PROJECT MANAGEMENT SOFTWARE
MARKET SEGMENTATION IN CHINA
---A MARKET REPORT FOR 3P INTERNATIONAL AB

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ABSTRACT

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Title: Project Management Software Market Segmentation in China  
--- A Market Report for 3P International AB

Problem: How to segment PMS market in China and what is the specific target segment for 3P International AB?

Purpose: This thesis aims on researching and analyzing the market segmentation of PMS industry in China by different dimensions for 3P International AB, a Swedish Project Software company, as well as other companies who want to enter into China’s PMS market.

Method: Secondary data is collected from articles and literatures in journals and through internet. Primary data is collected through qualitative interviews with 3P International AB and professional users from customer side.

Conceptual Model: A model of PMS Market Segmentation in China is used as the framework of whole thesis. The relevant theories and definitions are used during the research process.

Conclusions: Regarding 3P International AB’s current market position, customers of Niche Player and Visionaries would be the target groups for them in current situation, and challenger’s market segment is next target for the company according to the company’s vision. The market in East, North and South China, Shanghai, Beijing, and Guangzhou could be set as three centric bases for sales, service and marketing activities. It’s a very good chance to reach large companies before dominant products appear in the market. And it is also a good time to create convincing references for SME users, who’re more like followers after large companies.
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1 INTRODUCTION

The original thought of writing this thesis is according to the current demands of 3P International AB, a Swedish project management software company. The authors, who are students from Mälardalen University, were invited to research China’s project management software (PMS) market and help the company to find out its target customers in China. This study will segment project management software (PMS) market in China by three criteria of dimensions: Product Concentration, Geographic Spread, and Customer Type to show the current competitive situation, where the target customers are, and who the most attractive potential customers for the company. Through the analysis of market segmentation, readers could find the most beneficial target segments in China’s PMS market for business starting period company like 3P International AB.

3P International AB is a Swedish project management software company, which locates in Teknikbyn in the heart of Västeås and has some connections with Mälardalen University, invited its business student to research the PMS market in China. Two authors of this thesis are both from China, and one of them had two years working experience in Project Management area. So the initial requirement from 3P International AB aroused authors’ interests to get into the research of PMS market in China. More detail introductions about 3P International AB and its products and business model will be introduced in chapter three later.

As learned from journals, websites and the experiences as well, authors realized that China does have huge demand in project management skill and diverse level of PMS, the market is far from mature currently. For those suppliers of PMS from US or European countries with advanced knowledge in this area, they are also searching for more market chances in China. This thesis will focus on researching PMS market in China to provide valuable reference to PMS suppliers who want to enter this market and help them to figure out their marketing position, which will also drive the market to mature stage fast and bring bilateral benefits to PMS suppliers and the market itself.

According to the interview with CEO of 3P International Daniel Nilsson (see the Appendix III), and another master thesis written last year by previous MDH students for 3P International AB which researched and analyzed the market entry feasibility, the authors learned that the company understood PMS market potential in China is huge in the following years and the market entry feasibility is already studied in that research and it shows that entering China’s PMS market is promising. The company also has awareness about China’s political, technical and language barriers, etc. (Bai, C. and Xia, M.S. and Zhou, N., 2007)
Based on the above mentioned facts, the authors decide to investigate PMS market segmentation in China by different dimensions to help main reader, the 3P International AB to figure out the specific target market segments for their further marketing strategy.

1.1 PROBLEM STATEMENT

According to the overall awareness in PMS area based on authors’ research and current needs on 3P International AB who is eager to figure out their target customers in China, a strategic question of this thesis raised: How to segment PMS market in China and what is the specific target segment for 3P International AB?

1.2 PURPOSE

This thesis aims on researching and analyzing the market segmentation of PMS industry in China by different dimensions for 3P International AB, a Swedish Project Software company, as well as other companies who want to enter into China’s PMS market.

1.3 DISPOSITION

There are seven chapters included in this thesis. Chapter 1, the Introduction, is mainly about the general background information about the topic, problem statement, purpose, and chapters’ disposition. Chapter 2, the Methodology, presents method of collecting data and information, and method of giving analysis, conclusion, and recommendation. Chapter 3 introduces the main audience company; the 3P International AB. Chapter 4 introduces the main concepts of Project Management (PM) and Project Management Software (PMS), as well as their development and current situation in China’s Market. Chapter 5 presents the conceptual model, the Model of PMS Market Segmentation in China. Chapter 6 presents Findings and Analysis by both primary data and secondary data. Chapter 7 gives out the Conclusions and Recommendations according to the previous parts of thesis.
2 METHODOLOGY

In this chapter, the methodological questions would be answered, such as “how to select data”, “what kind of resources would be used”, “how to collect reliable primary and secondary data” and “what research method would be used in resources selection”. Besides, “how to build a suitable conceptual framework for the whole research” and “how to analyze the data” would also be discussed in this chapter. The following figure shows the main idea of the writing process.

Figure 1 Process of writing
(The authors’ model)

2.1 DEVELOPMENT OF CONCEPTUAL MODEL

According to the researching questions and purpose, a suitable conceptual model is necessary to be developed as the framework for whole thesis. Meanwhile, the supporting theories and relevant concepts would also be required. A clear conceptual framework will lead findings, analysis, conclusions and recommendations to a unified direction. In order to narrow down the researching target, the authors segment the market by three dimensions so that readers could get clear picture about the current market situation.

During the processing of researching, the authors narrowed down the researching target into different segmentations so that readers could get clear picture about the current market situation both from company side and customer side. After reading articles and searching on websites in PMS market field, authors found many concepts of market segmentation from different perspectives. In consider of the research field is mainly about business to business (B2B) industrial market, the concept of B2B
market segmentation which was introduced by Mitchell & Wilson in 1998 was been chosen.

Generally, the market could be segmented by a number of criteria, in another word, there are lots of variables in market segmenting. Since 3P Company has already chose China as their preferred country, the research would be developed according to current situation in PMS market in China. However, different industries need different software; different regions in China have different IT development environment, and the users’ demands differ from large companies and SMEs as well. Meanwhile, the researching targets in B2B market are groups of companies but not individual consumers. Consequently, Product Concentration, Geographic Spread, and Customer Type sections will be used to segment the PMS market in China to meet the fundamental researching needs of this thesis.

The figure 2 shows main ideas of the model of PMS market segmentation in China. The PMS market in China will be segmented in three dimensions: Product Concentration, Geographic Spread, and Customer Type. Furthermore, the Product Concentration section will be divided into four parts according to Magic Quadrant, which is a graphical representation of a marketplace at and for a specific time period (Gartner, 2006). The quadrant used certain criteria and standards to evaluate different products, which are provided by different players, to classify those players into different market segments. The Magic Quadrant would show the competitive situation directly. The Geographic Spread section will be discussed due to the real market share data, and classify China PMS market into high IT developed regions and low IT developed regions. The Customer Type section will be evaluated from two perspectives: Large companies, such as multinational companies, and SMEs (Small and Medium Enterprises), such as subsidiary companies of large companies.

![Figure 2 Model of PMS market segmentation in China](Authors’ model)
The Product Concentration section could provide an indicator of the current products in the PMS market and their relevant competitive positions. Because this thesis is going to research PMS market in China, the product, PMS, it is the most fundamental factor to study. As there are hundreds of PMS products in current market, the competition is fierce for a new entering competitor like 3P International AB. The product characters, investment scale, marketing strategy, geographic strategy, and so on, all of those factors could impact the competitiveness and performance of a company in the market. In order to give a general picture about current PMS product in the market, the IT PM Magic Quadrant method, which was introduced by Gartner in 2006, would be used in analyzing the product concentration segmentation. As for the specific and detailed concepts and introduction of Magic Quadrant, they would be shown in chapter 5, the conceptual framework.

The reason to choose Geographic Spread dimension is because the application of software product based on computer hardware, internet network and telecommunication facilities, as well as users knowledge of software and project management skill, education and economic developing level. While because of unbalance regional development, IT and telecommunication facilities construction in different regions of China are quite different, economy development, educational investment and industry investment also have big gaps among different regions. Over half of total computer and internet uses are located in East area, with better financial conditions and higher education level. Up to 68% of those who are not computer and internet users are because of lacking skills or equipments. (CNNIC, 2006, p24) So that’s why when segmenting PMS market in China, geographical places are also consided as important element to let the audiences know where their target customers might be.

Furthermore, the customers’ demands differ from large companies and SMEs also. The Customer Type dimension is been chosen because the PMS from 3P Company was originally designed for SME customers due to products features with simple functions for each PM functional areas and low developing cost as well. This software is not tailor designed for any particular industry or user; it covers all necessary PM areas but with basic functions for each only to keep low cost development. So this kind of software could simply define as web based easy use and low cost general PMS. Most SMEs should been the target customers except in some special industry with additional demands, because SMEs company scale is small, project is small and don’t need too much complicated functions, and they’re more concern about the cost, meanwhile the project from these companies are smaller and simple comparing with large projects regarding the amount of manpower, resources, contract value, knowledge etc. (21 Manager, 2003) However, to know more about the potential customers’ characters is essential work to all players. And also, to learn more about the real market demand from different type of customers would give the company some quite useful hints before entering into the market. Whether this kind of PMS
applied to SMEs only or also to those Large and Middle sized companies becomes an important issue for the segmentation research. Hence, the Customer Type is the other important dimension to investigate.

2.2 METHOD OF DATA & INFORMATION COLLECTION

After choosing the topic of PMS market in China, the next step of writing is collecting journal articles from reliable searching engines, ABI/INFORM, EMERALD DB, the related articles or websites from Google, the official PMI website and other marketing intelligence reports. The key words “project management”, “project management software”, “project management software marketing”, “IT Software marketing”, “marketing in project management software” and “IT software marketing intelligence/report” both in English and Chinese are used for information searching. In the process of this information collecting and reading, more and more clear picture about the overall PMS market will come out. This will be helpful in constructing the conceptual framework for this thesis.

Regarding the research from journals, websites and interview with CEO of the Swedish PMS Company and professional users to getting an overall picture about the industry in PMS area, and guideline of the conceptual framework as well, the method of how to collect the empirical data for this dissertation will be presented below. It’ll use two methods of empirical data collecting, by secondary data and primary data.

2.2.1 Collection of Secondary Data

The secondary data and information will mainly search from open database resources via library of Mälardalen University and other outside resources. In order to guarantee the accuracy and reliability of the data and information, the most of the journal articles would be retrieved from reliable search engines, ABI/INFORM, EMERALD DB, Datamonitor, etc.

The professional data and information about PM and PMS industry would be gotten from the official Project Management Institution website, the Marketing intelligence report from famous consulting company in China, and also University economy forums in China. Besides, reliable resource from Euromonitor International, the global market research on industries, countries and consumers would be also used during the research.

