

MEMORANDUM

Date: September 20, 2006

Subject: Valid Enterprise Co., Ltd. SCM Program

To: Dr. Ford

From: Chris Bolanos

Introduction

As a newer company with a customer base in the US, who manufacturers all-terrain, sports boards in China, the supply chain of the Valid Enterprise Co., Ltd. versus supply chains of other manufacturers in terms of logistics costs has been investigated as requested. The focus of the research revolved around the company's transportation and future manufacturing costs in China versus that of manufacturing in the US.

Findings

Manufacturing. Although current labor costs in China are cheaper than in the US, wages are going up 10% a year in China. Making improvement to efficiency and quality in China is difficult due to lack of technology and team management within the manufacturing setting. Top notch manufactures, such as Dell, are showing the US as a strong potential for manufacturing expansion.

Logistics. An overload of cargo ships at major US west coast shipping ports is leading to backlog of inventory. Insufficient rail systems create time delays of merchandise to distribution centers. Alternate transportation costs are uneconomical.

US Manufacturing. Develop a small team whose objective is to gather and present data on the cost of manufacturing boards in the US and compare those costs to the existing manufacturing costs in China. Current costs of transporting Finished Goods Inventory (FGI) from China to the US distribution centers needs to be compared to logistics costs of US manufacturing. In addition, the team should try to quantify the potential benefits of US manufacturing in regards to customer satisfaction. Customer satisfaction is based on timeliness of board delivery, quality of the board, and cost of the board. A presentation will help the team relay this information to upper management of the company.

Discussion

Method. Through extensive research, three credible documents have been chosen due to relatedness to current industry trends and validity to Valid's current manufacturing and logistics methods. These articles act as a benchmark for analysis of domestic and foreign industry standards and strategies. They are analyzed and the derived, real life conclusions are combined with "textbook" strategies to formulate in-house manufacturing and logistic strategies.

Supporting Data. Alex Taylor III’s article, “A Tale of Two Factories” published in September’s issue of Fortune Magazine states that Tenneco, a maker of auto parts, has manufacturing plants in both China and the US, and although the foreign plant’s 1% of production cost of labor is much lower than the US 12%, US gross operating margins are a third higher.¹ The Chinese plant is also far below the US plant in terms of improvement due to lack of machinery, suppliers’ unfamiliarity with specification, and no automation on the line.¹ This implies that these lower expenses result in lower productivity. Table 1 below compares the Chinese factory to the US factory. We can see that the Chinese factory has significantly lower wages now, but it’s estimated that wages increase 10% annually in China.¹ Litchfield has 324 employees while Shanghai 275, but Litchfield can produce one million more units than the Chinese Factory.¹ This leads to much higher revenues for the US plant. Table 1 clearly displays how much more a US factory can be versus a Chinese one based on production and revenues.

Table 1: Tenneco Chinese versus US Manufacturing¹

On the Job How the two factories compare

	Shanghai	Litchfield
Employees hourly/salaried	225/50	296/28
Wages monthly, blue-collar (US dollars)	\$210 - \$250	\$1,880 - \$4,064
Production (units/year)	400,000	1.4 million
Revenue millions (US dollars)	\$53.20	\$171

Dell, per David Kirkpatrick’s article in this month’s Fortune issue, even with its recent challenges, holds 19% of the worldwide market share and is expanding within the US borders.² Dell has been acclaimed as an innovator in manufacturing, which has manufacturing implications in various industries. Andy Serwer wrote in Fortune about a potential giant new computer-assembly plant in the North Carolina. Michael Dell asked, "Our business in North America continues to grow in increments of \$6 billion to \$7 billion a year--but where are you going to make all the stuff?"³ Dell is alluding to US manufacture as a better alternative that manufacturing outside US borders.

Barney Gimbel’s article illustrates that in the fall of 2004, “many of the 40- by eight-foot, 22-ton containers are still sitting stacked five high and ten across on the docks.”⁴ Shipping containers have revolutionized logistics, but with other deficiencies in transportation, intermodal transportation, (more than one mode of transportation) which is a must for Chinese manufactured goods, is seeing bottlenecks. In Gimbel’s article, Matt Igoe, the Los Angeles senior hub manager of the Burlington Northern and Santa Fe Railway, admits that in less than two years, his rails will be at true capacity.⁴ With a deficient rail system, Chinese imported goods have a hard time making it to distribution centers without use of costly truck or plane transportation.

US Manufacturing. By gathering data on costs of production in the US the company can make an educated decision on whether or not to continue operations as is or make adjustments to it.

The team needs to be objective while working on the project to keep out personal or organizations biases, which will lead to a informative presentation.

Limitations

Little to no data currently exists on in-source versus outsourcing of manufacturing of sport boards. Data relating to other industries such as computers and auto parts may not be applicable to board manufacturing hindering relevance. Quantifying costs of a non-existing plant has strong variability.

Footnotes

¹Taylor III, Alex. 2006. A Tale of Two Factories. *Fortune*, September 18: 118-126.

²Kirkpatrick, David. 2006. Dell in the Penalty Box. *Fortune*, September 18: 70-78.

³Serwer, Andy. 2005. The Education of Michael Dell. *Fortune*, March.

⁴Gimbel, Barney. 2004. Yule Log Jam. *Fortune*, December.