The Hong Kong Polytechnic University
MGT 6611 Advanced Business Strategies

Case Study: HardServe

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Content

Introduction

Paul Lee, the Marketing Director of HardServe, has just finished the weekly strategic meeting with David Ma in their new corporate head office in Kwun Tong, one of the busiest locations for manufacturing and trading companies in Hong Kong. David Ma is the Technical Director of HardServe, and they founded HardServe on a shoestring ten years ago. Returning to his office overlooking the Hong Kong Kai Tak Airport and the Central district, Paul was overcome with mixed emotions. On the one hand, he is extremely proud of what he has built from scratch in just ten years. On the other hand, he feels less in control now more than ever as the company continues to grow. Sipping on his ginseng tea, he is pondering what strategic direction HardServe should take.

HardServe is the only non-IBM AS/400 mini-computer maintenance service provider in Hong Kong, and it was able to capture 5% of this market over the last ten years. As HardServe grows, Paul is looking for a well-defined and comprehensive strategic plan to allow HardServe to continue its growth in the future.

Paul is glad that HardServe is facing a much better situation than most of the other firms in Hong Kong. While other firms are downsizing or going out of business, Paul and David are facing a dilemma in determining the areas to grow and what they need to do internally to sustain this growth.

David was astonished by the AS/400 when it was introduced in 1988. David was a computing student in the US at that time, and he was awed by the incremental power that the AS/400 provides over other existing systems. When David came back to Hong Kong, he worked as an AS/400 engineer with IBM Hong Kong. Then he ran into his high school buddy Paul Lee who was a marketing representative at IBM Hong Kong at that time. Subsequently, they left IBM Hong Kong together to start HardServe.

Hong Kong

Fishing Village to Metropolitan. Hong Kong Special Administrative Region ("HKSAR" or "Hong Kong") is located at the southern tip of China's Pearl River Basin and is one of the most densely populated cities in the world. Described as a "barren rock," control of Hong Kong Island, Kowloon peninsula, and the New Territories were ceded to the British in 1842, 1860 and 1898 respectively. Hong Kong, which started as a small fishing community and a hideout for pirates 150 years ago, has grown into one of the busiest metropolitan city in Asia.

Exhibit 1 Map of Southeast Asia

Because of its central location, deep-water harbor, hardworking and resourceful workforce, Hong Kong has grown into the world's tenth largest trading economy by 2002. Hong Kong is also famous for its freedom of economic activities and the resulting competitive environment. Hong Kong was rated as the world's freest economy in 2003 and the 17th most competitive economy in the world in 2002.

Hong Kong is also described as the gateway to China, with over 2,100 regional offices of foreign firms in Asia. Population grew from 32,000 in 1851 to over 6.8 million in 2002. GDP grew from HK$87 million in 1961 to HK$1,324 million in 2002, and per capita GDP

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grew from HK$27,000 in 1961 to HK$195,000 (US$25,000) in 2002. Hong Kong was mostly manufacturing based in the 1970's and has since became more service oriented as production moved to China. Although most of the manufacturing based have moved to China due to the lower cost, Hong Kong still serve as the main transit hub because of its more developed and established legal, financing and trade infrastructure. Hong Kong's largest trading partners are China, US and EU.

In additions to its manufacturing and service industries base, Hong Kong is one of the busiest shipping ports in the world handling close to 193 million tonnes of cargo in 2002. Hong Kong is also famous for tourism; Hong Kong is one of the most popular tourist destinations in Asia, and close to 14 million visitors arrived in Hong Kong in 2001.

Exhibit 2 Map of the Hong Kong Special Administrative Region

Economic Slow Down. Hong Kong was returned to China in 1997, and the economy has since experienced one of the longest and deepest recessionary period in recent decades. The Asia Financial Crisis in 1997 has started a deflationary trend in Hong Kong and the CPI averaged a reduction of 3% a year since 1998. Home prices decreased by up to 60% from its peak in 1997, resulting in severe erosion of home equity value. While the currency of other Asian countries has devalued after the Asia

Financial Crisis making them more export competitive, the Hong Kong dollar is pegged to the US dollar so that its export has become more expensive and less price competitive. The event of 911 in 2001 and Severe Acute Respiratory Syndrome ("SARS") in 2003 worsened the economic conditions because Hong Kong is very export oriented, and these events made trade more difficult. The 911 event slowed trade with the US as importers are more selective of their choice of foreign suppliers. The outbreak of SARS in 2003 eliminated almost all tourism and trade-related visits for three months. Unemployment and underemployment rose from 2.1% and 1.2% respectively in 1997 to 8.6% and 4.3% in the second quarter of 2003. On July 1, 2003, over 500,000 Hong Kong residents protested on the street against the government of Hong Kong for its inability to turn Hong Kong around economically.

