

Opti-Tech Limited : developing an Asian sales and service network

Xia, Yang; Gleave, Tom

2001

Xia. Y., & Gleave, T. (2001). Opti-Tech Limited: Developing an Asian Sales and Service Network. Singapore: The Asian Business Case Centre, Nanyang Technological University.

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**OPTI-TECH LIMITED :
DEVELOPING AN ASIAN SALES AND SERVICE
NETWORK**Publication No: ABCC-2001-006
Print copy version: 15 Nov 2001*Xia Yang and Tom Gleave*

The case is set in April 2001 and finds Peter Schmidt, Director of Sales (Asia) for Opti-Tech Limited (Opti-Tech), in the midst of preparing his business development plan for the upcoming fiscal year. Since joining the US-based electroforming equipment manufacturer less than a year ago, Schmidt has been spending about 80 percent of his time traveling throughout Asia learning about optical disc manufacturing, the industry serviced by Opti-Tech. Prior to Schmidt's arrival, the company had demonstrated a lack of commitment to the region, which resulted in a significant slump in sales and poor after-sales service. It was then that senior management realised that a more concerted effort was needed if the company was to develop an effective sales and service network in Asia, beginning with the hiring of Schmidt. After taking almost one year to learn about the industry and assess Opti-Tech's relative position in Asia, Schmidt has concluded that his first priority should be on determining who should be the company's key agents in selected markets.

Ivey-Nanyang Case Writer Tom Gleave prepared this case under the supervision of Associate Professor Xia Yang. The case is based on public sources and interviews with key personnel from Opti-Tech Limited. As the case is not intended to illustrate either effective or ineffective practices or policies, the information presented reflects the authors' interpretation of events and serves merely to provide opportunities for class discussion. The authors have disguised names and other identifying information to protect confidentiality.

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For copies, please write to The Asian Business Case Centre, Nanyang Business School, Nanyang Technological University, Nanyang Avenue, Singapore 639798
Phone: +65-6790-4864/6790-5706 Fax: +65-6791-6207 E-mail: asiacasecentre@ntu.edu.sg

In April 2001, Peter Schmidt, Director of Sales (Asia) for Opti-Tech Limited, was in the midst of preparing his business development plan for the upcoming fiscal year, which would begin on July 1, 2001. Since joining the US-based electroforming equipment manufacturer 10 months previously, Schmidt had been spending about 80 percent of his time networking throughout Asia learning about optical disc manufacturing, the industry that Opti-Tech serviced. Although his travel schedule was often tiring, he believed it was time well spent because he had been able to meet a wide range of industry players, as well as discover certain practices that were formerly unknown to his company. This lack of knowledge stemmed from a previous lack of commitment to the region. However, after two years of declining sales, senior management realised that a concerted effort was needed if Opti-Tech hoped to develop a robust sales and service network in Asia that could exploit the region's considerable market opportunities. This, in turn, led to the hiring of Schmidt as the company's chief representative in Asia. Explaining his immediate priorities for developing the company's business in Asia, Schmidt stated:

I have spent a great deal of time finding out what is going on in the industry and what is important to our customers and distributors. Now I have to put this knowledge to good use, starting with our agents. We have to make sure that the companies representing us are fully committed to developing their businesses and ours. Unfortunately, some of our agents seem less committed than they should be. But decisions about who to keep and who to dismiss are not easy - there are many trade offs that need to be considered, especially since establishing and nurturing relationships in Asia can be difficult. The ability to provide reliable and responsive service is also a priority. We need to make sure we are perceived as competent and responsive - this is one way we can differentiate ourselves from the competition.

COMPANY BACKGROUND

Opti-Tech's main business line was the manufacture and sale of electroforming equipment used by

companies involved in the optical disc manufacturing industry, such as compact disc (CD), read-only CD (CD-ROM), video compact disc (VCD) and digital video disc (DVD) producers. The New Jersey-based company was formed in 1995 as the result of a merger between Acoustic Technologies Limited and Optical Disc Solutions Limited. Acoustic Technologies was a small 30 year-old company that began by manufacturing equipment used by producers of audio (vinyl) records. By contrast, Optical Disc Solutions was a young electroforming equipment manufacturing specialist that had established operations in 1993. The merger was driven by the mutual interests of both parties. On one hand, Acoustic Technologies had failed to adequately adapt its product line to new dynamics in the recording industry, such as the emergence and growing popularity of CDs. This left it at a competitive disadvantage, which it sought to mitigate by gaining access to Optical Disc Solutions' superior electroforming equipment. On the other hand, Optical Disc Solutions was a very small player with only four employees, three of whom were involved in the design and assembly of the equipment. Optical Disc Solutions believed it would be advantageous to partner with Acoustic Technologies because the latter company was more widely known and continued to possess considerable general industry knowledge.

