Corporate Strategies of IT Firms in International Market - A Case Study of Acer Corporation

by

Anil Kumar Sahai

Ph.D. Computer and Information Science

University of California, 1990

SUBMITTED TO THE SYSTEM DESIGN AND MANAGEMENT PROGRAM
IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF
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Abstract

This thesis addresses the corporate strategies IT firms in international market. In particular, it investigates Acer Corporation - leading IT company headquartered in Taiwan. Acer's business model was distinctly different from traditional conglomerate corporate structures in Taiwan. Founded in 1981, Acer developed into a leading semiconductor company in the world by using a combination of manufacturing and operations processes, product offerings, marketing strategies and innovative management techniques. The existing market conditions in the region and the industry dynamics of its business greatly helped Acer to gain a large market share. Acer started experiencing loss in market share and lower revenue beginning in 1991. This thesis provides an analysis of factors that have led to Acer's immense success until a couple a years ago and the challenges it currently faces. The analysis shows that Acer's success has been a result of the combination of its strategy and quite importantly, the market and industry conditions under which it operated.

This thesis provides an analysis of how Acer got where it is today, then analyzes the potential for success for latest Acer's strategic initiatives and also presents a strategic framework as a recommendation for Acer. It presents a detailed analysis of the latest Acer's strategic initiatives, culminating in a judgement of whether they will succeed or not. A careful evaluation of its strategic options shows that its idea of services business, turning Acer in an IP based company and the Aspire Park project are at best long shots, at least within the framework developed in this thesis. Its move towards partnership and joint alliances with the industry leaders in North America seems to be quite promising, though. Finally, this thesis also presents a strategic framework consisting of product, marketing, joint alliances and restructuring options to take advantages of the opportunities as a result of the changing market and technologies. These options have been presented after a careful consideration of Acer's core expertise and existing industry dynamics.

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1.0 Introduction and Motivation

The liberalization and globalization of the world economy concurrently with rapid advances in electronic and information technology present new challenges and great opportunities for IT firms. Some of the assumptions underlying developments of industry, the locations of firms' core activities, sourcing of raw materials, marketing of products, training of individuals etc. may need to be reviewed in view of the emerging markets and new investment opportunities. The recent world trade agreements focus primarily on the trade of goods although the service sectors will soon be affected too. Moreover, the service industry is inherently transnational in its nature, and characterized by significant components of electronics and information technology, and in associated areas have direct implications on the division of labor and capital. Communications facilities can attract industry to locations with relatively lower labor costs especially when low cost communication channels can transmit the exportable products. The excellent example is software industry. The export processing zones, set up by many developing countries during the last few decades may have a new role under the changing economic and technological scenario of the world. Similarly, one can anticipate the changing role of science and technology parks. These developments add new dimensions to education and human resources development, as well as to the transfer of technology. The sweeping advances in communications, networking and Internet offer enormous opportunities and challenges to the management of multi-national corporations operating in and out of emerging markets.

1.1 Previous Related Research Work

Corporate strategies of firms have been studied by many authors [3,4,6,10,12]. The strategies for IT firms can be very different from firms in other industries. There are several approaches to analyzing the corporate strategies of companies; for example resources based approach [6] and
core competency approach [5]. IT companies also seem to attract large competition and it is important to investigate these companies in a competitive environment. Strategic frameworks under competition have been researched [1,2,3,12], and particularly in international environment [8,13]. IT companies also present a challenge as it related to working with diversified groups and several business units [7]. The reason being that the technologies change and so does the market. IT Companies need to continuously develop new company structures to address the fast changing technology [9,12]. It is important to note that most of the above research work provide an "after the fact" analysis and recommend a strategy based on the corrective measures. For IT firms, it is important that strategies are developed to position itself for the changing technology, market, industry dynamics, competition, and more recently the changing business structures as a result of the internet.

1.2 Outline of Thesis

This thesis examines the corporate strategies of Acer Corporation - a leading IT company headquartered in Taiwan. Founded in 1981, Acer developed in to a leading semiconductor company in the world by using a combination of innovative management techniques and a combination of product, marketing, manufacturing and operations strategies. The existing market conditions in the region and the industry dynamics of its business also helped Acer gain a large market share. In particular, Acer started experiencing loss in market share and lower revenue beginning in 1991. Since then Acer has taken several strategic steps to regain its industry leadership. The results have been mixed. This thesis provides an analysis of how Acer got where it is today, then analyzes the potential for success for latest Acer's strategic initiatives and also presents a strategic framework as a recommendation for Acer.
This thesis consists of eight sections. Section One provides an introduction and the motivation for this research. Section Two provides a discussion on Acer’s present challenges and recent strategic initiatives based on an interview with Mr. John Wang, a Vice President of Acer. This section also sets the stage for this research work as it presents the current strategic tension in the company. Section Three provides a detailed analysis of the company past and the industry dynamics that have led to Acer attaining such a high market share and leadership in the industry. In particular, it provides an analysis of the company's core competencies and resources that were utilized very wisely in making it a leader. Section Four presents a framework describing the various kinds of strategic decisions that a firm takes in its life cycle. It also provides information on the recent strategic moves taken by Acer in context of this framework. Section Five presents an analysis of Acer's core competencies using two popular strategic frameworks. This analysis shows what are the core competencies of the company, and how Acer has been able to transform these competencies into competitive advantage. It also discusses how Acer has been able to sustain its competitive advantage with the help from industry dynamics and existing market conditions. This section also discusses the present state of Acer in terms of its position in the market competition, revenue growth and its attempts to form global partnerships with the market leaders. Section Six provides discussion of how the industry, market and technology have changed in the recent years. It also presents an analysis of the changes in context of the frameworks used in Section Five. It shows that due to these changes, Acer does not enjoy the same competitive advantage of the 1980s. Section Seven provides a detailed analysis of the Acer's future strategy and discusses which ones appear to be problematic or have potential to be successful. This section also discusses how valuable will be for Acer to pull off these initiatives as well as the how hard will be for Acer to be successful in doing that. An alternative set of strategic initiatives is proposed in this section based on the company's core competency and the
current technological changes. Finally, Section Eight provides a summary of the thesis and conclusions.
2.0 The Challenge

Mr. John Wang, the Vice President of Acer seemed preoccupied with the current challenges of Acer, but was full of enthusiasm as we drove on the newly constructed toll-way from Taipei towards the town of Lungton which is fifty miles south of the capital city in Taiwan. We were going to visit the Acer’s multi-billion dollar project, Aspire Park – Stan Shih’s vision of tomorrow's “software” city. Mr. Wang started by reflecting upon the computer industry in Taiwan that was on the down turn. He realized that impact of economic showdown of Asia Pacific was having its toll on the local demand for PC products. Growing competition from the western companies has started hurting Acer’s revenue in the Asia Pacific market. He also realized the challenging tasks of improving quality of Acer’s products and services, developing a global logistics system for distribution of Acer products and turning Acer into a true global company. We would spend the next six hours discussing Acer’s perspective on the current state of the company and its recent strategic initiatives to turn Acer into a true global company.

John Wang, the Vice President of Acer Foundation in Taiwan, is primarily responsible for the reengineering efforts of the entire Acer Corporation. He is working on a comprehensive strategy to lead Acer to become a world leader in the IT market. In addition, Mr. Wang is also responsible for the development of future managers for Acer as the head of the human resources. This entails developing a team of new managers who will have commitment and desire to implement Stan Shih's vision for Acer.

The economic slowdown in Asia has forced most Taiwanese companies to either cancel or delay their IT acquisitions. This is in spite of the fact that Acer enjoys being the best brand for PC products from country. In fact, Acer is the only Taiwanese firm with a worldwide brand recognized by consumers. Acer also has the largest service chain in Taiwan, namely AcerLand

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1 The author, Anil Sahai, interviewed Mr. John Wang, Vice President of Acer Corporation, in Taiwan in December
which is quite similar to the ComputerLand in US. In the last few years, the service revenues in Taiwan have far exceeded the revenue from PC products in Taiwan. But the AcerLand has started losing money, as there is a big demand for very fast slap time - turn around time to address customer problems. This means that being too large is a great disadvantage for Acer in this game. But Acer's recent emphasis is to move away from production and manufacturing to the services business.

Acer has also started working on a global distribution logistics to become competitive to other PC companies (e.g., Dell, Compaq, etc.) in US. Given its dispersed sales, it needs even better logistics than the firms focusing primarily on U.S. It is very difficult to coordinate its activities across the continents. Inventory control and distribution of components is supported by a set of heterogeneous and very complicated procedures in different locations. The focus of the global distribution logistics system is on forecasting on monthly basis for all spare parts. This system would also be used for managing the workflow of the entire company worldwide. Unfortunately, there is no universal system at present time. This is a big problem for most companies that expand by mergers and acquisitions like Acer. It is true that in parts, Acer has grown organically but still ended up this way since its local units tend to be joint ventures. Acer's individual business units employ their own/local systems which are tailored to the local requirements and processes, and hence the disparity. It is also difficult to convince "old timers" to move to the new system. It is important that Acer staff has a commitment to the new integrated approach otherwise the new system will not be employed and/or used effectively. Experienced personnel who use and manage computer systems, almost always shows resistance to switching to new system because of fear of losing their expertise (importance) and job security. The transition to the new system has to be carefully planned with proper training

1998.

2 Stan Shih is the chairman and CEO of Acer Corporation.
programs and deployment programs for the employees who might be affected due to this transition. In this effort, they have also hired a CIO for consulting services.

In the past, a large effort has been spent in managing the manufacturing centers within Taiwan. Given its cost advantages and absence of competition, Acer was not pushed to invest in "quality" as much as US firms. Acer was able to sell its products in Asia pacific that was primarily very cost sensitive market for technology products until a couple of years ago. Now the company is paying for not having invested in the quality. Many US companies have shifted their operations to the Asia Pacific to take advantage of the lower labor cost, and thus can offer products at competitive prices. This has taken away the cost advantage of Acer in the local market. Consequently, quality is increasingly becoming the major factor in buying decisions of the customers. It is important for Acer to retain its dominance in the local market which is increasing in size. This dominant position will help Acer to increase its revenue in a market that it understands and knows well. Acer realizes this and is beginning to invest heavily in quality programs across its manufacturing plants and the newly focused services business. For example, the services business would have the support of a dedicated customer center. Acer feels that a customer center in Taiwan and abroad would provide a high quality service as the services will be outsourced to external outsourcing companies. This would position Acer to become a key player in the worldwide services market which is Acer's vision for the next millennium.