The empirical data from websites has also been evaluated before acceptance by the published column, potential purpose, quality of the previous articles, published time, etc. to insure those data used in this thesis are reliable.
Regarding the current secondary data, the large companies prefer to choose multi-functional PMS, who contains all nine knowledge areas defined by PMBOK and require very detail control of the cross areas meanwhile, some of them even invest a lot to develop their own PMS according to their special requirements. More detail introductions about the PMS and PM definition will described in chapter 4. In order to figure out the possible reasons behind the phenomena of using 3P company’s product, which defined as the simple, easy to use and web based PMS according to interview with CEO of 3P company, in niche market in large companies, it needs to further investigated to those demands from certain business unit or department in large companies due to lack of secondary data. Hence, the primary data is very important.

### 2.2.2 Collection of Primary Data

The primary data is collected as solid reference which can’t be collected from secondary data. And the primary data would give out more detailed and up to date information regarding the thesis topic. In this thesis, the primary data will be collected through qualitative interviews, since the main purpose of interviews in this research is to get enough professional information in particular field. It is important to find interviewees with relative knowledge or experiences in PM or PMS, and the numbers of interviewees depends on how much the expertise and suggestions the interviewees could give out (Worcester Polytechnic Institute). The authors are not aiming on having a large number of interviews. Contrary, to gain high quality and deeper understanding of the research topic would be much pursued. Hence, the qualitative interviews would be used during the research process.

Firstly, in order to gain better understanding and clearer aim of research, the author interviewed CEO of 3P International AB in his office on March 3rd, 2008. Through the interview, the company’s requirements and expectation of the market are clearly displayed and got reliable information from company side directly.

According to 3P International AB’s current experiences with contacting some bigger Chinese companies and its business with ABB Sweden, they find that even the software originally developed to focus on SMEs, large companies also very interested about this kind of software. So whether this situation is common in most large sized enterprises or just exist in few cases regarding the application of the simple, easy to use and web based PM Software, could both served by SaaS (Software as a service) through internet or hosted server. However, this situation is not common according to authors’ current study by available secondary data.
2.2.2.1 Method of Interviewees Selection

The interviews will only take from large companies (see the Appendix II) for the reasons mentioned above. As for the SMEs, due to sufficient secondary data for marketing research of SMEs, the interview to SMEs is not necessary.

In order to get a general picture about the potential customers in large companies and how they are using PMS, the author did interview with an expert who worked in large company for many years and worked as project manager with professional PMP certificate. After the interview, the authors have clearer overview points about the industry and decide how to choose other interviewees. As it is mentioned before that one of the authors had worked in project management area for years in large company, and has some contacts with big companies in China, the personal connecting to the Project Managers or relating team leaders who might be the potential users and also have influence on choosing PMS in different departments of large companies would be possible and efficient.

Another interview took with a Chinese Research and Development (R&D) project leader Dr. Sun face by face in April 3rd in Västerås, who has 13 years working experience from a famous industrial large company. According to his professional background and understanding of project management applied in R&D and other relating areas in large companies in China, other future interviews in large companies also suggested by him. According to his opinion that the core business project in large companies which requiring the detailed and comprehensive management of various resources, costs, communications and procurements, etc. would not applicable of this kind of simple PMS. However, it will be very welcomed those R&D, designing, or marketing department in large company which only has simplex demands on PMS mainly focus on task process, manpower assignment or together with short term project and simplex cost management, no matter in which industry.

As it is talked before, the qualitative interview method will be used in this thesis, and then, authors plan to interview 18-20 project leaders from different departments or business units of large companies in East China, North China and South China despite which industry they are. Because there are 60.3% Large companies gathered in these regions among the total 2154 large industrial companies published by State Statistic Bureau in 2004 (SD News, 2005). As for the number of interviewees, it is decided relying on the quality of interviews, which means if the suggestions and expertise from interviewees are enough to show certain phenomenon or to give out certain suggestions that highly connect to our research, the interview will be stopped. Those 18-20 interviewees could give out enough reliable information about PMS using in large companies in different industries and different regions in China. Hence, the aim of interview would be achieved.
One department manager of telecommunication construction from Beijing Mobile Company, two project managers, four leaders from project, designing, R&D and marketing department from two to three companies of Fortune Top 500 in China representatively will be chosen as potential interviewees at first step due to good personal connecting from researcher and which is easy to reach them and could guarantee the responses of interview in time.

Six to ten more interviewees will be introduced by the above mentioned interviewees, who might be their previous colleagues or friends working in other large companies. The response rate and time could also guarantee via the introduction by those interviewees in first step. And furthermore, these interviewees are selected randomly within large companies with less SRC (self-reference criteria) by researchers when choosing industry or department in large companies. With the answers retrieved from those interviews, the authors would get enough and comprehensive understanding on the demands of PMS in large companies.

Another three to seven interviewees will select from notable China’s PM forum online mypm.net: Project Management Union (PM Union), and the interviewees will select from online forum who work for large companies currently and willing to do interview, who’re also selected randomly no matter which company or industry they’re and the only criteria is working in large companies in China, which will provide more comprehensive result of interview by un-predesigned industry and geographical region and to verify the other interview results.

2.2.2.2 Method of Interview Questions Design

The qualitative interviews designed according to the purpose of this thesis and the reason described in previous paragraph, and it also based on the conceptual model.

Question 1 classified the following questions into 2 main categories which depend on whether the interviewee uses PMS product.

1. Do you use any Project Management Software?
   A. No (only answer Q2, 3)  B. Yes (answer from Q4)

For those interviewees who don’t use any PMS product, they only need to answer question 2 and 3. The purpose of question 2 is to know whether there is some potential market demand of the product, which is provided by 3P International AB, in large company. The purpose of question 3 is mainly on 3P International AB’s competitive environment investigation. The answers from question 3 could be used as a reference when analyze the Product Concentration segmentation of PMS market in China.
2. Do you think easy-used SaaS PM Software in relevant low price might be useful for your company or some departments of your company?

3. Do you ever hear about any brand of PM Software before?

For those interviewees whose companies are using PMS product, the answers to question 4 could indicate the Product Concentration among the true users.

4. Which PM Software you are using? Please indicate the explicit type or product brand, etc. And why are you chosen this one?

The question 5 and 6 could investigate the real situation of the large companies, whether they have demand on the PMS product provided by 3P company or not, and what are their real demand, including function and price perspectives.

5. Do you think your current software is the perfect one that exactly meets your needs? What else do you expected from PM Software to support your project management work?

6. How much will the price issue influence your decision? What range of price do you think you can most accept:
   - RMB below2000, 2000-10000, 10000-20000, 20000-50000, above 50000
   - (SEK below1739, 1739-8696, 8696-17391, 17391-43478, above 43478)

The question 7-9 mainly investigated the Geographic Spread of those PMS products users. The answers to these 3 questions would give out references about where the customers of PMS product are.

7. Where is the headquarter office of your company in China? How much influence will get from head office to select your PM Software?

8. Where is your department located in?

9. Where’s your project co-workers located? How much influence will get from it to select your PM Software?
2.2.2.3 Method of Interview Conduct

The primary data will be collected by qualitative research through interviews by telephone or email, only when the phone call can’t be got through. The advantages of using telephone interviews are the efficient method to find out how people respond to a specific issue far away researching location, and it is easier to access to people by phone who would never find the time to give you an interview. (Fisher, 2007, P169)

2.3 METHOD OF ANALYSIS, CONCLUSION & RECOMMENDATION

The segmentation model of PMS market in China will be developed by using Product Concentration, Geographic Spread and Customer Type as three dimensions in the PMS market.

Product Concentration

Regarding the product concentration, the overall information about current competitive situation in the market could get from articles and some researching reports. The Product Concentration will show some competitive products and their characters which will help us to know more clearly about the PMS product segmenting in the market. According to META spectrum Evaluation (2004), the PMS market includes products that coordinate, manage, and prioritize project and program portfolios and related resources, linking them in a single repository with appropriate views to categorize, assess the value/risk of, and score current and future projects in the context of business imperatives (financials, resources, competitive position, etc.). The project management (scheduling, planning, and management), product capabilities should include a basic level of management and/or analysis for people (resource management), programs (enterprise program management — project inter-relationships to deliver on programs), and process (methodology and/or templates for project portfolio assessment) (META spectrum Evaluation, 2004). It assess PMS by focusing on coordination across five main functional areas — project, program, resource, portfolio, and process management.

From this perspective, the Gartner evaluation company made a research for IT Project and Portfolio Management (IT PM) in 2007, in this research, the products in PMS market are classified into 4 types: Leaders, Challengers, Niche players, and Visionaries (Gartner, Magic Quadrant for IT Project and Portfolio Management, 2006). The current products in the market could be classified into certain quadrant by this method of segmentation. Several PMS products are listed out which have typical characters to compare and analyze. The result will be shown in a clear picture, named
magic quadrant which is introduced by Gartner Company, and this will help reader to understand the different positions of the products directly (Figure 3.1).

When get a clear picture of the products segment in the market by the evaluation criteria according to Gartner evaluation company, 3P company and its product are also been evaluated in the same way by authors. After that, we compare the analysis of 3P Company and the Magic Quadrant for IT Project and Portfolio Management by Gartner Evaluation Company’s report, the conclusion in product segment could be described and recommendation will also give in the end of this report.

**Geographic Spread**

The geographic spread section will show readers the location of target customers. As we all know that there are millions of companies who might be users in PMS market in China. But the regions where potential customers are more concentrated are the best targets. So it is necessary to segment by geographic dimension and evaluate the target ones accordingly.

Since this market depend a lot on the development of computer hardware, internet network and telecommunication facilities, user’s knowledge of software, education and economic developing level as well. The regional software sales volume, current application situation on internet and computer, management software companies and end users are studied and analyzed. Then both the city and regional area are focused and deep analyzed for 3P Company’s entering strategy.

**Customer Type**

In the customer type section, which are the potential customers and the characters of them are very important to the main audience of this report. To know more about the potential customers, the sellers could make selling strategies, products adaptations in a better way. In this part, the *Customer Type* would be analyzed from current situation of PMS application, obstacles and further requirements of PMS application, the cost expectation for PMS, and also companies geographic location which could further verify previous analysis on geographic spread section.