The newly merged company (named Opti-Tech Limited - Opti-Tech) initially enjoyed solid sales growth, going from US\$4 million in 1996 to US\$7 million by 1998. This trend was short-lived, however, as sales slumped to US\$5 million in both 1999 and 2000. The decline was attributed to increased competition from several new, albeit small entrants to the domestic market, as well as the lack of an effective sales and service network in the company's key export markets in Asia.¹ All of Opti-Tech's 32 employees, save for three, worked out of the company's New Jersey headquarters. Of the remaining three, one was based in California, another in Sweden and one in Hong Kong. The California-based employee provided equipment installation and technical services to clients located in the western US, South America and Asia. The Swedish employee acted as the company's sales representative for continental Europe, and was provided with technical support on an as-needed basis by the New Jersey office. In Asia, Opti-Tech was represented by Peter Schmidt, a German national who had joined the company as Director of Sales (Asia) in June 2000. Schmidt's arrival

1 Sales by region were as follows: US 40%; Asia 40%; Europe 10%; and South America 10%.

signalled the company's renewed commitment and hope for building its business in the region by setting a sales target of triple the current level within the next year.

OPTICAL DISC MANUFACTURING

The manufacturing of optical disc media involved four major process stages, each of which required different sets of competencies. The first stage involved the digital encoding of various source media, such as music, audio or software. This encoded content was passed to the mastering stage, where the information was decoded and transferred onto a thin layer of photo-resistant material that coated a disc shaped glass master. A microscopic layer of vaporised nickel was then applied to the glass master using a process called "sputtering," which gave optical discs their characteristic pits. After the sputtering process was complete, the glass master was put through an electroforming (or galvanisation) process, which started by rigidly mounting the previously metallised glass master within an enclosed electroforming cell. The cell served as a bathtub for electrolyte solution in which positive voltage stimulation was introduced to "persuade" free ions of nickel to find their way to the metallised glass master, where they aligned themselves in growing layers of molecular deposits. Nickel pellets were continuously placed in the corrosive solution to replenish the supply of free nickel ions until a sturdy finished stamper plate was produced. The finished stamper was then passed on to the replication stage where it was used as a die in an injection molding system for stamping thousands of CDs, CD-ROMs, VCDs or DVDs. A simplified view of the optical disc manufacturing process is provided below:

The types of companies involved in optical disc manufacturing included both vertically integrated manufacturers (VIMs), as well as specialist companies that participated in specific functions within the value chain. These specialist companies were typically involved in one of the following sets of activities: content recording and encoding,

mastering and electroforming, or replication. The reason that mastering companies often engaged in electroforming was because the technologies and processes involved were reasonably compatible. In addition, electroforming equipment cost substantially less than equipment associated with other parts of the manufacturing processes. This gave mastering companies an opportunity to add value to the production process without having to forego substantial investment. (See **Exhibit 1** - Optical Disc Manufacturing Equipment.)

OPTICAL DISC MANUFACTURING IN ASIA

Asia was home to about half of the world's optical disc replicating companies, many of whom were engaged in the illegal manufacture of audio, video and software products. Collectively, these companies produced about six billion CDs, CD-ROMs, VCDs and DVDs in 1999, or about 30 percent of global output. Approximately 4.2 billion of these discs were CDs and CD-ROMs, with the remaining 1.8 billion being mostly VCDs, and to a lesser extent, DVDs. One of the main reasons for the imbalance between the number of disc manufacturers in Asia and the region's global market share stemmed from concerns held by major content providers about being able to ensure rapid time-to-market. Since the vast majority of content provider's customers resided in either Europe or the US, a significant amount of final production was done close to these key markets to avoid shipping costs and time delays. In addition, growing concerns over copyright piracy in Asia had caused the content providers to reassign production to more secure environments.

