

Assignment

The Road to China

A6: The Road to China

<http://memagazine.asme.org/Articles/>

The Road to China (May 2006)

The outsourcing option isn't as cheap or as easy as it looks.

Building Trust (January 2008)

The essentials of doing business with-and in-China can be developed only over the long haul.

Read both articles, select one and write a group essay (500 words min.)

DUE ON April 26

A6 – “The Road to China” Building Trust – The Better Team

Update some of the statistics & knowledge given in 2008 article

In the fiscal year of 2009 there were 14841 seizures of counterfeit goods imported to the United States of America with a domestic value of \$260.7 million. Goods from China accounted for 79% of the total domestic value for all good seizures in the United States. Many economists believe that counterfeit goods comprise 8% of China’s GDP [1].

How do Chinese “see” intellectual property?

Chinese people generally do not give much value to the term intellectual property. Some individuals may not actually even accept that one should even be able to own their ideas. They see “intellectual property” as ideas that many people can benefit from, as opposed to one person or company being the sole benefactor. A Chinese engineer calmly said, "How can a person own an idea? More important than ownership is that large numbers of people make a living from the idea. This is how Chinese people think" [2]. In China, intellectual property has traditionally been freely distributed to the public, and the idea of intellectual ownership is relatively new. Ideas are passed around to improve one’s social status and copying others’ successful works is a fundamental element of their society.

Is this a cultural or an ethical issue?

From a Westerner’s perspective it is an ethical issue that stems from their culture. It wouldn’t be an ethical issue if all of their society was okay with this free sharing, and they only copied ideas from each other. However, when Chinese firms are suing other Chinese companies over the issue, it’s obvious that some people understand the worth and nature of intellectual property and aren’t willing to share their ideas. Also, when operating on a global scale, other countries see it as stealing, and it definitely becomes an ethical issue.

How can a company protect its *IP* when doing business in China?

The first step is to protect oneself legally, this means one needs to know the Chinese intellectual property rights enforcement. It is necessary to get all of the patents and legal coverage required with a law firm that is familiar with the business in China. The second and third steps are not to rush who gets to see the detailed product information and business secrets. Basically, treat all potentially valuable information as a secret that other companies will take at the first opportunity. The fourth step is to hire employees carefully; this means employees’ backgrounds should be thoroughly checked. Finally, the fifth step is to train your new employees with western business practices. It is important to ensure employees have the knowledge of why the protection of intellectual property is important. It is often necessary to include responsibility of protecting secrets in managers’ contracts.

Is the description of *guanxiwang* accurate?

Guanxiwang is an idea dealing with accountability and transactions between several parties. It is basically the transition of an obligation between two companies to a third or multiple companies that weren't previously involved. Instead of seeking legal action to pursue a wrongdoing, one would just go to another company who owes them a favor to fix it. However, guanxiwang is often viewed as a more general network of individuals who promote the general welfare by helping each other when possible [3]. The description given in "Building Trust" takes one aspect of guanxiwang and describes it as being used only to remedy potential legal troubles.

How different is from the West business practices and culture?

Chinese business is based on interpersonal relationships and trust that must be developed over a long period of time. Sharing and mutual benefits between companies takes place once this trust has been developed. This is different from America where trust is a somewhat given quality that can be lost as opposed to something that must be earned in the first place.

Is the description of Chinese working women sexist?

Women's roles in China seem sexist from an American point of view, but this is simply because women were "once devalued in Western culture". As Americans, we pride ourselves on the equality we strive for in society. However, in China, contribution to the group is more important than individual recognition; as such, women are understood to be important parts of society, but do not experience status that rivals male superiority. This seems like a contradiction in Western eyes, but it is an understood part of Chinese culture.

How can we help ourselves (Westerners) to build trust with China?

Becoming more aware of Chinese culture will do a lot to help build better relationships, which the Chinese value so much. **Accepting and embracing that they are an upcoming technological power is key in beginning to build the necessary trust that leads to business cooperation.** Also, acknowledging that Chinese culture has allowed them to become an economic power will help Westerners realize that multiple cultural values are valid, leading to better understanding between the two ideologies.