IBM AS/400 Mini-Computer

Long and Successful Product Life. International Business Machine ("IBM") introduced the then new Application System/400 ("AS/400") in June of 1988. The AS/400 was designed for the small and medium-sized companies, while its mainframe system was designed for large multinational corporations. The AS/400 was designed for reliability, low maintenance, and ease of component upgrade.

Since its introduction, the AS/400 has gained wide acceptance globally because of its broad range of available software applications, support and follow-on products. With continuous design and capacity upgrades, there is now over 700,000 AS/400 units in use globally, and there is a loyal following of corporate users. As communications technology improved, large companies are able to replace their mainframe computers with networked AS/400 systems further improving their popularity. IBM has also expanded the functions and capabilities of the AS/400 so that it can handle the Java-based online structure used for internet applications. In 2003, the general price range of the AS/400 ranges from US$1 to 3 million dependent on the configuration.

In the US, IBM sells the AS/400 systems through its own sales network and through its approved resellers. There is also an active market for pre-owned AS/400 systems. IBM and its approved resellers also sell new replacement hardware parts for the AS/400,

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and there is an active market for both new and used replacement hardware parts for repairs and upgrades.

Exhibit 3 Picture of the IBM AS/400 Family

Mission Critical. For most users, the AS/400 is a "mission critical" system in that all the firms' activities are dependent on the operation of the system. These firms have very low tolerance for system failure and downtime because all business transactions and activities will ground to a halt if their AS/400 systems become inoperable. As a result, these firms are willing to pay for third party maintenance service that can guarantee limited downtime. Fortunately, the AS/400 is known for its fault tolerance and reliability.

High Switching Costs. Most AS/400 users have very high explicit and implicit switching costs to migrate to other systems. There are high explicit costs to migrate because of the hardware and software investments that had been made. Most users also cater their operations to the AS/400 hardware and software configuration. The cost of customizing new software and hardware to existing operations can be prohibitive and the process extremely error prone. Costly and time consuming parallel operation and testing must be performed to ensure that the new system is reliable and free of defects. Employees must be retrained, and manuals and processes must be updated.

There are also high implicit switching costs to migrate to new systems. The person who recommends and oversees the migration is under tremendous pressure to ensure its

success because of the costs and detrimental effects of failure. Not only will a large amount of resources be wasted, the operation of the company might be jeopardized if the migration is not performed properly. There are several high profile cases in which companies spent years and millions of dollars to migrate to new systems only to revert back to the existing AS/400's due to their reliability and permeations into the organization. With the high perceived personal risk to support migration to other systems, incremental upgrades to the AS/400 are usually the recommended solutions.

IBM AS/400 Maintenance Service

After the purchase and installation of the AS/400, IBM offers annual maintenance service contracts to cover the maintenance of the system. IBM generally charges about 10% of the list price of the system for the annual maintenance service. Hence, the annual maintenance service can cost between US$100,000 and US$300,000. Most companies will purchase the maintenance service because of the critical nature of the system; it relieves management and the technology department the task of maintenance and upkeep of the system. Under these service contracts, IBM will be responsible for all the cost and parts of the repairs. To address the critical nature of the AS/400's to the users, there are normally penalty clauses in the contract that limit the down time of the system. Historically, IBM has focused more on hardware sales and the sales team compensation is based on new hardware sales. Since 2003, IBM has shifted its focus more towards software and service revenue (like maintenance service) and it expect to derive close to 70% of its revenue from software and services in 2005 from 45% in 2002.

Local in Scope. While technologies have expanded the geographical coverage of other businesses, the AS/400 maintenance service is very localized. The service providers must be physically close to the client location to provide proper and timely repairs. The engineers must be able to diagnose the problems, secure the required replacement parts, and physically replace and install the proper components; all within the time limits stated in the service agreement. Due to the penalty and the high service level required, most maintenance service providers are very local in scope to ensure that the service performance is met.

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Competitive Advantages. From a service provider's perspective, three main factors determine profitability. First, the service provider must achieve a certain size to obtain benefits of lower average cost from economies of scale effects. Most of the expenses are fixed costs, and marginal profit increases drastically when the firm operates pass the break even point and the average cost per repair falls. Second, the service provider must ensure that the service provisions are met to avoid the penalty. Service provider must have access to a broad range of hardware parts and qualified engineers on a timely basis. A good logistic system and access to a large pool of hardware parts can help service provider source hardware parts, and an experienced and well trained engineering team can affect repairs efficiently. Third, service provider must try to sign up newer machines because they break down less often and parts are easier to obtain. As machines age, they would require more frequent maintenance and repairs and increase the overall cost of the service providers. Hardware parts for older systems are also more difficult to source and might cause delays and penalties to the service provider.