The researching data in this part are mainly from interviews to large company users and the secondary data from articles or journals of small or medium sized company users. The current or potential demands from these two types of users are analyzed. When compare with current offer from 3P company, the target users will suggested by author.
After the detail findings and analyzing for above mentioned three segmentations of PMS market in China, it will be possible to draw out the conclusion about the most attractive targeting cross segments for 3P Company and other similar PMS companies as well. Meanwhile, valuable recommendations will give out for better plan of the company’s marketing strategy in China thereafter.
3P INTERNATIONAL AB

3P International AB (public) is a Swedish company founded in the fall of 2006 by Projektkontoret i Skandinavien AB, and locates at Teknikbyn in the heart of Västeås, Sweden. 3P International AB (called 3P Company for short) is in the early stage of China’s marketing entry and wants to figure out its ideal target customer in the market. The business model of the company is built on the following areas: Project management software, Project management training, and Project management method. (3P’s Business Plan, 2007)

The product differs from the other software and looked as easy-to-use software with a low price. There is a lot of software on the international market and they are pretty complex with a high threshold to use. In some cases the implementation of the software could cost several millions of RMB and user’s company also needs consultants to manage the complicated software. 3P International AB’s goal is that every beginner user could use the software for a low cost. Then the software focuses very much on How to run projects and combined fundamental PM knowledge in it. There are a lot of knowledge built in the software by means of instructions, checklists, templates and examples. The software is also very customizable and dynamic. As a user you could easily customize the project according to your needs, you aren’t tied up to a specific project methodology. And different users in same project group could share real-time updated information through internet in the data center. So shortly, this PMS has features as: web based software (it was also called as SaaS according to most up to date articles in software industry); easy-to-use; cheap; project management knowledge; and customizable.

The company is developing project management software and trying to expand their project management skills in Europe and Asia. It originally focus in the SMEs both in Europe and Asia, and China is its first market entry country in Asia and 3p also expecting it to be its largest potential market. 3P International believes that investment in China is definitely worthy and will positively get big return, but it is a small company like most of other SMEs with only limited financial support, they need to consider about the short term return and investment efficiency. Meanwhile, they are lack of marketing intelligence resources.

However China is such a huge market, the regional development and technical facilities are quite different, the demands from various scales of company users or the users’ demands according to its own developing stages are different too. What kind of specific product segment should they focus on? Where should they start with its business, which city, which region? And what kind of company users or individual users would be their customers? These questions are the main problems for 3P International AB currently and they are eager to solve them before they take next action, such as set an office or branch in China.
4 PM & PMS IN CHINA

This chapter will introduce contemporary project management definition and the knowledge lately applied in China’s market, as well as the relative project management software industries and their current development in China. It will present an overview picture of PM & PMS for readers and it is also a foundation background for later marketing segmentation discussion in China.

4.1 CONCEPT OF PROJECT MANAGEMENT (PM)

Project management is defined as “The application of knowledge, skills, tools, and techniques to project activities to meet project requirements”. (PM world today, 2008) Project Management (PM) as a management tool, it leads projects to a successful conclusion by leading, planning, organizing, and controlling the project stakeholders, resources and the project environment. (PM world today, 2008)

Because of the complexity of managing the vast array of issues within a typical project, formal project management methodologies were developed. As the early methodologies were further enhanced, a common body of knowledge began to emerge that could eventually be cast into guidelines for effective practice. Recognizing the important of project management as a career path unto itself, this work resulted in the formation of the Project Management Institute (PMI) in 1969. (Cervone, H.F., 2007) PMI is the world’s leading non-profit association for the project management profession with more than 260,000 members in more than 171 countries. PMI is recognized for the advocacy programs conduct with governments, organizations and industries around the world as they recognize and embrace project management to achieve business results. (Project Management Institute, 2008)

Within a project, the various activities that occur are divided into five broad sets of interrelated actions and activities. As a project progresses in time, it moves through these various process groups as work is completed. (Cervone, H. F., 2007) These process groups are defined in the PMBOK as:

(1) Initiating processes which focus on gaining authorization of a project or one of its phases.
(2) Planning processes that define objectives and select courses of action will be used to effect project goals.
(3) Executing processes used to coordinate activities, staff, and other resources in order to put the plan into action.
(4) Controlling processes which provide the context for measurement and monitoring of project results in order to prevent variance from the plan or correct the course of action when a variance occurs.
(5) Closing processes that formalize the acceptance of the project and bring the
project activities to an end.

Within each process group, the project manager must select the appropriate detail level processes from the various knowledge areas in order to meet the project objectives. In total, there are 44 different detail processes within the five process groups. These 44 processes are subdivided into nine knowledge areas. Not every project will use each detailed process defined within a particular knowledge area. Furthermore, the detailed processes tend to be applied to tasks in different ways and in differing order depending on the overall project objectives. More formally, the knowledge areas have been defined as project management knowledge and practice in terms of their component processes (Project Management Institute, 2008). The nine knowledge areas are: Scope management; Time management; Cost management; Quality management; Human resource management; Communications management; Risk management; Procurement management; and Integration management.

4.2 CONCEPT OF PROJECT-MANAGEMENT SOFTWARE (PMS)

Project Management Software will assist you in finding the project management solution that is right for your situation. The directory includes: project management software, bug and defect tracking, project accounting, project estimating, project portfolio management, project scheduling, requirements management, and resource planning and scheduling software. (Project Management Center, 2008)

Project management software comes in many different levels of sophistication with prices ranging from $50 to $20,000 or more. Software itself does not make project managers more effective; it just makes them more efficient. PMS does not teach you how to define scope, communicate to the project sponsor or make clear assignments to your team members. It just lets you accomplish these and many other PM tasks more efficiently. (4PM, 2008) There are 50 top PMS packages was selected based on a combination of ranking votes and frequency of visits according to Project Management Center. (Project Management Center, 2008) (Appendix I)

4.3 PM & PMS INDUSTRY IN CHINA

Project Management can be identified as one of the field which is the new booming profession in China. Reliable statistics indicate that China will need nearly 600,000 trained project management practitioners and some 100,000 certified project management professionals in the coming three years to meet the huge demand for project management skills. (PMI Annual Report, 2005)

In order to improve the project management skill, PMS as a useful tool both applied
in education and training area, and industrial and business projects’ management area. PMS in China normally divided into two simple types, one is mainly used in construction and building industry, which need multi-projects management and complex resources controlling. The other is focused on team members working cooperation function, which commonly used in new products designing, researching and development, software development in the industries of manufacturing, telecommunication, IT, financial, etc. (CCIDNET Consulting, 2005)
5 CONCEPTUAL FRAMEWORK

This chapter will present the whole conceptual framework, which is based on the model “Segmentation of PMS market in China”. Besides, the concept and criteria of market segmentation in B2B circumstance will be introduced. Furthermore, the other relative theories that are used to analyze the PMS market segmentation in China will also be presented in this chapter.

As it is talked in chapter 2.1, the conceptual model would be developed from some theories and suitable for the researching purpose of this thesis. The following figure is the conceptual model which was shown in chapter 2.1, too. (The Figure 2* in chapter 5 is the same as the Figure 2 in chapter 2.1) The specific concepts and definitions in the conceptual model will be introduced in following parts of this chapter.

![Figure 2* Model of PMS market segmentation in China](Authors’ model)

5.1 CONCEPT OF MARKET SEGMENTATION

As it introduced in chapter 2.1, the research field is mainly about B2B industrial market, the concept of B2B market segmentation which was introduced by Mitchell & Wilson in 1998 is exactly suitable for the research.

According to Mitchell & Wilson (1998), “Business-to-business market segmentation is an ongoing and iterative process of examining and grouping potential and actual buyers with similar product needs into subgroups that can then be targeted with an appropriate marketing mix in such a way as to facilitate the objectives of both parties.
The process has strategic and tactical marketing implications and should be periodically reviewed to incorporate the lessons of experience and to maintain an optimal cost/benefit ratio.”

Good market segmentation will result in segment members that are internally homogeneous and externally heterogeneous; that is as similar as possible within the segment, and as different as possible between segments (NetMBA, 2008).

5.2 SEGMENTATION CRITERIA

According to the main conceptual model, the Product Concentration, Geographic Spread, and Customer Type sections would be used as criteria to segment the PMS market in China due to the fundamental researching needs of this thesis.

5.2.1 Product Concentration

According to the study of current secondary data, PMS differs when applied in different industry for different projects. PMS would been used to support efficient project management, which includes nine knowledge areas: scope management, time management, cost management, quality management, human resource management, communications management, risk management, procurement management, and integration management. (Project Management Institute, 2008).

In this part, the IT PM Magic Quadrant (Gartner, 2006) would be used during the analysis process and be shown as the result. The Magic Quadrant is a graphical representation of a marketplace at and for a specific time period. It depicts analysis of how certain vendor measures against criteria from that marketplace, as defined by Gartner (Magic Quadrant for IT PM, 2006). As for the criteria of the quadrant, it could be found in appendix iv, which focus on specific definition of every term using in the quadrant and unnecessary to talked in detailed here. This graphical analysis includes four main elements, leaders, challengers, niche players, and visionaries. Any provider in the Magic Quadrant - including niche players – would be recommended in certain circumstances, depending on the user’s needs. The quadrant indicates different marketplaces of different vendors.

There are four types of players in the market showing in Magic Quadrant, leaders, challengers, niche players, and also visionaries. They act competitively with each other with their own characters and different market place. Those four players provide products in different concentration, focus on different target customers, and might exist in different geographic locations. They all exist in the market dynamically, which means the market places of them would be changed with the time passing. The
changes of investment, marketing strategies, business targets, corporative partners, etc. would arouse the changes of their market place in certain field. The quadrant analysis in this thesis is just suit for current situation of PMS market with limited investigation and information during research for this thesis.

In order to let readers know more clearly about the four market players, the definitions and characters would be introduced as follow:

5.2.1.1 Leaders

Leaders have many traits in common with providers rated as visionaries and challengers; however, they distinguish themselves with relatively high ratings in many characteristics, not just a few. Product depth in such core areas as advanced scheduling, resources and cost management distinguishes most leaders, and most offer a range of deployment options (e.g. pilots, staged implementations and SaaS (Software-as-a-service, which means providing software and service by hosted server via internet/web.)) to address customers’ varying needs at different levels of PM capability maturity. Leaders also tend to have, not just capable system intergradations partners, but some core, direct PM Service offerings, going beyond implementation and support to include process-change consulting. Their vision of the IT PM market often extends to communication and quality management, with features aimed at improving team performance (e.g. via collaborative features and methodology support).

IT PM leaders have a history of addressing such IT requirements as APM, providing analytic frameworks for the application (not just the project) portfolio, as well as an ability to track such nonproject IT demand as minor software change requests, so managers can assess their cumulative impact on resource supply. Their product development often drives toward a more holistic offering – for example, providing a means of monitoring processes and decisions from IT service management and ALM tools. Consistency over time between providers’ stated a strategy and product direction and its actual execution – that is, integrity – is important, along with demonstrated vision enabling it to address emerging, often vaguely defined, market requirements.