Despite his extensive travels throughout the region, Schmidt was still uncertain about the total number of optical disc manufacturers in Asia, although he estimated the number to be between 1,000 and 1,400. He was more certain, however, about the types of players involved in the industry, as well as their degree of concentration. For example, he estimated that the Greater China region was home to about one third of the region's producers, while Japan and Korea contributed another one-third. The

	Encoding	Mastering	Electroforming	Replication
Input	Encoded music, video, software	Glass master with layer of photo resist covering	Glass master with data pits and metallized layer	Finished stamper plate
Output	Glass master with layer of photo resist covering	Glassmaster with data pits and metallized layer	Finished stamper - cleaned and ready for replication	CDs, DVDs etc

remaining production was concentrated in India, Pakistan and Southeast Asia. Schmidt also believed that about half of all manufacturers were involved in some form of illegal production, and that many were also accustomed to doing business "under the table." This latter factor presented a challenge to US-based companies because they would be contravening the Foreign Corrupt Practices Act (FCPA) if they engaged in making "under the table" payments of any kind.²

Taiwan, Southeast Asia and India were the key markets involved in CD and CD-ROM manufacturing, while China and Hong Kong served as the main VCD and DVD producing markets. China's influence had grown enormously in recent years, with legitimate output estimated at 300 million discs in 1999 alone. As with CD production, a key factor inhibiting the growth of legitimate VCD production in Asia was piracy. Strong demand, coupled with excess replication capacity (especially in China and Hong Kong), resulted in a blatant disregard for copyright laws. For example, of the estimated 1.8 billion VCDs produced in Asia in 1999, almost 60 percent were believed to be pirated copies, many of which were major Hollywood titles that had appeared in advance of the legitimate releases. This problem was not expected to abate soon, as evidenced by a recent crackdown by relevant authorities in China and Hong Kong. After the respective authorities closed down numerous illegal operations, over 100 new replications lines suddenly sprang up in Malaysia, Indonesia, the Philippines and Thailand in a very short period of time.³

DVDs had increased considerably in popularity over the past two years and were expected to replace VCDs as the format of choice for video oriented content, with global demand expected to grow from 400 million units in 2000 to 2.3 billion units by 2005. When taking into account other types of applications (such as audio, software and data storage), demand for this format was expected to reach 3.7 billion units by 2005, with an estimated value of about US\$100 billion.⁴ In an effort to secure a minimum 25 per cent global market, the Chinese government

had supported all 35 registered DVD player manufacturers in China by providing funds and incentives to expand capacity, as well as secure the required technologies.⁵

OPTI-TECH'S PRODUCT LINE

Opti-Tech had traditionally focused on the manufacture of equipment designed for use in the electroforming stage of the optical disc manufacturing process. The equipment was sold through one of three channels. One channel involved direct sales to either VIMs or mastering companies. A second channel involved the sale of equipment to mastering equipment manufacturers, in turn, packaged Opti-Tech's equipment with their own to create a one-stop solution for mastering companies involved in electroforming.⁶ A third channel involved the use of agents which in turn, sold the equipment to VIMs or mastering companies.

A complete electroforming turnkey solution used in CD replication included the following components:

Component	List price (US\$)
Electroforming bath (3 cells)	180,000
Electrocleaning station	60,000
Stamper punch *	75,000
Back side finisher	60,000
Thickness profiler	15,000
Water de-ionizing system	60,000
Waste treatment system	40,000
Chemical set	10,000

** price for single hole puncher; a multi-diameter hole puncher (used in the production of DVDs) cost \$100,000*

In pricing its products, Opti-Tech used a standard formula of three times the unit cost to arrive at its list price. Discounts were then applied which varied according to the distribution channel used. VIMs and mastering equipment manufacturers typically received a 15- to 20-percent discount on the purchase of entire turnkey systems, with the purchase of components or spare parts warranting a 15-percent discount. Mastering equipment

2 The FCPA prohibited US-based firms from paying, offering, promising to pay (or authorising to pay or offer) money or anything of value to foreign officials for the purpose of obtaining or keeping business. Violations of the Act could result in fines on the US company's officers and directors of up to \$2 million, as well as prison terms of up to five years.

3 <http://www.opticaldisc-systems.com/2001MarApril/2001MarAprilcontentmain.htm>.

4 The implied compounded annual growth was expected to average 42% during this period. Source: Strategy Analytics.

5 "DVD Player Quality Becomes Top Priority," <http://www.opticaldisc-systems.com/sepOct2000>.