Exhibit 4 Picture of an Inventory Warehouse

In the US, there are many third party maintenance service providers for the AS/400 and other systems. They usually charge a fraction of IBM's charges for comparative service levels. They normally will use pre-owned parts to reduce cost and that sometimes lead to a timeliness advantage because new parts are not always readily available.

IBM AS/400 in Hong Kong

With many foreign firms setting up their regional offices or headquarters in Hong Kong, Hong Kong has become one of the largest markets for AS/400 in Asia. In 2003, there are about 1,500 units of AS/400 in Hong Kong, and they are widely used in the banking, insurance, retail and manufacturing sectors. There are about 10 new units imported each year for new implementation and replacement purposes. Most firms choose to purchase the annual maintenance service package from IBM, and it has 95% of the maintenance service market share in Hong Kong.

There were several firms that offered maintenance service for AS/400 but most have went out of business over the last decade. Now IBM and HardServe are the only two companies remaining in the AS/400 maintenance service business. While IBM has been focusing on the sales of new AS/400 systems, HardServe has been slowly gaining market share for the post-sales maintenance service.

Lately, Paul was worried about the economic conditions of Hong Kong. The last several years have been one of the most difficult periods he has encountered since moving here forty years ago. The adverse economic and business environment, together with a government with an indifference attitude, has done havoc to the confidence of the local businesses. Despite these worries, he was pleasantly surprise to find drastic increase in sales. Paul finds out that as firms look for ways to reduce operating costs, routine maintenance are the first candidate for reduction. As a result, HardServe was able to gain market share without much marketing efforts because of its lower price and comparable services.

Generally, HardServe can provide comparable coverage and service offerings to IBM's services at 40% to 50% discount.

HardServe

Paul Lee and David Ma founded HardServe in 1993 to provide general computer services for various computer systems. In the first few years, HardServe was involved in different computer hardware systems from personal to mini-computers. Gradually, HardServe focused its attention on the maintenance service of the IBM AS/400 after it built up a customer base. The maintenance service has grown considerably over the last several years due to the adverse economic environment in Hong Kong and HardServe's reputation. HardServe also provide website design and hosting services but the entry barrier is very low. Hence, the industry is extremely competitive with thin profit margins; it is also extremely labor intensive. HardServe is also building up its disaster recovery service which has grown considerably since 911 and SARS. By 2002, HardServe has about 200 customers with annual revenue of HK$30 million (US$3.85 million). In 2002, 80% of its revenue came from maintenance service, 20% of its revenue came from disaster recovery service, and revenue from website design service was negligible.

Organizational Structure. HardServe has a very flat organization structure and an informal culture since its inception. The current organizational structure is shown in Exhibit 5 below. This structure has served HardServe well in the past because it allows HardServe to cater its services to each customer. By 2003, HardServe has grown to about 60 employees in four departments: Administrative and Accounting Department, Customer Service Department, Computer Engineering Department, and Internet Technology Department.

Exhibit 5 HardServe Organizational Structure
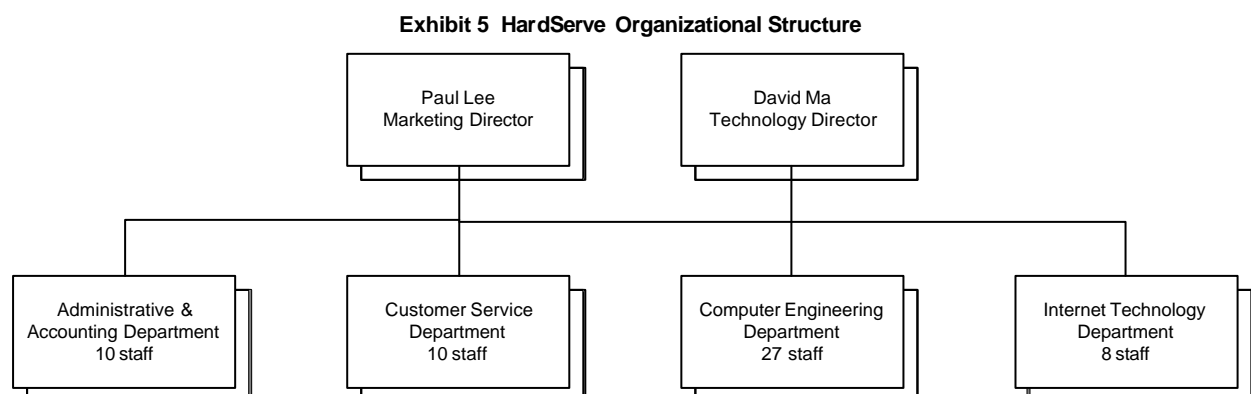
Lately, Paul feels overwhelmed by the coordination efforts required to service HardServe's expanding customer base. In particular, Paul feels that the customer service representatives and the engineers are not communicating sufficiently and effectively resulting in occasional miscommunications and missed opportunities. Paul thinks that the various departments can be better coordinated but finds it difficult to determine what to do and where to start.

