Practices of Modern Engineering

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 <u>one</u> and write a group essay (500 words min.)

DUE ON April 26

A6: Questions to ponder

The Road to China (May 2006)

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

Update some of the statistics given in 2006 article

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

What are the hidden costs of doing business with China?

What is an inflexible supply chain?

How can the USA benefit from China's weaknesses described in article?

As of 2011, has trade with Mexico improved? Is the long supply chain still an issue?

A6: Questions to ponder

Building Trust (January 2008)

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

Update some of the statistics & knowledge given in 2008 article

How do Chinese "see" intellectual property?
Is this a cultural or an ethical issue?
How can a company protect its *IP* when doing business in China?

Is the description of *guanxiwang* accurate?

How different is from the West business practices and culture?

Is the description of Chinese working women sexist?

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

Do Westerners "understand" China (culture)?

Other Resources

The WORLD FACTBOOK: World CIA report on CHINA

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

Country facts

http://factsanddetails.com/china.php

http://www.economist.com/countries/China

(+ special report Dec 2010: Friend or foe?)

A (very interesting) Debate

August 4th-14th 2010 — learn more

China model: China offers a better development model than the West?

http://www.economist.com/debate/days/view/553

A recent update from South of the Border

http://money.cnn.com/2009/11/03/news/international/US_dumps_china_for_mexico/?post



FEATURES DEPARTMENTS MARKETPLACE NEWS UPDATE

feature article

the China road

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

by Alan S. Brown

Everyone knows the cheap-imports stories: Automated plants closed. Old line producers now distributing imports. Counterfeit imported goods. Mass layoffs as more production moves overseas.

Any discussion about how U.S. companies are outsourcing manufacturing quickly becomes a discussion about China. China's unusual combination of low wages, modern technology, and an enormous internal market of more than one billion people has forged the world's lowest-cost modern manufacturing infrastructure.

It is easy to see that labor and materials costs are cheaper in China, but it is harder to pin down the costs of stolen intellectual property, complex supply chains, inflexible manufacturing schedules, and project management overhead.

These hidden costs exist. When unmasked, they suggest that outsourcing manufacturing to China is not always a simple decision. In fact, looking for the quick bottom line fix often leads to disappointment.



Emerging mega-market: General Motors officially launched the Cadillac brand in China at Beijing's Imperial Ancestor Temple in June last year.

Today's outsourcing is unlike waves of factory closings in the past. In the 1950s and 1960s, steel, textiles, and shipbuilding began to move overseas. In the 1970s and 1980s, consumer electronics, plastic products, and automotive parts followed.

What's different today is that some low-wage countries have begun to add technology to the mix at increasing rates. Over the past decade, the production of many advanced technology products, from circuit boards to cell phones, began to shift to such emerging Asian economies as Taiwan, Singapore, Malaysia, and South Korea. Much of that work eventually gravitated to China. By 1995, China was exporting more technology products to the United States than it was importing.

Today, says outsourcing expert Ronil Hira, an assistant professor of public policy at Rochester Institute of Technology in New York, China's technology trickle has turned into a flood. "What are our best-selling items to China, where we ran a \$2.8 billion surplus," he asks. "Oil seeds and soybeans. What are China's biggest selling items to us? Computers, electrical machinery, and capital equipment, where Beijing ran a \$50 billion surplus."

The emergence of China as a global market economy is an epochal event. Unlike other low-wage countries, it has a huge and growing internal market of 1.4 billion people—20 percent of the world's population—to support its factories. While vast swatches of the country are undeveloped, many areas are moving rapidly into the new century.

China's economy is huge. It has grown about 9 percent annually for the past 15 years. At \$6.4 trillion, it is nearly 60 percent as large as the United States and almost twice as large as third-ranked Japan. It has become the third-largest trading nation, after the United States and Germany. Over the past decade, 120 million Chinese have moved to cities to feed its factories.

Although the average Chinese income is equivalent to only \$5,000 per person, it is not distributed evenly. Along China's rapidly developing coast, income is twice the countrywide average. China's middle class, more than 100 million people strong, is larger than the entire population of Germany and somewhat smaller than that of Japan.

It has a huge appetite for consumer goods, such as cars. At five million vehicles, it is the world's third largest auto market. General Motors Corp. alone sold nearly half a million cars there in 2004. People who have visited

As of 2010 - the information shows China is the 2nd nation

Beijing say it has gone from a city of bicycles to a city of cars in less than five years.

Corporations from all over the world want a slice of this lucrative market. China is happy to oblige them—with one significant condition: Companies that build factories in China must transfer technology as part of the deal.