The manufacturing business would be supported by a worldwide distribution logistics system for spare parts. Better product management techniques would be used to manage their product development and offerings, although presently they are sure about the product offerings. They have decided to use 50% product components from OEMs and 50% from within Acer compared to only 20% product components come from OEMs presently.
Acer wants to build a global brand with local touch. Its brand is strong in Taiwan where as it has a "low cost" reputation abroad. Now that the competition has taken away the cost advantage, it needs to rebuild its brand as the quality leader in both products and services. Acer has hired a Brand Management Chief from Europe Acer who also had local expertise in Asia. They have embarked upon a world wide advertisement campaign and sponsorship of major events like Asian games in 1998.

Mr. Wang also pointed out various problems with Acer's product and marketing strategies. With price margins falling in the semiconductor products, Acer needed to move in to new product lines - but it is not clear what those might be. On the marketing side, it is not clear when to use the OEMs and how to resolve the conflicts of OEM products with its own customers. As a result Acer needs to be very careful in choosing its OEMs. Recently they have had some confusion with two channels, i.e., trying to sell through OEMs and directly to its customers. Acer has opened a cost center (a customer call center) in Costa Rica for North and South America. It is providing 100% service from this location with 500+ local employees, and the center is doing a great job.

Emphasis is being made to develop and document all intellectual property (IP) that has been developed at these manufacturing plants because Shih feels that the past knowledge is not being used adequately at dispersed locations. Shih also feels that a knowledge base of its IP will help Acer to more effectively address its competitors from using/copying the same techniques. Note that this IP is not only the product knowledge but also the various procedures and processes that have resulted in higher productivity for the company. All these processes are being documented and catalogued in a knowledge system that can be accessed form anywhere in the world by Acer employees. Its purpose is to access and transfer knowledge within Acer as well as to extract profits by applying it to others by licensing. Acer is embarking upon turning itself in to an IP company by trying to build know-how. It was trying to build value add products and
service based on its existing cutting edge products. Its goal is to obtain three to four hundred patents in the next five years. These patents could be cross-licensed to other companies for revenue. The patents could also be leveraged while negotiating technical partnerships with other companies. In this effort, Acer has formed a large Research and Development (R&D) organization in Taiwan and USA. There is a plan of a small R&D group for software engineering in People's Republic of China. Mr. Wang admits that Acer's core competency is in producing hardware but it has also produced software to support the hardware it produces. It is not clear if Acer can develop IP in the software market, though with the current state of things.

Acer also realizes that it is very hard to get corporate business in North America and that is why it has started looking for partnerships with companies in US. Acer has started on a large investment plan to invest in new technology companies. It had realized that not all the technologies could be developed in-house and it has to go for partnerships and acquisitions to get the new technologies. Its goal was to acquire 100+ companies in the next five years.

Acer realizes that there is a huge potential for business of software products in the coming years and beyond. Acer is planning in a big way to position itself to play in this market. In this effort, there is a grand scheme of developing a "software city" in a multi-billion dollar Aspire project. Aspire is a whole city in itself with housing, clubs, training centers, and R&D centers to provide an environment to turn Taiwan in to a world class software company. Please note that Shih wishes to turn Taiwan, and not only Acer into a software giant.
Table 1 below summarizes Mr. Wang’s thoughts on current status/issues of Acer and the related strategic initiatives that Acer has introduced.

<table>
<thead>
<tr>
<th>Issue</th>
<th>Strategic Initiative</th>
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<tbody>
<tr>
<td>Branding</td>
<td>• Global Branding with local touch</td>
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<tr>
<td>Quality</td>
<td>Invest in quality</td>
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<td></td>
<td>• Outsource call centers</td>
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<td>• Training programs</td>
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<td></td>
<td>• New Processes in Manufacturing</td>
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<tr>
<td>Turning Acer into a Global Company</td>
<td>IT Improvement</td>
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<tr>
<td></td>
<td>• Global Logistics program for distribution</td>
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<tr>
<td>New Strategy</td>
<td>• Develop Services Based company</td>
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<td></td>
<td>• IP Based Company</td>
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<td>• Invest in new software and hardware companies</td>
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<td>Marketing</td>
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<td>• Internet based systems</td>
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<tr>
<td>Products &amp; Services</td>
<td>• Aspire Park</td>
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<td></td>
<td>• New Products – Not very clear!</td>
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</tbody>
</table>

Table 1: Summary of Acer’s Recent Strategic Initiatives

As we will see later in Section 5.1 and 5.2, the above initiatives attempt to build additional capabilities and address the changing conditions of the market and competition. In principle, these initiatives appear reasonable as they respond to almost all of issues related to industrial dynamics, the changing landscape of the market conditions, evolving technology and new opportunities. The underlying issue is how Acer can use its existing capabilities and infrastructure to transform its capabilities in to a new competitive advantage. Using Aspire Park to innovate new software products along with its plans to invest in new hardware and software companies appears to be a reasonable approach to sustain the newly acquired competitive advantage in context of the Competitive Strategy Framework discussed later in Section 5.1. However, it is not very clear how its initiatives to expand in to services business, for example, will provide a corporate advantage in context of the Corporate Strategy Triangle discussed in
Section 5.2. Acer is also not very clear about the new product strategy based on its core competency that could provide a corporate advantage.

Now, in Section 3, we provide a review and analysis of the company's core competencies and resources that were utilized very wisely in making it a leader. It is important to understand the company's past strategic decisions and the industry dynamics that have led to Acer attaining such a high market share and leadership in the industry. This understanding is crucial for a detailed analysis of its strategic initiatives.
3.0 ACER - A History in Making [15]

3.1 Acer Profile

Following years of ruthless price-cutting in the international PC markets, and at a time when large, unwieldy corporate conglomerates such as IBM were on the decline, Taiwan’s Acer group has thrived. It has achieved a significant ranking as a supplier of PCs to world markets, vying with the likes of Compaq in the US, at the same time that it has undertaken significant reengineering and devolution. The Acer group has also developed a worldwide network of essentially autonomous businesses that produce and distribute an extremely wide range of IT-related products and components, with the more recent emphasis being on consumer markets. According to figures supplied by Acer, the group now operates directly in over 38 countries and supports dealers in over 100 countries. In 1995, combined revenues stood at approximately US$5.7 billion, representing a growth rate of over 75 percent in the previous years. However, during 1995-97, the company faced growing competition, and the growth has slowed down resulting in total revenues of US$6.5 billion in 1997. It has implemented a set of new strategies to improve its operations, formed alliances to expand in regional markets in US, Europe, South America and Asia, and recently restructured the company.

In addition to Acer’s manufacturing base in Hsinchu, Taiwan, Acer also has manufacturing facilities Subic Bay, Philippines; Penang, Malaysia; Suzhou, PRC; and recently developed sites in Juarez, Mexico; Cardiff, Wales; and Zhongshan, PRC. Acer has an annual unit volume of more than 6 million computer products, including 800,000 notebooks. The company anticipates shipping eight million computer units, including one million notebooks in 1998.

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3source: Corporate website www.acer.com
3.2 Some Background

ACER CEO Stan Shih was born in a poor family. Having lost his father when he was 3 years old, Stan sold duck eggs, watermelon seeds and lottery tickets from a roadside stall with his mother to earn a living. He was an early whiz at math and science, having honed his skills making quick calculations in selling eggs by both metric and local measurements. Shih was able to attend National Chio Tung University, graduating with masters in engineering. With some of his friends from the university, he scraped together $25,000 in 1976 to set up Multitech. They all put in 16+ hours everyday, and the breakthrough occurred in 1981 with the "Microprofessor", a product developed in house. The simple calculator with monochrome monitor was a giant success. Stan shifted his production site to Hsinchu.

For years, Multitech was an OEM or subcontractor, whose products were sold under brands like Texas Instruments and Siemens. But in 1986, the company launched its own trademark, Acer, which rose to rival world's biggest PC names, becoming the best known Taiwan brand in the process. Its success also elevated the public's view of Made in Taiwan label. Acer expanded to frontier markets like India, Cyprus and Bahrain, all the while moving to big prize - the United States\(^4\). Acer has watched its OEM-based contract manufacturing revenue soar from practically zero in the late 1980s to $3.78 billion in 1998\(^5\).

Shih is widely regarded as a non-traditional manager, eschewing centralized oligarchical control in favor of local management and ownership. Under his unusual style of leadership, the corporate model of Acer has developed into one not of rigid, vertical integration, but rather the supply and demand of the IT market itself. 1992 was a critical time for Acer, when it reached the US$1 billion mark in revenue - usually a critical point in the growth of all large companies. At

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\(^4\) Having expanded too fast in US, Acer is still losing money in US. Losses from US and memory chip operations have slashed its 1998 profits by 63% despite slight rise in sales. More on this later.

around that time Acer was influenced very much by the managerial and administrative expertise of Leonard Liu, who came to Acer from IBM's research labs. Liu became president reporting to Shih with his main role of heading up Acer America Corporation. This was Acer's first move to professionalize the management of the company.

3.3 Stan Shih's Smiling Curve

The primary key to success in today's high technology industry is providing value. By doing well in "value added" business segments, companies can succeed in the current disintegrated business environment. In 1993, Stan came up with the following chart that looks like a big smile; he called it his "smiling curve" (Figure 1). Value is added in component production on the left side and marketing/distribution on the right. Today, there is no longer value added in assembling computers - everyone can make a PC. To succeed in the new IT age, you have to gain a top position in component segments, like software, CPUs, DRAM, ASICs, monitors, storage etc. or else as distribution leader in a country, for example, Dell Computers in USA.

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6 Source: www.acer.com
7 Note, however, that this curve is now 6+ years old, and the firm and industry has moved on!
Figure 1: Stan Shih's Smiling Curve

The key to success on the component side of the chart is global competitiveness [14]. Universal standards in components mean global competition, so if a company is to pursue a segment along the left side, one needs new technology and strong manufacturing capability for economies of scale. On the distribution side, where the competition is local, a firm can succeed through a good image, brand name awareness, well-managed channels, and effective logistics. In today's disintegrated industry environment there is one smile rule: if you are not one of the market segment leaders, you cannot survive. Speed and cost are two main factors for success for companies on both sides of the curve. "Speed" means fast time to market with new products and fast responses to change in the industry. "Cost" includes minimizing overhead, inventory reduction and risk management.
3.4 Manufacturing Strategy and Corporate Structure

Unique manufacturing methodology is one of the main factors for Acer's success. The production of key components is carefully controlled at large manufacturing sites and then appropriate components are shipped to franchise locations around the world where they are assembled into systems customized to local requirements. In the early 1990s, Acer adopted a radical approach to PC manufacturing -- a "fast food" PC assembly strategy -- as a means of reducing cost and delivery time of PCs made for itself and for its OEMs. In this procedure, Acer ships printed out boards from Asia by air to assembly sites worldwide. Cases, monitors and other items are shipped by sea. Processors, DRAMs and disk drives are sourced locally. This supply and demand model consists of both Regional Business Units (RBUs) and Strategic Business Units (SBUs). This strategy has helped the company in winning PC contracts from big OEMs, including Fujitsu Ltd., IBM Corp., and most recently Siemens Nixdorf. As a result Acer has seen its OEM-based contract manufacturing revenue soar from virtually zero in 1980s to a US$3.78 billion or 60% of its sales in 1998.

