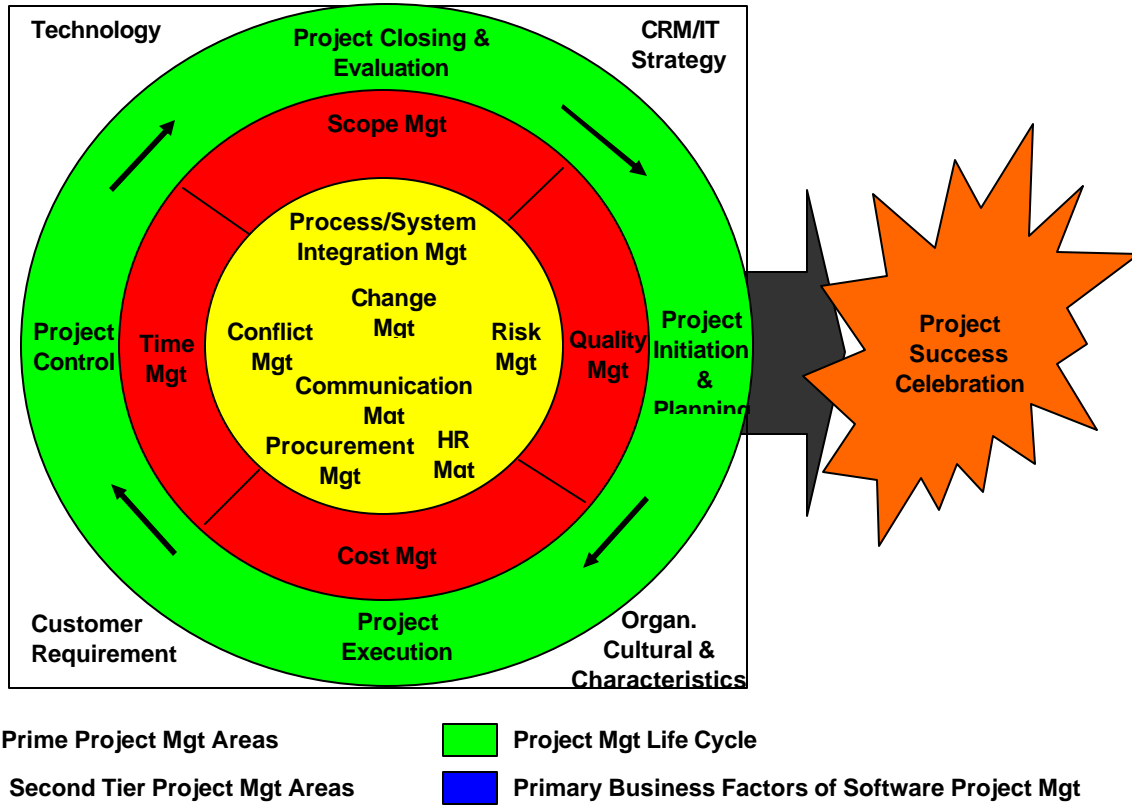


Figure 1. Proposed Software/CRM Project Management Model for Financial Service Industry

Within the context of software project management environment, the generic project management life cycle includes project initiation, planning, execution, control, closing and evaluation. In general, the basic components are common to any industries which include scope management, time management, resources management, quality management, cost management, communications management, risk management, procurement management and integration management. However, four project management components are identified as prime (or most important) project management areas in the financial service industry. They are scope management, time management, quality management and cost management. The second tier project management areas are shown in the center of Figure 1. In view of the business nature of financial institutes is all about offering professional services to customers, people related project management areas in the second tier, such as, communication, conflict management, change management are particular important. Besides, it is commonly found that most financial institutes have inherited with a number of disperse legacy systems. Therefore, process/system integration is a burning issue when doing software project management.

3. Methodology

The objective of our study is to validate the CRM / software project management model proposed and its assumptions as well as to obtain a better understanding of how to implement a successful CRM / software project in local financial institutes in Hong Kong. To testify the proposed model and its assumptions, a research study was conducted with both financial institutes and software vendors. In particular, our study focused on testing the hypotheses given in Table 1.

To understand CRM / software implementation of financial institutes from different perspectives, we decided to invite both executives from financial institutes and software vendors to participate in a survey. We planned to conduct face-to-face interviews whenever possible.

