# DMK International (2) – Customer Segmentation and Customer Value Proposition

DMK International plans are designed to become a number one software outsourcing company in China.

-- DMK International Corporate Vision

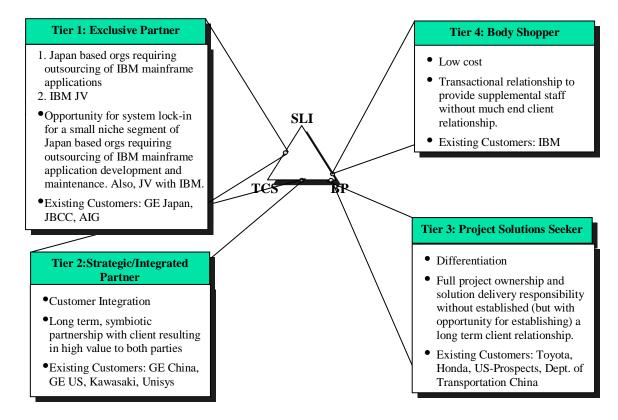
# **Customer Segmentation**

DMK received its first business order from Japan while it was an organization within the Dalian Maritime University in mid 90's, given the team strength in Japanese language and culture. Since then, DMK has been expanding its resources targeting at Japanese market. After DMK became an independent business entity in 1996, its organization was aligned with its customers by geographical regions – mainly Japan and China. This "natural" formation of the geographical segments is due to the distinct differences in language, culture, customer expectation, and experience. A DMK team specialized in serving one Japanese customer is likely to be able to serve another Japanese customer. However, that is not true for a team specialized in serving a Chinese customer to serve a Japanese market.

As DMK expands into US market as a new territory, DMK divided its market into three segments - Japan, US, and China – and continued to build its business by the three regions. Upon examining this market strategy, we find that this way of segmenting the market may seem to make sense and evolve naturally; however it does not seek to maximize value for both DMK and their clients. Specifically, it does not clearly tell DMK which customers are of high value, and to what extend a customer contributes to its long term profitability. Engaging with senior executives at DMK and taking a hard look at value proposition and the continuum of customer bonding, we used The Delta Model as the framework to re-segment customers into four tiers. Figure 1 shows the customer segmentation and the main characteristics for the four tiers. Each tier represents a different level of customer bonding - Tier 1 being the most bonded, and Tier 4 the least. A good validation for this segmentation is that the level of long term profitability for DMK also aligns with the order from Tier 1 to Tier 4. Given strategic bonding and profitability significance, DMK should be trying to move customers from Tier 4 towards 3, 2, and 1. More discussion on the tiers follows below.

Professor Arnoldo C. Hax, and Teaching Assistant and Sloan Fellow graduate, Harry Reddy, along with Sloan Fellow graduate students (Hideo Uchida, Paul Lin, Priya Iyer, Richard Chao, and Yoshiro Fujimori) prepared this case. MIT Sloan School of Management cases are developed solely as the basis for class discussion. Cases are not intended to serve as endorsement, sources of primary data, or illustration of effective or ineffective management.

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#### Figure 1: Customer Segmentation and its Main Characteristics

### **Tier 1 – Exclusive Partner**

#### **Business Dimension:**

The niche market of IBM mainframe application development and maintenance in the Japanese business environment gives rise to this tier. DMK's key competency in Japanese language/culture, and strong experience and expertise in IBM mainframe technologies, is unique in China. The IT industry in China did not really take off until the early 90's. At that time, mainframe technology was no longer the IT trend, and therefore most engineers are only educated and experience in newer technology. DMK acquired its IBM mainframe expertise by assimilating entirely a large team of experts from a government department that was shut down with one of the only IBM mainframe installations in China. As part of this, DMK also acquired a fully operational IBM mainframe which makes it feasible for off-shoring new mainframe development, provides them competitive advantage, and creates an entry barrier.

In contrast to China, mainframe technology was adopted in Japanese industries when mainframe technology became available in the market in early 1970's. Today most of the banking and insurance industries continue to rely heavily on mainframe systems for critical business operations. The shift from mainframe to newer technology of today has made it difficult to find talent for new development and extremely expensive to maintain, in Japan. For this reason, many Japanese companies are seeking lower costs of services and support for their mainframe systems. Offshore companies in India possess the mainframe technology expertise but have neither the language nor the cultural skills that are absolutely essential to working in Japan. This gives DMK an opportunity to lock in those customers.