6 It is important to distinguish between the mastering equipment manufacturers and the mastering companies who used the equipment as part of the optical disc production process.

manufacturers received a 15- to 25-percent discount on turnkey system purchases, as well as a 10-percent discount on component and spare part sales. Agents that sold turnkey systems or components were given a commission based on the final selling price of the equipment sold, while spare parts sales earned a standard 10-percent commission. The agent's commission schedule for turnkey system and component sales was as follows:

Final Sale Price (% of list price)	Commission (% of final price)
90 – 100	10
85 – 89	7
80 – 84	5
below 80	case by case

Each turnkey system was normally able to produce between 15,000 and 20,000 finished stampers every year. Each stamper was in turn, used to produce between 50,000 and 80,000 individual optical discs. Since each finished stamper was only good for only one audio, video or software title, an implied opportunity cost existed regarding the titles chosen for production. Typically, it took two weeks for an Opti-Tech technician to install, test and activate a complete turnkey solution. Since the equipment was designed to last for several years under normal use, once a turnkey system was installed, the user would likely only need certain spare parts and chemicals to maintain operations. Daily routine maintenance was expected to be performed by the end users, although trained technicians from either Opti-Tech or its agents were usually needed to perform one to two days of robust maintenance at least once per year, provided that the system had been running smoothly and was not abused. The cost of these service calls was borne by Opti-Tech or its agents. Among the operational problems that did arise, many were associated with a lack of maintenance, a change in staff or production runs that exceeded the equipment's recommended settings. In these instances, technicians from Opti-Tech or its agents needed to make more frequent visits lasting one to two days. The tone of the related discussions usually had to be handled with a certain level of sensitivity since the optical disc manufacturers would often blame defective equipment as the source of the problem, even though it was their own abuse that was the root cause.

VIMs were usually able to maintain up to four replication lines by integrating extra electroforming baths and electro-cleaning stations into their existing configurations instead of buying entire new turnkey solutions. For companies choosing to purchase

these additional components, access to de-ionised water and wastewater treatment was still required. However, some companies operating in less environmentally stringent jurisdictions tried to save costs by forgoing the purchase of wastewater receptacles. This explained why the company's de-ionised water and wastewater component sales did not match its electroforming bath and electro-cleaning station sales. For companies that integrated additional components into their existing systems, an Opti-Tech technician required two to five days to install and test the equipment before it could be formally activated.

In an effort to create new revenue streams, Opti-Tech had recently developed two new high potential applications using the equipment that was originally designed for optical disc production. These modified electroforming systems were expected to target companies involved in holographic image printing, as well as those involved in the semiconductor manufacturing industry. The use of holographic images had particular appeal for firms having to fight intellectual property rights violations since corporate holograms could be printed on their legitimate products to indicate authenticity. Internal research efforts also indicated that modified electroforming systems could be used in the manufacture of semi-conductors, although it was too early to determine the viability of this application. The cost to make the modified electroforming systems was essentially the same for the two new applications as it was for optical disc manufacturing.

OPTI-TECH IN ASIA

From 1995 to 2000, Opti-Tech maintained a limited presence in Asia, with sales and service being facilitated mostly by personnel based out of the US. In 1999, after it realised that it was experiencing a steep sales decline in Asia, the company dispatched Alexi Kovalev, one of its New Jersey-based service technicians, to Hong Kong, from where he was expected to service customers in need of equipment installations or other technical assistance. However, the Russian immigrant to the US had never previously lived in Asia and found the experience to be very unsettling. Therefore, he requested a transfer back to the US after only three months. It was then that the company realised that it needed to make a stronger commitment to Asia if it expected to increase its sales and service capabilities in the region. After several months of searching for the appropriate candidate, Opti-Tech hired Peter Schmidt in June 2000 to become the company's first permanent sales director in Asia. Schmidt was

hired on the strength of his extensive sales background in the region, having previously served as a regional sales director for a German-based dental equipment manufacturer. In this previous role, he substantially increased the German company's business in all major countries of the region, with a focus on China, Japan, South Korea and Taiwan. The fluently bilingual (German-English) speaker had a strong cultural understanding of the region, having worked in Asia for over five years, and having attained intermediate proficiency in both spoken Mandarin and Japanese.

In making the shift to Opti-Tech, Schmidt's mandate became the fulfillment of four key objectives, which were:

- to establish sound relationships with existing customers by ensuring that they understood Opti-Tech had an accessible and permanent face in Asia;
- to assess and re-organise the company's network of sales agents;
- to significantly improve the company's after-sales service capabilities; and
- to increase sales of optical disc manufacturing equipment, as well as assess the opportunity for the company's holographic and semiconductor manufacturing applications in selected new markets.