Two sets of questionnaires (one for software vendors and another for financial institutes) were designed. Both open-end and closed-end questions were developed. Each questionnaire contained more than 20 questions. Section I of questionnaire focused on the background of company and interviewee. Section II focused on project management and covered the CRM / software project implementation in respect of difficulties, cost management, resources management, conflict management, risk management, change management and best practices.

Besides our own contacts, company names and contact lists were downloaded from Trade Development Council website (<http://hkdirectory.tdctrade.com/>) and the Hong Kong Associations of Banks website (www.hkab.org.hk) respectively. In early September 2005, we sent emails to targeted interviewees requesting face-to-face interview.

Unfortunately, there were only 6 responses. Most of the targeted interviewees were unwillingly to accept face-to-face interview, as it was very time-consuming. To get more participants, we decided to simplify the questionnaires by reducing the number of open-end questions. The simplified versions were administered online on September 16, 2005.

	Hypothesis
H1	The software project implementation areas in financial services industry are related to the size of the financial institute. Financial institutes with bigger size tend to emphasize on system integration, analytical system upgrade and service automation because their operation is more diverse and complex than small financial institutes. It is cost effective by doing system integration, analytical system upgrade and service automation.
H2	Whether to use external consultant or in-house software project team is related to the size of financial institute. Financial institutes with bigger size tend to have external consultants.
H3	Business users have to be included in the project team as they hold the professional knowledge of the operations. By including the business users, it can reduce the conflict of interests and resistant to changes during project implementation.
H4	Implementation practice of having external consultants to work with internal project team usually adopted the approach of implementing a system incrementally through smaller, pilot phases / projects.
H5	People aspects, such as different interests of different parties, staff resistance and roles and responsibilities are the most difficult tasks where conflicts are always found since the financial service industry is by nature people based and customer oriented.
H6	Scope, cost, quality and time management are the most important project management areas for CRM / software project in local financial institutes.
H7	Related to the prime areas (scope, cost, quality and time management), the most frequently required deliverables are system specifications, cost control plan, quality requirements/control, project schedule plan.

Table 1. Hypothesis to be Tested

Then we sent out the online versions to targeted interviewees and asked them to complete the questionnaire online. Results were more encouraging. By mid October, including web and face-to-face questionnaires, we received 23 sets from vendors and 20 sets from financial institutes. Response rates for vendors and financial institutes were 14.4% and 50% respectively.

4. Findings

Our analysis focused on quantitative measurement of choice and preferences. Raw data was input to SPSS to calculate frequency, means and generate summary tables. We also investigate relationships between some variables. Given the large amount of data from our survey, we will present results on conflict management, change management, and risk management in a later paper.

4.1 Profiles and respondents

Among the 20 respondents from financial institutes, 90% of them were in managerial level or above. In particular, for the 10 face-to-face interviews, most respondents were executives from major banks such as HSBC, Citibank, Standard Chartered Bank and Bank of East Asia Limited.

The background of financial institute respondents included personnel from both business and technical area with distribution being 75% to 25% respectively. 75% of respondents' companies had over 1,000 employees, in which 65% had over 2,000 employees and 10% with 1,000 to 2,000 employees. The remaining 25% worked in companies have less than 500 employees. For software vendor side, all 23 respondents had software project implementation experience with banks and financial companies. Most of them are of technical background, such as, project manager, system analyst, chief technical officer, system manager, quality assurance and security specialist, and senior consultant. About half of the vendors were working in *large* organizations with more than 100 staff. While the other half were in small organizations with less than 50 staff.

4.2 Project implementation area

It was found that large financial institutions with more than 1,000 employees were more focused on service automation (30%) and integration of database of different areas (35%). They also had projects in customer segmentation systems, sales automation, front desk operation, and campaign management system. Small financial institutes with less than 500 employees were

mostly involved in sales related projects such as sales automation and customer segmentation.

It might be that large corporations tried to reduce operational cost via service automation. Management wanted to automate manual processes to streamline operational flow and improve efficiency. On the other hand, with increasing emphasis of CRM, many large financial institutes foresaw the need of transferring from traditional product-centric environment to customer-centric one. In order to have a holistic view of customers, integration of silo databases, which would facilitate data analysis, was necessary. Therefore, database integration was another popular implementation area for larger financial institutions.