Customer Dimension	Description	
Products	Critical partner to client providing highly integrated, customer specific, high-value added turnkey solutions for legacy mainframe applications in Japanese market	
Services	24x7 Maintenance of mission critical mainframe legacy applications Application extension through analysis, design and development of new, integrated modules	
Customer	Japanese Corporations in Financial Services, Insurance, etc. industries.	
Channels	Direct, Referrals from highly satisfied existing clients	
End Users	Japanese Corporations, Japanese Government organizations.	
Complementors	IBM (as a h/w and s/w partner), existing clients, Accenture	
Unique Competencies	<ol> <li>Combination of deep knowledge of mainframe applications and deep understanding of Japanese culture (not available to other companies in China).</li> <li>Very high level of quality (only CMM level 5 and Six-Sigma company</li> </ol>	
	in China) combined with all the other cost advantages available to Chinese companies not available anywhere else in the world.	

Figure 2: Business Dimension for Tier 1 – "Exclusive Partner"

Companies like GE Capital businesses in Japan fall into this tier. Under GE Corporate Master Services Agreement (MSA), those capital businesses in Japan have developed deep relationship with DMK including training of DMK personnel on GE mainframe systems for them to develop the expertise to support GE themselves. The lack of alternatives of comparable mainframe and Japanese knowledge, and the huge amount of costs and energy GE capital businesses in Japan have invested in, makes switching cost extremely high. DMK has successfully achieved customer lock-in and competitor lock-out in this tier. Another customer DMK has in this tier is JBCC, a joint-venture between DMK and IBM Japan. Under this JV agreement, work from IBM through this JV has to go into DMK.

Accenture is a complementor in this tier. They bring deep business domain expertise and provide technology strategy at the high end of the IT consulting value chain. However, work that is needed in the lower end in the value chain is expected to be performed by low cost

provider such as DMK. This creates a complementary relationship between Accenture and DMK and provides an end-to-end solution with the best ROI for clients. See Figure 2 for more details.

#### Value proposition:

In this exclusive relationship, bonding in many aspects besides business MSA is at its maximum possible level. In operation, both DMK and the customers have dedicated teams to develop lasting relationship, understand culture of each other, supported by high level management, and resolve daily operational issues. Technology knowledge, methodology (Six-Sigma for the case of GE) and experience are shared and have become common language. Teams of the two companies work together as one team, and infrastructure is merged into a common network for seamlessly connectivity. In some cases, GE can allow DMK to use corporate software licenses legally thereby reducing costs to DMK. All these work towards providing the critical Japanese mainframe solutions at low costs. For Tier 1 clients, DMK typically serves as a one-stop-shop or a total solution provider by offering bundled hardware and software solutions.

Value Proposition Element	Description		
Experiences	Seamless extension of client team with integrated culture, skilled technologists with deep understanding of clients business		
Value Delivery Systems	<ul> <li>Dedicated client focused team immersed in all aspects of client's culture</li> <li>Network integration to seamlessly extend client environment</li> <li>Open communication of all relevant information on both sides</li> <li>Executive sponsor, CEO oversight and full corporate reach</li> <li>CMM and Six-Sigma delivery methodologies for delivery</li> <li>Value added reselling of hardware and software for one-stop-shopping</li> </ul>		
Value Appropriation	Value gained by customer: Superior ROI, improved time-to-market, Security, Resource Stability Value gained by DMK: Exclusive long-term relationship, higher margins, predictable revenue Value shared by both: Shared IP, shared learning shared risk		

Figure 3: Value Proposition for Tier 1 – "Exclusive Partner"

In this tier of closely bonded relationship, DMK is considered valued partner and enjoys long lasting and secured business, and thus predictable revenue, and higher margin. Customers also benefit from controlled security, improved time-to-market through seamless operation, and superior ROI. See Figure 3 for further details.

#### Challenges:

One challenge is the need for continuous improvement year after year. If DMK does not improve its processes then the high level of profits will provide a strong incentive to competitors build the required skills over a period of time. Every major mainframe system and operation change initiated by customers is a challenge in terms of technology transfer, speed of acquiring new knowledge and new organization to cope with the change. Imperfection in coping with customer change may have significant negative results as DMK is serving business critical systems for customers. Hiring and retention is another key challenge as DMK seeks to expand business in this tier. As explained earlier, it is practically not possible to hire new graduates with mainframe knowledge as most new graduates choose to work on newer technology such as Java and Oracle. DMK also assumes the risk of training engineers on mainframe technology only to have them headhunted away by other Japan focused outsourcing providers. However, acquiring the entire system development process and Japanese business domain knowledge is both difficult and time consuming.