5.2.1.2 Challengers

Challengers resemble leaders in many ways, such as product depth combined with enough experienced technical sales support to effectively reach the market. Often, however, the product may emphasize one core area, such as project cost management, without all around strength across most IT PM functional areas. In general, challengers are consistently profitable, with a steady foundation of maintenance
revenue, a growing installed base and an experienced, international sales force with thorough training in the PM solution. Significant international operations help sustain an ability to execute, in part by insulating providers from shifts in local market or economic conditions.

5.2.1.3 Niche players

Like challengers, niche players may stress a specific aspect, such as cost management, VS. all-around PM functionality or they may have strength in a specific region. Again, depending on the user’s needs, any provider included in the Magic Quadrant could be recommended. Like visionaries, niche players may differ from leaders in revenue strength or installed base; some may have experienced flat sales or restructuring lately, or have been inaccurate in responding to changes in the market or technology. They may have a less experienced senior management team, or depend on Web or inside sales to control costs and compete on price, whereas PM typically takes an enterprise sales force that is used to high-level sales and longer sales cycles.

5.2.1.4 Visionaries

Visionaries may differ from leaders in product depth or revenue strength, or they may lack the installed base and sales force of a challenger, but they often share – or originally innovated – features and traits of the leaders (e.g. methodology support and APM frameworks). Like the leaders, they seek to enable PM broadly as a business process, with IT processes and skill-set types being only one area addressed. Some visionaries have been more experimental with business models, and they may approach various markets more broadly, with variable packaging and pricing (e.g. SaaS and phased implementation packages). Vision ratings can reflect innovative approaches in areas such as resource performance management, pipeline analysis and preconfigured (but tailorable) portals for a variety of enterprise roles.

5.2.2 Geographic Spread

Software industry based on computer and telecommunication facilities; while China’s regional technical facilities and economy development difference are quite big. So the Geographic Spread dimension is very useful to figure out the possible regions of high demand of PMS. The Geographic Spread section could provide a guide to the regional share of industry revenue/gross product.

According to the conceptual model, this thesis will focus on two main types of
regions, high IT developed regions and Low IT developed regions. In order to let readers have clearer idea about the geographic locations of different regions in China, a China map (Figure 4) will be used with different colors which indicate different regions. And the relevant investigation about IT and software industry development situation in China will be shown followed the colored China map, so that the reader could know the exact location and also the PMS industry development conditions in China directly. This will be especially useful to 3P International AB, who wants know where their target customers are and how the local IT and software development situations are. It’ll be the base and pre-requirement for investment.

5.2.3 Customer Type

In this thesis, the definition of large companies and SMEs are taken reference from CCID Consulting, 2002. Large companies here indicates the companies’ capital scale or sale revenue reaches 0.5 billion to 5 billion (0.44 billion SEK to 4.35 billion SEK), or even more than 5 billion CNY (4.35 billion SEK). The SMEs, in traditional definition, indicate the type of enterprises that classified by fixed capital, revenue, the yearly tax, and employees numbers. This type of enterprise includes the medium-size enterprises, whose capital scale or sales volume between 50 million to 0.5 billion CNY (43.5 million to 0.44 billion SEK); and the small-size enterprises, whose capital scale or sales volume less than 50 million CNY (43.5 million SEK). Besides, in traditional industries (including manufacture, energy, fright, construction, communication, etc.), the SMEs indicate IT system (mainly indicates personal computers) usage rates in the enterprises are 0-30%; and yearly independent IT products or technical purchasing amount is less than 3 million CNY (2.6 million SEK). The second definition develops recently because traditional SMEs began to start building independent IT departments, so that the extension of the definition of SMEs becomes more and more popular. (CCID Consulting, 2002)

Although the software originally designed for those SMEs, according to the interview in the beginning of this thesis with Daniel Nilsson, this product designed according to the guideline of PMBOK and could be applied for managing most PM functional areas for most projects which doesn’t require specific deeper management in one specific area. It means most project management from majority industry who doesn’t have particular industrial demand or detail functional management demand could apply this kind of software with low price investment. One case from a current contact of 3P International AB in China shows that the Large and Middle sized company also has the possible demand of this kind of easy-use PMS with Web based function. Whether this kind of PMS applied to SMEs only or also those Large and Middle sized companies becomes an important angle when research the market segmentation by customer type section.

Generally speaking, the product concentration section could provide an indicator of
the current competitive situation and typical concentrative area in the PMS market in China. The Geographic Spread section could provide a guide to the regional share of industry revenue/gross product. The Customer Type section could provide a general picture of target customer that matches company type with the product to some extent.
6 FINDINGS AND ANALYSIS

In this chapter, the collected information would be organized and analyzed following the conceptual framework. The information contains both primary data and secondary data.

As it is talked in previous chapters, the market segmentation is crucial and primary task for this research topic. It is needed to know more about the current situation of PMS market in China so that it could help 3P Company design proper promotional strategy according to customers’ needs in segmented market.

In following parts of this chapter, the findings and relevant analysis will be presented by the segmentation criteria, Product concentration, Geographic Spread, and Customer Type.

6.1 PRODUCT CONCENTRATION

After reading some reports and searching some PMS in the market, the strength and cautions of each product are showed out by comparing. As it is said previously, the result will be shown in a magic quadrant analysis. But it would be too complicated to show every product in this report. In order to make a clear and direct result of the research on product concentration in PMS market in China, the authors decide to choose some typical products which could show some special characters and has some effects in relative field in the market.

As it introduced in chapter 5, the magic quadrant analysis would be used for analyzing product concentration in this thesis. The magic quadrant includes four parts that leaders, challengers, niche players, and visionaries. Here, those four players will be talked one by one. In order to analyze the magic quadrant in detail and let readers know the differences among those four types of marketplaces, two typical vendors in each marketplace would be chosen out and analyzed both in strength and cautions. The vendors are basically chosen from the Gartner’s research in 2006 (Figure 3), and also taken reference of the top 50 PMS (Appendix I).
6.1.1 Leaders

As a group, the leaders in this market have strong and coordinated capabilities across the core five functional areas, enabling users to more effectively evaluate and analyze the project portfolio. They maintain highly reliable and current data about resources, projects, and programs (as a view on projects), and are supported by effective processes. However, even the leaders — CA Clarity and Primavera — are considered “emerging” with regard to maturity, because product capabilities are evolving (along with process and organizational maturity on the part of users). According to the report, META spectrum Evaluation in 2004, CA Clarity continues to drive higher revenues and should be able to broaden its user base following the acquisition of Evolve. Primavera continues to execute impressively for a private company, is growing revenues at an impressive clip, and continues to be profitable.
(1) Primavera System

Strength
- Primavera Systems provides a robust set of project management solutions. It is particularly strong in enterprise project scheduling and execution.
- Acquisition of ProSight adds a best-of-breed, stand-alone portfolio analysis and management system, as well as a capable consulting arm for PM implementation and best practices.
- Primavera is well-established in many accounts, and will continue to generate significant new license and maintenance revenue in multiple PM areas, in addition to IT, ensuring its financial viability.
- Fast, effective service and support are among Primavera differentiations.

Cautions
- Primavera focuses mainly on complex enterprise project planning, scheduling and management, and less on the management of all IT requests (such as tracking application life cycle activities and work associated with IT service delivery).
- Primavera relies heavily on partnerships to deliver its solutions.
- Last year’s major round of investments in Primavera (more than $150 million by Francisco Partners and Venture Partners) have enabled it to increase direct services from about 30% to more than 50% of engagements (Gartner, 2006), and to provide engagement management for almost all the rest.
- Primavera pricing can be cost-prohibitive for some organizations with tight PM budgets.

(2) CA Clarity

Strength
- New Clarity 8 features integrate views of IT components into services to better budget and track service costs (supported by Unicenter interface) and give business stakeholders a view of the cost and status of IT services.
- CA kept pace with the market’s brisk (almost 20%) growth (Gartner, 2006) and retained its market share vs. surging HP and Primavera.
- CA sees PM as the cornerstone of an integrated set of applications for managing enterprise IT, with Clarity being the main tool supporting IT executive-level planning (not just project planning) and controlling execution.
- Clarity’s position in the CA product line, along with such complementary products as Unicenter, has enabled it to begin realizing an ITPC vision.

Cautions
- Lingering doubts based on past years’ poor pricing and accounting practices continue to restrain CA’s market momentum.
- Demands from large, complex enterprises, and a shortage of skills in the market to support PM consulting and professional services, have handicapped CA sales’ ability to respond to opportunities in midsize IT organizations.
6.1.2 Challengers

Challengers should be evaluated based on the key requirements of the user and the ability of the vendor to effectively implement these complex products. Challengers hail from various market areas such as the Oracle and also include maturing solutions like SAPx RPM. These are vendors that have strength in one or more of the key functional areas (e.g., resource management/financials, portfolio analysis) and are seeking to build capability across the core five areas with recent product releases (e.g. qualitative risk management). Indeed, Oracle has tremendous resources, but has not yet had the opportunity to mature their products or establish a strong user presence. Microsoft Project, which due to its market ubiquity and low price points, struggled to achieve profitability for some time, is now profitable, which is a positive sign for the company.

(1) Microsoft Project

Strength

- Microsoft Project’s new Enterprise Project Management (EPM) 2003 release is able to leverage its place in the Microsoft Office suite. It particularly leverages SharePoint for strong communication management and collaboration
- Microsoft’s licensing fees present a potentially cost-effective PM alternative to the pricing of other large enterprise vendors in the space
- The company enjoys wide partnership relationships that augment its marketing channel and help support its leading market share.
- Microsoft continues to develop an application management solution by combining Microsoft Project EPM with Visual Studio Team System (Gartner, 2006).

Cautions

- Microsoft relies chiefly on service and support partnerships to deliver and implements its PM system, and this support via third-party provider is not always cost-effective.
- Microsoft’s PM solutions are based on the use of multiple stand-alone products set up and configured to support a PM environment, as opposed to other vendors in the space that provide more-configured processes out of the box.
- The emphasis on project schedule set up has not always fit IT management’s resource planning and time/cost management focus; however, the 2003 release attempts to address this by creating simple (e.g. single-line) projects via the Web client and enabling named-resource or skill assignments to them
(2) Oracle

Strength
- Features of Oracle’s PM systems are underused in IT organizations, many of which could leverage functionality beyond the planning, budgeting and costing they use.
- Oracle has significant market reach into IT organizations using Oracle applications, including PeopleSoft organizations; their chart positioning reflects this dual reach (METAspectrum Evaluation, 2004).
- Integration is possible for multiple business applications already in use and supporting payroll, time and labor, enterprise budgeting, human resources, procurement and other business processes.

Cautions
- Full Oracle users are best positioned to benefit from Oracle’s “flavors” of PM because its products are not sold outside its customer base.
- The IT organizations using it should be comfortable with a “run IT like a business” model.