Figure 2: ACER Corporate Structure
Figure 2 shows the worldwide corporate structure of Acer. RBUs are responsible for assembly, marketing, and distribution. Acer America is responsible, as an RBU, for North America, and Acer Europe for Western Europe. Acer Computer International (ACI) is now based in Singapore. Another RBU is Acer Computec Latino America (ACLA), with offices in both Miami and Mexico City, operating as a joint venture with the Mexican company Computec. Acer Sertek is the RBU for the Taiwan and Greater China region.

The SBUs, on the other hand, specialize in the manufacturing of core products and components, including motherboards and systems. They supply to both the RBUs and OEM customers. Brand name and OEM production and sales are complementary. Acer SBUs include systems and motherboard makers such as AOpen and Acer Inc.; IPB (Information Products Business unit), which also manufactures PCs; and API (Acer Peripherals Inc.), a manufacturer of, in particular, monitors and keyboards. TI-Acer is a joint venture with Texas Instruments of the US in the production of DRAM. ALI (Acer Laboratories, Inc.) is a manufacturer of ASICs for motherboards.

Although the big names, such as Acer Inc., AOpen, and TI-Acer are well known, the SBUs also include some less obvious units. Ambit Microsystems, for example, located in the Hsinchu Science-Based Industrial Park, is a specialist maker and packager of hybrid thick-film circuits, modules, and ASICs. TWP, or Third Wave Publishing, is also a bit of a surprise. This Acer SBU, located in Taipei, is a specialist publisher and distributor of IT related materials, including books, magazines, and software.

3.41 Acer America

Acer America Corporation, headquartered in San Jose, California, is a member of the Acer Group. Acer America Corporation handles Acer's R&D, engineering, manufacturing and marketing operations in the United States and Canada. In September 1990, Acer acquired Altos
Computer Systems, one of the top manufacturers of multi-user and networked UNIX computer systems for commercial markets. In February 1997, Acer acquired Texas Instruments® Mobile Computing business, including the award-winning TravelMate and Extensa notebook lines, making Acer the fourth-leading notebook manufacturer in the United States. The Acer Group's 1997 revenues totaled approximately US$6.5 billion divided about evenly among North America, Europe and Asia (including Taiwan). In 1997, Acer America posted revenues of US$1.4 billion.

The company believes that to succeed in the IT industry in the 1990s, significant value must be added to PC systems. Anyone can assemble a PC, but international success will depend on added-value products and components that lead in their own particular market segments. Distribution will then have to be at a speed ahead of the rest of the market. The large global resource base of the Acer network can constantly be leveraged, to supply the necessary technologies and components at competitive prices. Regional autonomy also means customized products for the specific needs of local markets. The more recent emphasis on the mass consumer markets, with plans for VCD players and other multimedia products, as well as mobile phones, is completely in line with this strategy.

A recent Acer success story, the Aspire PC, is also in line with this strategy, including as standard such value-added items as CD-ROM drive and sound card (it is marketed as a "multimedia" machine), and fax/modem, while otherwise being designed specifically for the home and small office market. The approach may not be as glamorous as high-end niche manufacturing, but one thing is clear: it's a strategy that works. Acer claims that its PC systems now rank as seventh worldwide, ninth in the formidably competitive US market, and first in developing markets such as the Middle East and Latin America. The Aspire, meanwhile, is now ranked third, in the US in the retail channels. This means that in the US at least, Acer is now

8 Source www.acer.com
challenging the likes of Packard Bell and Compaq. The Aspire was the brainchild of Acer America, and the new model is a clear example of how Acer can develop its new ideas from the ground up, but more than from top management down. Already well known for a striking external design that looks good in a home setting as well as in an office, a lot of thought was also put into the new model’s “ease of use,” helping to maximize its consumer appeal. Market research has shown that customers without a lot of familiarity with computers are intimidated by the initial set-up procedure, the “OOBE” or Out-of-the-Box Experience. Acer claims the Aspire can be set-up within five minutes. Cables are color coded for the various ports and sockets, and the user confronts the Acer Computer Explorer (ACE) at power-on. ACE is a GUI that the company claims is simpler to understand and use than that of Windows 95.

Meanwhile, Acer has moved a significant proportion of production offshore. IPB, one of the Strategic Business Units, for example, is now centered in Subic Bay, in the Philippines, while API has facilities in Malaysia and Mainland China, as well as in Taiwan. Although it is by no means a unique strategy, another key aspect of Acer’s “disintegrated” approach is the policy of shipping “bare bones” systems rather than complete PCs. The items that are then outsourced tend to be the more “perishable” ones—those with a fast life cycle, such as CPUs—where in-house production might lead to over-inventory.

Use of the term “perishable” echoes the vogue in-house Acer style of describing all Acer production as a branch of some imaginary IT Macdonald. The bare bones supply strategy—actually referred to by AOpen as a “Compuburger” approach—is a “Fast Food model,” where, following export, the local distributor sources CPUs and HDDs from a Certified Vendor list, at local rates, supposedly getting a better price than would be obtainable in Taiwan. This approach certainly avoids the overheads involved in shipping CPUs, for instance, from the States, only to have to re-export them back there. The RBU’s then retain the authority to define the product for the local market, according to what is locally available.
To implement this Just-in-Time production, Acer created a worldwide network of factories: memory chips and main boards alike are manufactured and assembled at 50 locations from Bangkok to Buenos Aires, from Suzhou to Ahrensburg. And yet these offshoots do not operate as ancillary plants – they have long been independent companies, and in some countries are even listed on the stock exchange. This “local touch” corporate philosophy has turned the employees of a remote Taiwanese group into highly motivated managers of independently run companies. “Acer Aspire” for instance, the futuristic multimedia computer, has been designed solely by the US subsidiary. For those who appreciate the fast food metaphor, Acer is undoubtedly in the “millions of PCs sold” category. In fact, the group claims to have sold over four million in 1995.

3.5 Acer Management Philosophy – Decentralized Management & Structure

A unique corporate structure was created in 1976 – instead of rigid pagoda of patriarchal power typical of Chinese family businesses, Shih opted for an open structure with extensive individual responsibility and financial participation. Acer continues to tap the urge to become the boss – by giving decision-making powers to local managers in the Acer plants and offices around the world and letting them run their operations like managers. In simple terms, Acer has already rejected the conglomerate model.

3.5.1 Local Ownership - Motivation

Acer shares both opportunity and risk by encouraging local ownership for employees and the general public. If local managers and employees are able to share in the benefits of the business’s success, they will be very motivated to take on their share of responsibility for running the
business and will do their best in all that they do — for the good of the company. Acer is unique in its willingness to give up control and majority ownership of its local operations in order to motivate each franchise to maximize their own business’s overall growth and profitability, thereby maximizing Acer’s overall success.

3.6 Fresh Technology for Everyone

The Acer Group is set to begin a new phase in its historic business development, based on the new corporate mission statement: Fresh Technology Enjoyed by Everyone, Everywhere. The fast-paced change in the IT industry’s business environment reflects the changes occurring in technology and product innovation. To provide the best value, products need to have the freshest technology available. But ‘fresh’ is not the same as ‘new.’ New can mean expensive, unproven, and risky. New is often not affordable for ordinary people, especially those from developing countries. Fresh means the best: proven, high-value, low-risk technology which is affordable to everyone, plus has a long useful life span. Fresh means innovation based on mature technology which is user-friendly, reasonably priced, and enjoyable by everyone, everywhere. Acer has a history of providing fresh innovations, starting with ChipUp, single-chip CPU upgrade solution, which let PCs, be easily transformed into high-performance systems. For example, Acer’s screwless and modular housing designs were a boon to both users and service providers alike. Its Uniload distributed assembly system is proving to be one of the best fresh ideas to date, as are the OOBE (out of box experience) easy system set-up design and ACE (Acer Computer Explorer) user interface. Most recently, the new Aspire line of multimedia home PCs offers the most visually powerful example of a fresh idea and new ways of thinking. The Aspire design has
been heralded by business and industry media, and has even been called "... the hottest story of the season," by leading IDC analysts\(^9\).

### 3.7 Strategies in Phases

The fresh concept does not only apply to technology. Fresh ideas are very powerful when applied to business strategy. Keeping the company fresh is the only way to compete successfully in this rapidly changing industry. Earlier in Acer’s history, from its beginning in 1976 during the first phase of the company’s development, the focus was on microprocessor technology and helping to obtain its benefits for Taiwan’s high tech future. Phase two began in 1986, targeting the development of the Acer brand name and the company’s globalization efforts. Phase three began in 1996, with two major goals as its focus: to literally provide fresh technology to be enjoyed by everyone, everywhere, and to make the Acer brand a household name worldwide as the company moves more deeply into the consumer electronics markets.

With advanced multimedia technology, PC applications continue to move from office to home use in the future. PCs will become consumer electronics products with a wider range of uses and applications in the areas of communications, entertainment, and education. Both the products and the company will become more consumer oriented. For Acer to continue to be an innovative leader in the IT industry, it has to become a market-driven expert in consumer electronic as well as personal computing.

### 3.7.1 A “Client-Server” Business Network – Ability to be Flexible

Computer networks, using a client-server architecture, link together personal computers and PC-based servers. Such networks are powerful enough to replace large minicomputer and mainframe systems, offering better performance and value, plus exceptional flexibility because they can be

\(^9\) source: www.techweb.com
easily modified to meet users’ changing needs. Using this same client-server design philosophy, Acer has created an organizational structure, which helps the company to meet the rapidly changing market needs in this ever-changing industry. When implementing this strategy, Acer created one important distinction. In a client-server network, client computers usually act as clients and servers generally perform server roles. In Acer’s client-server organization, client companies can also act as servers and servers may very well behave like clients — adaptability is an essential part of the basic design.

3.72 Flexible and Fast

An information technology (IT) company the size of Acer could never be managed effectively from one central location. It would be impossible for the business to react quickly enough to changing conditions in local markets. To stay fast and flexible, responsibility is delegated to a network of autonomous business units. In this way, Acer Group companies can compete efficiently in their respective market segments. The client-server structure also lets each unit fully benefit from the competitive advantages gained by leveraging the global resource base made possible by this large network of diversified business operations. It’s a company designed to maximize its speed, cost, and value advantages — responding quickly to changing needs and shifting trends, Acer minimizes costs in order to maximize the value to its customers.