## **Tier 2 – Strategic Integrated Partner**

#### **Business Dimension**:

DMK and customers have integrated teams, infrastructure, culture, methodology, and share knowledge extensively in this tier. This tier takes advantage of the integration to provide solutions to multiple business units, and multi-phased projects jointly with customers by reapplying the technical and business domain knowledge DMK has acquired for that customer. Kawasaki is an existing customer that falls in this tier. The DMK team that initially established a relationship with Kawasaki continues to provide services in multiple Kawasaki facilities, and also in continuous project upgrades and maintenance.

GE is another customer here. Any business from GE US and GE China can choose to receive services from DMK under the Master Services Agreement (MSA) which already covers comprehensive contractual agreement on legal issues. All they have to do is to focus on the technical work contents and service level agreements for technical delivery. DMK has teams already knowledgeable about GE culture and expectation that work for any GE business. DMK has succeeded in customer lock-in in this tier, but not competitor lock-out. See Figure 4 for more details.

Figure 4: Business Dimension for Tier 2 – "Strategic/Integrated Partner"

Customer Dimension	Description
Products	Long term relationship with client to provide customized and integrated solutions across multiple business units
Services	•T&M and Fixed price application development across multi-phase projects
	-Joint application development enabled through deep understanding of client culture and methodology
	·Dedicated retained teams as extension of clients IT organization
Customer	GE US, GE China, Kawasaki, Unisys
Channels	Direct
End Users	N/A
Complementors	Other GE partners, IBM, other software partners, Accenture
Unique Competencies	<ol> <li>One of 12 exclusive outsourcing vendors for GE</li> <li>Six-Sigma/CMM level-5 quality combined with China's cost advantage.</li> </ol>

## Figure 5: Value Proposition for Tier 2 – "Strategic/Integrated Partner"

Value Proposition Element	Description
Experiences	Integrated teams of skilled technologists with deep understanding of client's business
Value Delivery Systems	<ul> <li>Dedicated client teams fully trained in clients methodologies and processes</li> <li>Joint development plans</li> <li>Cross-training and periodic two-way knowledge transfer</li> <li>Business Relationship Manager, CEO oversight and full corporate reach</li> </ul>
Value Appropriation	Value gained by customer: Superior ROI, improved time-to-market, Resource stability, Shared risk, continuous improvement Value gained by DMK: Access to client network as sales channel, credibility,learning Value shared by both: Co-development of shared standards and processes

#### Value Proposition:

In this level of integration, both DMK and the customers invest in periodic two-way training and knowledge transfer. Relationship is sponsored by high level management in both organizations. Dedicated business relationship managers are in place to manage day-to-day operations and business relationship. DMK teams that have specific knowledge, experience, and a cultural understanding of the customers are readily available to serve business needs with short ramp up time and low risk. This provides superior ROI and time-to-market for the customer, reduces security risks, and provides a dedicated team of resources for the customers. DMK wins new orders via referrals within the customer organizations, thereby reducing cost of new sales. See Figure 6 for more details.

#### Challenges:

The key challenge is in maintaining quality of services & process (Six-Sigma, CMM5) as DMK grows its business and customers. Maintaining quality standards is a requirement for growth of the business, yet it is growth that puts significant stress on the ability of the organization to maintain CMM level 5 and Six-Sigma quality standards. Consider a large corporate such as GE: if a DMK team does not perform well in any one division of GE, words spread and other business units in addition to future opportunities from the same division might disappear entirely.

Hiring could be another challenge, as DMK is not a big national brand in China, and has been able to recruit mostly in the northeast part of China, in and around Dalian. DMK competes with numerous other outsourcing organizations around the world for people with customer relationship management skills and experience in US and Japan.

### Tier 3 – Project Solution Seeker

#### **Business Dimension**:

Customers in this tier typically do not have a fixed set of predefined outsourcing partner relationships. They have well bounded discrete needs and select a set of outsourcing companies to bid out each project based on the needs of that project. They judge on provider's delivery capabilities for their specific needs, and pay on Time & Material (T&M, i.e. hourly or monthly rates), or Fixed Price for those deliverables. Long term relationship and therefore integration or bonding, is minimal in this tier. DMK wins those projects by offering high quality and matured process experience (Six-Sigma and CMM5) at low costs which are perceived by customers as the differentiators in this tier. IBM Japan and NEC are currently such customers in this tier. See Figure 6 for more details.