6.1.3 Niche Players

The products in this part are not strong enough to face strong competition but still have relevant capacity and potential to develop. Such as Augeo Software, the most advantage is they have a loyal group of corporate customers. This makes Augeo as a steady source of license and maintenance revenue. The Atlantic Global is good at flexibility and easy to use without special training. However, these vendors will improve rapidly, and expect them ultimately to take a significant share of this market.

(1) Atlantic Global

Strengths
- Atlantic Global’s product, Corporate Vision, lets users flexibly model and change organizational and project structures, and roll reporting up into programs at various organizational levels so managers get reports relevant to them.
- For time reporting, the browser-based tool is reportedly easy to deploy and requires virtually no training.

Cautions
- Portfolio management functionality is not as robust as other packages and relatively new to the marketplace.
- Atlantic Global has few customers outside of its U.K. base (METAspectrum Evaluation, 2004); however, it is well-positioned for growth in that base.


(2) Augeo
Strengths
- Augeo provides its product, it mainly as a multitenant SaaS offering (on-premise is available, with data transportability from SaaS) that is server, browser, database and platform independent.
- Multilingual support includes Japanese and Chinese, along with English, French, German and Spanish.

Cautions
- As SaaS competition heats up, price pressures could constrain available revenue for further R&D needs.
- Augeo is a young company, and its reliance on the SaaS model limits its marketing reach.

6.1.4 Visionaries

The products in this part are not really start business in this field as existed competitors. But they have certain capabilities and business models, or even has broader business horizon in many fields. Such as eProject, it has suitable business environment and functional supports before really entering the PMS market. And also eProject could get financial supports from partner investors. While, the ITM Software could not provide too broad horizon in different business fields, it focus on C-level management team in companies (METAspectrum Evaluation, 2004). This also could be a professional advantage of ITM Software. Some customers need general and easy-use PMS for common office work connected to PM; however, there are also other customers require high-level management software products to achieve relevant more professional and more complicated work during the management process.

(1) eProject
Strengths
- eProject can support PM environments of varying size, from a handful of resources to thousands.
- eProject can provide enough basic PM functionality to support and match the low maturity levels of many project organizations.
- eProject supports IT project management, but also other project environments.
- In May, 2005, eProject announced completion of a B round of venture funding totaling $12 million (Gartner, 2006), led by Bay Partners and including previous investor Kennet Partners.
Cautions

- SaaS/on-demand vendors are university challenged to provide integrations to other data sources for its customers. As ALM/PM requirements become less a fad and more a reality, eProject will need to provide an integration strategy that will not drive up total cost of ownership (TCO) costs for its PM solution.
- Customers will need to review eProject’s on-demand technical service and support offerings and computer-based training to assess whether these services are sufficient of whether they must invest in eProject’s higher-tier service offerings.

(2) ITM Software

Strengths

- ITM software’s product focuses on the role of the CIO and C-level executive PM for IT environments.
- In addition to portfolio, financial, and governance and compliance management modules, ITM provides a vendor management function for handling contracts and costs, as well as tracking and assessing performance of vendors using scorecards and dashboards (Gartner, 2006).
- ITM’s product is based on CIO-level domain expertise. The company’s management team is made up of past CIOs, and the vendor draws from extensive research and knowledge gleaned from interactions with hundreds of CIOs.

Cautions

- With a product development foundation based on visibility, the ITM product has made more advances in package breadth than package depth.
- Financial strength is less than some other PM vendors, because ITM is a young, venture-backed company still working toward breaking even.
- ITM does not have a deep ALM/PM integration strategy.

6.2 GEOGRAPHIC SPREAD

According to the conceptual model, the high developed IT regions and low developed IT regions in China will be researched and analyzed in this chapter. The unbalance economic development in different regions in China leads unbalance IT and software industry development to some extent. Because the large area and lack knowledge of China geography, the author found it’s necessary to give a clear picture to show the locations of different regions in China. This is also useful for following analysis about geographic spread of PMS market in China.

The figure 4 is a regional map of China. The different color will indicate different regions; the color of figures will also be used in figure 5 so that readers would see the
connections and analysis results directly.

![Figure 4 China regional map](China Map, retrieved on May 20, 2008)

According to CCIDNET Consulting (DeMing Consulting, 2004, P40), the area development of management software in China is unbalance. East China with 31% market share of total management software’s sales volume, North China with 25% and South China with 21% representatively, they are the main industry centers for management software. The figure 5 shows the regional management software market share by sales volume in China 2004.

![Figure 5 Regional Management Software Market Share in China 2004](DeMing Consulting, 2004, P40)
From the chart above, East, North, and South of China are the high IT developed regions; the other four regions are relevant low developed in IT field. Those two types of regions will be analyzed dividedly in the following steps.

### 6.2.1 High IT developed regions

Over half of total computer and internet uses are located in East area, with better financial conditions and higher education level. Up to 68% of those who are not computer and internet users are because of lacking skills or equipments (CNNIC, 2006, p24).

The management software customers and the software companies mains located in Beijing, Shanghai, Guangdong, Zhejiang and Jiangsu, where get 69% sales turnover totally within the whole market (DeMing Consulting, 2004, P44). The figure 6 below shows the important software industry bases in different cities in China. Those bases are concentrated in big cities, owning big investments, and taking up relevant large areas.

<table>
<thead>
<tr>
<th>No.</th>
<th>City &amp; Region of China</th>
<th>Investment (billion CNY) ((115 \text{ CNY} = 100 \text{ SEK}))</th>
<th>Area (m²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Beijing, North</td>
<td>1.5</td>
<td>1,190,000</td>
</tr>
<tr>
<td>2</td>
<td>Shanghai, East</td>
<td>3.7</td>
<td>450,000</td>
</tr>
<tr>
<td>3</td>
<td>Dalian, North East</td>
<td>1.3</td>
<td>100,000</td>
</tr>
<tr>
<td>4</td>
<td>Chengdu, South West</td>
<td>-</td>
<td>666,000</td>
</tr>
<tr>
<td>5</td>
<td>Xi’an, North West</td>
<td>0.7</td>
<td>660,000</td>
</tr>
<tr>
<td>6</td>
<td>Ji’nan, North</td>
<td>-</td>
<td>1,200,000</td>
</tr>
<tr>
<td>7</td>
<td>Hangzhou, East</td>
<td>-</td>
<td>520,000</td>
</tr>
<tr>
<td>8</td>
<td>Guangzhou, South</td>
<td>-</td>
<td>32,000</td>
</tr>
<tr>
<td>9</td>
<td>Changsha, Central</td>
<td>0.8</td>
<td>350,000</td>
</tr>
<tr>
<td>10</td>
<td>Nanjing, East</td>
<td>-</td>
<td>120,000</td>
</tr>
<tr>
<td>11</td>
<td>Zhuhai, South</td>
<td>0.1</td>
<td>80,000</td>
</tr>
</tbody>
</table>

![Figure 6 Software industry base concentrated in cities of China](Deming Consulting, 2004)

From the figure 6 above, more than half of software industry bases concentrated in cities in north, east and south of China, the high IT developed regions. The figure also
reflects the attitude of supporting development of IT and software industry by local governments. The PMS industry development degree also reflects the popularity degree of using IT products, especially the PMS, in local companies.

Although the competition in the high IT developed regions is also higher than other regions, the 3P International AB and other companies who have similar needs to enter into China PMS market could also use the advantages of the high level development in the PMS industry. The bases actually are also kind of cluster, the new comers need to realize the competition in the high IT developed regions, and also be conscious of the current industry resources that could be shared or used directly.

Concerning 3P International AB’s localized officer setting for better service for its geographic strategic markets, three main cities are suggested, and there are Beijing, Shanghai and Guangzhou.

As mentioned above that management software customers and the software companies mains located in Beijing, Shanghai, Guangdong, Zhejiang and Jiangsu, where get 69% sales turnover totally within the whole market and Software industry base concentrated in cities in figure 6. Beijing could be set as centric location in North China, which won largest software market share and got large investment for its software industry base and near other high potential markets like Xi’an and Dalian in North China also.

Shanghai could be set as centric location in East China, where just nearby big potential markets in Zhejiang and Jiangsu in East China and got the largest investment for its software industry base.

Then Guangzhou as the centric location in South China, because Guangzhou is a metropolis city in Guangdong province, where also has a major software industry base and easy to reach other markets in South China.

6.2.2 Low IT developed regions

According to the figure 5, the low IT developed regions are Central, North West, North East, and South East of China. Although the speed of development in PMS industry is higher and higher in China recent years, and there are also some software industry bases in the low IT developed regions, it is still hard to new comers like 3P International AB to start business in this kind or region. This is because the relevant low industry development from provider side and the relevant low products demands from customer side. The business environment in the low IT developed regions is not mature, and there is no industry cluster or stable supply chain, which is not ready for accept new comers, especially foreign companies to build their business.
Besides, the risks would be very high to the players to invest in low IT developed regions, and they would become the industry leaders in the low IT developed regions but it doesn’t mean that the investor could earn more revenue or profits because of low market demands from local customers in those regions.

6.3 CUSTOMER TYPE

According to the conceptual model, the Customer Type here would be classified into large companies, and SMEs. During the research process, the qualitative interview is used to investigating the potential market in large companies. Meanwhile, a great amount of secondary information and empirical data is used to analyze the customers of PMS market among SMEs. Here, the findings and results of researches and investigations about different customer types with the same demands will be depicted mainly by four aspects: current situation of PMS application, obstacles and further requirements of PMS application, cost expectation for PMS, and companies’ geographical location.

6.3.1 Large Companies

A qualitative interview research method used for collecting the data from large companies concerning their demands on PMS. The interview results come from 21 interviewees, two department managers of large China’s state owned companies, three project managers, and nine team leaders of project, designing, R&D or marketing event department representatively from three Top Fortune 500 companies in China. The specific company name and interviewee’s name will not be exposing in this thesis in order to comply the interviewee’s will to protect the company or personal confidential. And seven anonymous volunteer interviewees from notable China’s forum PM Union who are working for large companies currently as well.

According to pre-designed semi-structured questions in Appendix II, valuable information gathered regarding the current management tool usage for project and the demands from those large companies. From which, the possible potential niche market among them could be found.

Below data come from 21 interviewees, who are either team leader, project manager or department manager, in various departments in 12 different large companies involving the industries of Manufacturing, IT, Telecommunication, Designing and Consulting areas.
6.3.1.1 Current Situation of PMS Application

Although in the corporate level among those large companies, SAP, Oracle or other local brand software in challenger position are applied, none of the department is using the PM function of those software according to the interviewees. The reasons are various, but the main one is the not easy using and professional training and supporting required when applying it. So they choose other approaches instead.

14 out of 21 interviewees are using Microsoft Project to manage their current project works. Most of computer users now days are quite familiar with Microsoft products, the products’ menu list, profile or display are almost designed in the same way and very convenient to users. When the user managed one Microsoft product, it’s quite easy for him to manage another one. Furthermore, the PMP training institutions are using Microsoft Project as a practicing tool for those trainees. Majority of project managers who got PMP certificate are all very familiar with this type of PMS.