3.73 Client-Server Operations – Knowledge Transfer

The Acer Group organizational structure defines two types of business units: Strategic Business Units (SBUs) and Regional Business Units (RBUs). SBUs are technology companies, responsible for the design, development and production of PC component and system products. SBUs are also responsible for OEM product sales and marketing. RBUs are primarily Acer-brand marketing companies, responsible for specific regional territories. They develop new
distribution channels, assemble finished products, provide support for dealer and distributors networks, and even create new joint venture Acer operations in key local markets. Put simply: SBUs make Acer-brand component products and RBUs assemble and sell them. The Acer Group business network links the two BU types, bringing reciprocal access to the products and channels available within The Acer Group, and creating win-win business opportunities for each respective BU. Each BU in turn is able to establish its own business partners either through spin-offs, joint ventures, or some other type of relationship building strategy. Once these newly created BU-based partnerships are established, they too can tap into the worldwide Acer Group resource network. If, for example, the new partner has expertise with a new type of technology, they may choose to leverage an Acer SBUs manufacturing capabilities. In this way, the network can grow and expand as opportunities present themselves to each member of The Acer Group.

3.8 Acer Business Strategy

"... The trend towards the convergence of communications and computer technologies is pushing companies to combine forces and create products, which meet, and even simulate, consumer demand. We believe in the potential of Acer-3COM strategic alliance to do exactly this and look forward to a long-term, win-win relationship together." -- Stan Shih

Acer is more vertically integrated than the major vendors and already has components/subassembly supply relationships with these regional distributors. Acer also has a unique ability to rebalance inventory through its relationships with industrial distributors when necessary. Consequently Acer is better equipped to get inventory out of the channel-assembly market and into the component-distribution market when needed or rebalance in the other direction in times of short supply. Acer has also avoided adding more functions to motherboard, which at times can cause compatibility difficulties when different subassemblies are swapped in and out. This design difference also makes it easier for resellers to upgrade older systems instead of replacing them when servicing their customers.
3.9 Revenue and Growth

Acer is one of the first PC companies to enter non-US and European markets around the world. Acer's full range of core PC technologies and local focus has achieved global results. It has made Acer one of the most competitive and well-known PC brand names in the world. Through its commitment to provide speed-of-delivery, competitive pricing and increased value to its corporate and consumer users, ACI, along with its partners, have seen their PC business enjoy dramatic growth. ACI has achieved more than 50% compound annual growth in gross revenue over the last five years. It made net profits of T$4.754 billion in the first three-quarters of 1999, triple the year-earlier total of T$1.568 billion with the help of a major microchip spinoff. In 1999, its third-quarter results included extraordinary income of T$1.3 billion arising from the midyear sale of a 30 percent stake in Acer Semiconductor to microchip titan Taiwan Semiconductor Manufacturing Corp. It also benefited from a spike in prices of dynamic random-access memory chips, while losses had dwindled at its troubled Acer America unit, which has expanded cooperation with IBM Corp. According to reports, Acer is well on track to meet its full-year profit target of T$7.5 billion, having reached 64 percent during the first three-quarters. The fourth quarter is generally the briskest for seasonal reasons. The following table provides the revenue and profits of Acer Group from 1993 till 1998.

<table>
<thead>
<tr>
<th>Year</th>
<th>Revenue (million US$)</th>
<th>Profits (million US$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1993</td>
<td>86</td>
<td>1883</td>
</tr>
<tr>
<td>1994</td>
<td>205</td>
<td>3228</td>
</tr>
<tr>
<td>1995</td>
<td>413</td>
<td>5825</td>
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<td>1996</td>
<td>188</td>
<td>5893</td>
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<tr>
<td>1997</td>
<td>89</td>
<td>6509</td>
</tr>
<tr>
<td>1998</td>
<td>13</td>
<td>6717</td>
</tr>
</tbody>
</table>

Table: Acer's Revenue and Profits from 1993 to 1998

Note that the sharp drop in Acer's profits in 1997 and 1998 is due to losses incurred by Acer America in semiconductor market which was hit pretty badly as result of the fall in demand.

10 Source: www.acer.com
3.10 Summary

Acer's core competency is building cutting-edge personal computers faster and cheaper than competition. Period! This gives Acer the competitive advantage of cost and flexibility. Though it has hit some snags lately, noticeably a loss from its microchip-manufacturing join venture with Texas Instruments, the company's future looks bright. According to Goldman Sachs the Acer can boost its earnings per share next year by 45% to $3.67, and rates the stock a buy.\(^\text{11}\)

For the future, strong expansion and the creation of a worldwide alliance of borderless global companies are both a part of the plan. Further development of the image-building theme "Global Brand, Local Touch" will continue to strengthen the Acer brand name worldwide. This re-engineering strategy made Acer into a lean, closely coordinated organization, providing leading technology at reasonable prices—the main requirement for success in today's competitive markets.

\(^{11}\) Source: www.techweb.com
Companies employ different set of strategies at different phases of its life cycle as illustrated in Figure II below. Initially the product idea comes from in-house innovation, and the company resources are concentrated around development and marketing of the product. During growth phase, efforts are used in marketing to achieve high market share, revenues and the innovation is heavily influenced by the market pull. Once a company has achieved “success”, competition sets in. Additionally, company has to expand to retain its growth, and starts diversifying and expanding. With the competition growing and limited resources (competencies), the company starts joint ventures and alliances setting up subsidiaries and business units. The product innovation becomes very difficult to manage at that point. Coordination of individual company activities to benefit the overall company becomes a challenge.

Acer has used a combination of diversification, innovative management techniques for its operations, human resources management, and channel strategies to gain competitive advantage. It has been able to give (almost) complete decision making power to its business units while still leveraging the competencies from these individual autonomous units by

- innovative operations management using the concepts from JIT
- building a “client server” organization that enables open communication and knowledge transfer
- promoting a management style which promotes individual growth
- wisely choosing its partners in successful companies like IBM in US

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12 Author developed this life cycle model with suggestions from Dr. Donald Lessard.
Figure II: Strategic Decisions at Various Phases in Lifecycle of a Large Company
1976  "Multitech" as distributing agent of electronic products for foreign vendors in Taiwan
1981  introduces its own innovative product
1982  starts its own manufacturing
1982  introduces Microprofessor-II when Compaq launched world's first IBM-compatible clone
1993  starts manufacturing IBM-compatible computers for OEMs and under its own brand
1983  introduces Microprofessor-III
1983  became the biggest computer firm in Taiwan in 1983
1983  sets up Third Wave Publishing Corporation as a technical publishing firm
1984  Aver invested overseas to setup R&D lab in US
1984  starts OEM and own brand PCs in US
1984  Sets Peripherals Inc. via Multiventure Investment Inc. for OEM orders
1985  sets a warehouse in Europe
1985  sets up sales offices in Indonesia, Malaysia, Singapore and Thailand
1986  starts its aggressive expansion in Taiwan and abroad
1986  sets up Japanese subsidiary
1986  sets up Acerland - Taiwan's first franchised computer retail chain
1986  introduces clone AT-PC AT - leapfrogs IBM which introduced 16-bit in 1984
1987  enters ASIC business setting up Laboratories
1987  acquires Countpoint but Countpoint's technology became obsolete
1987  Expanded its ASIC business
1987  Changed its name and brand for $1m
1988  lists its stocks in Taiwan and speeded up its internationalization
1989  pays -$9m in a settlement to IBM concerning PC-AT technology
1989  Bought Kangaroo Computer BV in Netherlands
1989  Sets up joint venture with TI
1990  acquires Altos (Unix network) for $5.5m to develop services - but it costs $20m
1991  has its first loss - a scuffle at the top
1991  Launched an ad campaign with a budget of $20m
1992  was reborn - employs global strategy which will continue until 1995
Jun-95  Peripherals opened new production facility in Taoyuan city at a cost of $40m
Jan-96  Chipmakers in Taiwan and South Korea plan to invest more than $30b in new capacity
Sep-96  introduced a $500 PC and a $199 PC for young children
Sep-97  decided to enter Russia market by selling from Finland
Nov-97  plans to enter pure-play IC-wafer foundry business - $1.3b Fab
Jan-98  and TI form a new company to provide IC testing services for its investors and other chip companies
Jan-98  develops world's first 20-speed CDROM drive
Apr-98  acquires PC manufacturing and assembly operations of Siemens Nixdorf Info. Sys.
May-98  Kuang Hwa Investment Co. Ltd. a venture-capital firm has invested $30.34 in Acer
Jun-98  has licensed login-IC production technology from IBM and will move in to logic and embedded area
Jun-98  introduces channel assembly program with 9 distributors and capacity to build 100,000 units monthly
Jun-98  China Development Corp. (CDC) is planning large investment in TI- $58.5m
Jun-98  Acer Restructures in six divisions
Sep-98  Siemens's deal is cancelled
Jun-99  IBM starts shipping Acer's Aptica under its own brand
Aug-99  Acer signs alliance with Cisco to supply IC products for telecommunication and switching products
Sep-99  Acer signs alliance with Computer Associates to jointly offer total solution in the enterprise market
Figure III above maps the major strategic decisions in the history of Acer in our attempts to calibrate the above life cycle model for Acer. The events are divided in three major stages. In the first stage, i.e., Initial Stage from 1976 to 1986, Acer started with a novel invention of “microprofessor” and the continued to develop capabilities. This is the time when Acer also developed OEM contract management processes, set up sales offices in Asia Pacific, Japan, Europe, and started OEM offices in US. It also introduced innovative management techniques to promote innovation across the company and pushed down the decision making power to the local managers. In the second time stage, Growth Stage from 1986 to 1996, Acer used its capabilities in to competitive advantages. It was able to use unique manufacturing and operations to gain market share. It expanded its ASIC business, changed its name to establish a brand for Acer, set up joint ventures with TI. It also launched a comprehensive ad-campaign to promote its brand with a budget of $20 million. It opened a new business offering peripherals products. It expanded further by entering Russian market selling through its sales offices in Finland. Taking advantage of its capabilities in the semiconductor manufacturing, it also invested $1.3 billion in a new FAB to enter IC foundry business. These strategic moves gave Acer a great competitive advantage over its local competitors and most US companies in the local Asia Pacific market. In the third stage, i.e., On Top Stage from 1986 to present, Acer has started experiencing the heat from local as well as the international competitors. The driving factors being the downturn in regional economy, US companies moving their production facilities to the Asia Pacific region (and thus taking away Acer’s advantage of low cost labor) and falling profit margins in the semiconductor products. These were the external forces. Internal to Acer, it has started experiencing cost crunch due to absence of a global logistics distribution system that has resulted in increasing inventory costs for Acer in coordinating it supply chain across the geographical boundaries. This is also the time when Acer has tried a strategy of combination of outsourcing, partnership and alliances. It attempted to develop an alliance with Siemens Nixdorf in Europe to acquire its local PC
manufacturing plant where SNI would provide its marketing infrastructure to Acer in Europe\textsuperscript{14}. It also licensed login-IC production technology from IBM so that it could move in logic and embedded processors and systems market. In the recent months, Acer has signed partnership agreements with Cisco to provide ASICs for Cisco’s telecommunication and networking switching products. It has also signed a deal with Computer Associates (CA) to jointly provide total solution in the enterprise market where Acer will use its PC product family and CA will use its software and systems products.