Customer Dimension	Description		
Products	Individual project solutions without committed long-term relationship		
Services	T&M and Fixed price application development for discrete projects		
Customer	Toyota, Honda, Department of Transportation China, US prospects		
Channels	Direct		
	Consulting partners such as IBM		
	Strategic partners such as GE		
End Users	N/A		
Complementors	IBM, GE, other software partners, Accenture		
Unique Competencies	Six-Sigma/CMM level-5 quality combined with China's cost advantage		

**Figure 6: Business Dimension for Tier 3 – "Project Solution Seeker"** 

#### Value proposition:

DMK delivers high quality results that meet customer expectations at low costs. Dedicated teams learn about the customer culture, work style, and expectation for the project, and team managers oversee project progress and delivery. Besides high quality and low cost deliverables, customers gain from understanding DMK capability, and often learn from DMK on the CMM5 and Six-Sigma methodology in practice. DMK gains new learning from customer domain and knowledge, and also opportunities of establishing long-term relationship. See Figure 7 for more details.

Value Proposition Element	Description	
Experiences	End to end delivery of a project with high quality and competitive price	
Value Delivery Systems	<ul> <li>Structured processes and teams with high quality of performance</li> <li>Ability to quickly ramp-up on clients business and culture</li> <li>Process for seamless transition at end of project</li> <li>Dedicated project team manager with executive oversight</li> </ul>	
Value Appropriation	Value gained by customer: Experimentation, learning, flexibility, reduced time-to- market, high quality, ROI Value gained by DMK: Opportunity for long-term relationship, ROI, learning Value shared by both: Shared learning in business domain and new technology	

Figure 7: Value Proposition for Tier 3 – "Project Solution Seeker"

#### Challenges:

The challenge is in the timely development of expertise in new industry verticals to increase market share, maintaining high project management skills working well with different customers that all have distinct processes and culture. Mobilizing resources that are capable and flexible enough to work with new customers and new projects is also a challenge. This requires DMK to assign the scarce higher end caliber talents to meet the needs. Having a pool of such personnel increases idle time and is costly to DMK.  $\rightarrow$  RISK IS TO MANAGE FLEXIBILITY AT COST

# **Tier 4 – Body Shoppers**

#### **Business Dimension**:

Customers in this tier are known as body shoppers. That is, they have transactional needs to fill in their skill or labor gaps. Customers own and manage the projects and approach DMK with skill specifications and expect DMK to assign personnel that meet the needed specifications. The requirement of work is a specific duration, and payment is done based on the T&M for that period. Since the provider selection criteria is based on the ability of provider to offer the personnel meeting a set of technical skills, DMK's differentiated capabilities in software development process and methodology with CMM5 and Six-Sigma, do not add significant value. Cost is a major driver. The company that provides the personnel with the lowest cost wins the deal. The relationship experience is not repeatable. If the same customer approaches DMK again next time, they are likely to have different personnel skill set requirements. Therefore, the experience gained in the previous project has limited applicability. See Figure 8 for more details.

Customer Dimension	Description
Products	Individual resources to supplement existing project teams and fill skill gaps (transactional)
Services	T&M and retained resources for fixed time durations Provide specific technology development skills on projects
Customer	IBM Japan, NEC
Channels	Consulting partners such as IBM, Direct
End Users	Corporations
Complementors	N/A
Unique Competencies	Consulting partnerships technology skill differentiation

Figuro 8.	Rusiness	Dimension	for Tier	1	"Rody	Shopper"
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Value Proposition Element	Description
Experiences	Supplement team with individual resources and fill gaps with skill expertise
Value Delivery Systems	Strong bench that can be tapped on demand Mix of skills and expertise
Value Appropriation	Value gained by customer: Resources on demand and skills on demand Value gained by us: Opportunity to up-sell, learning, improved bonding Value shared by both: Exchange of skills

Figure 9:	Value Proposition	for Tier 4 – "Body Shopper"
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#### Value proposition:

Skills expertise and a flexible on-demand resource pool is the primary value proposition for customers. Customers resolve their skill set gap and resource issues at that specific time. DMK uses such engagements as a "foot-in-the-door" for targeted prospective clients and can use the opportunity to build credibility and trust to migrate the client into higher tiers. Also, the body shopping approach by customers offers the ability for DMK to gain experience in specific industry verticals, new technologies and innovative processes which can be leveraged in future client work. See Figure 9 for more details.