So many people choose Microsoft Project also because of its popularity and even those who are not experienced PMP training and not deeply understand PM are incline to use Microsoft Project when deal with time management or cost management mostly for divers tasks during work.

5 interviewees are using Microsoft Excel to manage their works instead of any other PMS. These interviewees answered that Microsoft Excel is standard software installed in every PC in their company and team member know how to do with it, so they don’t need to apply additional cost for PMS which need to fill application forms, waiting for boss’s signature and train their team users to learn the new software, etc. And their working process is simple and don’t need too much complicated functions involved.

Excel has very powerful functions to deal with divers’ data management. Users who are Excel expert could use it as efficient management tool for their work although it still has its shortcomings compare with PMS for project management work. But majority of users are not real expert for it, many required functions could not been realized according to the interviewees.

While according to another 2 interviewees, they’re using PMS which developed according to their specific needs. One is for project documentation management, which is applied for multi-projects documentation management within the business unit and each project involving diverse documents, such as contract, purchase orders, fax, meeting minutes, delivery order, payment receipts, spare part record, after sales documents, etc. The other one is for sales project management, which is applied for different sales orders or biding projects. The function required from them are simplex compare with other project management which may involve all or majority of five process groups and nine knowledge area defined by PMBOK. The current PMS is either has too much other functions which they don’t need them at all, or the specific
management function area is not developed enough and not fit their requirements. Another reality to develop their own software is that they though they don’t have enough patient to study all those exist software and find out the most closest one for their requirements and pay the high cost for software licenses finally, since they thought their requirements are very clear and software developing cost in China is low.

6.3.1.2 Obstacles and Further Requirements of PMS Application

Not all team leaders are experts in PM area and have clear ideas about PM and PMS, although their works need PM knowledge. And appropriate PMS could be very useful tool for their efficient work on management, but how to choose an appropriate one is another problem.

For those Microsoft Project users, the software used currently is PC version and not Server Version, which is inconvenient to share the most updated information with other team members efficiently. To cause additional cost by changing the Server version is one thing, besides, whether it is worth for the high cost of software certificates fee for many other non project managers also who involved in the project team is another debatable issue.

The function modules of Microsoft Project coves all PM knowledge area and applied to almost all industries, for the users who only need one or two small function modules, the software is over qualified already and charged a lot for every users in their working team. That’s the other main reason for some of their project members to choose Microsoft Excel.

For those Microsoft Excel users, they’re facing some similar situation as PC version
Microsoft Project users meet. The updated information could not share with other team members efficiently. And furthermore, the multiple authorization user level could not be set by this method. The efficiency of management too much depends on users’ proficiency on the application of Excel. Some of them have no idea how to improve their work performance by software, but they think they do need to.

For the self-developed software, it takes long time to communicate the software requirements among the users and software developers, and also need long period and manpower for software testing after it finished. After sales service is another problem, because there’re many small software developing companies and even individual developers in the market, the capability is various and not easy to evaluate.

3P’s PMS also covers majority of PM knowledge area, comparing with Microsoft Project, each function module designed simply with low cost and could provided by the way of SAAS or local server installation, which is attractive to those project teams.

6.3.1.3 Cost Expectation for PMS

According to the interview, those interviewees from large companies regarding the software cost issue, more than half of them are not sensitive about the price.

6 out of 21 interviewees consider 10000-20000RMB (8696-17391SEK) for corporate license of PMS is acceptable for them currently. And 9 out of them think 20000-50000RMB (17391-43478 SEK) for corporate license is acceptable. Only 3 interviewees accept the price above 50000RMB (43478 SEK), and 3 accept the price below 10000RMB (8689 SEK).

In fact, the price range is not strict for them. It all depends on software itself. If the software do perceived as an useful tool for better work and efficient management just perfectly fit to their requirements, price is not the most concerned issue as long as it within a reasonable range. Majority of them think the cost of PMS below 50000RMB (43478 SEK) is acceptable for a corporate license.

However, the expectation for the software function by different users from divers industry and various working team is quite different. And people are also differing in relying management software and comprehending how much benefits PMS would bring for the work’s performance. It results in their definition of reasonable price.
However, the reasonable price they perceived is one thing, the decision maker’s or influencers’ opinion is another.

Meanwhile many of them also concern about the tough job to influence their supervisors and other team members to accept new software by additional cost and for each user’s certificate fee and training, even if they themselves think it is a good one and worth for it.

Concerning about each user’s certificate fee, 17 interviewees of them think it’s better to purchase the software as a package or self-developed to get corporate license or own the copy right. So the reasonable cost for corporate license or software’s copy right is welcome that everyone in their team could use it instead applies it user by user. Especially for those with many team members and only require several simple function modules.

6.3.1.4 Companies’ Geographical Location

The interviewees’ companies locate in high IT developed region of China. 11 out of 21 interviewees’ companies come from Shanghai mainly and other cities nearby in East China; 5 out of 21 of them come from Beijing of North China; 3 out of 21 of them come from Guangdong Province of South China; and the other 2 come from Dalian and Shandong representatively.

Some of them have several partners involved in their project team and located in other regions in North China or Central China. But those partners will not influence too much to their decision of choosing PMS.
According to the interviewees, majority of the head office and branches of the companies are in North, East or South China.

Besides the interview results as presented above, other data from News.net also point out geographical inclination from large companies. Specific cities named as the most attractive ones by Top Fortune 500 companies. Certain cities in China get high recognition by Top Fortune 500 companies according to News.net, which are mainly in North, East and South China (NEWS.NET, 2008). The reasons of that are those cities have notable universities and lots of enterprises, which enable them have the probability to access to high level human resources and active economy with huge potential development and opportunities.

The top 10 cities that those large companies being great attracted are listed as below:

- Beijing: 5 out of 21
- Shanghai and other near cities in East China: 11 out of 21
- Guangdong Province: 3 out of 21

Figure 9 Large Companies’ Geographical Location
(By Interview)
<table>
<thead>
<tr>
<th>Rating</th>
<th>City Name</th>
<th>Region</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Shanghai</td>
<td>East China</td>
</tr>
<tr>
<td>2</td>
<td>Beijing</td>
<td>North China</td>
</tr>
<tr>
<td>3</td>
<td>Xi'an</td>
<td>North China</td>
</tr>
<tr>
<td>4</td>
<td>Wuhan</td>
<td>Central China</td>
</tr>
<tr>
<td>5</td>
<td>Guangzhou</td>
<td>South China</td>
</tr>
<tr>
<td>6</td>
<td>Nanjing</td>
<td>East China</td>
</tr>
<tr>
<td>7</td>
<td>Chengdu</td>
<td>South West China</td>
</tr>
<tr>
<td>8</td>
<td>Hangzhou</td>
<td>East China</td>
</tr>
<tr>
<td>9</td>
<td>Ha'erbin</td>
<td>North East China</td>
</tr>
<tr>
<td>10</td>
<td>Tianjin</td>
<td>North China</td>
</tr>
</tbody>
</table>

Figure 10 Top 10 Attracting Cities
(NEWS.NET, 2008)

So there’s no doubt that Shanghai and Beijing are the most investable locations in China now days. Besides them, the third city recommended is Guangzhou instead of Xi’an regarding above figure 10, the reason already stated in chapter 6.2. And furthermore, Guangzhou ranks as fifth in South China, and Xi’an ranks as third in North China, the difference between them is not severe and there’s already Beijing recommended in North China, so considering about big potential market in South China and strategically marketing geographic development, the authors suggest Guangzhou as the other centric location for 3P International AB in China.

6.3.2 SMEs

The total amount of SMEs in China was nearly reaching 40 million according to Iresearch in year 2006 and will keep 7%-8% increasing rate in the later 5 years (Iresearch, 2008).

Meanwhile, defining an SME in the Chinese context presented some difficulties when comparing the marketing of information with that in many European countries. A UK SME is usually accepted as employing up to 200 people: some studies have used 100 as their upper limit (Kinnell, M., 1994). However, in China the scale of businesses is larger and the definition of SME in China is very complex, it depends on many dimensions, the employee amount, sales revenue, etc. and differ by industries, such as construction industry could up to 3000 employees and sales value lower than 300million RMB (261 million SEK) with lower than 400million RMB (348 million SEK) total capital could identified as SME.

SMEs play an important role in stimulating economic growth in China, the output value, sales revenues and tax revenues of SMEs in the industrial sector accounted for 60%, 57% and 40% (Yang, K.Z., 2006) respectively of the total of all the industrial
output value. Meanwhile the regional difference in the development of SMEs is another feature.

6.3.2.1 Current Situation of PMS Application

According to a survey took by 21CN and Topoint websites with 3943 valid samples, 97% of the total interviewee enterprises have employees who need computer to process works (Li, Y., 2002). In these enterprises, 51% have more than 20 computer user employees, 22% have more than 20 professional full-time computer user staff. These enterprises have most strong demand on informationization. There are only 23% enterprises don’t have intranet, and still in stand-alone operation period. Part of this kind of enterprises don’t need intranet, while quite other part actually do need but without relative capability to build up their own intranet. Besides, 56% enterprises in the survey own intranet, and also professional departments who are in charge of building and maintaining work. Although the needs of getting access to internet are increasing rapidly, most enterprises are using traditional telephone-modem. 6% interviewees indicated that their companies don’t have internet access; other 53% said their companies adopt dial-up modem or ISDN. However, there are also 41% interviewees said that they are using DDN, frame relay or other way to get access to internet.

The PM Software of 3P International AB is web-based so that the speed of access to internet is quite important; otherwise customers couldn’t keep normal works. Regarding the survey, as for what is informationization, the interviewees gave out different answers. Only 10% think informationization equal to computerized. Almost half interviewees consider intranet, intra-mail, and non-paper office as real content of informationization. Furthermore, the importance of software is also admitted to huge extent. 66% of interviewees consider E-commerce as an important sign of informationization. This also indicates that more and more enterprises are seeking their own develop space online. 43% of interviewees think ERP (Enterprise Resource Planning) should also been included in informationization process. PMS could be considered as a module of ERP, and also could be single management software. But only 10% of interviewees might know the meaning of PMS in subjective, the percentage of SMEs who use PMS is consequently quite less. Hence, advertisement and training will be necessary to these enterprises who might become potential customer in future.

Employees in enterprises have great demand on informationization knowledge and specific informationization training. The applications of informationization are stated in order in follow: financial management (56%), business management (55%), publicity management (42%), stock management (42%), customer relationship management (40%), operation decision-making (30%), and supply chain management (25%). From this order, the higher and more advanced level, the lower in spread
degree. Enterprises usually begin to accept informationization from lower level to higher, and then go in deep step by step. Lots of advanced informationization applications are not known by most enterprises, but the market foreground is quite beautiful.