Marketing. Paul is the Marketing Director of HardServe and he is the only person responsible for marketing. In the initial years, Paul had to spend quite a bit of time in gaining access and trust before signing up new clients. Over time, HardServe has build up a "quality at reasonable cost" reputation in Hong Kong. Due to its lower cost structure, HardServe is able to provide large discounts from comparable services from IBM. Paul also emphasize a last resort insurance clause in most contracts which requires HardServe to pay for IBM to come in and finish the repair if HardServe is unable to repair the AS/400 within a specific time. For many new clients, this last resort insurance clause was able to provide them with the comfort and assurance to switch to HardServe. Now, most of the marketing are being done through word of mouth referral by HardServe's existing clients.

HardServe has not developed a coherent marketing strategy so far because Paul is using all his time marketing to potential clients referred to HardServe through existing clients. HardServe's customer base has also grown such that Paul can only talk to each client once a year. As a result, Paul thinks that he would need to hire another marketing person if HardServe continues to expand its customer base. Unfortunately, experienced and effective marketing person for AS/400 maintenance service is very difficult to find. Not only must they project a very trustworthy image, they must also be extremely persistent and patient because it takes a lot of time and efforts to cultivate a success relationship. Paul is pondering if there is an effective performance evaluation and compensation system for this type of positions.

Engineers. In additions to marketing, Paul is also a concerned with HardServe's ability to hire qualified AS/400 engineers in the future as its customer base grows.

IBM Hong Kong downsized its maintenance service operation over the last 5 years and many experienced AS/400 engineers accepted their early retirement package reluctantly. Fortunately for HardServe, most of these engineers are AS/400 enthusiasts like David and HardServe was able to hire them at reasonable salaries. However, IBM Hong Kong has completed its downsizing process and qualified AS/400 engineers are becoming more difficult to find.

The training of new engineers also presents a problematic situation for HardServe. There is no external training program available for AS/400 repair services and all engineers are trained by IBM's inhouse programs. The engineers are usually trained using an apprentice system because knowledge is best accumulated through actual service work. Sensing a potential shortfall in engineers, David started an internal training program for AS/400 engineers last year and the response have been tremendous due to the high unemployment situation in Hong Kong.

Despite the program's initial success, David is uncertain about the effectiveness and the continual benefits of the training program because of several concerns. First, David worries that these engineers will leave HardServe after they are trained. They might join IBM for their higher salaries or start their own company as HardServe's competitors. David worries that HardServe is training its own potential competitors. Second, David feels that the trainees are in the business for a living and they are not really enthusiastic about the technology. Hence, he worries about their commitment and dedication in the future. Third, HardServe's apprentice system is still in its infancy and the quality of training varies widely. While some engineers are happy to share their knowledge and experience with their trainees, some engineers are very protective of their knowledge and their trainees suffered as a result.

Both David and Paul are inexperienced in the training and development area, and they are at a lost of what can be done. Are there alternatives to setting up their own internal training programs? How can HardServe minimize the risk of training its own potential competitors? How can the engineers be motivated to share their knowledge and experience? Is an employee stock option plan a feasible and effective solution?

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Hardware Parts Inventory. HardServe is well-known within the industry for having a large and comprehensive hardware parts inventory. Despite the carrying cost, it is a competitive advantage because HardServe is able to provide more timely service as replacement parts are readily available. Timely repair is critical for customers because they cannot tolerate prolonged downtime of their operations. As a result, David consciously built up HardServe's hardware parts inventory over the years despite the trend towards minimum inventory and just-in-time systems. There were occasions when even IBM Hong Kong must purchase parts from HardServe for their repair services.

HardServe build up its inventory through two sources. First, David is experienced in the pricing of hardware parts. He bids for large lots of parts in oversea auctions when he considers the lot reasonably priced or if it contains parts that HardServe needs. The average price of the individual parts is generally low. Second, there is no market for pre-owned mini-computers in Hong Kong. When companies upgrade their systems, they have to pay to have their older systems scraped. As a result, most customers opted to give HardServe their old computer systems after they upgrade as HardServe removes the system from the customers' premises for free. As a result, HardServe has built up a large and comprehensive hardware parts inventory.