With the growing competition with the big names like IBM, Compaq and HP in its own turf, Acer is currently experiencing a tough time right now. It has tried unsuccessfully to partner with Siemens. Acer’s operations mirror the rationalization strategy of foreign MNCs. After suffering dramatic losses in 1991, Acer has started to recognize the need for a more integrated manufacturing relationship structure and is attempting to move both upstream and downstream within the information industry [10]. Acer has been extremely successful in shaping its strategy while successfully distributing its operations across continents. However, with the growing competition and changing business conditions due to internet, it needs to develop new strategies to effectively manage and coordinate its activities across geographical boundaries. It appears as if Acer has reached a junction where it needs to very carefully articulate its next strategic move that will determine if the company can continue to be a leader in the IT industry.

\section*{4.1 Acer’s Recent Strategy}

Acer has adapted a combination of strategic moves in the recent years, and this section presents the Acer’s recent strategic initiatives in the following subsections.

\textsuperscript{14} This deal was subsequently canceled due to financial reasons. For more details, please see Section Six.
4.11 Reorganization and Reseller Strategy – Process Driven

Acer has experienced heavy loss in its Acer America subsidiary. Acer America restructured into six new divisions in its bid to provide “customer centric solutions”. This restructuring should translate into more resources for the channel. It has also introduced Co-op incentives for VARs by increasing co-op dollars for VARs delivering customer centric solutions. It has introduced a new Discover Acer training program that provides an incentive for resellers to take product certification tests and bid against other competing resellers for points that can be used for a variety of prizes in cyber-auction. Acer’s new web site, called Channel Forum, provides resellers with information about reseller programs and policies. The site also contains product information, sales and marketing tools, service and support resources, e-mail and phone numbers of Acer contacts. Its Channel Alert Initiative provides resellers with timely press releases, product announcements, promotions and price changes. The Channel Update is a weekly electronic newsletter providing updates on the company’s corporate and business activity. The Electronic Product Catalog offers updated product information, phased out products and warranty and service information. Acer Assist provides system diagrams, parts lists and prices, technology articles, frequently asked questions and service and support information.

4.12 Marketing and Expansion Strategy – Process driven

Acer is focusing more resources on the small-business market rather than the corporate market. The corporate infrastructure acquired in the past is being shifted to leverage and support the channel. Acer has created an XC or Internet information appliance task force to accelerate the company’s entry into that market. Acer defines XCs as information appliances built on the industry standard X86 Intel PC architecture and open Internet protocols.
4.13 Distribution and Vertical Integration – Process driven

Acer products are sold by more than 10,000 resellers in more than 100 countries. Products are available through wholesale distributors, original equipment manufacturers (OEMs), value-added resellers (VARs), and independent dealers and retail chains worldwide. One of the most vertically integrated microcomputer manufacturers in the world, Acer has joint venture agreements with Texas Instruments for DRAMs and National Semiconductor for ASICs.

4.14 Industry Partnerships – Technology Sharing and Complementary Capability Driven

4.14.1 Acer – IBM

Acer is broadening its reach beyond DRAM market by licensing logic-IC production technology from IBM Microelectronics that will help it move into the logic and embedded-chip arena next year. This deal was structured as a straight cash-for-license and did not involve any joint-development arrangements.

4.14.2 ACER – 3COM

Acer formed a strategic alliance with 3-COM to integrate networking technologies and products. The idea is to combine marketing and technical expertise of the companies to deliver new networking capabilities. As a part of the deal, Acer will deliver PCs with 3COM network interface cards as a system solution enabling users in the corporate enterprise, small business and education to easily connect their computers into corporate LANs, WANs or intranets or to the internet. Acer and 3COM will implement joint worldwide sales and marketing programs throughout all Acer Regional Business Units.
4.14.3 Acer – Siemens

In April, 1998, Acer signed an agreement to acquire Siemens Nixdorf Information-Sytem (SNI) that would allow Acer to purchase SNI’s computer manufacturing unit located at Augsburg, Germany, and become SNI’s exclusive partner in supplying SNN-branded computer based products. The idea was that with a current production of 1.4 million computers and a staff of 2000, Augsburg would be the main manufacturing and assembly plan in Europe and one of the most important links in Acer’s global computer production network spanning 30 countries. This facility would serve the computer manufacturing and assembly needs of both SNI and the Acer group. Acer’s global manufacturing facilities would enhance SNI’s ability to serve its customers on a worldwide basis. Both Acer and SNI seemed to mutually benefit from each other’s core competencies. Augburg’s facility would strengthen Acer’s position in Europe and reinforce Acer’s already advanced mass production network. In addition, Acer had found a long term OEM client in SNI (one of the top 5 vendors in Europe). SNI would be able to reduce production costs and that could be passed on as more competitively priced products to their customers by leveraging Acer’s quick response to market, global manufacturing logistics and economies of scale.

However, in September 1998, the deal between Acer and Siemens collapsed. Acer said a variety of reasons were to blame for the failure to come up with an agreement. Primary among those is concern over the financial crisis in Asia and Russia, which, Acer said, is causing it to exercise real caution in investment planning. Acer said it is also concerned about the restructuring of its troubled semiconductor business group, including Acer Semiconductor Manufacturing Inc. (ASMI), and must give top priority to the restructuring. With semiconductor prices falling, it is important that Acer carefully manages its cost structure. Acer’s structure along business units has been extremely successful, and it is important now to plan out the structuring of ASMI.
4.15 Expansion and Technology Initiatives – *New market/technology Driven*

4.15.1 Acer – Fab Player

Acer is ready to join Taiwan’s ever-expanding ranks for IC fabrication companies. Acer plans to jump-start its move into IC production by taking over a 6-inch wafer line from TI-Acer. Acer is set to buy production equipment from TI-Acer and expects to begin production with the equipment at its current location. This will provide Acer an entry into the growing IC market where it can leverage its semiconductor manufacturing capacity to provide IC products quickly and in volume. Delivery time and volume the driving factors in IC business.

4.15.2 Acer – Thin Client initiative

Acer officially joined the thin client initiative by unveiling five reference design specifications for light weight mobile devices for internet and e-mail access, document creation to high speed X86 based multimedia appliances.

4.16 Acer Peripherals – *New Product Driven*

Acer Peripherals Inc., one of Acer’s fastest growing SBU’s opened a new production facility in Taoyuan City, not far from Taipei. The new unit was completed at the end of 1995, at a cost of some US$42 million. All production is automated, including warehousing and inventory control. The production lines are scrupulously clean, and apparently employees sometimes have to take “dust showers,” as well as take off their shoes and wear clean work jackets and hats. Production is ISO-9001 certified; ISO-14000 approval is being applied for.
4.17 Internet Products – New Product Driven

Acer foresaw the Internet as becoming a major driving force in the multimedia market, and this is one reason why Acer is also planning to produce a unit dedicated to Internet reception, a “Web” or “Internet box”. Although API no longer produced X-terminals, previous production experience with them would prove useful in developing an Internet device. The management climate at API emphasized teamwork. Stan Shih is an interesting leadership model, never authoritarian, but always ready to listen to the ideas and advice of others.

4.18 Aspire Park – Taiwan’s “Silicon Paddy” – Vision Driven

Acer is spearheading a 450-acre privately funded industrial estate on the outskirts of Taipei, which will include a Creation and Innovation Center as well as green space and homes. The idea is to follow the US model of branding and R&D. Acer is planning on investing US$1 billion within the next 13 years to nurture about a hundred new software start-ups on the island. Aspire Park hopes to attract not only software houses, but also advertising companies, architectural firms and even individual artists so that the programmers can work and live next to creative people from other fields.

4.2 Acer Future Vision

CEO Shih has set the official stamp, recently, on a drive for public ownership of the various Acer entities. The goal is to have twenty-one publicly listed companies by the start of the twenty-first century. This goal has been restated as a slogan in typical Acer fashion, “21 in 21.” So far, two have been listed Acer Inc. in Taipei, and ACI in Singapore. Stan Shih is willing to give up control of Acer’s companies, content with a residual 40 percent stake. Shih perceives very clearly that a group as large as Acer now is cannot hope to have a centralized vertically
integrated corporate structure. The company has to be devolved ("disintegrated"), so that de facto control can pass to local people close to the markets. One of ACI's key strengths is its overriding commitment to customers. This customer-focused approach to business has placed Acer, from International Data Corporation (IDC) reports, among the top 10 PC companies in the world, and No. 4 in Asia Pacific excluding Japan. By proactively analyzing their needs, it continues to satisfy customers' demand for innovative, high quality, user-friendly products.

The following Table A presents the summary of Acer's recent strategic initiatives and whether they are process, technology, product or vision driven. A brief comment of the related impact on Acer's business functions is also provided.

<table>
<thead>
<tr>
<th>Strategic Move</th>
<th>Driving Factors</th>
<th>Possible Impact on Acer's Business</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reorganization and Reseller Strategy</td>
<td>Improved processes Improved reseller selection</td>
<td>Higher productivity Better reseller management Higher Revenue</td>
</tr>
<tr>
<td>Marketing and Expansion Strategy</td>
<td>Improved Process Expansion to new markets</td>
<td>Better marketing of products New market potential</td>
</tr>
<tr>
<td>Distribution and Vertical Integration</td>
<td>High cost of distribution Product Focus</td>
<td>Better product offerings Leverage others' distribution capabilities</td>
</tr>
<tr>
<td>Industry Partnerships</td>
<td>Technology Sharing and Complementary Capability driven: Cannot invent all technologies</td>
<td>Leverage other products to offer better products</td>
</tr>
<tr>
<td>Expansion and Technology Initiatives</td>
<td>New market/technology Driven</td>
<td>Be able to introduce products based on new technology Access to new market</td>
</tr>
<tr>
<td>Acer Peripherals</td>
<td>New Product Driven</td>
<td>Access to new market with new products</td>
</tr>
<tr>
<td>Internet Products</td>
<td>New Product Driven</td>
<td>Access to new market with new products</td>
</tr>
</tbody>
</table>

Note that this section does not try to evaluate the above strategic initiatives. The objective is to provide a snapshot of the Acer's strategic direction. A comprehensive analysis of Acer's future strategy is provided in Section 7.
5.0 Acer's Success: Analysis

This chapter provides an analysis of factors that have led to Acer's success. Two different strategy frameworks are used, (a) Competitive Advantage framework (Dr. Michael Scott-Morton) - which relates more to the internals of the company in order to maintain a sustainable competitive advantage, and (b) Corporate Strategy Triangle used as a framework for corporate strategy [10].