The feedback from software vendors also indicated that they had been involved mainly in development of analytical system (65%), design and installation of CRM system (43%) and implementation of Internet banking / phone banking (39%) with large corporations.

The findings matched with hypothesis H1, which suggested that the software project implementation areas in financial services industry are related to the size of the financial institute. Financial institutes with bigger size tend to emphasize on system integration, analytical system and service automation because their operation is more diverse and complex than smaller financial institutes.

4.3 Implementation practice

Regarding the implementation practice of whether to employ external consultants or use in-house software project team, it was found that 55% financial institute respondents adopted the practice of implementing software with external consultants helping the project team. It seemed to be an ideal approach to leverage on consultants' expertise and also blended with internal company culture. Another common practice (30%) was in-house development. Least common approach was totally out-sourced to external consulting firm (10%).

Relating project implementation approach with company size, 85% (11 out of 13) large corporations adopted the approach of a mix of external consulting firm and internal project team, while smaller companies preferred out-sourcing. The advantage of mixing external consultants and internal project team was to leverage on consultant's expertise and also train up internal staff.

For small financial institutes with less than 500, they would either totally outsource the software project to consultant or doing it in-house.

With reference to hypothesis H2, the results showed that it was likely that the use of external consultant or in-house software project team might be related to company size.

4.4 Project team structure

All financial institute respondents replied that they had different business users in their project team. 75% of respondents replied that their project team had included IT technical personnel. However, only 15% respondents responded that they had involved Financial Control / Risk Management personnel in their projects. Only 10% respondents answered that they involved QA personnel.

The findings reflected that the interest of different business users were still the prime concern of the project. It could be seen that by involving different business users in the project team, it not only helped smoothing out the project management, but also helped balancing the interests of different departments, ensuring the final products of the project could be accepted by major users. However, the low percentage of dedicated financial and quality assurance personnel in the project team could reflect that the financial as well as quality assurance aspects were of less concern.

The findings confirmed hypothesis H3 that the participation of business users in the project team was vital to the implementation of software project.

4.5 Project implementation approach

Financial institutes were sensitive to risk exposure area. 70% respondents adopted a more conservative approach by implementing a system incrementally through smaller, pilot phases / projects. Only 15% respondents adopted more aggressive approach – implement the new system across the entire company at one time.

When matching implementation approach with practice, it was found that more than 70% (8/11) financial institute respondents having external consulting firm to work with their internal project team usually adopted the approach of implementing a system incrementally through smaller, pilot phases / projects. By doing so, it was believed that the project implementation risk could be significantly reduced. The result suggested that hypothesis H4 holds.

Deliverables	Performance Rating (1-6)
Final project report	2.55
User acceptance test results	3.5
User manual	3.15
QC plan and checklist	2.9
Cost control plan	2.35
System spec document	3.3
Software design document	2.5
Risk mgt plan	3.05
Stakeholder mgt plan	2.3
Project schedule	3.65
Software project mgt plan	2.7

Figure 2. Satisfaction Level on Agreed Deliverables

4.6 Agreed deliverables

Respondents replied that the five most common project deliverables required for their past project were Project Schedule, User Acceptance Test Results, Final Project Report, System Specification Document and User Manual. These deliverables covered the areas of management of time, scope, and quality.

To some extent, the results of the most commonly agreed deliverables were in line with the level of importance ranked for the project management areas. Except that the cost management was proposed to be one of the prime project management areas, but only 30% respondents replied that the cost control plan was one of their agreed deliverables. Hypothesis H7 could only be partly stated.

Among the five most commonly agreed deliverables, project schedule, user acceptance test results, user manual, and system specification document had their performance satisfaction level higher than the average of 3, as shown in Figure 2. Though final project report was voted as the third commonly agreed deliverable, its performance satisfaction level (2.55) was below the average of 3.

Other agreed deliverables with performance satisfaction level lower than the average were the software project management plan, software design document, cost control plan, quality control plan and checklist and stakeholder management plan. It implied that these areas were not managed well and hence did not meet the expectations of the respondents. Stakeholder management plan and cost control plan had the lowest performance satisfaction level of 2.3 and 2.35 respectively.