Since HardServe's hardware parts inventory was build up slowly over time, the parts are scattered over HardServe's several warehouse facilities. HardServe still uses an inventory management system from many years ago of which only new parts are tracked. Pre-owned computer systems and used parts are simply kept around the warehouse and parts are pulled as required. The engineers have been pulling parts out from different systems and there are no central records of what is available and what needs to be ordered. David is considering a more comprehensive inventory management system because the pre-owned parts are very valuable and David is concerned about the improper handling of the parts or potential pilferages by employees.

The Solution to all Problems? One of Paul's buddy, Simon, is a logistic expert that had built an integrated management information system for the largest local telephone

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companies. Simon had been advocating the benefits of a similar system for HardServe to improve its overall information dissemination process. In his proposal, Simon writes:

".... The integrated management information system has four interactive modules: the marketing module, the customer module, the engineer module, and the inventory module. The general design and logistic is depicted below.
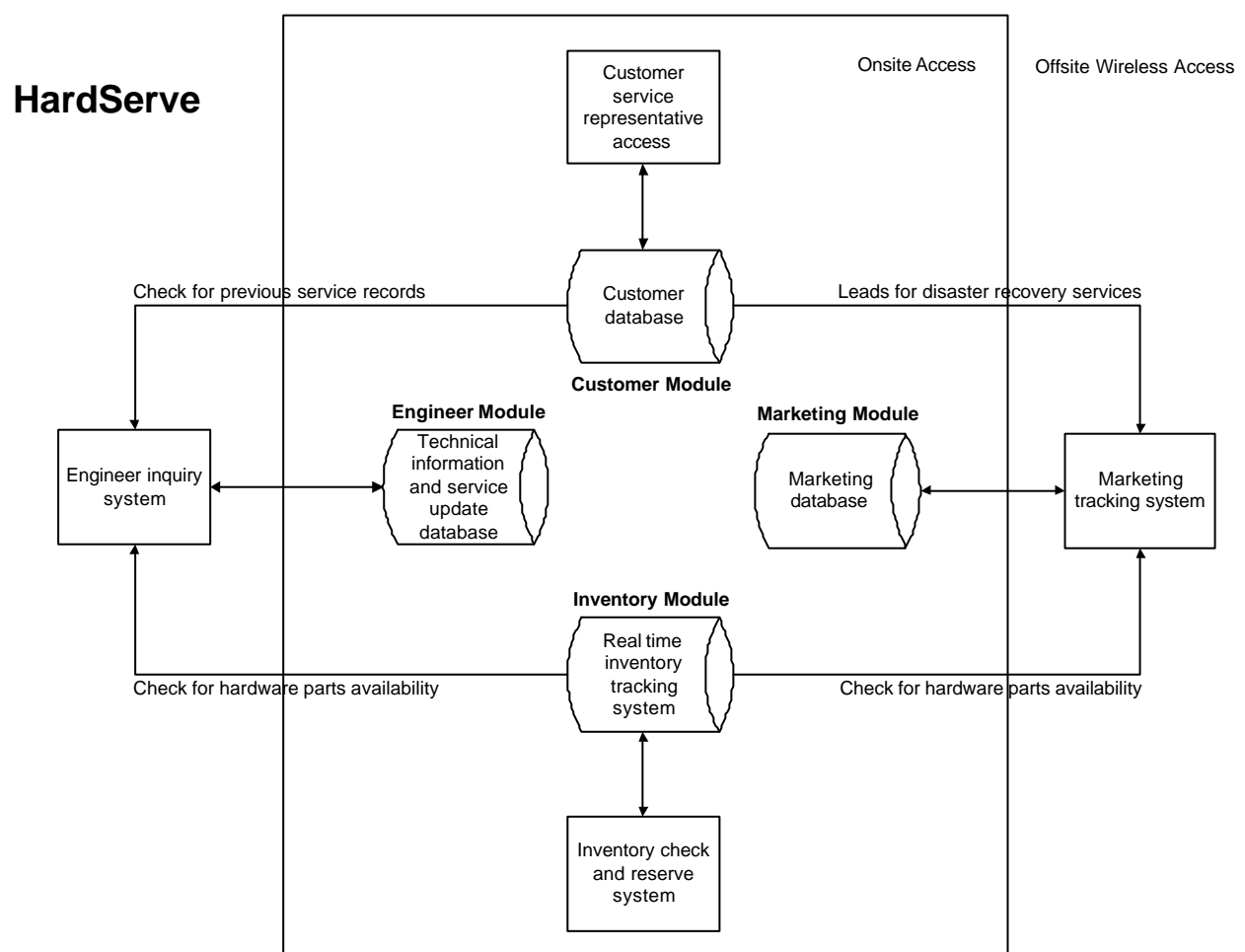
The marketing module is a database that record calls to prospective customers and tracks the progress. The marketing module can access the inventory module to check the availability of parts for the potential customers' systems. The marketing module can also access the customer module to obtain leads to market disaster recovery services to existing customers. Should HardServe decide to expand its marketing team, the marketing module can be used as a central database for more effective and focused marketing efforts.