The first framework deals more with the internal aspects of the firm that are within a firm's control and derives the competitive advantage as a result of its core competencies, industry structure, competition and how it addresses the needs of customers. This together with the entrepreneurship and the leadership, culture and management incentives within the firm could result in the competitive advantage. The second framework deals with the firm's internal resources and its business environment. Then how a firm organizes its structure, systems and processes to work towards the firm's vision to develop competitive advantage. The framework does not talk about this competitive advantage can be sustained, though! Note, however, that both these frameworks derive the competitive advantage from the company's resources and its environment. The purpose here is to show that we arrive at the same conclusions for Acer's success in the 1980s using any of the above frameworks.

5.1 Competitive Advantage Strategy Framework

Acer had rejected the conglomerate structure in Taiwan where Stan Shih rose from a poor family and was able to form a multinational company with little starting investments. It is important to analyze the factors that led Acer to sustain a competitive advantage in 1980s and early 1990s. This framework provides an analysis of the capabilities internal to the firm that are under its own control to manage.
As we showed in Section 4.7, Acer was able to build a set of capabilities in the Initial Stage during 1976-1986 in terms of innovative manufacturing and distribution techniques. In addition, Acer also developed unique management techniques to gain the loyalty of its employees by sharing company’s growth and better compensation structure. Such a working environment allowed product innovation and helped Acer in developing and offering a diversified set of products and services. This helped Acer to gain a big market share in the Asia Pacific. In the subsequent years, by expanding its business to Japan, Europe and US, and by investing heavily in branding (it changed its name – Please see Section 4.7 for the time line of Acer’s major initiatives), Acer was able to turn its capabilities developed in the Early Stage to competitive advantage in the Growth Stage. We use the Competitive Strategy Framework as described in Figure 3 to analyze how Acer has been able to sustain a competitive advantage until very recently in Taiwan and Asia pacific.

5.11 Industry Structure, Competition and Costs
Acer was the first in PC industry in Asia pacific. It started with a great technical solution, and took advantages of the low labor costs in Taiwan, emerging appetite for high technology
products in Asia Pacific and most importantly the first mover's advantages in the industry. Since its customers (initially from Asia Pacific region) were just beginning to experience the introduction of high technology products, Acer was able to capture a great market share. The low labor costs in Taiwan helped Acer in keeping high cost products of competition of European companies and US from making any threats to its market share. The cost difference between Acer products and US brand products was in several multiples - and this also helped Acer in getting away with not so high quality products. And this was OK because Asia was (and continues to be) primarily a very cost sensitive market. Fashioning under its own name enabled Acer to distinguish itself from other Taiwanese manufacturers. Acer became the leading PC brand in South East Asia, Mexico and the former USSR, and second in Latin America. As a part of its marketing strategy, Acer chose to gain a foothold in less developed and less competitive markets first rather than to directly confront global competitors like HP, Compaq, and NEC. In the more developed markets, Acer preferred to be an OEM or original design manufacturer (ODM) supplier.

**5.12 Core Competency**

Acer's core competency was in building almost cutting-edge personal computers faster and cheaper than competition in the 1980s and early 90s. This was possible due to its manufacturing strategy. The production of key components was carefully controlled at large manufacturing sites and then appropriate components are shipped to franchise locations around the world where they were assembled into systems customized to local requirements. In the early 1990s, Acer adopted a radical approach to PC manufacturing a "fast food" PC assembly strategy as a means of reducing cost and delivery time of PCs made for itself and for its OEMs. In this procedure, Acer ships printed out boards from Asia by air to assembly sites worldwide. Cases, monitors and other items are shipped by sea. Processors, DRAMs and disk drives are sourced locally.
5.13 Leadership, Culture, Management and Incentives

In contrast to the rigid pagoda patriarchal power typical of Chinese family businesses, Acer had implemented an open structure with extensive individual responsibility and financial participation. Acer continued to tap the urge to become the boss – by giving decision-making powers to local managers in the Acer plants and offices around the world and letting them run their operations like managers. Acer shares both opportunity and risk by encouraging local ownership for employees and the general public. If local managers and employees are able to share in the benefits of the business’s success, they will be very motivated to take on their share of responsibility for running the business and will do their best in all that they do — for the good of the company. Acer is unique in its willingness to give up control and majority ownership of its local operations in order to motivate each franchise to maximize their own business’s overall growth and profitability, thereby maximizing Acer’s overall success. This made Acer different from other companies. Loyalty was name of the game and Acer benefited from people's innovations and devotion to the company. In turn it made Acer as one of the most "sought after" company for people looking for a career in the high technology industry.

5.14 Entrepreneurship

Management of the company provided an environment where Acer employees were not afraid of taking risks and innovating new product ideas. These ideas were always considered for implementation into new products. Acer was able to offer a diversified set of products and services to customers. This also helped as the foundation stone for its strategy of offering "fresh technology" products to its customers.
5.15 Sustainable Competitive Advantage

Acer was able to use its core capabilities in the manufacturing and distribution processes to expand in to Japan, Europe and US. This helped Acer to gain a sizeable market share in the PC and semiconductor market in the above regions in addition to its already dominated Asia Pacific market. The local low labor cost also allowed Acer to continue to offer competitive prices. Once the competitive advantage established, the innovation (that led to its ability to offer diversifies set of products to customers) and the management techniques of the company provided a solid stage to Acer to sustain a competitive advantage over its competitors for a long time. But as we will see later, with time many of these factors no longer provided competitive advantages to Acer, and that is precisely where the trouble for Acer started.

5.2 Corporate Strategy Triangle

Collis and Montgomery suggest using the Corporate Strategy Triangle in [10] as a framework that defines the set of five elements that together as a system lead to a corporate advantage as described in Figure 4.
5.21 Vision, Goals and Objectives

Acer's vision was to become the leading manufacturer of PC products in the world. Stan worked on this vision by providing a unique management style to the company by nurturing a culture of ownership in Acer employees. Decisions were pushed down to the implementers and profit sharing was introduced. This helped employees in providing better solutions while taking on risks. Acer also had the goal of providing “fresh” technology to customers and such a commitment to customers was rare to find in the 1980s. Acer also made a serious effort to work towards this goal by using core capabilities of manufacturing and distribution to offer latest technology products at competitive products.

5.22 Resources

Acer's primary resources were the know-how of running a unique manufacturing process. The low cost labor advantages were transformed into a very profitable business by coordinating its activities across manufacturing, distribution and assembly of PC products. Design boards were sent by air, heavy components were sent by sea and the items with shorter life cycle were procured locally in its plants all over the world. In addition, Acer had also developed a very efficient production plan in Taiwan where it enjoyed the greatest market share.

5.23 Business

In the times when PCs were just coming in the market, Acer enjoyed great profit margins on its products due to lack of competition. This was mainly for two reasons: first, Acer had cost advantage over its competitors from Europe and US. Two, Asia Pacific was too cost sensitive and therefore Acer did not have to compete on quality.
5.24 Structure, Systems and Processes

Acer had divided itself in business units (RBUs and SBUs) in various parts of the world. This structure allowed focusing of the business activities and the open communication among these units allowed innovative business propositions to mature. The individual business units had focused objectives and systems were set up to remain focused. On the same hand, detailed business processes were in place to help in coordination of its activities across the globe.

5.25 Corporate Advantage

The combination of above mentioned five factors gave Acer a set of corporate advantages over its competitors in the Asia Pacific region while Acer honed its expertise in manufacturing and delivery of semiconductor products.
6.0 The New World

This section discusses the changing landscape of the IT industry and the marketplace in the last 10 years, and how it has affected Acer's business. It is shown that in the new world, Acer no longer has the competitive advantage it had once enjoyed in the 1980s.

6.1 Asia Pacific: Labor costs, Economic slowdown, Market Place, and Competition

Demand for low cost products from Asian Pacific attracted a lot of capital to the region. Many US companies shifted their production plants to take advantage of the low cost labor. This phenomenon in general created a lot of wealth for many people in the region and companies started taking high risks in construction and manufacturing business. The labor costs soared, especially in Taiwan and Singapore. This started taking away the low labor cost advantages that companies were enjoying before. Again, companies started shifting to yet lower labor cost countries like Thailand, Philippines and India. Then the economy of the region suddenly came crashing down, and so did the demand for products in the region. This has also caused a big dip in the demand for PC products in the region.

In context of the Competitive Strategy Framework of Section 5.1, the industry structure has changed as more firms are competing for the same market at reduced prices. The expectations of the customers have also changed as they are demanding high quality products. So the competitive advantage that Acer once enjoyed is no longer true. Similarly, in context of the Corporate Strategy Triangle of Section 5.2, the business environment of Acer has changed (due to increased competition and falling semiconductor prices) and its resources are not enough to generate the same competitive advantage it had in the 1980s.
6.2 Technology and Quality

Technology has also changed rather rapidly in the last 10 years. New manufacturing tools have become available that pushed the product costs lower. Combined with the latest prosperity in the Asia Pacific, the people in the area were ready try and purchase high cost items from the west. Suddenly, the companies in the US and Europe were able to push their products in the Asia Pacific. The products from Europe and US traditionally have much higher quality. In particular, in the IT industry, IBM, HP, Compaq and Dell were able to sell their high quality PC products at comparable prices to Acer's products. This has resulted in a very big challenge to Acer because suddenly it has to compete with the big names not only in quality but also in price. This is a very big factor in Acer's troubles in the recent years.

The change in technology has resulted in change in the industry structure. The competing companies are using the cutting edge technologies for better IC yields and internet technologies to coordinate their distribution of components across the globe. Again the Industry Structure of Competitive Advantage Framework of Section 5.1 shows that the change in industry structure (almost) eliminates Acer’s competitive advantage. The Corporate Strategy Triangle of Section 5.2 shows the same as the business environment has changed but it also provides a clue that the competitive advantage can be regained by investing in organization, systems and processes of Acer.

