

Dell Computer Corporation in China: A Case Study in Global Information Systems

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ABSTRACT

When a company goes global, what unfamiliar factors tend to affect its information systems operations? The purpose of this paper is to illustrate such factors through a case study. These factors are unfamiliar due to the fact that they do not work within the domestic market where the firm operates and is headquartered. These factors arise due to operation in a different environment governed by a totally different set of rules. While the impact on the information system will be the focus of this paper, some of the larger issues will be touched on also.

Dell In China

As one of the world's largest PC manufacturers, DELL COMPUTER operates on a global basis. The company fully executes the various business functions such as manufacturing, finance, sales and technical support in each of five locations: Austin (Texas) and Nashville (Tennessee), covering North America; Limerick (Ireland), covering Europe, Middle East and Africa; Penang (Malaysia), covering Asia-Pacific and Japan; and finally Xiamen (pronounced Shia'-men), covering China. Dell has sales offices in 33 countries around the world and sells its products and services in more than 170 countries and territories.

In November 1998, DELL set up its China Customer Center (CCC) in Xiamen, China. Situated in the South Fujian Province (to the west of the Taiwan Straits), Xiamen – a traditional trading port – is one of the first four Special Economic Zones in China. It covers an area of 1,565 square kilometers and has a population of 1.25 million. As a sister of DELL, Asia in Malaysia, DELL CCC's main business is in the China market. In addition to all the customers in China mainland, it also serves Hong Kong, which was previously served by DELL, Asia. As of January 1999, about 200 employees worked in Xiamen with the following distribution: about 25 in Finance, 50 in Sales, 10 in Human Resources, 80 in Operations, and 40 in Technical Support and Engineering). With its own order-to-manufacturing system and accounting system, DELL CCC can produce and sell PCs independently.

Founded in 1984 by Michael Dell, DELL executes a direct business model. By selling PCs directly to customers, DELL can best understand their needs and try to meet those needs. Because The DELL model was proven to operate effectively in USA and other parts of the world, DELL decided to adopt it in CCC too. Though the China market is potentially huge, it is quite different from the American and European markets. Only when the special market factors are well considered, can DELL model be successful in China. This paper will examine these factors one by one.

1. Competition

DELL has a number of Chinese domestic competitors, especially in the PC market. One of them is LEGEND. LEGEND's parent company, LEGEND Group Holdings Company, was established in Beijing in 1984 under the Chinese Academy of Sciences. Since then, LEGEND Group Holdings Company has become one of the largest high-tech enterprises in China. LEGEND is active in the following areas:

- the manufacturing and sale of LEGEND personal computers,
- the distribution of foreign brand computer-related products,
- the provision of systems integration solution and services,
- the manufacturing of motherboards and printed circuit boards.

The other major competitor of DELL is GREATWALL, which was set up in Beijing in 1986.

These competitors can sell at a very low price, sometimes 40% lower than DELL's. They can do this by getting raw materials directly from domestic suppliers. For many PC buyers now in China, price is the factor that concerns them the most. How, then, can DELL compete with these companies under a price disadvantage? DELL uses the knowledge gained from direct contact before and after the sale to provide completely tailored customer service such as toll-free technical support calls and three-year warranties. For buyers who are lacking in technical expertise, this is really a great incentive to buy Dell.

2. Sales Channels

One of the advantages of the DELL model is that customers can configure and buy whatever kind of PC they want through the Internet. But the Internet is not so widely used in China. Those customers who do have Internet access place an order by accessing DELL CCC's website (www.dell.com/ap/cn), and clicking the Buy-a-Dell-Store icon on the top of the homepage. Then they can configure the PC they wants, get its price, and purchase it with the help of very detailed instructions. In CCC, this function is very limited. Even for those who can access DELL's website, it is almost impossible to purchase on-line. First, most Chinese do not have a credit card. Second, because of the general perception that Internet security is poor, people are afraid of their credit card information being filched illegally through the Internet. As a result, only 5 – 10 percent of the orders are made through the Internet, while the rest are made through telephone, fax, and express mail.

3. The Order Process

Influenced by the traditional culture, many Chinese prefer face-to-face communication to talking through telephone, especially while deciding a purchase. Chinese customers are used to seeing and touching a product before buying it. This challenges the sales strategy of DELL.

Like DELL in the United States and European countries, DELL CCC has both outside and inside sales people. Outside sales people are both in Xiamen and the other three sales offices, located in Beijing, Shanghai and Guangzhou, while all the inside sales people work only in Xiamen. The job of the outside sales force is to track potential PC buyers such as global companies, small businesses, and government agencies. Their real function is to entice the customer by establishing a *personal*

relationship with them. This is still the best way to do business in China. Outside sales then transfer all the information about these prospects to inside sales. Inside salespeople contact prospects, negotiate order details with them, and close the sale. discuss with them by telephone and fax, and made orders for them.

