

DMK; Unlocking China's potential as an outsourcing software hub

In October of 2004, after an introductory course in strategic management, a group of students¹ who were enrolled in the Sloan Fellows program at the Sloan School of Management at MIT decided to revise the competitive situation of a small software company in the north of the People's Republic of China. The name of the firm was initially DMK but was renamed HiSoft in 2005. Early on, the group decided to apply the Delta Model, an integrative strategy framework developed by Professor Arnaldo Hax, as their main conceptual tool. Using this methodology, they analyzed the company's present situation and proposed a coherent set of strategic initiatives to its top management. The final objective was to provide advice that would allow DMK to achieve the level of profitable growth it had been seeking in previous years.

Industry

The industry of outsourcing IT services offshore has experienced phenomenal growth since the turn of the century, and some analysts project that the industry will continue to grow at a compounded rate of 20% in the next few years, reaching the \$15 billion mark by 2007. The dominant leader in this market is India, a country that has a substantial pool of stable companies capable of offering not only low level services but also complex project management and even IT strategy counseling. China's share in the IT offshore market has been growing in recent times as the country has begun to produce scores of highly skilled software programmers and to improve its communications infrastructure and business climate.

The internationalization of the world economy and the last decade's technological advances made the success of many businesses much more dependent on properly managing information about their products, clients and internal processes. In particular, large companies in developed countries have been experiencing notable increases in the amount of resources required to manage their information, with a notable impact on the bottom line. At the same time, the relative dearth of programmers at home and the need to continuously increase the service level have made the possibility of outsourcing their IT services a very attractive alternative. Forrester Research analyses, for example, show that savings from offshore outsourcing can amount to 50% of the IT bill for a large company.

Because outsourcing IT services offshore appears extremely attractive, a vibrant and highly competitive market has developed in India and China. Both countries enjoy a substantial labor cost differential with the US and other developed countries and boast a large pool of IT talent. The size of the Indian IT industry is orders of magnitude larger than the Chinese - \$12,5 billion vs. \$700 million in software exports in 2003. However, most analysts coincide in pointing at the latter as the next big outsourcing hub due to the sheer magnitude of skilled programmers it can produce, its economic links with

¹ The members of the group were: Hideo Uchida, Paul Lin, Priya Iyer, Richard Chao, and Yoshiro Fujimori

Southeast Asia and Japan, its huge potential as a market and the fact that demand for IT services will soon outgrow India's capacity to produce new programmers.

The Chinese IT industry is highly fragmented with some 200,000 workers distributed among 6000 companies. This makes it quite easy for customers to switch providers, thereby increasing the level of rivalry among incumbent firms. In addition, several factors such as government incentives, low capital needs, and low exit barriers, facilitate the entry of new small firms.

On the supply side of this industry, we find that Chinese technical universities are adding around 50,000 new graduates to the labor pool every year. In spite of this enormous influx of new talent, China is at a disadvantage to India when providing outsourcing service professionals because so few Chinese programmers speak English fluently. Hence, the wage differential between India and China for this kind of professional is still 12% to 15% lower in India. In even starker contrast, according to human resources specialists, is the gap in management skills of Chinese programmers and their Indian counterparts. These experts point at this differential to predict that the higher value-added outsourcing will continue to flow to India, while only the most clerical tasks will be awarded to Chinese companies. One final factor limiting the local supply of labor in China is the limited ability for people to relocate freely within the country. However, the government is changing labor regulations in an attempt to facilitate the geographic adjustment of labor supply and demand. While turnover in Chinese software firms is still low compared to the one endured by its Indian counterparts, competition among firms in tech hubs in China is not only for market share but also for programmers with language and management skills.

The demand for IT offshore outsourcing services is mostly driven by North American, European and Japanese companies trying to lower the cost of their IT operations. Besides the cost differential mentioned above, there are a number of other variables that determine what particular functions are outsourced and how outsourcing takes place. Rather than being an 'all or nothing' decision, CIOs have to evaluate what parts of their operations can be outsourced and how far away they are willing to have this work done. Firms typically start by transferring those tasks that have relatively low strategic relevance but require many man-hours to perform. In time, the tendency is to outsource more core tasks as IT services firms prove their reliability and their technical and managerial capabilities. Once the decision of outsourcing is made, it is necessary to determine how far away from the company this work can be done. Geographic and cultural distance between suppliers and customers of IT services are equally important to consider because both increase the coordination costs of the relationship. In sum, CIOs need to decide upon two kinds of trade offs. On the one hand, the more core tasks they are willing to transfer to outside providers, the more they will be able to reduce their costs. At the same time, this increases the costs of switching from one IT services provider to another if things go wrong or better alternatives surface. On the other hand, if they decide to go offshore, they will probably incur higher coordination costs but will be able to fully capture the benefits derived from lower wages in India and China.