6.3.2.2 Obstacles and Further Requirements of PMS Application

The obstacles of enterprises informationization are knowledge lack in decision-making level (56%), finance shortage (54%), low employee quality (51%), lack in systematical informationization designing plan (47%), conflict between informationization and inhere module of enterprises (43%), low possibility of solutions (42%), and lack in subjective cost-benefits analysis (40%).

![Figure 11. Obstacles of Enterprises Informationization](image)

As for the model of enterprises informationization, 45% of interviewees chose to make according to the real situation. This indicates that most current informationization products can’t meet enterprises’ needs. There are two points could be analyzed by informationization service providers: how to customaries software products to provide low-cost individual products; and how to let more enterprises find suitable products, in another word, how to improve before-sale service is quite significant.

22% of interviewees hope service provider could customaries the solution, but if the improvement cost too much will be a problem. 20% of interviewee enterprises chose to explore by themselves. This is also meaningful to some extent. But to SMEs, self-explore could not achieve the same effects as professional services. Only 13% of interviewees said they could use current products.
6.3.2.3 Companies’ Geographical Location

In all of the 16958 SMEs in another survey from Industrial SMEs research report in 2004, numbers of SMEs in eastern China (12273), including East China, North China and South China, takes up 72.37%; central China (2742) takes up 16.17%; western China (1943) takes up 11.46%. The number of SMEs in eastern China is 2.65 times than the sum of SMEs central and western China. The number of SMEs in Guangdong, Jiangsu, Shandong, Zhejiang, Shanghai, Fujian, and Hebei seven littoral provinces takes up 61.81% in total. Especially, 14.77% of total SMEs fasten in Guangdong province (SME.CN, 2005).

So regarding the potential SMEs customers, North China, East China and South China are again the most attractive regions for 3P International AB to focus on. And especially the number of SMEs in Guangdong reaches 14.77% and will get dynamic and huge potential development for the company who targeting to SME customers.

However large and medium-sized enterprisers’ purchase on PMS reach to 86.8% market share, and it gets 69.4% market share in China’s North, East, and South areas in 2005 (CCIDNET Consulting, 2005). China’s PMS market is far from mature; top 10 suppliers got 70.2% total market share, but none of the current suppliers stands in a dominant position. Beside several world famous brand, such as Primavera Welcome, Microsoft, there’re many local suppliers created their brands in the market, and also some small suppliers focusing on one specific industry or specific function or self developed software for a particular big construction project like TGPMS for the Three Gorges Project are also commonly existing and on developing in PMS market in China.
7 CONCLUSIONS AND RECOMMENDATIONS

Regarding the findings and analysis for thesis topic, this chapter will summarize the answers to solve the problem of how to segment PMS market in China and what is the specific target segment for 3P International AB.

The PMS market segmentation is analyzed from three dimensions, Product Concentration, Geographic Spread and Customer Type representatively. And the recommendations will be presented accordingly as well.

7.1 PRODUCT CONCENTRATION

There’re four categories of market players in PMS market, they’re Leaders, Challengers, Visionaries, and Niche Players, which are evaluated by criteria of ability to execute and completeness of vision.

The company should evaluate its execute ability via the product/service quality, overall viability includes an assessment of the overall organization's financial, Sales execution, market responsiveness and track record, marketing execution, customer relationship and the organizations’ operation ability. And to assess the complete vision of the strategies, include its market understanding, marketing strategy, sales strategy, product strategy, business model, industry strategy, geographic strategy and innovation as well. This would guide the company to get the right positioning in the market, set up a specified direction for the goal and improve its competence meanwhile.

Regarding 3P International AB’s current market position, customers for Niche Player and Visionaries would be the target groups for them. SaaS mode is very good choice to begin its market in SMEs and large companies department level users in China. Furthermore, considering user’s demands of product or service in China’s market and 3P International AB’s vision and current execute ability, the challenger’s market segment is the second step for 3P International AB to access.

With the improvement of market awareness about PMS and PM knowledge, the competition in Challengers’ segment will be fiercer. Ready to reach Leaders’ segment is long term strategy but not suggested to take the risk for current entry with high investment and low execute ability according to 3P International AB’s current situation.
7.2 GEOGRAPHIC SPREAD

The IT and telecommunication facilities construction, education and economic developing level, region’s investment attractiveness are the main factors differ East China, North China and South China from other regions.

These three regions are the highly economic developed area in China with good condition of IT and telecommunication facility construction, excellent education and job market, majority of SME and large company subsidiaries. Thus the East, North and South China should be the right potential geographic markets for PMS.

Furthermore, in order to develop its market, local host for SaaS product in strategic location is significant. As analyzed, Shanghai and Beijing are two most centralized IT software industrial city and with large investment in the market. They’re also the most attractive city for large companies to invest and have high SMEs proportion in the city or nearby. In addition, although Wuhan and Xi’an are also attractive cities for investment, they are near North and East China and could be reached from Beijing and Shanghai. When considering strategic region of South China, Guangzhou is also in the crucial position since there’s big amount number of SMEs in Guangdong province and it’s the best city in South China.

So when considering of the segmenting market in East, North and South China, Shanghai, Beijing, and Guangzhou could been set as three centric bases for sales, service and marketing activities. The market environment and industry cluster development are good for new entries to build their business with some existing industrial resources in PMS field.

7.3 CUSTOMER TYPE

Although the company’s product originally designed for SMEs, certain departments in large company also have the demands for this kind of simple, easy to use and web-based PMS.

PM education in China is far from prevalence. Most of project leaders or managers are not understand PM knowledge and PMS as well. And also there’re many open source free PMS available in the market, as well as piratical PMS accessible which attracts some SMEs to take the risk for cost saving. It will spend lots of effect on SMEs and get low return comparatively. But the SMEs’ market has huge potential, it worth to cultivate.

For the large companies, the department or teams in R&D, designing or marketing
areas have strong potential demands of simple, lower price and web-based PMS. It’s a very good chance to reach them before dominant products appear in the market. And it is also a good time to create convincing models for SME users, who are prefer to follow large companies.
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APPENDIX I: 50 top PMS

- **AceProject - Project Management**: Offers web-based project management, bug tracking and timesheet software.
- **ActiveProject® Project Management**: ActiveProject® is web based project management and collaboration software.
- **AdHoc Gantt Chart for Lotus Notes & Domino**: AdHoc Gantt Chart applet is a unique component for Lotus Notes developers who are looking for a true MS Project like project scheduling and resource planning tool for Lotus Notes and Domino.
- **BiLL - The Simplified Project Management Tool**: Manage your projects from anywhere - Check the progress of your projects in real time - Evaluate the cost-effectiveness of your projects with a single click - Organize your team's work more efficiently - BE COMPETITIVE!
- **BugBox - Deliver Projects on Time**: Deliver projects on time with BugBox. Buy today or evaluate for free.
- **BUGTrack**: BUGTrack is reliable, convenient, secure and completely web-based issue tracking system.
- **Celoxis Project Management**: Celoxis offers project management, Document mgmt, workforce mgmt, time/expense, client collaboration, custom forms, knowledge mgmt, certified email.
- **Copper Project**: Copper Project is a web-based project management tool that allows teams to manage themselves more effectively. It is designed especially for team-based consultancies including software developers, design studios, and other internet-connected businesses.
- **CS Project**: Project scheduling and management software for Manufacturing and Mining.
- **Elementool Bug Tracking**: Elementool enables software developers to track new bugs, prioritize and assign bugs to team members, generate bug reports, send email messages between users, attach files, type notes in a message board.
- **EPAM Project Management Center**: EPAM Project Management Center is a web-based collaboration environment for IT projects. It streamlines project planning, requirement and risk management, software construction, quality assurance, and organizational process performance.
- **faces**: extendible project management software.
- **Genius Enterprise Project**: Genius Enterprise Project ensures your projects are completed on time, and under budget, while exceeding stakeholder expectations.
- **i-lign**: Web-based business alignment software for project portfolio management. i-lign aligns projects with business goals. Extensive management functionality includes strategic planning, budgeting, risk management, time-recording and reporting.
- **icTracker®**: icTracker® is web-based Bug Tracking, Task Management, Project Management, and Document Management Software.
- **Infowit Creative Manager**: Manage Less, Create More! Infowit is the only project management solution built exclusively for creative and design firms. Customizable and modular, Infowit adapts to your business: Estimating, Tracking, Client Review, Assets, Prospecting, and more!
Issue Tracker: Complete unlimited issue management and reporting in a web application service.

Intellect EPM: Executive Project Management: Intellect Executive Project Management (EPM) is the first ever browser-based tuneable application designed specifically with the Executive user in mind.

IntelligenceSoft web-based Project Management System: integrated project planning, monitoring and management environment.

JS Portal – Time, cost and project tracking: Track your time, cost and projects quickly and easy without the usual hassles. By simply administrating your time and costs for only two minutes a day you will boost your efficiency substantially.

JSPortal – Time, cost and project tracking: Track your time, cost and projects quickly and easy without the usual hassles. By simply administrating your time and costs for only two minutes a day you will boost your efficiency substantially.

LeadingProject: Quickly start multiple projects, share resources, track and report work progress to meet deadlines and achieve project goals. Perfect for product, project and marketing campaign planning within mid-size IT businesses with mixed Windows/Mac OS.

Legadero Tempo IT Project, Program & Asset Mgmt: The Legadero TempoTM Governance Suite is a robust and seamlessly integrated single solution for addressing all of the IT Governance requirements of Information Technology organizations.

ManagePro and MProWeb: ManagePro and MProWeb are integrated suites of software tools for managing work efforts.

MS Project and MS Project Server: MS Project is the market leader in project management software. It enables project planning, resource scheduling, multiple types of diagrams and reports, project costing, project control and project status update.

NIKU Clarity: NIKU Clarity provides project management modules: portfolio manager, resource manager, project manager, demand manager, financial manager, Clairity Studio(tm), Schedule Connect and Service Connect.

OPMcreator: OPMcreator is a web based project management and collaboration software tool enabling your teams to share unlimited projects and workspaces.

PlanWise Project Management: PlanWise supports both enterprise level and project level planning. Tasks including milestones, Gantt chart, changes, issues, risks, decisions, people, budgets, workloads, reviews, business alignment, baselines, reporting and time-recording.

Primavera: Project management software for large and small projects.

Primavera Project Collaboration Solution: P2.net is a collaborative web based Project Management solution designed to support and maintain the project environment and improve delivery across both Public and Private Sector Organisations.

Project Insight.NET: Enterprise 100% Web Based Project Management Software for Microsoft .NET.

Project Office Management System (POMS): Multi-user, collaborative environment for running an efficient project office, covering: project planning, scheduling, requirements capture, defect tracking, risk management, and financials.