The customer module is a database that maintains all customer information and activities and it is used by the customer service representatives to better service customers. The customer module contains detailed information on each customer so that the customer service representatives can answer customer inquiries quickly. Customer service representative can use the customer module to ensure timely billing and payment receipts. The customer module can also be used as a source of leads for HardServe's disaster recovery service. In addition, the engineer module can access the service history information within the customer module for engineers to perform more effective repairs.

The engineer module is a database that maintains the latest up-to-date technical information on the AS/400 and it is designed for easy access by the engineers during their repairs. The engineer module can also access the customer module to recall service history and the inventory module to ascertain parts availability.

The inventory module is a database that tracks all inventory parts of HardServe. Each individual new and pre-owned part will be checked, tagged, valued, and recorded in the inventory module. The engineer module can access the inventory module to check for parts availability, and the marketing module can access the inventory module to ascertain that parts are available for the potential customers' systems. Most importantly, HardServe can use the inventory module to track parts turnover and order parts when needed. The inventory module can also reduce the potential risk of pilferages by employees.

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The marketing and engineer modules are based on portable wireless technology so that they can be accessed outside the office by handheld devices. The marketing person can access the information while marketing to a potential client, and the engineers can check for service history and parts availability during the repair. ………"

The integrated management information system? The four modules? Portable wireless technology and handheld devices? Some lines with single arrow and some with double arrows? Paul initially thought that Simon send over the NASA proposal to HardServe by mistake. Paul met with Simon later and Simon was able to explain the system to Paul in more details.

While this proposed integrated management information system by his buddy Simon is very appealing on paper, Paul is uncomfortable with large and complex projects that change processes for the whole company. He has seen customers undertook projects of similar scope, only to retrieve back to the old processes due to implementation difficulties.

Paul is also concerned about the security of the integrated management information system. There appears to be too many ways to access HardServe's customer and inventory information. As the wireless technology is relatively new, he fears that it might create a large loophole for others to exploit HardServe's information.

Despite Paul's uneasiness of this system, he is also painfully aware of the logistic constraints that HardServe is facing as it continues to grow. If only there is a systematic evaluation that can be performed on this system to put his mind at ease.

Expand to China or Expand Locally. Several of HardServe's major customers started operations in China last year and they have asked HardServe to service their AS/400s in China. As a result, HardServe opened six offices in China since last year. While the China offices have been able to break even, HardServe is having difficulty acquiring new customers. First, HardServe does not enjoy the favorable word-of-mouth referrals since it does not have a long history in China. Second, Chinese firms have a higher tolerance for operational downtime and they usually forego the maintenance service.

Paul knows that there is huge opportunities for growth in China in the future, but it will take time and effect to develop.

Although Paul was born in China, he moved to Hong Kong with his family when he was very young. Although Paul is unfamiliar with the business environment in China, he has heard of prevalent problems like employee pilferage, persuasiveness of corruption and bribery activities, and an uncertain legal and business framework.

Paul is wondering if there is any systematic way to evaluate the risk of a country and of a particular industry for potential entry by foreign firms. Paul is also wondering how risk analysis can help him with his business decision making process.

Despite the opportunities for growth in China, it is risky and uncertain. At the same time, Paul sees tremendous potential for growth in Hong Kong. Currently, HardServe has 5% of the AS/400 maintenance service market and IBM Hong Kong has the remaining 95%. Paul thinks that HardServe can gradually increase its market share to 10% over time. Market share of over 15% might force IBM to take retaliative measures to protect its market share and Paul sees risk in competing directly with a deep pocketed industry giant.

Disaster Recovery Service. The terrorist attack on September 11, 2001 in New York City has shaken many US multinational firms in Asia. Not only have they started to administer precautionary measures to safeguard their personnel and corporate assets, their need to continue operations undisturbed have also ignited the demand for disaster recovery ("DR") services.