Most businesses, from behemoths like GM to small firms like composite golf club maker Aldila Inc., are eager to comply.

While most of China's new factories serve the local population, many others export. More than half of all Chinese exports to the United States are from factories owned outright or partly by Taiwanese, Japanese, and U.S. companies.

The result is something new under the sun: low wages and a thriving internal market harnessed to advanced technology. Once in China, new technology tends to move freely. Chinese enforce intellectual property restrictions loosely if at all. As a result, even local Chinese companies can often compete globally.

Many are no longer competing with cheap knockoffs, low-quality goods, and labor-intensive assemblies. Instead, they are making high-definition televisions, computer displays, third-generation cell phones, and computer and networking hardware. Those high-tech products are growing faster than other Chinese exports to the United States.

Chinese original device manufacturers now engineer and manufacture everything from cell phones to PDAs for some of the world's largest c onsumer electronics makers, according to Roger Wery, practice leader for outsourcing strategy at global management consulting firm Pittiglio Rabin Todd & McGrath of Mountain View, Calif.

"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 entrylevel products and engineer the more advanced models themselves."



Shanghai GM began exporting a 10-seat version of Buick GL8 executive wagon to the Philippines in 2001.

Yet China is increasingly competitive at technology's edge. In December, for example, Huawei Technologies Co. Ltd., China's largest telecommunications provider, signed a deal to build a third-generation mobile phone network to Telfort BV, the Netherlands's fifth largest mobile carrier.

"Wireless was an area where the United States and Europe were leading," Wery said. "Korea and China have closed the gap and are priced aggressively. If we don't have an IP lead on them, how long can we justify our cost advantage?"

Low-cost labor and high-tech manufacturing have made China the leading destination for companies looking to cut costs by outsourcing production. In the past, RIT's Hira said, U.S. companies would have fought to protect domestic production.

Today, businesses embrace offshore outsourcing to cut costs. Some buy from Chinese producers. Others build their own factories or joint ventures. Even companies that want to keep manufacturing in the United States may feel forced to look offshore to remain competitive.

If China's advantages are well understood, not all of its costs are immediately obvious, according to Nicholas P. Dewhurst, executive vice president of Wakefield, R.I.-based Boothroyd Dewhurst Inc. Dewhurst works with companies that use his software to reduce manufacturing and assembly costs. Many compete or outsource to China. "I don't believe anybody yet has a handle on what

outsourcing costs truly are," Dewhurst said.

"Let me give you an example," he said. "On the way to Cincinnati, I overheard someone say he had just bought a set of Callaway Golf Clubs and a bag for \$250. That's a bargain because the bag alone usually goes for \$350.

"There was a problem, and he sent them back to Callaway for repair," Dewhurst said. "Callaway wouldn't touch it. It was a Chinese knockoff, copied right down to the patent numbers. How do you, as Callaway, capture the cost of that?"

Although Callaway was not able to verify this specific incident, a spokesman said the company would not repair counterfeit articles. According to a press release issued early last year. Callaway pursued enforcement actions in 11 countries in 2003. The actions involved 37,000 individual counterfeit products, including golf clubs, clothes, and bags. The company said one case, which resulted in a criminal charge against a U.S. reseller, was traced back to a supplier in China.

The cost of stolen intellectual property and lost opportunities is not as easy to calculate as the cost of labor when deciding whether or not to outsource. Many companies also underestimate the time and energy needed to manage projects on the other side of the globe or to master the complex supply chain from China.

Few hard numbers about the true cost of doing business in China are readily available. Recently, however, firms such as Pittiglio Rabin Todd & McGrath and supply chain consultant Aberdeen Group Inc. of Boston have conducted studies that are examining some of these issues.

The 7,000-mile supply chain that stretches from China to the United States is the most obvious place to dig for hidden costs.

"Logistics costs in the United States are below 3 percent of revenue," according to Aberdeen's senior vice president of research, Chris Jones. "Our study found companies in China were paying from 6 to 12 percent of revenue, depending on product and factory location.

"People sometimes don't understand all the complexity involved when going from truck-based shipping in a single country to cross-border, multimode logistics," added cost due to long & inefficient transportation and storage

Jones said. "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."

It is easy to underestimate potential revenue losses when bringing products into the United States. Last holiday season, for example, companies struggled to bring goods to market by Christmas. For some, port backups made the difference between full price or profit-eating markdowns.

Jones found that 42 percent of the firms he studied took more than 60 days to receive an order from China, compared with only two weeks in the United States. Surprisingly, 89 percent of the firms with the longest lead times also had the highest logistics costs.

"You'd think slow shipments would be cheap, but it indicates that they don't know how to run their supply chain," Jones said. "They are the ones paying extra for expedited shipping or writing off their Christmas revenue."