Schmidt established the company's regional office in Hong Kong, where rent and related office expenses, including the use of temporary secretarial assistance, amounted to \$5,000 per month. The decision to locate in Hong Kong was based on the fact that the Special Administrative Region of China served as a convenient point from which to service the Chinese mainland and Taiwan. Initially, Schmidt was expected to spend about 80 percent of his time traveling throughout the region getting to know the industry and the company's customers and agents. This meant that salary and traveling expenses for Schmidt alone was expected to total about \$200,000. An annual budget of \$75,000 had also been earmarked for the salary and related traveling expenses for one yet-to-be hired service technician who would be fully dedicated to installing and servicing Opti-Tech's equipment throughout Asia. This amount was in addition to the three-week training program that the technician would receive at company headquarters in New Jersey. As Schmidt explained, the technician that he was expected to hire over the next month needed to exhibit a strong

blend of technical knowledge and diplomacy in order to ensure that the end users did not lose face:

In producing CDs, DVDs and the like, the origin of any defects is usually quite difficult to determine. However, a lot of companies are quick to blame the electroforming equipment, even though there is no evidence it is the root of the problem. This means our technicians have to be able to diagnose both the mastering and electroforming equipment, as well as demonstrate a friendly and diplomatic attitude since we often find that, in fact, our equipment is not at fault after all.

By April 2001, the company had established a base of about 50 end-users scattered from Japan in the east to Pakistan in the west. The markets with the greatest number of customers were Taiwan (12), Hong Kong (10), Japan (6) and China (5). Among these countries, there were important differences in the nature of the client accounts. For example, of the 12 accounts in Taiwan, two had bought entire turnkey solutions, while the rest had bought electroforming bath and electro-cleaning modular components. Hong Kong was evenly split, with half the accounts buying full systems, while the other half had purchased components. In China, two customers had purchased turnkey systems, while three others had bought components. Japan was unique in that all revenues were derived from the sale of electro-cleaning systems.

Recognising the inherent difficulties of selling and servicing the company's equipment across such a vast territory with only himself and one technician to call upon, Schmidt had asked the head office for a \$150,000 increase in operating budget to support the hiring of an additional sales representative and technician. Senior management's response was that Schmidt should first prove that such funds were needed by demonstrating a marked increase in sales. Rationalising the company's decision, Schmidt stated:

I can understand head office's reaction - we are a small company and we must watch our expenses closely. We also pay agents to sell and service our equipment, which means we should require less internal staff. But it's a bit of a 'chicken or the egg' game. Maybe if we had had more people up front, we could drive sales faster and provide better service sooner. Regardless, I

have a lot of faith in the management team in New Jersey, and I am confident that if I can make a business case for the additional staff, they will give me the money.

ONE KEY COMPETITOR

Prior to February 2001, the electroforming equipment manufacturing industry had only three truly global players, Jansen Brothers of Denmark, ElectrOmega of Belgium and Opti-Tech. The rest were small regional players that did not have the resources to market their products effectively away from their home bases. In the case of Jansen Brothers, the bulk of the company's revenues were derived from its lithographic equipment manufacturing division. However, it had also developed a sizeable electroforming equipment manufacturing division in recent years, rising to the number two position worldwide with 25 percent market share, based on sales and profits of \$10 million and \$2 million respectively in 2000. In February 2001, Jansen Brothers bought Electromega which, at the time, was the world's leading electroforming equipment manufacturer, with 50 percent market share. Despite its strong market position, Omega Manufacturing Inc. sold off its electroforming subsidiary in order to focus on the manufacturing of mastering and replication equipment. This was because Omega Manufacturing Inc. had secured strong technological leadership in these latter two segments, both of which offered higher profit margins than electroforming. The transaction was valued at \$8.5 million. Despite creating a clear dominant competitor with 75 percent global market share, no forthcoming actions from Europe's anti-trust bodies was expected because the actual size of the market was, as yet, considered too small.

Jansen Brothers began a concerted foray into Asia in 1999 by establishing a sales and service center in Singapore staffed by one sales representative and two technicians. Since then, the company had established agency relationships in China, Hong Kong, Malaysia, Taiwan and Thailand. Apart from the formidable Danish competitor, Opti-Tech's Schmidt felt that no other electroforming companies warranted concern due to a lack of visibility in the region. As an example, he pointed to the fact that in 1999, one of Opti-Tech's US-based competitors attempted to enter Asia, but retreated after less than one year, allegedly because its prices were too high and its after-sales service was poor. Another company, Access Japan, served only the Japanese

market, where it had earned a reputation for producing substandard equipment. This meant that it had had a difficult time gaining the faith of Japan's powerful VIMs and mastering equipment manufacturers, such as Sony and Panasonic.