#### Challenges:

Key challenge is maintaining the low cost structure because customers go for cost. Also, since customer requirement is unpredictable, DMK needs to have a pool of resources on bench ready to meet the requirements. This creates unpredictable personnel idle time which hurt DMK's profitability.

# Assignment (Mission of the Business)

The students are asked to do assignment on Mission of the Business, Five-Forces Analysis, and Value Chain Analysis; these can be found in Exhibit 1 & 2, 3 and 4 respectively.

#### The Mission of the Business:

A statement of the current and future expected product scope, market scope, and geographical scope, as well as the unique competencies of the business must develop to achieve a its desired competitive positioning.

# Exhibit 1

# THE MISSION OF THE BUSINESS

	Now	Future
Product Scope		
Services Scope		
Customer Scope		
End-User Scope		
Channel Scope		
Complementor Scope		
Geographical Scope		
Unique competencies		

# PRIORITY ASSESSMENT SCALE FOR BUSINESS SCOPE

Scope	Priority	The Product, Consumer, Channel or Geographical Location
		is being divested or exited from
		will be assigned a low level of importance
Existing	Е	will continue to receive the current level of resouroces
	+	resources to achieve a better competitive position.
	++	is assigned the highest level of importance and the resources needed to achieve as outstanding a competitive position as possible.
		is very tentatively considered for business activity
	-	is tentatively considered for business activity
New	E	will receive the necessary level of resources
	+	will be assigned a high level of importance and the necessary resources to achieve a strong competitive position
	++	will be assigned the highest level of importance and the resources needed to achieve as outstanding a competitive position as possible

Existing Product Scope	 -	Ε	+	++
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New Product Scope	 -	Ε	+	++
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# Challenges from Changes in Product Scope

# Exhibit 2

Mission Statement
Product Scope
Product Scope Now:
Future:
Services Scope
Now:
Future:

Customer	Scope
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Now:

#### Future:

# End-User Scope Now:

Future:

# Channel Scope Now:

Future:

Complementor	Scope
Now:	-

Future:

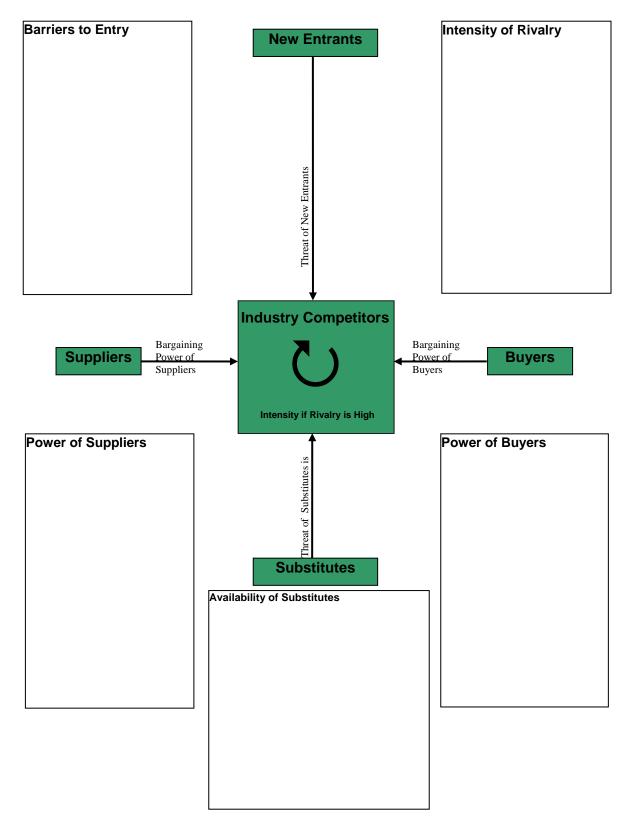
Geographical Scope Now:

Future:

Unique Competencies Now:

Future:

#### **Exhibit 3 Porter's Five-Forces Analysis**



# Exhibit 4

5		FIRM	INFRASTRUCTU	IRE		Margi
Support		HUMAN RESOURCE MANAGEMENT				
Activities		TECHNOLOGY DEVELOPMENT				
[	PROCUREMENT					
	Inbound Logistics	Operations	Outbound Logistics	Marketing and Sales	Service	Margin

**Primary Activities** 

SOURCE: This setup for the value chain was suggested by Michael E. Porter (1985).