4.7 Importance of project management areas

Respondents were asked to rate the importance of project management areas from 1 to 6, where 1 indicated not important and 6 indicated the most important. From the feedback of financial institutes (see Figure 3), there were eleven out of twelve project management areas with importance rating above 3. In other words, the eleven areas were all important to the respondents. The only one area that was thought of less important was procurement management with a rating of 2.05. Among the eleven project management areas, Project Planning, Time Management, Quality Management and Communication Management were said to be the top four important areas contributing to success of a software project management; followed by ‘System Integration Management’ and ‘Cost Control’, which received an equal importance rating.

Software vendors’ rating of importance of project management areas, however, was somewhat different from that of financial institutes. Software vendors emphasized much on scope management and change management on people; which were not the top priorities of the financial institutes. The difference could be easily understood as they had different perspectives. Software vendors were more concerned about scope management as it affected the resources and hence the cost to be charged. Besides, as they were seen as ‘outsiders’, it was important for them to receive cooperation from their clients. Thus, change management on people was also a key concern.

On the other hand, financial institutes emphasized more on communication as most of our respondents in financial industry were large corporations. Communication hierarchy among many users was more difficult and complicated. As for vendors, they mainly interact with project team representatives. Communication would be more direct and less complicated.

Figure 3. Rating on Importance of Project Management Areas

Project Mgt Areas	Rating of Importance (Mean)		
	Financial Institutes	Software Vendors	Consolidated
Project Planning	4.15	4.91	4.56
Time Mgt	4.1	4.65	4.4
Quality Mgt	3.8	4.78	4.33
Communication Mgt	3.65	4.74	4.23
System Integration Mgt	3.5	4.26	3.91
Cost Control	3.5	4.78	4.19
Scope Mgt	3.4	5.13	4.33
Human Resources Mgt	3.35	4.04	3.72
Conflict Mgt	3.3	4.7	4.05
Risk Mgt	3.05	4.61	3.88
Change Mgt on People	3.05	4.87	4.02
Procurement Mgt	2.05	3.65	2.91

Financial institutes also stressed on quality management and system integration management whereas vendors played less emphasis on them. It was because financial institutions could not afford errors in their operation. In today's severe competitive market, customers took 'efficiency' as a basic requirement in financial services. Therefore, seamless system integration, which could lead to improve efficiency was a major concern.

Although the sequence of the importance of project management areas varied between the financial institutes and software vendors, it was found that both parties ranked the following project management areas as their 6 top priorities.

1. Project planning
2. Time management
3. Scope management
4. Quality Management
5. Communication Management
6. Cost control

The findings suggested that the proposed prime areas for project management model in financial institutes were stated. Hypothesis H6 was affirmed. In addition, it also highlighted that project planning and communication management could not be undermined. Project planning could be seen as the first step of implementing a project. Without a good project plan, a project might experienced problems of inadequate resources, unclear scope, poor scheduling and lost of quality control. Communication management could be vital to project management as good communication helped enhancing understanding of the

project, seeking employees' support, and gaining their commitments to deliver the project results.

4.8 Gap between importance of project management areas and their performances

Both financial institutes and software vendors were asked to rate the performance of different project areas based on their last projects. The results showed that financial institute respondents were not satisfied with the performances of most project management areas, especially for system integration management and quality management. The gap between the importance and performance ranged from -0.2 to -0.75; the larger the gap, the poorer the management of the area in the project. In this regard, although the financial institute respondents thought that time, scope, quality and communication were the most important project management areas, they were poorly managed. Procurement Management was the least important area, and its performance was better than expected with gap of 0.6. Conflict Management was also rated better than expected.

Comparing the importance against the actual performance of the project management areas of the software vendors, most of them felt that their system integration management performed slightly better than expected. The performance of other project management areas did not match with their level of importance. Among them, scope management and change management were the worst performed areas with a big gap of -1.09 and -1.3 respectively.