SHIFTING THE DISTRIBUTION CHANNEL BALANCE

Since 1997, about 60 per cent of the electroforming equipment that Opti-Tech had sold in Asia went to mastering equipment manufacturers who, in turn, bundled the equipment with their own for sale to optical disc mastering companies. The remaining sales were split evenly between direct sales to VIMs and mastering companies, and sales that went through the company's agents. After assessing Opti-Tech's position in Asia, Schmidt had concluded that the company needed to shift sales away from the mastering equipment manufacturers towards agents if it was going to develop an effective sales and service network in the region. This was because the mastering equipment manufacturers tended to play Jansen Brothers off against Opti-Tech (and vice versa) by asking the two electroforming equipment manufacturers to bid for inclusion in packages that were being put together for sale to mastering companies. Apart from the fact that the mastering companies were seldom disclosed to either electroforming player, Opti-Tech was concerned that price had become the overriding criterion for deciding the winning bids. While he was confident that Opti-Tech's equipment was superior to Jansen Brothers', Schmidt was concerned that the larger, better financed company would be willing to take less profit margin at present in order to secure more market share. This had caused Opti-Tech to offer deeper discounts than preferred to the mastering equipment manufacturers in order to remain competitive in the bidding process. A shift in sales through company agents was not without its challenges, however, as Schmidt needed to resolve whether or not Opti-Tech should retain its current representatives in Taiwan, Japan and India. While he acknowledged that each of the existing agencies offered certain advantages, he was nonetheless concerned that the company's products were not being given the proper attention in terms of sales effort and after-sales service reliability.

Taiwan

Opti-Tech's agent in Taiwan was TPC Ventures Co. Limited (TPC Ventures), a company involved in a diverse array of business activities, including VIM of optical discs, the sales of CD replication

equipment and the brokering of military hardware. The well-connected Taipei-based company had extensive dealings throughout Greater China, and therefore maintained satellite offices in Beijing and Hong Kong. Among its 20 Taiwan-based staff, four were dedicated to selling electroforming and CD replication equipment and related supplies to industry participants. In addition, one technician was dedicated to installing and servicing the equipment on an as-needed basis. The company also employed one sales representative and one technician in Hong Kong who were dedicated to selling and servicing electroforming and CD replication equipment to local customers, as well as to those in southern China. TPC Ventures did not have any optical disc industry sales and service staff in its Beijing office since the special economic zones in the South were home to the vast majority of the country's optical disc manufacturers.

Opti-Tech first started dealing with TPC Ventures in 1997, after its managing director, Mr. Wu, approached Opti-Tech about establishing an exclusive distributorship for Taiwan. Since then, the Taiwanese company had sold Opti-Tech equipment to users in Taiwan, Hong Kong, China, Malaysia and Thailand, the same markets where it also sold CD replication equipment and related supplies. An integral part of the company's business development strategy was to leverage its considerable financial resources by taking an active role in developing other replication companies throughout the region by providing private equity financing. As part of the financing arrangements, TPC Ventures was expected to supply the start-ups with the necessary equipment.

In assessing TPC Venture's performance, Schmidt was deeply concerned that none of the agent's four sales representatives seemed keen on selling Opti-Tech's electroforming equipment. Instead, they seemed more interested in selling CD replication equipment. He was also concerned that the agency had sold only four turnkey systems since it started representing Opti-Tech, all of which occurred during an 18-month period in 1997 and 1998. Furthermore, of the systems sold, only two were in Taiwan, including one that TPC Ventures had bought for its own use. Schmidt found this disturbing because, despite its small size, Taiwan was one of the largest optical disc replication markets in the world. Another disturbing discovery was that the majority of the Opti-Tech equipment sold involved electro-bathing and electro-cleaning units that were integrated with low quality electroforming equipment supplied by other producers to create turnkey systems.

Compounding the problems further, Schmidt had discovered that TPC Venture's service technicians would sometimes do a sub-standard job when providing after-sales service. In explaining the Taiwanese company's strategy, Schmidt commented:

After putting the pieces of the puzzle together, I think I have figured out what Mr. Wu is up to. First, he wants cheap access to electroforming equipment for himself, which is why he approached us about getting the exclusive agency for Taiwan. This means that all of the equipment he buys for himself or his start up companies is reduced by the standard discount. Second, he puts together inferior electroforming turnkey systems that have the appearance of quality because they contain some Opti-Tech equipment. But in reality, when TPC [Ventures] incorporates inferior equipment from other suppliers, the whole system becomes substandard because the electroforming process is only as good as the weak link in the chain. I believe he does this because he does not want other companies to have access to top quality equipment since they could become potential competitors to his existing replication business. This probably also explains why his service technicians don't always do a good job."