Do Westerners "understand" China (culture)?

Generally, westerners probably don't understand Chinese culture. Westerners are brought up learning the values of individualism and recognition, something that contradicts Chinese values. It is almost impossible to "understand" another culture; instead, different societies should simply strive to accept other cultures and recognize their contributions and importance to global society.

References

- [1] "China Overwhelming U.S. with Counterfeit Goods." *Homeland Security News Wire*. Web. 26 Apr. 2011. <<http://homelandsecuritynewswire.com/china-overwhelming-us-counterfeit-goods>>.
- [2] Doucet, Mia. "Building Trust." *Mechanical Engineering*. Jan 2008: 1-7. Print.
- [3] "Business Networks in China: Guanxi and Guanxiwang." *China Window - China's Home on the Web*. Web. 26 Apr. 2011. <http://www.china-window.com/china_business/china_business_tips/business-networks-in-chin.shtml>.

EXTRA CREDIT

The China Road

Why do local Chinese companies compete globally? Is it fair or not?

Local Chinese companies are able to compete globally because “Chinese enforce intellectual property (IP) restrictions loosely if at all” [1]. This is an issue when US companies outsource the manufacturing of goods to China due to the cheap labor and results in Chinese competitors selling nearly identical products. It is extremely difficult to remain cost-competitive when the US engineers are doing all of the upfront design and Chinese companies steal the IP. “Roger Wery, practice leader for outsourcing strategy at global management consulting firm Pittiglio Rabin Todd & McGrath of Mountain View, California [said,] “There’s not a single hour of engineering invested in these products by Palm, Sony, Ericsson, and others. They simply put their name on these cost-competitive entry-level products and engineer the more advanced models themselves” [1]. This is not fair, because these Chinese companies are pulling-the-rug right out from under the US companies. Additionally, the US companies get hit twice by paying for manufacturing to be done in China and getting a competitor selling an identical product in the market.

What are the hidden costs of doing business with China?

The hidden costs of doing business with China include “stolen intellectual property, complex supply chains, inflexible manufacturing schedules, and project management” [1]. This overhead for outsourcing is hard to measure and if fully calculated, it’d be hard to tell if the trip to China is worth it. “Nicholas P. Dewhurst, executive vice president of Wakefield, R.I. based Boothroyd Dewhurst Inc. [said,] “I don’t believe anybody yet has a handle on what outsourcing costs truly are.”” A featured article by mechanical engineering, ‘The China Road,’ said, “Many companies also underestimate the time and energy needed to manage products on the other side of the globe or to master the complex [7,000 miles] supply chain from China” [1].

What is an inflexible supply chain?

An inflexible supply chain is one that requires a set amount of time to get from the manufacturing site to the consumer. These can be as long as four to five weeks coming from China. “Aberdeen’s senior vice president or research, Chris Jones, [said] people sometimes don’t understand all the complexity involved with going from truck-based shipping in a single country to cross-border, multimode logistics... We’re talking about goods, passing through the hands of 17 to 24 different parties. They include manufacturers, crate forwarders, consolidators, customs and regulatory agencies, carriers, ports, and more” [1].

References

- [1] Brown, Alan S. "The China Road" *Mechanical Engineering*. Mar 2005: 1-12. Print.

A&M Team – (China) Building Trust

Overall, Chinese culture is extremely different than the culture that we have grown up with and are used to in the United States. There are numerous social stigmas that exist in America that run our moral compasses on a daily basis. These stigmas do not exist in Chinese culture and therefore the decisions made are extremely different as well. It is not a question of whether one is right or wrong; it is an undeniable fact that both cultures are right in their own way. However, due to the fact that these two cultures are extreme opposites, Americans do not understand even the smallest bit of Chinese culture. This is the obvious problem in understanding their business practices and being able to successfully convey our ideas with theirs.