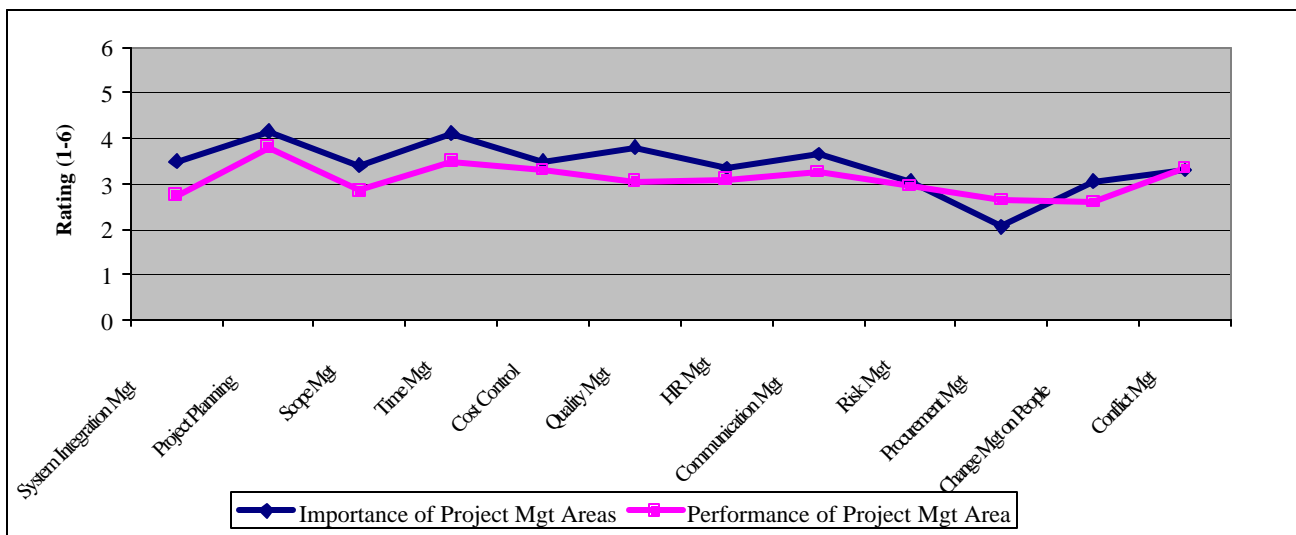


Figure 4. Financial Institutes – Gap Analysis Between Project Management Area and Performance

According to software vendors, it was very common that financial institutes would expand project scope (i.e. ask

vendors to do more tasks) during project implementation. As software vendors had to maintain good relationship

with clients, they usually agreed without asking for extra charges. In addition, unwillingness of conservative banking staff to cope with new changes was also a major difficulty for vendors. Conflict management, project planning, cost control and risk control were the second group of project management areas with large deviation from the level of importance expected.

In sum, the gap analysis highlighted that all the project management areas (regardless of the level of importance) could have done better. Those most important project management areas identified were the areas that failed most on meeting their expectations. In other words, even though they were believed to be important, they were not managed well. Change management on people was the badly managed area. It might suggest that people management and matters related to interpersonal relationship were most difficult part of project implementation.

4.9 Difficulties encountered

The top five difficulties ranked in project implementation by financial institute respondents were:

1. Continuous change of requirements (50%)
2. Different interests of different parties (50%)
3. Insufficient resources (45%)
4. Unclear roles and responsibilities (30%)
5. Staff resistance/ poor communication (25%)

Among the top five highly ranked difficulties, four of them were about people management, such as different interests of different parties, unclear roles and responsibilities, staff resistance and poor communications.

When correlating the project difficulties with implementation areas, we found that insufficient resources, different interest of different parties and continuous changing of requirements were mostly found

in both software project implementation of Service Automation and Integration of Databases.

It could be understood that service automation and integration of database of different areas involved re-design of cross-departmental work process flows. It, therefore, increased the complexity and hence the difficulties of handling different interest of different parties and the continuous change of requirements were unavoidable. In that case, it was always thought that the resource provided was not enough for handling the issue. The mapping of project difficulties with implementation practices showed that for those projects implemented jointly with external consultants, they experienced a lot more difficulties than the other implementation practices, such as, total project outsourcing and recruit experienced project in-charge.

Different from the feedback of financial institutes, the software vendors reported that the five frequent difficulties encountered in project management with financial institutes in order of severance were:

1. Employee resistance to change (70%)
2. Poor communication (61%)
3. Difficult to integrate highly diverse legacy systems (57%)
4. Inadequate budget (52%)
5. Process review for automation (39%)

The top two were highly related to people aspects, which implied that people issues were more difficult to handle. It could be due to the fact that the software vendors were the 'outsider' of the financial institute. As an outsider, implementing new changes / new system would definitely face a lot of resistance from the client's employee. The results supported hypothesis H5 that people aspects were the most difficult tasks in project management.