Given his concerns, Schmidt began to consider whether or not he should transfer the agency in Taiwan to Huangjin Shouhou Co. Ltd, a very successful distributor that specialised in selling chemicals to Taiwan-based companies involved in all stages of optical disc manufacturing. During his travels, Schmidt befriended Mr. Li, Huangjin Shouhou's managing director. After several discussions with Mr. Li, Schmidt was left with a very favourable impression about the Taiwanese manager's depth of knowledge about the local market, as well as industry related technologies and processes. Subsequently, Schmidt met several of Li's clients, and their disclosures gave him the impression that Li and his sales and services teams were serious about customer service and the need for developing lasting relationships. At the same time, however, Schmidt was not convinced that the company had strong technical knowledge since it did not sell equipment. In addition, if Schmidt elected to go with Li's company, Opti-Tech would need to

establish a formal agency in Hong Kong and the Chinese mainland, since Huangjin Shouhou was dedicated solely to servicing its domestic market. This would be a significant sacrifice since TPC Ventures was so well-connected in these markets.

Japan

Nakamichi and Son Co. Ltd was Opti-Tech's lone agent in Japan. Based in Osaka, the small, family-run enterprise was started and managed by 55 year-old Yoshiro Nakamichi. His son, Kyoshi, acted as the company's sales representative who devoted most of his time to spare parts and chemicals to a wide range of optical industry players (including some of Japan's largest VIMs and mastering equipment manufacturers) in addition to Opti-Tech electro-cleaning systems. Mr. Nakamichi's daughter, Midori, served as the company's secretary and office administrator, while Haruki Nishikawa, the company's lone technician, provided installation and service support based out of his home in Tokyo.

Schmidt's first impressions of Mr. Nakamichi and his son were favourable, based on their friendly demeanour and seeming eagerness to grow their business. This was demonstrated by the company's request to "invest" in troubleshooting equipment made by Opti-Tech valued at \$100,000, even though Nakamichi had yet to repay any of the outstanding balance.⁷ These favourable impressions were reinforced after Schmidt verified that the Opti-Tech components sold by the family run agency accounted for about 90 percent of all foreign made electro-cleaning systems sold in Japan. Still, he was concerned by the apparent lack of technical knowledge displayed by both Mr. Nakamichi and Kyoshi, as well as the fact that only one technician was employed to install and service the equipment nationwide. A related concern stemmed from the fact that Nishikawa had recently moved to Tokyo, ostensibly because he had had a falling out with Mr. Nakamichi. Despite their disagreements, Mr. Nakamichi asked Nishikawa to remain with the company because he valued the technician's skill and expertise. Consequently, Nakamichi agreed to the technician's request to be allowed to return his native Tokyo, where he worked out of his home.

Another issue that Schmidt found troubling was Nakamichi's desire to boost sales abroad in places like China and Hong Kong due to the limited demand

for foreign made electroforming equipment in Japan. While he appreciated Nakamichi's desire to grow the business, Schmidt believed that such endeavours placed a strain on the agency's limited resources. This was exemplified by the sale of some Opti-Tech equipment to Tsinghua Tongfang, the technology incubator established by Tsinghua University in Beijing. Apart from a delay of almost one year to get the paperwork properly completed, the installation was botched and took an extra week to rectify.

Given Nakamichi & Son's limitations, Schmidt began to consider appointing an alternative agency. The most compelling prospect was the chemical division of Fujiyama, a large Japanese conglomerate. The most compelling reason for teaming up with Fujiyama was the access that Opti-Tech would have to a comprehensive sales, distribution and service network spanning the entire nation. However, Schmidt remained cautious about pursuing discussions with Fujiyama further, even though the corporate giant had shown a keen interest in securing Opti-Tech's exclusive agency for Japan. Schmidt elaborated:

After we became a bit more serious in our discussions, I agreed to sit in on presentation given by one of their sales representatives. That guy almost put me to sleep for two hours he droned on and on in a monotone voice talking one by one about Fujiyama's various chemical products. Boring! He had no energy, no life, no entrepreneurial spirit. I think this comes from having been part of a protected market all these years - he wasn't hungry for business. Another thing to think about is their technical knowledge - they are not used to selling high priced sophisticated equipment - they are used to selling commodity products.

India

Opti-Tech's representative in India had also given Schmidt cause for concern. Godra Trading Company Limited had represented Opti-Tech for the past three years in India and Pakistan, where it also sold mastering equipment and related chemical supplies, among other types of industrial goods. The company was owned and managed by Atul Godra, a 57 year-old native of Bombay who had been involved in importing and exporting industrial equipment and supplies all of his adult life.

⁷ Opti-Tech provided Nakamichi with the troubleshooting equipment based on the premise that the \$100,000 value would be a draw against future commissions.