ProjectST: Affordable, Easy to Use, No-nonsense Project Management Software.

Smooth Projects: Web-based Project Management & Collaboration System. Manage projects, tasks, outsourcing companies, users, project files, trouble tickets, contacts, project forums and more!

TargetProcess: TargetProcess is an integrated agile project management and bug tracking software.

TeamHeadquarters-Unified Team Management Solution: TeamHeadquarters unifies your work on project management, help desk support, and whatever else comes along.

ThinMind - Expense, Issue, Project, And Timesheet Management: A fully integrated web based software suite for expense reporting, issue tracking, project management, and timesheet reporting. Sign up for our free 30-day trial and get started today!

ThinMind Issue Tracking: ThinMind is an integrated administrative tracking solution that allows employees / contractors to enter and work issues from anywhere. Use the entire product suite, or select only the modules you need. Try our free 30-day trial!...

ValleySpeak Project Server: Integrated Project Management, Issue Tracking and Discussion Forums

VERTABASE PRO: Easy to use, web-based project management solution. Robust Features and Powerful Reports in an Intuitive Enterprise Solution. Top-rated by PROJECTMagazine.

VIP Organizer is a To-do list software to plan working tasks: VIP Organizer is a Personal task management software for workflow optimization by to-do list usage.

VIP Team To Do List: VIP Team To Do List is a professional and fully-featured powerful tool to manage to-do list of teamwork's tasks. It will help you create and manage tasks and events of your teamwork. It has a user-friendly and easy-to-use interface.

VPMi web-based project management office: The VPMi is a web-based PMO that allows everyone to see all related project, program, and team collaboration information at a glance. Don’t miss our free demo and trial offer online.

White Cloud Systems: WhiteCloud is an advanced and integrated project management solution, specialised for agile software development teams. WhiteCloud delivers functionality required to bring complex software projects to successful completion.

3 Olive Solutions - Portfolio Intelligence: 3 Olive – Portfolio Intelligence is an on-demand project portfolio management solution for mid-sized organizations and PMO groups. It combines a complete process workflow with an easy-to-use, low-cost solution.

@Task Enterprise Project Management: @Task is a comprehensive enterprise project management system that includes: project planning, task management, resource management, project costing, and document management.

@Work Business Productivity Suite: Combines four robust applications that can stand alone or seamlessly integrate into a full-featured project and workflow management system. With these browser-based applications, your team can be productive whether at the office or around the world.
APPENDIX II: Question List of the Interview with Large Companies

Introduction

During the research, the authors found that not only SMEs, who are the target customers of 3P International AB, but also some Large and Middle size Enterprises have the same requirement on easy-use and low price general PMS. In order to know clearly about the large companies’ demand, the authors decide to make an interview with some large companies. Since the interview only focus on large companies, so the content will be mainly composed from the other two aspects of Product Concentration and Geographic Spread perspectives.

Presentation before the interview

Hello, this is an interview from two master students in Mälardalen University, Sweden. We’re doing research for master thesis on Project Management Software Market in China. Regarding to your department’s work as we understand, there might be some demand to use software to manage your projects.

Hopefully, you could have around 10 minutes for an interview regarding your experience on using PM Software and your opinions on the demands for PM Software from your department.

Thanks very much.

Questions

1. Do you use any Project Management Software?
   A. No (only answer Q2, 3)      B. Yes (answer from Q4)

2. Do you ever hear about any brand of PM Software before?

3. Do you think easy-used PM Software in relevant low price might be useful for your company or some departments of your company?
4. Which PM Software you are using? Please indicate the explicit type or product brand, etc. And why are you chosen this one?

5. Do you think your current software is the perfect one that exactly meets your needs? What else do you expected from PM Software to support your project management work?

6. How much will the price issue influence your decision? What range of price do you think you can most accept:
   RMB below 2000, 2000-10000, 10000-20000, 20000-50000, above 50000

7. Where is the headquarter office of your company in China? How much influence will get from head office to select your PM Software?

8. Where is your department located in?

9. Where’s your project co-workers located? How much influence will get from it to select your PM Software?
APPENDIX III: Email interview with CEO of 3P International AB

Från: BIN PAN [mailto:carole.panbin@gmail.com]
Skickat: den 3 mars 2008 13:18
Till: daniel.nilsson@3pinternational.eu
Ämne: Question List for Preparation of the Marketing Plan

Dear Daniel,

I’m so glad to talk with you this morning!
It is a very good chance for both of us for this marketing plan, and hope we’ll well cooperated during the next months.

Here are the questions as I mentioned in the meeting, it maybe seems detail but we need to know more aspects of the elements of your company before we start to plan our research, and maybe some of them you're not sure currently and just let me know how much you know about them:

1. What's the main difference of your PM software V2 with other similar mature software?
2. Do you use same price for all markets? How about your profit margin?
3. Do you really know about your competitors, how many competitors you have? Who? What about their market positions?
4. What is the expectation to China's market about the developing speed, investment return period, revenue of yearly profit, etc.?

Looking forward to hear from you soon!

Besides, as you know we still need to talk with our tutor once the direction made, and later 2 months is not too much for this big plan, I hope to use as much time as we could this month also. I really hope to do a valuable job for your efficient marketing plan in the near future!

Have a nice day!

Best Regards,
Carole
Hello Carole,

I’ll try to answer your questions, see below. I think we are going to focus on who is our ideal customer (market investigation) and what we communicate to them (what are their needs). Then, if there is time, I would like to know which channels we should use to reach them, e.g. Internet, magazines, free seminars, ads etc.

We will make place for you at our office as soon as you want.

Ps. I attach our product sheet, a competitor analyze (Swedish), a power point presentation and a old version of a business plan. Ds.

1. **What's the main difference of your PM software V2 with other similar mature software? Easier for users or cheaper?**

We differ us from the other software's as easy-to-use software with a low price. There are a lot of software's on the international market (not so many in China though) and they are pretty complex with a high threshold to use. In some cases the implementation of the software could cost several millions of RMB and the company also needs consultants that manage the software. Our goal is that everyone could use the software for a low cost. Then our software focuses very much on How to run projects. There are a lot of knowledge built in the software in means of instructions, checklists, templates and examples. The software is also very customizable and dynamic. As a user you could easily customize the project after your needs, you aren't tied up to a specific project methodology. So, the short answer:

   · Easy-to-use
   · Cheap
   · Project management knowledge
   · Customizable/Web based Software

2. **Do you use same price for all markets? How about your profit margin?**

The software comes in two different editions, hosted and enterprise. The hosted version (the customer uses our servers) works as an SaaS (Software as a service). The customer pays per 350RMB per user and month. The Enterprise edition (the software
is installed locally at the customers servers) we make an quotation. In China we have bundled the software and education/training. As a starting point the price don't differs from the markets, but we maybe have to make some adjustments for the Chinese market. As our product is an Internet software we don’t have any larger costs the more customers we have.

3. **Do you really know about your competitors, how many competitors you have? Who? What about their market positions?**

We have pretty good knowledge about our Swedish and Chinese competitors in the project management software field. I can provide you with more information as we meet.

4. **What is the expectation to China's market about the developing speed, investment return period, revenue of yearly profit, etc.?**

We have some estimations and objectives for the Chinese market. Although, they are depending on how we enter the Chinese market.

Kind regards, Daniel Nilsson
APPENDIX IV: Definition of Criteria of Magic Quadrant

During the research of Gartner, the evaluation criteria of classifying different marketplaces are Ability to execute and Completeness of vision. Inclusion in the IT PM Magic Quadrant is mainly determined by a mixture of a half-dozen major factors and how well a solution and its provider meet them. The definitions of those factors will be listed as below (Light, M. & Stang, D.B., 2006)

**Ability to Execute**

**Product/Service**
Core goods and services offered by the vendor that compete in/serve the defined market. This includes current product/service capabilities, quality, feature sets, skills, etc., whether offered natively as defined in the market definition and detailed in the sub-criteria.

**Overall Viability (Business Unit, Financial, Strategy, and Organization)**
Viability includes an assessment of the overall organization's financial health, the financial and practical success of the business unit, and the likelihood of the individual business unit to continue investing in the product, to continue offering the product and to advance the state of the art within the organization's portfolio of products.

**Sales Execution/Pricing**
It means the vendor’s capabilities in all pre-sales activities and their support structure. This includes deal management, pricing and negotiation, pre-sales support and the overall effectiveness of the sales channel.

**Market Responsiveness and Track Record**
Ability to respond, change direction, be flexible and achieve competitive success as opportunities develop, competitors act, and customer needs evolve and market dynamics change. This criterion also considers the vendor's history of responsiveness.

**Marketing Execution**
The clarity, quality, creativity and efficacy of programs designed to deliver the organization's message in order to influence the market, promote the brand and business, increase awareness of the products, and establish a positive identification with the product/brand and organization in the minds of buyers. This "mind share" can be driven by a combination of publicity, promotional, thought leadership, word-of-mouth and sales activities.
**Customer Experience**
Relationships, products and services/programs that enable clients to be successful with the products evaluated. Specifically, this includes the ways customers receive technical support or account support. This can also include ancillary tools, customer support programs (and the quality thereof), availability of user groups, service-level agreements, etc.

**Operations**
It indicates the ability of the organization to meet its goals and commitments. Factors include the quality of the organizational structure including skills, experiences, programs, systems and other vehicles that enable the organization to operate effectively and efficiently on an ongoing basis.

**Completeness of Vision**

**Market Understanding**
It indicates the ability of the vendor to understand buyers' wants and needs and to translate those into products and services. Vendors that show the highest degree of vision listen and understand buyers' wants and needs, and can shape or enhance those with their added vision.

**Marketing Strategy**
A clear, differentiated set of messages consistently communicated throughout the organization and externalized through the Web site, advertising, customer programs and positioning statements.

**Sales Strategy**
The strategy for selling product that uses the appropriate network of direct and indirect sales, marketing, service and communication affiliates that extend the scope and depth of market reach, skills, expertise, technologies, services and the customer base.

**Offering (Product) Strategy**
The vendor's approach to product development and delivery that emphasizes differentiation, functionality, methodology and feature set as they map to current and future requirements.

**Business Model**
The main idea of business model is soundness and logic of the vendor's underlying business proposition.

**Vertical/Industry Strategy**
It means the vendor's strategy to direct resources, skills and offerings to meet the
specific needs of individual market segments, including verticals.

**Innovation**
Innovation here includes direct, related, complementary and synergistic layouts of resources, expertise or capital for investment, consolidation, defensive or pre-emptive purposes.

**Geographic Strategy**
The vendor's strategy to direct resources, skills and offerings to meet the specific needs of geographies outside the "home" or native geography, either directly or through partners, channels and subsidiaries as appropriate for that geography and market.