Culture of China affects the way that they do business. Chinese are very relational people, and establishing a good relationship goes a long way when doing business. The reason relationships are so valued is because Chinese depended on relationships to accomplish tasks before their government and banking were reliable. Another difference between eastern and western business culture is the perception of silence. In China, it is socially acceptable to be silent and pause while thinking about what was said while in American culture silence is usually treated as undesirable.

The Chinese people differ from Westerners in their views of intellectual property based on their concept of an “idea.” To Chinese people, an idea is not something that can be owned by an individual. In their minds, the purpose of an idea is benefit a large group of people, so those being benefited should share in ownership of the idea. This leads to the belief that Westerner companies claiming to be there for the benefit of the Chinese people should not own the idea. The idea belongs to all people. As stated in the article “In China, ideas are like air. Would you expect to pay for air?” (Mia Doucet “*Building Trust*”)

Chinese business is based on trust. It takes years to build trust and it can be passed along generations. A complex series of favors and personal relationships is the backbone to Chinese business. Instead of taking issues to the courts, people owe each other favors. These favors can be exchanged between other people and can cross generations. Westerners who work in China say that the women are hard working. However, women are frequently overlooked in the workplace just like they used to be in the US.

Chinese business is built on a foundation of trust, making it imperative for Westerners to build relationships with their business counterparts overseas. However, because of the differing cultural values mentioned previously, building relationships with the Chinese can put Westerners’ intellectual property at risk. When the Chinese ask for a share of the technology, Westerners should exercise their right to refuse the request. Sharing information too early can

cause a company to lose its monopoly on the IP and lose its competitive edge. Westerners should also create well-constructed contracts to protect their products.

References: ???

Building Trust in China

The article was very interesting, to say the least. It was amazing to see the differences in thought between China and the West on Intellectual Property (IP). The article suggested that the concept of IP in China is for the most part disregarded, with China adopting their first patent law in 1986. The West is a culture dominated by personal success, and that's what our idea of China was before reading this article. However, it seems that the Chinese are much more open about their ideas than we are in America.

One of the interesting sections of the article was the concept of “guanxi” and “guanxiwang”. The basis behind both of these concepts is relationships between companies. In China the platform of your business seems to be more based on your connections and network of people you trust, and whom trust you, than on your equity in the bank, so to speak. Here in America it seems to be the complete opposite when it comes to “Big Business”. When you think about companies like “Big Tobacco” and any of the large fortune 500 companies, the last word that comes to mind is trust. The article seems to suggest that without trust and loyalty, you don't succeed in China. Loyalty and trust can only be built over a period of time, and is not an instantaneous process by which you do one favor and gain a large amount of trust. The way in which a company develops trust in the Chinese market is to continually reciprocate acts of service and favors between your company and a Chinese company for an extended period of time. The more companies that you are loyal to, and that are loyal to you, the more “guanxiwang” you accumulate, and apparently, the better you do in the Chinese market. This is an idea that is hard to fathom in our current western market. The American market doesn't operate like this! If you were the first company to step out to try and initiate this relational aspect of business in the western world, you would undoubtedly make your company vulnerable to being taken advantage of.

The last portion of the article talked about things which a company could do to make their IP safer in the Chinese market. The article brought about a good point that it is the responsibility of the company to go through every avenue to protect their IP before entering the Chinese market. Instead of trusting any company you are working with don't disclose your trade secrets, or really anything important for making your product until you develop a lot of trust and loyalty between you and your partner. The basis of the article was different, but very informative. It was interesting and though provoking to see the Chinese viewpoint on IP. It was our initial response to conclude that the Chinese were wrong for thinking this way, but they do bring up a very valid point. If an idea can make the standard of life better for the general public, why should one person or one company own the rights to produce this product? In a very utilitarian view, shouldn't all companies have the right to produce this idea in order to maximize the good of the public? **Again, this is not how we think in America, but to do business in**

China your company has to prepare and acquaint yourself with the practices and mindset of the Chinese Market.

References ???