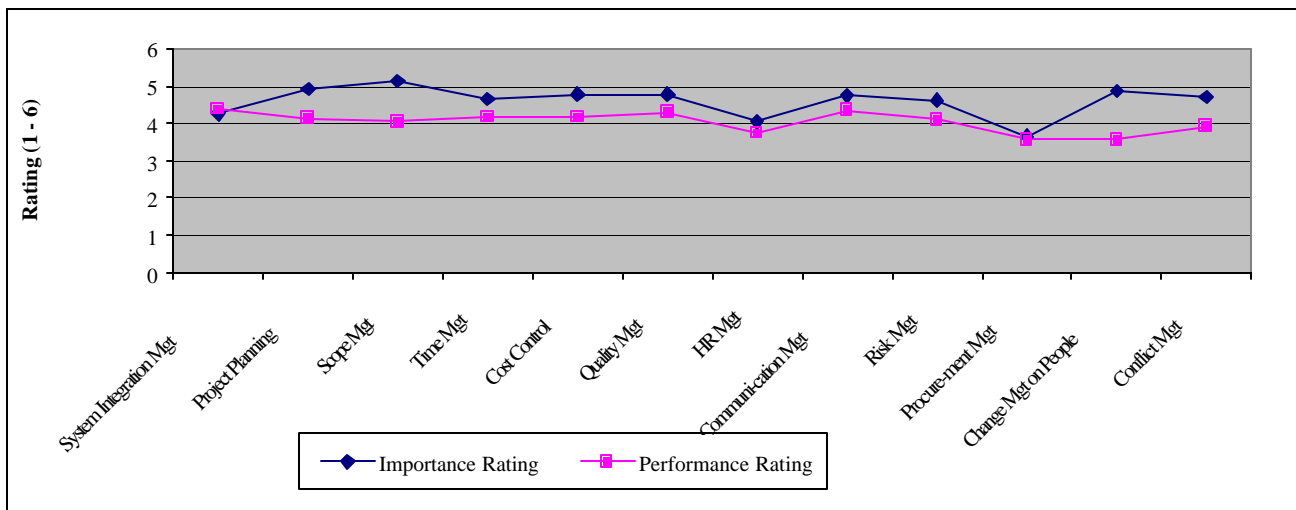


Figure 5. Software Vendors - Gap Analysis Between Project Management Areas and Performance

Figure 6. Best Practices for Software Project Implementation in Financial Institutes

Best Practices	Financial Institutes	Software Vendors	Consolidated
Thorough studies of interface requirements of the legacy systems	20%	22%	21%
Work processes streamline	65%	61%	63%
Software project must be in line with the marketing strategy	35%	52%	44%
Manage stakeholder expectations	70%	78%	74%
Ensure employees to have a complete understanding of the project	25%	48%	37%
Get employee and management to support and commit in the project	70%	87%	79%
Train up employees to cope with the changes	40%	39%	40%
CRM/IT system has to be based on people	10%	22%	16%
Integrate legacy databases in CRM/IT system	30%	17%	23%
Thorough evaluation is necessary for selecting technology vendors	25%	17%	21%
Measure and keep track of the ROI of the project	30%	43%	37%

4.10 Best Practices

It was found that the top four selected best practices by the two groups were similar, as shown in Figure 6. The results further supported the findings of previous sections that people aspects were important to the success of project management. To get employee and management to support and commit in the project, in other words, to clear the staff resistance, was the best way to make a good start of a project. Secondly, management of stakeholder expectations through out the project life cycle would definitely help reducing operational risks and conflicts and hence increased the efficiency and effectiveness of project management. Besides, managing people to cope with changes, streamline workflow and ensuring software project in line with marketing strategy also played a vital role in managing a project successfully.

5. Conclusions

With reference to the proposed software / CRM project management model, it was found that for the four prime project management areas (scope management, quality management, time and cost management), cost management was not as important as communication management. In fact, it was found that the most important four project management areas included project planning. Our findings imply that financial institutes implementing CRM project could increase its success rate by having a good management on communication.

All our hypotheses are supported except H6 and H7. There are a number of limitations in our study. Low response rate from both financial institutes and software project management vendors has undermined the validity of the research results. Another limitation of the study is that it only focuses on one specific region - HK. In future, a comparison of the software project management practices with different service industries could be done.

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