For the individual buyer, they are supposed to pick up a toll-free call and talk to inside sales of Dell Direct team directly. The inside sales enter order details into SMARTS (DELL's order-to-manufacturing system) and send the hard copies of orders to Credit Administrators in Finance department at the same time. Credit Administrators check the credit reliability of the customers, approve order requirements and then download orders to Operation Department through SMART. On operation line, the data of orders transfers from SMARTS to DOMS (another system used to follow the status of manufacturing orders until they are delivered). There are certain links between SMARTS and DOMS so that the SMARTS users can also view the status. At the end of this chain, SMARTS creates an invoice of each order indicating that this sales revenue is gained and close this transaction. This revenue data will transfer to ROSS (a financial system) through links between SMARTS and ROSS

At the beginning of DELL's operation in China, many customers didn't feel comfortable with this kind of purchasing process, even complained about it. They considered it is not polite enough to do business only by telecommunications such as phone, fax and email. What's more, they don't trust a business deal unless there is a visible person behind it. As DELL spreads over China, customers are getting familiar to this unique sales method.

As for credit management in China, because most Chinese customers do not have any official credit records in banks, the Credit Administrator needs to be particularly careful while approving credit applications. There is no way for Credit Administrator to check customers' credit history from the bank. Instead, customers are required to fill out a form by themselves to report their credit history and at least three references. Occasionally, a financial statement from the bank is required.

4. Product Localization

Product localization is very important. Since not all PC users know English, DELL provides product statements in Chinese, Chinese keyboards – which are similar to western keyboards but with Chinese translation on the function keys, and Chinese version of software such as Chinese Microsoft Office 97. Product customization has caused Dell to switch suppliers as well as modify manufacturing processes. In fact, in order to satisfy customers' needs best, DELL CCC began working on product customization far before it sold out the first PC in China. Now it has successfully completed localization of most products.

5. Distribution

Unlike USA and European countries, China has not developed freeway systems everywhere. Distributing product by truck in China is not so quick and cheap as it is in USA. In China, orders from all over the country are collected and downloaded into the system and manufactured in Xiamen. All the finished products are distributed to customer directly from Xiamen. Sometimes DELL has to use to meet customer's needs via train, plane or ship, which may be slower or more

expensive than truck. On the other hand, competitors such as LEGEND and GREATWALL do not suffer from such transportation problems because they have agents all over the country and every agent has inventory from which to sell. Products can be directly drawn from the agent nearest to the customer.

6. Trade Restrictions

Operating as a foreign-owned company in China, DELL has to follow the restrictions of both America and China. For example, complying with American law, DELL cannot sell its product for military use. SMARTS (described earlier) has a certain name list of forbidden customers, and can automatically hold any order under these names. The industry is also regulated by the strict rules about foreign exchange in China. Except for foreign purchase use, DELL cannot convert the revenue gained in the Chinese currency RMB (Yuan Renminbi) to US dollars without the permission of the China Foreign Currency Management Committee (CFCMC). That is, DELL CCC always keeps its profit in RMB, not in USD. If DELL wants to exchange RMB to USD, it needs to send a report about exchange purpose and amount to CFCMC to get approval. In principle, only when DELL needs to pay USD to its foreign suppliers for materials or services can these requirements be approved. All foreign companies in China are under this restriction. In this way, China can efficiently avoid investment capital flow out of the country.

7. Accounting

Different from USA and European countries, China has a unique accounting system. Instead of individual income tax, value-added tax contributes most to national tax collection. Value-added tax is based on the price of the product. The rate is decided by the local tax bureau completely and varies with the producer. The local tax bureau considers the number of employees, functions, volume of business and so on to determine whether the business should be characterized as a *large manufacture* or as a *small business*. Large manufacturers' value-added tax is always 17%, while small business' is 6%. Every product of DELL is sold at the 17% value-added tax, and this amount is borne by the customer of course. By the request of local tax bureau, DELL has to print out a certain kind of value-added tax invoice for customers in addition to the ordinary invoice. At the beginning of every month, the Tax Analysts at DELL turn all the value-added tax of the previous month into the local tax bureau.

8. Management Reporting

There are all kinds of financial and management reports taking place between CCC and outside everyday. The following are typical reports:

- **Daily Sales Report**
The Sales Manager produces a daily sales report, indicating how many units of which model were sold in which location.
- **Daily Credit Report**
The Credit Administrator produces a daily report of order received from inside sales, order downloaded to DOMS, and invoice created (transactions completed by SMARTS).
- **Daily Manufacturing Status Report**
The Operation Process Administrator reports manufacturing status of each order. This report

indicates how many orders entered production, how many were in the product line, and how many are ready to be shipped out on a certain day.

- **Daily Distribution Report**

The Logistics Manager is in charge of producing a daily distribution report that indicates the rate of actually delivered order relative to the orders that should have been delivered on a certain day.

Most of these reports are sent to DELL (Asia) by email within the Intranet and Fax. Some reports such as sales report and daily report of credit administrator are sent to DELL, Austin too where they are compared against quotas set there. Feedback is usually provided if the figures are very bad or very good.

9. Standards

Given the wide cultural (both national and administrative) disparities between China and the U.S., Dell has set strict standards in all areas of operation. The following exemplify the areas in which these standards have been implemented:

- Software: Such as MS Office.
- Hardware: A local area network consisting of Dell's own computers.
- Data: Including date and currency formats.
- Reports: Both format and contents.
- Procedures: Such as how to deal with customers, or how to collect from delinquent customers.
- Attitudes: In terms of punctuality, respect for the customer, and positive problem solving.
- Language: English as the official managerial language within CCC.

10. Lessons

The two generic lessons to be learned from this case are:

- A. Global companies operating in a new country need to be cognizant of a variety of environmental factors.
- A. Only through standardization of all facets of management and technology can the overwhelming differences between the home country and the host country be brought within reasonable control.