TO: Dr. San Andrés
FROM: Tyler Lindt, Jack Schommer, Pilar Mondragon, Brice Jackson, Carlos De la Guardia
Subject: Gilligan's Blade – The Road to China
Date: April 25, 2011

China presents both an economic challenge and opportunity to developed nations. Chinese labor is cheap. However, the Chinese do not think like Westerners and their country is on the opposite side of the planet.

First, China's cheap labor has drawn manufacturing work from Western countries. This outsourcing has lowered production costs for some companies. The prevailing opinion states that taking one's business to developing nations like China is always cheaper. This view also holds that those remaining in developed Western countries do so to maintain high quality in complex products or to support nationalism in the West. In actuality, the decision to go oversees involves much more.

The cost of logistics due to outsourcing is easily quantified. The enormous costs associated with product transportation across borders, seas, and continents dwarf those paid by companies that both produce and market in a single country. Not only are costs higher when outsourcing, but schedules are far slower. Communication and implementation across continents leads to long delays and difficult deadlines. Even so, geography is not the only barrier to effective outsourcing.

Building trust in China is paramount to business success. *Guanxiwang*, a complicated network of personal relationships in which individuals are bound to one another through favors is an integral part of Chinese culture. This means outsiders with no connections have trouble creating effective business relationships.

However, building trust with Chinese companies is difficult, given that an estimated 20 percent of Chinese manufactures are counterfeit. This means that many products manufactured for Western companies in China are reverse-engineered and subsequently sold by Chinese companies. Westerners cite intellectual property violations while Chinese call on their cultural axiom: ideas cannot be owned any more than the air we breathe. Intercultural trust will require that businesses bridge this gap.

The price reductions China offers are open to those willing to work diligently to protect their interests, seek cultural understanding, and alter their business model as required.

References:

<http://www.memagazine.org/backissues/membersonly/mar05/features/chinaroad/chinaroad>

<http://www.memagazine.org/backissues/membersonly/jan08/features/building/building>

Last Pick: Hidden Coasts in China

China has definitely become the world's greatest emerging market in today's economy. With that said, China has done some shady things to get there. In the United States, stealing of intellectual property is illegal, but in China it is something that is done daily. This is what China has been doing behind the curtain for many years to catch up with technology in more developed countries. The stealing of intellectual property has led to local Chinese companies competing globally, hidden costs in doing business, and a rough supply chain from the world's new power. These issues have been slowly becoming bigger issues, and are the spotlights of this essay.

The ability for local Chinese companies to compete globally is not something that happened by magic. A clever tactic that China used to achieve this is making special contracts with companies that are looking for offshore services. When a company comes to China to build a manufacturing plant, i.e., offshoring, China will make a special contract with the business. This contract states that in return for cheaper business, production costs, and the ability to manufacture, the business must share their technology with China. This has allowed China to let the United States do the expensive side of business, research and development, and gain from it by using it in their own manufacturing. This allows China to undercut other countries and sell goods cheaper because they did not incur the research and development costs leading to greater sales and profit. This sequence of events is also done by reverse engineering products. In this case, there is no contract to exchange information; China simply does it because they want to. Engineers in China will simply take a product made by another company and "reverse engineer" it, or analyze it so that it can be copied. This lack of intellectual property laws has allowed China to rapidly catch up to the rest of the world in the technology industry and has caused some great

concern. Even though this is not breaking the law in China, is it ethically wrong? I tend to believe that it is, but this is question that each individual will answer for themselves. **Money can change a lot of things, especially one's ethics.**

There are many hidden costs associated with Chinese manufacturing, including complex supply chains, project management costs, inflexible schedules, and most importantly, the potential theft of Intellectual Property (A. Brown). The transfer of technology in return for opening a plant is a major component of IP theft, allowing China to rapidly increase its technological knowledge. Combining the transfer of technology with the philosophy of sharing ideas to improve the country results in competition from within China against the foreign companies from which the technology originated. Special precautions must also be taken to prevent reverse engineering of a product by Chinese competitors. However, because of the limited enforcement of IP protection, Chinese companies to manufacture a nearly identical product for years at a lower cost.