Disaster recovery service encompasses two services. First, all customer data are transferred periodically to the DR service provider's storage system. The DR service provider is used as a backup facility from which customer data can be retrieved as required. Both the customer and the DR service provider must have access to high speed high capacity communication network. Second, the DR service provider provides a contingent location and all the facilities for the customer to continue operation. The DR service provider maintains an empty office with desks, phone lines, computers,

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electronic access, and other required office facilities at a convenient offsite location. In HardServe's case, it also provides compatible mini-computer systems for customers to continue their operations as well. In case of a fire or other unexpected events at the customer's premise, the customer can use HardServe's office to continue their business. With data backup and standby computers, the customer can also ensure that there will be minimal data lost and downtime. In other words, the DR service provider provides the customer with an immediate and ready contingent location for operation.

Paul has always marketed the DR service as an insurance policy for the continuous operation of a company. Despite its importance in a disastrous situation, Paul was only able to sell its DR service to multinational firms and local banks. They were in most cases required by their head office or the local regulatory authorities to purchase the DR service.

Severe Acute Respiratory Syndrome. In spring of 2003, Hong Kong was hit with the Severe Acute Respiratory Syndrome ("SARS") incident. An unknown but highly contagious and deadly virus originated from China spread in Hong Kong, killing close to 300 and infecting close to 2,000 people. The World Health Organization ("WHO") put Hong Kong under travel alert for three months and Hong Kong's tourism and other business activities came to an abrupt halt. In order to continue operations, many local firms have their employees work in shifts or in offsite locations to lower the chance of infection.

While other local businesses are suffering severely, HardServe was facing unprecedented demands for its DR service. For the first time, local companies experienced first hand the importance of having DR service coverage. Most of HardServe's DR customers are able to continue operation seamlessly. Paul's telephone rang continuously from inquiries and he has to turn away most of the new clients due to limited capacity.

The demand for DR service increased drastically as its importance is recognized. At the same time, numerous DR service providers mushroomed in Hong Kong overnight. While they provide physical facilities and personal computers, only HardServe and IBM

Hong Kong are able to provide DR service for the AS/400 systems. The high cost of the AS/400 and the uncertain demand for its DR coverage have provided a natural entry barrier for HardServe and IBM. HardServe is also able to minimize its investments by using pre-owned AS/400 systems in its inventory. As a result, its cost of providing AS/400 DR service is even lower than IBM's.

Now that the demand for its DR service is exploding, Paul has to turn his attention to fine-tuning of the pricing. Since DR service is in effect an insurance policy, Paul is wondering if he needs an actuaries to help him determine the probability of loss in order to price the DR service properly.

As demand surges, Paul is also thinking about expansion of HardServe's DR service. He has some intuitive numbers from back-of-the-envelope estimations, and he is wondering if they can be translated into financial models that take into account different real life scenario situations.

The Rookie. David's nephew Little John joined HardServe this summer as an intern and he stopped by to say hello to Uncle Paul. Little John, being a graduating student from a top local university, is trying to apply what he had learned in school. Little John told Paul that he is getting a hang of the business, but some questions still border him and he is hoping that Uncle Paul can shed some light on these issues for him.

First, Little John has just read Porter's five forces model and he was analyzing HardServe using this task-based model. However, the results do not explain the success of HardServe very well. Little John took a strategic course last semester and other analytical models were discussed. He is wondering if models of other approach or orientation can do a better job of evaluating HardServe's strategic position.

Second, Little John sees IBM Hong Kong and HardServe as the only two AS/400 maintenance service providers in Hong Kong. According to his basic economics course, this can be classified as a duopoly or oligopoly industry and there are collusion possibilities. Since IBM Hong Kong prices their maintenance services at a relatively and

consistently higher level, shouldn't HardServe price their services just below IBM's to maximize profit?

Third, since HardServe already has the infrastructure and technical expertise, why not expand the maintenance service to cover other types of computer systems?

It's Miller Time. After promising Little John that he will research the matters further for him, Paul has an out of body experience. He saw himself going through Simon's management information system proposal, decided on whether to expand to China or expand locally in Hong Kong, solved the engineer recruitment and the inventory management issues, single-handedly nurtured the disaster recovery service business, and to top it all, answered Little John's questions all before his dim sum lunch. He looked down and saw himself wearing a white toga – he is God himself.

Sudden noises outside drove him back to reality. He looks at his watch and it is exactly five o'clock. Everyday, it appears that all the employees are able to finish all their work, pack and leave the office between five o'clock and one minute past five. Paul thinks to himself that he will attend to this morale issue after all the above work is done.

In the meantime, he will retrieve to his own Lazy Boy at home and think hard about how to deal with these issues. While he knows that he can handle any individual issues by themselves, there are just too many of them and they all seems to be highly important and urgent. How can he prioritize his time to deal with these issues systematically and track the results?