For firms looking to outsource IT, outsourcing firms in their home countries are the main alternative to China and India. These firms are generally seen as more competitive than their overseas counterparts in providing strategic IT solutions and many of them specialize in providing IT consulting services rather than coding and maintenance. In fact, the global market for IT outsourcing seems to be structured in three tiers that might be described as strategic IT, complex project management and database/legacy systems maintenance. Geographically, these tiers corresponded to IT providers located in developed countries, India and China respectively.

DMK

The city of Dalian, located in the southernmost point of the Liaodong Peninsula, is considered the 'Silicon Valley of Northern China'. As a result of a bold government initiative in the early 90s, the city enjoys one of the most advanced software technology parks in the country and is home to several universities that annually graduate close to 2000 software programmers. Dalian has unusually strong business links with Japan. As a result of the wars waged in that region between China, Russia, Great Britain and Japan during the 18th and 19th centuries, Dalian was under Japanese rule from the turn of the 20th century until the end of WWII. This has not only resulted in a large portion of the population being able to speak fluently in Japanese but also, and more importantly, being able to understand and properly respond to the particularities of doing business in Japan.

Against this background, a group of students at Dalian Maritime University started to provide IT services to Japanese companies. After a short incubation period, DMK was incorporated in 1996 as an independent private company. DMK grew consistently, although rather slowly, during its first decade of existence. By 2004, it reached the \$20 million mark and was home to 1450 employees. Thirteen hundred of them were located in China, 100 in its offices in Tokyo and Osaka and 50 in the US. The bulk of its revenues (70%) came from Japan while an additional 25% came from the US, where it had started operations in 2002. The local Chinese market represented the remaining 5%.

DMK's basic outsourcing services included applications and database maintenance, development of new applications and IT engineering services. The range of technologies and programming languages it supported spanned from old legacy systems to Java, Oracle, .Net, AS400 and ASP. Particularly important for many of DMK's banking and insurance customers was the expertise the company had in mainframe legacy systems. With the absorption of a state-owned company in the mid nineties, DMK gained access to a relatively large pool of experts in IBM mainframes. This breadth of expertise equipped DMK to work for firms in a wide variety of industries and in tasks varying from the menial to the critical. In addition, DMK obtained certificates from several well respected international institutions, including ISO9001, Six Sigma and CMM. In fact, DMK became the first Chinese firm to reach the SEI-CMM company-wide level 5 assessment and also the first certified GE Global Development Center in China. The benefits that DMK derived from these certificates and the many awards it obtained from governmental, industry and economic press institutions were credibility and discipline. By obtaining these coveted logos, DMK sent a clear signal to potential customers of the

strong systems it had in place to assure the quality and reliability of its work. This was particularly important for a Chinese company given the lack of a clearly structured IT market in this country. On the other hand, obtaining and maintaining these certifications forced both managers and programmers not to 'cut corners' that could hurt the quality of their work in the long term.

Organizationally, DMK had its headquarters and back-end services concentrated in Dalian where most of the work was done. In Japan, DMK's offices had the double mission of expanding the business base of the company and providing on-site customer service for particularly sensitive projects. The US offices were opened in 2002 when DMK decided to expand its operations to this country. The staff in these offices provided their American customers with a liaison that was able to understand both business cultures. Back in the Dalian headquarters, the organization of the work was established along geographic lines. There were dedicated teams for American, Japanese or Chinese customers. Interaction among all three was limited, causing some difficulty adjusting workloads since the fortune of DMK in these countries might vary from one quarter to the next. However, within-country teams had become extremely efficient at creating and disbanding sub-teams as needed to cope with demand variability. As a whole, DMK was seen as a lean, flexible and frugal organization with a strong orientation to providing high quality customer service.

In its 9 years of existence, DMK has worked for over 80 clients in three countries. Approximately one fourth of them are Fortune 500 companies. DMK's top five customers by revenue in 2004 were IBM, GE, Unisys, AIG, and NEC. The company's clientele varies widely in the types of services required -from application maintenance to IT engineering-, in the type and breadth of technologies required -from mainframe legacy systems to object-oriented programming-, in types of industry -from banking and insurance to high tech manufacturing to embedded systems-, and in size and criticality of the services outsourced. However, cutting across all these categories, there was the sentiment among DMK's managers that while some customers took the time and effort to make the relationship last and grow, other customers took an extremely short term approach. Encouragingly, some of the latter had become so impressed with the quality of DMK's work that they had gradually confided DMK a growing amount of increasingly complex work to DMK. Accordingly, their contribution to both the top and the bottom line had increased substantially.

Questions:

Given this brief introduction to DMK and the industry in which it operates, how would you:

- Segment DMK's customer base and define a value proposition for each customer tier?
- Characterize DMK as a bundle of competences?
- Define DMK's Mission statement in its various dimensions?
- Formulate a Strategic Agenda that helps DMK attain its growth objectives?