The costs associated with an inflexible manufacturing schedule, due mainly to the complexity and size of the Chinese supply chain results in an inability to react quickly to market changes. It may take 5 to 6 weeks for a Chinese manufacturer to be able to respond to a small change that could be done by a US manufacturer in 24 hours, resulting in a product that is far late to the market (A. Brown). It is also more time consuming to manage a manufacturing project oversees due to distance, language, and cultural barriers. To ensure both the Chinese and foreign company are on the same page, much effort must be put forth through "late-night phone calls, last minute travel, and supply chain monitoring" (A. Brown).

The lack of supply chain infrastructure in China greatly adds to time and cost of doing business in China. In China they lack some of the basic shipping practices that have been used in the States for decades. They often keep a large inventory at midpoints along the 7000 mile distance to The United States to better deal with fluctuations in schedule changes. If the customer requests any changes with the order, the waiting time is approximately 2 months. The 7000 mile distance also plays a huge role in increasing the cost of doing business with China. Keeping track of shipped goods is much more difficult than looking up a tracking number on UPS's or USPS's website. The time difference is 12 hours depending on the location. The added time needed to coordinate with the suppliers is a large hidden cost that many companies fail to realize. Engineers are being paid to work far outside the typical workday to conduct conference calls.

It is difficult to put a price on doing business with China. It is often cheaper to do business with China in the short term, but **in the long term only time will tell**. The ability for small time shops to compete globally by reverse engineering and IP theft is troubling in the big picture scheme, but often fails to attract the attention of day to day business. **As engineers it is our responsibility to examine the price of doing business overseas, and decide whether that will help or hurt our bottom line.**

References ??

Sources

Brown, Alan S. "Road to China." *Www.memaginze.org*. 1 Mar. 2005. Web. 26 Apr. 2011.

The Road to CHINA

Prepared by: **Team Alpha**

China has become one of the largest economic powers in the world in the recent years. It has a current GDP of \$9.8 trillion dollars (US Currency) up from \$ trillion in 2006 and growing at approximately 10% (CIA). The average wages per person in the country is only at about \$7400 US dollars a year, which is up from about \$5000 in 2006. The country is the largest exporter of goods at about \$1.5 trillion dollars worth of goods and services with about 20% of that going to the United States (CIA).

Local Chinese companies can compete globally and have become this large economic power because IP restrictions are not enforced strictly in that country. When companies outsource work to China they are obliged to turnover technological knowledge. This technology passes freely among companies, so local companies do not have to spend large sums on research and development to produce competitive products. **When companies agree to turnover technology in order to do business in China, they cannot expect this technology to go unused.** Therefore anything the Chinese companies do with their technology cannot be deemed unfair.

There are many hidden costs associated with doing business with China. Along with stolen intellectual property there are complex supply chains, inflexible manufacturing schedules, and project management overhead to name a few. As stated earlier, companies that wish to build factories in China must transfer their technology as a component of the contract. With lax intellectual property laws, China can also make knockoffs that can stack up costs to the average consumer trying to find a good deal and buying a knockoff. The complex supply chain that exists when working with China can also raise costs across the board, as more personal are required to assist in the global logistics. These are just a few examples of the hidden costs.

All industry in China works on an inflexible supply chain. An inflexible supply chain is one where the manufacturer makes “batches” of a model and does not produce what the customers or economy is demanding (or not demanding). This type of supply chain is slow to react to schedule changes if they react at all. There is often over-production, inventory wastes associated with keeping dead stock, time spent on transporting items and time spend by workers waiting for materials to appear on the assembly line. Toyota, for instance, **employs the Just-In-**

Time (JIT) philosophy which is exactly the opposite of an inflexible supply chain. They manufacture the number of cars that have been ordered, rather than building a fixed amount of cars each day. An inflexible supply chain would do the later and build 500 cars each day even if the customer demand was not there. This is just one example of how an inflexible supply chain would be used at an automotive manufacturer.