6.3 Internet and E-Commerce

Internet and E-Commerce have transformed the whole world in many ways. Suddenly the cost advantage of running an office in a low cost country does not seem that attractive. Internet has also changed the way businesses are run. E-Commerce has started to allow business to manage

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More on this in Section 7 that presents a set of recommendation for Acer.
their operations in more economical ways. For example, Dell Computers sells its products exclusively using internet. This has taken away the needs for large sales organization and hence it can offer much lower cost products to its customers compared to other companies. Same is true for most of the PC components and ASIC business as companies continue to move their sales operations to the internet. This has also created an immense pressure on Acer as it is barely starting to move its sales operations on the internet. In terms of the frameworks used in Section 5.1 and 5.2, the industry structure (business environment) has changed, and Acer no longer enjoys the same competitive advantage.

6.4 Chip Industry and FABs

Cost of FABs has gone up considerably. Now days, a new process, it requires about US$8 billion to develop a FAB, and at today's rate of change of technology, a company requires to have a new FAB every three years. This is a large investment that only companies like Intel, IBM, etc. can afford every three years. Unless Acer’s revenue increases so that it can invest such a huge amount for a new FAB, it needs to find alternative capacity to remain competitive in this business.
7.0 Analysis of Acer Future Strategy

Acer's strategy has been primarily along these dimensions. First, Acer has diversified by offering full spectrum of products, and more recently partnering with other technology leaders like IBM, Cisco and Computer Associates. Second, Acer has grown rapidly through a strategy mixing innovation, investing in local manufacturing and distribution, and acquiring manufacturing capacity from others. Third, the corporate structure of Acer was also reorganized so that Stan Shih can work on the new semiconductor company in the DRAM business. This will allow him to concentrate on the business in the industry that is experiencing very low price margins and attracts a cutthroat competition. He is also working on the transition of Acer into a "customer centric" company. Fourth, the compensation structure also has had a great impact in retaining employees and promoted product innovation as the product decisions have been pushed down to individual contributors (compared to traditional companies where decisions are forced from top). Fifth, their internal management style has been innovative in capturing employees' loyalty.

Let us look at the particular initiatives of Acer and see how they stack up in the current world of competition and technology.

7.1 Service based market

Acer is investing its resources in developing a services business using its base in Taiwan. There are several issues with this approach. First, the core competency of Acer has been in developing and delivering semiconductor products. The services business requires expertise in customer management that Acer does not seem to champion in. It is banking on outsourcing this business to other competent leaders in this business. But in that case it is doubtful if Acer will be able to grow its own expertise from learning only. It appears that Acer is going for a business where it does not have expertise. Yes, it is true that Acer will get some initial business due to its strong
base in Taiwan and the strong brand image that it has. The second problem is that Taiwan presents a relatively small services market with already established several services companies. It is not possible for Acer to build a high revenue business. Now, if Acer decides to use that services business to launch itself in the international market, it will be facing an uphill battle with the large customers like EDS, IBM Global Services, Siemens, etc. in North America and Europe. Even in the locally in Asia Pacific there are already established companies like Fujitsu, SONY, IBM, EDS, HP and Cisco that have established their market shares. Without the core competency in the services business, it is not possible for Acer to excel in this endeavor.

Companies from North America are also expanding in to South America and competition is quite fierce over there also. But this may be place where Acer can get a break as it has a big installation base already in place. It will need to partner with other companies by bringing its core competency in PC products to the table. Thus combining its expertise with the system expertise of other established services companies it can succeed in providing total system solutions to customers in South America. So Acer needs to refocus its efforts by wisely choosing the geographical location for its services business.

7.2 Intellectual Property (IP) based company

Acer's attempts to turn itself into an IP based company is similar to what US companies did 10 years ago in response to the IP and copyright practices by the European companies. The US companies realized the value of retaining IP for their products and thereby protecting their market. But the issue with Acer is that it is a hardware centric company and its expertise is in the manufacturing processes. In high technology business, it is very difficult to convert these processes as IP. In addition, the IP of semiconductor products generally is very specific to the product. In other words, there is very potential of generating revenue from a semiconductor
related IP. Now, for argument sake, even if Acer succeeds in generating valuable IP, it will not be able to compete with companies in US like IBM, Texas Instruments, Intel, and AMD. In other word, where is the market for IP generated by Acer? In IT business, the IP of software and systems products has the greatest value that can be realized in the market via licensing, alliances or outright selling. In this space, Acer does not appear to be in a position to challenge companies like IBM which spend billions of US dollars in their R&D to develop new products and in turn generate valuable IP. Presently, Acer is just beginning to build a foundation in the software business using the Aspire Park initiative. It will be quite some time before Acer starts building IP in this market segment. It is not clear from their plans that they have marketing strategy for this initiative. It is also not clear how Acer plans to sustain such a vision that requires continuous investments in R&D. Even companies like IBM shelved their R&D projects in the early 1990s in favor of developing marketable products. Acer, currently in shaky condition is not in a position to invest deeply in R&D to develop IP. Its shrinking market share will also prevent it from being close to the customer needs which is a "must have" condition to developing innovative products that can be marketed.

7.3 Aspire - An attempt to develop IP for the company in the software world?

Stan Shih is investing several billion of dollars in developing a software "city", Aspire Park, in the city of Lungtan about 50 miles south of Taipei in Taiwan. Shih calls it a pioneering intelligent community offering high quality life and full-fledged functions of working, entertaining, recreation and learning. There are several other research centers already established or in the process of developing in the immediate area. Acer is planning a strong community information infrastructure using latest communication network, a creation and innovation center,
and a housing scheme with all facilities to provide an ideal environment for research and innovation of new software products.

Mr. Wang had taken the author on a tour to the Aspire Park construction site where he spent a long time in explaining how serious Acer is in this vision.

Acer's Aspire Park is a vision to convert Taiwan in a software champion of the world. There are a few problems with that happening. There are two things that need to exist for a
company/country to become a champion in software industry. First, there should be a core software development expertise. Unfortunately, Taiwan in general and Acer in particular have flourished while producing hardware components and therefore no expertise in software development is available. This is unlike India and People's Republic of China that have large pool of trained software professionals. Secondly, there should be a huge local market for software products so that the innovation for new products and services can take place. Taiwan has a very small software market as a consumer. So its product innovation is quite limited. This is also true in case of India and PRC. And this is precisely the reason why India and PRC have failed to produce any software products that have captured a big market share in North America or Europe. India and PRC champion in providing software development (actually implementation only!) for products with detailed specifications and a blue print.

Acer is trying to solve the first problem of expertise by developing a training center in Aspire Park where it plans to bring experts from USA and Europe for classes and seminars on a continuous basis. It is also hiring several professors and leading technologists form US as consultants. However, these steps only help in small ways. To get a large number of people with software expertise requires a local software market with career opportunities for people to choose that profession. And this is not there in Taiwan and Aspire cannot solve that. Due to absence of software expertise and local software market to support product innovation, it will not be possible for Taiwan to become a world leader in software products.

7.4 Partnerships and Alliances

Acer has signed partnerships with IBM and Cisco to provide PC products. Its partnership with Cisco has been long overdue. These are good partnerships that will help Acer push its products in the North America as well as be able to provide better "system" level products to its customers.
all over the world. Partnership with IBM will also be very helpful in opportunities for Acer to pick up some spillovers from the IBM Global Services business unit in the Asia Pacific. It will also give opportunities for learning from IBM Global Services that could help in Acer's own service business initiative. Acer's partnership with Cisco is particularly interesting because Acer leverage its semiconductor manufacturing competency in providing components for an ever increasing telecommunications, networking and switching products from Cisco. This partnership also appears to be a level field in contrast to its earlier attempt to partner with Siemens where Siemens only provided the market (and a very costly one too!) for Acer. It is very crucial for Acer to allocate its expertise and resources wisely in this relationship to develop a win-win situation for the both companies in the alliance.

Last week, Acer has also signed a partnership agreement with Computer Associates (CA). This alliance will lead to formation of a new joint venture targeting the Application Service Provider (ASP) market. The new company will leverage the Internet to deliver selective applications and services to different business entities. In addition to eliminating purchasing software licenses and corresponding hardware platforms up-front, clients will be charged based on system usage. In lowering startup and operating costs, resellers will be able to leverage a broader customer base for the respective applications. By taking advantage of the ASP's usage-based billing model, the end user can optimize cash flow and maximize return-on-investment. The new joint venture will use both company's sales and marketing channels as well as its IT infrastructure and applications. Enterprises of all scales can benefit from the open, robust and secure environment that ASPs are typically built upon. CA and Acer each hold 50% of the shares of the new joint venture. The new company will initially offer localized Accounting and Enterprise Resource Planning (ERP) applications from CA's joint venture partners in Taiwan. This is a very good move by Acer in its attempts to move in the software and services business.
### 7.5 Summary of Analysis

The following Table 1 summarizes the Acer's current strategic moves and probability of success based on the analysis of its strategic moves.

<table>
<thead>
<tr>
<th>Strategic Move</th>
<th>Probability of Success</th>
<th>Comments / Open Issues</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service Based Business</td>
<td>Low</td>
<td>• Where is the market in Asia Pacific?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• European and US markets have established players – Siemens, EDS, IBM, etc.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• How will it position itself in the services market?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Develop services market in Asia Pacific, South America?</td>
</tr>
<tr>
<td>IP Based Company</td>
<td>Low</td>
<td>• What is Acer’s IP? Can it sustain that?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• No consumer market in Taiwan to promote innovation resulting in IP</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Where will it sell its own IP?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• The problem is that Acer has to find market to sell its IP – how does it stack up vis-a-vis its competitors in US</td>
</tr>
<tr>
<td>Aspire Park</td>
<td>Minimal</td>
<td>• lack of expertise, lack of local consumer market to promote product innovation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• high competition from overseas</td>
</tr>
<tr>
<td>Partnership &amp; Alliances</td>
<td>Medium to High</td>
<td>• How Acer plans to reallocate its resources and efforts in alliances?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• How is it handling the Asian crisis as the demand for semiconductors in the area has been falling? This pushes Acer back in the market with big competitors?</td>
</tr>
</tbody>
</table>

Table 1: Summary of Acer's Major Strategic Moves

Service industry is experiencing phenomenal growth. As IT products are being introduced, customers are finding increasingly difficult to manage even existing technology products, let alone the new technology products. Especially small to medium companies cannot invest in the hiring new staff or training old staff to manage the new products. Therefore there is huge opportunity for Acer to enter this fast growing market. As large service providers like IBM Global Services, EDS, CA, etc. become dominant players in this market by offering total solution, Acer may find itself as an only OEM supplier to these services firms. Therefore the
value of Acer’s successful entry in the services market is huge, not only in the immediate future but also in the long run. However, this is quite a challenging task. Acer’s competency is in manufacturing and distribution processes – it is yet to be seen how it manages to transform these core capabilities in the services market. Its approach to outsource its services business of call center is a good solution in the short run. However, it does not quite appear to be a solution in the long run. It needs to develop the expertise required for services business in-house, develop a competitive advantage using its already huge install base and then continue to work on sustaining this competitive advantage.