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Teaching Notes

HardServe faces different types of problems and opportunities. There are numerous solutions for each problem and opportunity. However, resource constraints means that only some of the solutions can be implemented and the reader must be able to prioritize the issues to resolve.

Small Business at Threshold of Growth. The founders of HardServe had grown the company until the threshold of internal control. Now the founders must learn to delegate responsibilities and formalize many of the processes in order to sustain HardServe's growth. Internal controls are needed to ensure that required tasks are completed within predetermined parameters. Founders must learn to evaluate and select strategic alternatives, dropped unprofitable divisions, and realize that they cannot be everything to please everyone.

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Models for Evaluation of Strategic Choices. Michael Porter's five forces model and the resource-based view model are two models that evaluates the strategic position of firms. Porter's model is task-based model which looks at each task or product; the resource-based view model evaluates the firm based on the capabilities that it possesses.

Reference:

Task based model	▪ What is Strategy, M. Porter, Harvard Business Review, 74, 6, 1996, 61-78 ▪ Strategy and the Internet, M. Porter Harvard Business Review, March 2001, 63-78
Resource based view model	▪ Firm resources and sustained competitive advantage, J. Barney, Journal of Management, 17, 1986, 99-120 ▪ A Resource-base View of the Firm, B. Wernerfelt, Strategic Management Journal, 5, 1984, 171-180 ▪ The resource-based theory of Competitive Advantage: implications for Strategy Formation, R. Grant, California Management Review, 31, 3, 1991, 114-135
Corporate strategies	▪ Does Corporate Strategy Matter? E. Bowman, Strategic Management Journal, 22, 1, 2001, 1-23 ▪ The Fall and Rise in Strategic Management, H. Mintzberg, Harvard Business Review, 72, 1, 1994, 107-115 ▪ Why business models matter, J. Magretta, Harvard Business Review, 80, 5, 2002, 86-92 ▪ Management strategies for small companies, H. Woodward, Harvard Business Review, January-February 1976, 113-121
Competitiveness	▪ Untangling the Origins of Competitive Advantage, I. Cockburn et el, Strategic Management Journal, 21, 10-11, 2000, 1123-1146 ▪ What have we learned about generic competitive strategy? A meta-analysis, C. Campbell-Hunt, Strategic Management Journal, 21, 2, 2000, 127-254 ▪ The changing rules of global competitiveness in the 21st century, S. Zahra, Academy of Management Executive, 1999, 13, 1, 36-42 ▪ The Core Competence of the Corporation, C. Prahalad et el, Harvard Business Review, 1990, 79-91 ▪ Using Core Capabilities to Create Competitive Advantage, K. Vickers, Organizational Dynamics, summer 1996

Knowledge Management. Management of information and know-how is a common problem area in small businesses. Effective information flow becomes more critical as the business grows. Having a good information and knowledge sharing system will also facilitate change in ownership and succession process.

Reference:

Knowledge Management	▪ What's Your Strategy for Managing Knowledge? M. Hansen et el, Harvard Business Review, March-April 1999, 106-115 ▪ Knowledge Management Systems: Issues, Challenges, and Benefits, M. Alavi, Communications of AIS Volume 1, 1999 Article 7 ▪ Knowledge Management Configurations and Approaches: The Case of the Sales Process, M. Corso et el, EurOMA, 2002 ▪ Managing Professional Intellect: Making the Most of the Best, J. Quinn et el, Harvard Business Review, March 1996, 71 ▪ Knowledge Management: An Introduction and Perspective, K. Wiig, Journal of Knowledge Management, 1, September 1997, 6-14 ▪ Knowledge diffusion through Strategic Communities, J. Storck, Sloan Management Review, Winter 2000, 63-74 ▪ Knowledge Management for Business Performance Improvement, D. Carlucci et el, EurOMA, 2002

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MGT6611 Advanced Business Strategies
HardServe

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Critical Success Factors. The student should recognize that some service and / or product elements are fundamental to a business' success, i.e. these are critical success factors. For HardServe, having a well stocked hardware parts inventory is a critical success factor as customers require timely repair of their mission critical systems. Hence, there is limited application of just-in-time inventory control or working with suppliers to reduce inventory levels.

Risk Analysis for New Foreign Market Entry. There are many existing frameworks to evaluate the risk of entering new foreign markets. However, key areas that should be discussed are political risk, cultural differences in terms of effects on marketing, distribution, and production, exchange rate fluctuations, allocation of human and other resources to manage the market entry, and use of strategic alliances like joint ventures or partnership arrangement for risk sharing.