Though outsourcing to China seems to come with many benefits due to cheap labor and manufacturing, businesses can actually lose much more revenue than gain in dealing with the market flaws associated with China. **First and foremost China has little to no protection at all in protecting intellectual property.** Reverse engineering, and employed workers leaking vital information are huge flaws in trusting **the East. China's technology is so advanced and labor is cheap enough where the Chinese can quickly replicate and distribute your product without the owner even knowing.** The second huge flaw in outsourcing to China is that the supply chain is so long that being on schedule is nearly impossible, especially with changes during production. Outsourcing supply chains are incredibly inflexible and any changes to products could take "five to six weeks" to fix, while "a producer in the United States can respond within 24 hours to changes in product mix" Thus with the United states tough intellectual property protection and easy adapting supply chains benefits for outsourcing to China come minimal if any at all and the US can take advantage of this over China.

The long supply chain between China and the United States is still a large economic issue. There is a lot of extra time and energy spent to manage the complicated 7,000 mile supply chain from China. Weeks can be lost in transit, and importers often charge extra money. The long supply chain is also slow to react to schedule changes, making it less than ideal for markets where the newest features and looks count. Outsourcing saves money on paper, but time to market is hurt. Some companies prefer outsourcing in Mexico because they can respond faster to market fluctuations and still save money on labor. **However, as of 2011, United States trade with Mexico has not greatly improved due to issues with labor unions and drug cartel.**

Websites Used

<https://www.cia.gov/library/publications/the-world-factbook/geos/ch.html>

<http://www.memagazine.org/backissues/membersonly/mar05/features/chinaroad/chinaroad>

The LeftOvers: The China Road

As has been a common theme throughout the class, every day the world becomes flatter, with many more countries participating in the production of goods. In this world, producers compete to produce the best goods at the lowest prices. In *The China Road*, Alan Brown addresses the advantages and disadvantages of the current practice of outsourcing and how the Chinese will play into the future of American business [1].

Discussed in the article is the importance of intellectual property. Many Chinese manufacturers are able to produce goods for far less than their American counterparts. However, this often involves the theft of intellectual property, including patents and trademarks. One example used in the article is that of Callaway golf clubs. Chinese manufacturers produce the clubs for a fraction of the price and distribute the clubs through long and complicated distribution networks. These networks are often hard to trace and create major problems for regulation.

While these counterfeits often closely emulate the functions of the authentic products and consumers save significant money in purchasing them, the company that spent the time and money to develop the good is not rewarded for its research and development. To combat this issue, the American government is applying significant pressure to the Chinese to curtail this practice. In the future it will be much more difficult for Chinese manufacturers to poach the ideas, research and intellectual property of American developers.

In addition to governmental pressures, many companies are developing their own practices to reduce the damage done by intellectual property theft. Often, companies will send nonfunctional subunits of projects overseas so their technology will not be poached. The different subunits will be produced separately in China, sent back to the United States and reassembled here, avoiding the possibility of the manufacturer possessing enough knowledge to develop the product on their own.

Some businessmen take it a step further. Even with the reduced cost of manufacturing in China does not provide enough incentive to manufacture in China. They argue that the benefits of a flexible supply chain that comes with a more traditional style of business outweigh the reduction in manufacturing costs. With quickly changing consumer demands and the importance of time-to-market, companies cannot afford month-long downtimes waiting for a product modification. Brown highlights the loss that companies face when goods fail to make it to market by Christmas. Goods that arrive early are sold at full price while goods that are late are significantly marked down and can be sold at cost or even below.

Finally, in the article Brown touched on the important differences between the American and Chinese corporate cultures. In China, few workers view intellectual property as valuable. In fact, Mia Doucet describes in *Building Trust* how the Chinese educational system does not encourage students to cite resources used in their studies. This is completely different from the United States, where students may be expelled for academic dishonesty for the same actions. Thus, Chinese engineers have no moral qualms when reverse engineering a product to produce it cheaper than their American competitors.