Developing an IP based company will be very advantageous to Acer in the long run. There are opportunities for revenues from cross licensing as well as the opportunities of technology partnerships at favorable terms. IP can also produce market dominance resulting total market share albeit with some legal implications. The value of IP will be huge particularly in the software systems area. With the present set of expertise, it does not appear that Acer can easily attain such a distinction in the software market. Its vision of becoming the world leader with Aspire Park has great challenges in the near future. Absence of sizeable software market at home and lack of software talent (in terms of number of professionals) in Taiwan pose a great challenge for Acer in this endeavor. Experience from India shows that absence of software market in the home country seriously impedes the local firms’ capabilities of producing new world class software systems and products.

7.6 Possible Strategy for Acer

This section presents a set of strategic options for Acer in the current situation of the company and the industry in general. Acer could consider a strategy of a combination of product,
marketing, joint alliances and restructuring to take advantages of the opportunities as a result of the changing market and technologies.

7.11 Products
Server market in US is growing fast and companies like Compaq and Dell are working hard use their PC products as servers for the enterprise market. This has been triggered by the fact that companies are looking for economic alternatives in using smaller systems for their IT needs. Acer can use its PC line of products and develop value add products like networking (alliance from Cisco will help), storage (alliance with IBM will help) and services (alliance from CA will help). Acer’s core competency of PC product line can be complemented by the network, systems and software solutions from Cisco, IBM and CA, respectively. Such a combination has the potential of developing total solution for enterprise market. This will give a great opportunity to Acer in entering the $50+ billion enterprise market. Enterprise market is the target of many companies (e.g., IBM, Compaq, Dell, HP, etc.) that are trying to penetrate this market with solutions based on PC systems. This penetration of enterprise market has yet to take place. Therefore Acer has an opportunity to play in this market at an early stage due to absence of any particular dominating company. The driving factors in this market are the reliability, performance, networking and total solution. Acer can leverage its expertise in PC product line by developing value added PCs with high performance and reliability exclusively for enterprise applications by teaming up with CA, Cisco and IBM.

Once in the server market, it will also give opportunity to Acer to develop server management tools – Aspire can be a great place to develop this line of products and developing IP for the company. Aspire can be used as the development center to develop management systems. Combining the management system with Acer’s peripheral products offering Acer will be in position to offer a complete server solution. Again this product is line totally consistent
with Acer’s core competencies. Offering a product in server market with management systems will also aid Acer in getting in the already “in-making” Acer’s services market

Acer could also take advantage of its PC product line in developing internet server products, for example large Application Severs (its last week’s deal with Computer Associates is precisely for this product family). Internet market is growing and will also give Acer an opportunity to develop other value add products and services once it has obtained an entry in this rapidly growing market. Alliance with companies like Microsoft and IBM Global services can help Acer to bring e-commerce applications down on PC based systems for small to medium sized customers.

Acer can also leverage its semiconductor manufacturing capabilities to position Acer’s processors as the multimedia servers and the network switching gears partnering with Cisco, Bay, 3COM, Intel, and Microsoft. Demand for multimedia and networking components is rapidly growing market in excess of $60 each year.

7.12 Change Geographic Market Focus

European market is too expensive – but Acer should position itself in Europe. The failed Siemens Nixdorf deal could be a result of the vast difference in the cultures of the two companies. Acer should choose partners with similar culture – NCR, ICL, Olivetti, etc. could be viable partners. It could press harder in India partnering with large software houses like Infosys in addition to its already “not so happy” relations with Wipro. There are some problems with managing relationships with the Indian companies – which has to be managed in a better way. The risks need to be distributed and local talents should be drawn in managing Acer’s interests in India. Acer’s complete “hand off” management in India cannot succeed.
7.13 New Alliances

Acer could partner with SAP, BAAN or PeopleSoft to provide best underlying hardware for the enterprise applications – this opens up a new market and also potential for services contracts. It could setup joint marketing and sales partnerships with local firms in India, Europe, Middle East and South America where a strong local partner is needed for success. Another avenue worth consideration is the market of entrepreneurial firms forming part of the international supply chains that is quite large. Therefore aligning with SAP or BAAN for this type of solution for this “vertical” group might be interesting.

7.14 Organizational Restructuring

Other companies have copied Acer’s organizational structure, management style and corporate culture and therefore it does not enjoy a competitive advantage in that domain. Acer needs to develop new initiatives to retain its employees and modify the company's organizational structure to be consistent with the services based industry where it wants to be. Stan Shih's recent vision of turning Acer in a customer centric company is in the right direction. For implementation of this vision, Acer needs to develop and acquire better customer management tools (for example a customer database), create a corporate environment where customer is valued the most. This will require a heavy investment in the IT to support customers. There are several Customer Relationship Management (CRM) systems available that help you to acquire and retain your customers. Acer could acquiring one of these CRM systems to enhance its ability to manage its customers.

7.15 Improved Channel/VARs/Distributors Management

Acer’s latest “on line” distributor management system launched in US has been a great success. This should be improved to incorporate sales and marketing functions, and replicated all over the
world as the first step. In second step, management systems from different countries should be integrated so that the information can be shared and communicated to all parts/levels of the company at the same time. These systems also need to be integrated with its global distribution logistics system currently under development in Taiwan. This will greatly enhance Acer's ability to manage the distribution of spare parts all over the world and thus reducing inventory costs and shortening delivery times for the components to its customers. Acer should consider using Internet based system to offer on-line access to its channels and VARs for product information and sales promotions. These on-line systems can also be used to configure total solutions that will help channels and VARs to win deals. Integrating this system with the customer support will greatly enhance Acer’s capability to provide high quality support services. Such integration of customer support, marketing and sales is normally not available using traditional desktop or network based systems.

7.16 Moving Sales and Marketing Operations to Internet

Acer should seriously consider taking advantage of the internet in its sales and marketing activities. A global system could be developed that could provide latest product information and price updates to its customers, OEMs and channels directly. This will eliminate the paperwork and the sales cycle would be shorter. A novel idea will be to have an XML based system that will allow customers not only to view product information on the internet, but it will also allow the to create total solutions using the expert system embedded in the XML based platform. This is a new technology and is just picking up. There are only a few companies in the whole world, like Broadvision, who have mastered the art of XML. This will be great addition to Acer's internet based system giving it a big competitive advantage.

Integrating its marketing and sales systems with customer support system will help to provide better online services to its customers and distributors. Such a system is increasingly
becoming a necessity to remain competitive in today’s world. Table 2 below provides a summary of recommendations for Acer.

<table>
<thead>
<tr>
<th>Recommendation</th>
<th>Rationale</th>
<th>Comments and Issues</th>
</tr>
</thead>
</table>
| **Introducing new products like servers, ASP, multimedia, switching and networking** | • Can leverage its core competency of PC products  
• Can leverage alliance with market leaders like IBM, Cisco and CA. | • How to allocate its expertise and resources? |
| **Change Market Focus to include Europe, India and South America** | • South American market is growing with limited competition. Everyone has a chance.  
• India will be huge market in 10 years and there is no PC manufacturer there.  
• Europe is very important | • Alliance with European companies like ICL, NCR.  
• Alliance with Infosys and Wipro in India |
| **New Alliances** | • Need to enter large enterprise market. There are large dollars in that business  
• Can leverage its PC products partnering with services companies | • alliance with dominating player like SAP, Peoplesoft and BAAN to provide total solutions |
| **Organizational Restructuring - turning into a customer centric company** | • New initiatives needed to retain employees.  
• Structure needs to be consistent with the business.  
• Need to be closer to customers to understand their needs to serve better | • Deploying CRM for customer management  
• Knowledge system to share expertise across company |
| **Improved Channel/VARs/Distributor Management** | • Need more efficient system for distribution to remain competitive | • Deploying global distribution logistics system and moving away from the old system! |
| **Moving Sales and Marketing Operations to Internet** | • Need to be more efficient and faster response  
• reduce cost  
• remain competitive | • Deploy internet based system based on XML based platform to provide value added information to its customers. |

Table 2: List of Recommendations for Acer
8.0 Conclusions

This thesis has investigated Acer Corporation and analyzed the factors that have led to its immense success until a couple a years ago. This analysis has been done using two most popular strategic models that address the core competencies of a company. The analysis shows that Acer's success has been a result of the combination of its strategy and quite importantly, the market and industry conditions under which it operated. Acer's strategy has been primarily a combination of

- broad diversification by offering full spectrum of products, and more recently partnering with other technology leaders like IBM, Cisco and Computer Associates.
- a strategy of mixing innovation, investing in local manufacturing and distribution, and acquiring manufacturing capacity from others.
- a distinctive corporate structure of business units
- an internal management style that has been innovative in capturing employees' loyalty.
- a compensation structure that has succeeded in retaining employees and promoted product innovation as the product decisions have been pushed down to individual contributors (compared to traditional companies where decisions are forced from top).

The market conditions of the 1980s in Asia Pacific and the low labor costs helped Acer in gaining a big market share in the region. There was not competition in the region because companies from the west could not match Acer's low prices. This however resulted in Acer's neglect of investing in quality for the local market that was extremely cost sensitive.
In time as the technology changed and combined with the economic showdown in the Asia Pacific region, Acer started feeling pressure from the competition as the western companies started their own products in the region at competitive prices. In addition, Acer faced the customers’ demand of high quality products because suddenly the price difference in Acer and western products was not much.

Acer has taken several strategic steps to deal with this new and changing market and industry structure. In context of the strategic frameworks used in this analysis, a careful evaluation of its strategic options shows that its idea of services business, turning Acer in an IP based company and the Aspire Park project may not be the right solutions. Its move towards partnership and joint alliances with the industry leaders in North America seems to be quite promising, though.

This thesis has also presented a set of alternatives for Acer with its pros and cons in the form of a strategic framework. This framework consists of a combination of product, marketing, joint alliances and restructuring options to take advantages of the opportunities as a result of the changing market and technologies. These options have been presented after a careful consideration of Acer's core expertise and existing industry dynamics.
14. Me-Too is Not My Style, Stan Shih, Internal Publication of Acer Corporation, 1992
15. Information for Section Three was obtained from the following websites:

www.acer.com
www.webtech.com
www.idc.com
www.gartner.com
www.informationweek.com
www.pcweek.com
www.yahoo.com
www.ibm.com
www.cisco.com
www.hp.com
www.compaq.com
www.intel.com
www.ti.com
www.ca.com