Schmidt's initial impressions of Godra and the five sales engineers that he employed were favourable, based on their very strong knowledge of the Indian and Pakistan markets, as well as above average technical knowledge. At the same time, however, the Opti-Tech sales director had some reservations about Godra Trading's energy and commitment to the sales process, and its commitment to after-sales service. Schmidt also acknowledged that finding a new agent to assume Godra's place would be very time consuming, especially since he had not come across any other potentially suitable agents. At the same time, he intuitively knew there were likely to be several other capable companies in India, since it was home to a sizeable CD replication industry. In considering what to do about the Indian agency, Schmidt remarked:

Godra and his team are smart people, although I have this nagging concern that these guys are not really interested in driving sales. On a couple of occasions I suggested setting up visits, but Godra didn't want to go because he personally didn't like the other companies....even though I had learned from third parties that these were high potential leads. When I asked why, he just said that it was a matter of personal preference. He does show signs of life, though. Just the other day I got after him because he had let too much time pass between visits with another potential customer. He called the company up the next day and booked an appointment - now we have to see if he can close the sale or not.

One thing is certain. If I am going to make a switch, I must factor in the opportunity cost of my time. With so many other things going on, I am already stretched to the limit... finding another agent in India would mean that I would have to let other things slip, and I don't know if I can afford that or not.

Singapore

The company's newest agent, Singapore-based TBT Chemicals Pte. Limited, began representing Opti-Tech in July 2000. The small proprietorship specialised in selling various chemical and compounds to semiconductor industry players. Apart from the small domestic market, TBT Chemicals also represented Opti-Tech in Indonesia, Malaysia

and Thailand. In sizing up the sole proprietorship run by Tan Beng Tee, Schmidt had no particular concerns or reservations. This was because Tan and his team of three technicians and two sales representatives had all shown strong technical and market knowledge, as well as an aggressive attitude towards sales and service. Given his desire for growth, Tan welcomed the opportunity to diversify his portfolio of products and was the first agent to discuss with Schmidt the possibility of selling electroforming equipment that could be used in the holographic printing, thin film transistor manufacturing and semiconductor manufacturing processes.

In summarising the criteria he would use to decide what agents to keep or replace, Schmidt offered:

Some important factors that need to be considered when deciding who we want to represent us is the agent's knowledge of the local market, their technical knowledge of the equipment we are selling, and their willingness and capability at servicing the equipment after it is installed. This is an emerging industry with a lot of fly-by-night types out there trying to make a quick dollar, but in reality they don't know what they are doing. We have to avoid getting hooked up with these people if we expect to build a brand that says 'premium equipment - premium service.'

Another factor we have to be concerned about is the level of geographic coverage that an agency can provide. There are plenty of companies out there claiming that they can cover all kinds of markets - but the big question is 'how effectively?' Sometimes it is better to stick close to home and do it very well instead of spreading yourself too thin. It's a question of resources.

We also need to consider the nature of the companies themselves. There are a lot of smaller companies out there that understand general market conditions and the technology we are offering, but how hungry are they to sell our products? We want companies that want to grow their businesses by helping us grow our business. The downside to this is that some companies are not so stable in terms of their finances or

staffing. Another thing to keep in mind is that companies that specialise in selling chemicals or spare parts have a very different mindset than those that focus on equipment sales. Commodity products require high volume sales to make a living, while the more equipment sellers need to invest in time and relationship building to sell such higher ticket items. Essentially, so much comes down to the entrepreneurial nature of the companies.

MAKING SOME TOUGH CHOICES

In considering the challenges he faced in the upcoming year, Schmidt was especially anxious about resolving the choice of company agents:

If Opti-Tech wants to become an entrenched player in Asia, we must first, drive sales and second, serve the customer properly afterwards. We lost ground over the past couple of years because of our previous lack of commitment here. That has changed now, and we are looking to achieve big things. We are still in the early stages of the industry growth cycle, with plenty of room before the peak. But we must start by making sure that we have the right agents in place first to help us achieve our sales and service goals. This is not easy when you consider all of the different trade-offs involved. But decide we must - there is no time to lose! If we don't secure our future now, the Jansen's of this world are going to come along and eat our lunch.

EXHIBIT 1**OPTICAL DISC MANUFACTURING EQUIPMENT**

	Mastering	Electroforming	Replication
Required equipment	Decoder Mastering system Sputtering unit Chemical set	Electroforming bath Electrocleaning station Stamper punch Back side finisher Thickness profiler Water de-ionizing system Waste treatment system Chemical set	Moulding machine Replication lines Printer Packager
Required investment (US\$)	\$1 - \$2.5 million	\$500,000	\$3 - \$5 million