While outsourcing to China has some serious issues, including a lack of respect for intellectual property and increased time-to-market, the significant reduction in labor prices will inevitably lead the United

States overseas. The free market should, over time, provide cheaper products to more consumers but may cause problems for American manufacturing.

References: ???

References

- [1] Brown, A.S., 2005, "The China Road," *Mechanical Engineering Magazine*.
- [2] Doucet, M., 2008, "Building Trust," *Mechanical Engineering Magazine*.

The Road to China

The 2005 article is relatively recent, but a look at updated figures shows the economic surge that China has been going through. Since 2005, the GDP of China has grown 65% to \$10 Trillion¹ and has gone from the third largest auto market to the largest market.²

Chinese companies have distinct advantages when it comes to increasing manufacturing output compared to others. Extremely low-wage labor resulting from a large and relatively poor population, a lack of environmental and intellectual property regulations, and an undervalued Yuan all contribute to the booming Chinese economy.³ The large, cheap working population can only be seen as fair as this is the law of supply and demand. However the rampant theft of foreign intellectual property and undervalued Yuan are nothing short of illegal and unethical. Most Chinese companies require foreign companies to bring their technology to China to do business. This combined with lack of intellectual property law has led to widespread reverse engineering, this is literally stealing the work of foreign companies and not fair in the least. In a global economy, all players must follow the same rules to maintain proper order and stability.

Many hidden costs to this cheap Chinese labor are overlooked. The physical distance between China and the United States, combined with Chinese logistic inefficiencies can wreak havoc when a company is trying to reach a deadline for market releases or order customization and repairs. The theft of intellectual property is nearly impossible to calculate but is apparent to everyone that has seen counterfeit merchandise. Every time a product is sold that is counterfeit or produced without permission, the company whose merchandise is copied loses that market share or suffers loss of reputation.

An inflexible supply change results when long distances between markets and inefficient supply chain methods make it difficult for the supply chain to react to changes or needs. An example of this could be when a man in the United States needs to make a change to a production process in China but cannot because the Chinese engineer is asleep, as it is the middle of the night over there. Inefficiencies in Chinese logistics could make a request very difficult to process and implement. The China Road article mentioned that logistic changes within the United States can be met within 24 hours. In China it can require five to six weeks.

The financial wealth of American companies could be used in order to attract the brightest minds of China by paying much higher wages and providing a better quality of life.

Further increasing logistic efficiency and manufacturing process efficiency could take away the low cost labor advantage of the Chinese. If an automated process in the United States can cost less than hiring many cheap Chinese laborers, products can be produced here at a lower cost, with guaranteed logistic advantages.

Within the last 10 years trade with China has exceeded Mexico, however with increasing transportation costs and logistics the U.S. economy is search from geographically closer

production. Mexico's trade benefits include optimizing time frames and the population is more skilled and technologically equipped to handle manufacturing complex products. Despite the high wages of Mexico compared to China the savings on logistics are beginning to overcome the expensive labor in comparison. Mexico is superior to China in efficiency and quickly modifying products and quality control. Trade with Mexico is vastly improving and being thought of as a more viable option as compared to its overseas counterparts.⁵

References

1. CIA, "World Fact Book", <https://www.cia.gov/library/publications/the-world-factbook/> (accessed April 14, 2011)
2. "China Income, China National Income", Economy, Investment & Finance Reports, http://www.economywatch.com/world_economy/china/income.html (accessed April 14, 2011)
3. Brown, Allen S., 2005, "the China Road", ME magazine, March 2005, Feature Article.
4. Kennedy, Simon, "China Yuan Undervalued by 20% Versus Dollar, Peterson Study Says", Bloomberg November 09, 2010, <http://www.businessweek.com/news/2010-11-09/china-yuan-undervalued-by-20-versus-dollar-peterson-study-says.html> (accessed April 14, 2011)
5. Cook, Bob "Mexico Vs. China", Manufacturing.Net June 06, 2008, <http://www.manufacturing.net/Articles-Mexico-VS-China.aspx> (accessed April 14,2011)