Wery at Pittiglio Rabin Todd & McGrath agrees. Companies frequently spend more on air shipments than planned. This makes up for <u>inflexible supply chains</u> that have four to five weeks of products in transit at any given time. Importers often tie up extra money in inventory to guard against shortages.

Extended supply chains are also slow to react to schedule changes, Wery said. "A producer in the United States can respond within 24 hours to changes in product mix, such as color, packaging, and delivery location," he said. "In Mexico, it takes about three or four days. In China, they need five to six weeks."

That creates huge problems for companies in markets where new looks and features count. "If you're six months behind the market leader, your revenue potential could be cut in half," Wery said. "On paper, outsourcing saves money, but your time to market is not guaranteed.

"Right now, we're working with a client that is doing systems engineering in California, writing software in Russia, and manufacturing the electronics in Malaysia. All the back-and-forth between different time zones impacts time to market. They might have been better off spending 20 to 30 percent more for the product and getting to market earlier."

Because the <u>supply chain is so long and rigid</u>, most successful practitioners limit outsourcing to products or standard components that rarely require changes and have established, predictable markets. Others prefer near-shoring in places like Mexico, where they save on labor but can respond faster to market fluctuations.

Intellectual property is a major concern for anyone who does business in China. The Callaway golf clubs are only flotsam in a flood of knockoffs that deluge the United States each year.

"IP is an issue in China and in the Asia Pacific region, and it's nothing we should be shy about," said Kevin Elgood, engineering director for TRW Automotive Holdings Corp.'s Asia Pacific Technology Center in Shanghai, China. "They do reverse engineering and they have little regard for IP."

One of the reasons TRW established its own engineering center in China was to give the company more control over its own and customer's intellectual property. Even so, advanced technology development remains in the United States; Chinese engineers adapt the designs to local markets.

This helps, but it is no sure solution, according to Wery. "If you have engineers offshore, they become prime targets for Chinese companies seeking to hire talent," he said. "Poaching happens, so you're never completely protected."

Companies have other ways to protect themselves. They slice projects into modules, retaining value-added systems engineering at home, while outsourcing mechanical engineering, electrical engineering, and manufacturing to different vendors. This keeps any one company from reverse engineering an entire product.



CNC machining centers (above) at TRW's plant in Langfang. The company makes parts, including brake calipers (below) for automakers selling vehicles in China.



Other companies send out only low-value work. "Take tools and dies, for example," said automotive analyst David Cole, chairman of the Center for Automotive Research in Ann Arbor, Mich. "You can do the rough cut anywhere in the world. You just pick who has the lowest price. It's the sophisticated fitting of the dies in the plant that adds value, and you have to be on the scene to do that."

Developed nations continue to pressure China to fully enforce patents and other intellectual property protection. Some companies have hired investigators to collect evidence. Even when China shuts down violators, many simply relocate elsewhere.

It takes management time and energy to overcome offshore outsourcing's distance and cultural barriers.

"There is a cultural difference," said Craig Hergenroether, chief information officer of packaging equipment maker Barry-Wehmiller Cos. Inc. of St. Louis. "We deal with brilliant people, but they'll say yes to everything.

"You'll ask them to do something you know is impossible and they'll say, ÔOh, no problem.' Then they'll work 20-hour days, and when they miss a deadline, they'll say they worked very hard," he said. "Experienced companies have worked through these problems to develop better communications."

Wery agrees. Companies need a "high-touch" approach to avoid misjudging the effects of language, culture, and time-zone challenges on product cycles and production planning.

Many firms are unprepared for the amount of project management—including late-night phone calls, last-minute travel, and supply chain monitoring—needed to bring an outsourcing relationship up to speed. It may take months or even years of heavy travel to ensure that both parties understand one another. Even then, companies need strong, consistent internal processes to avoid problems.

Sometimes, Chinese companies cut corners to meet price expectations of foreign customers. "Those businesses are often very entrepreneurial and not very mature," Wery said. "They do not have established processes, infrastructure, training, or management. To achieve cost targets, they need to cut corners and end up doing things you would never do in the U.S., especially in environmental areas."

Some Western firms look the other way. Others cannot afford to. They remember how low labor costs led to consumer boycotts against companies like Nike and Ikea during the 1990s. They worry about consumer reaction to charges of military-enforced labor or toxic disasters. Still, said Wery, it is an uphill battle to impose key metrics beyond those relating to cost.

China's combination of low labor costs and modern technology—aided by lax intellectual property enforcement—makes it a manufacturing powerhouse. Its increasingly prosperous internal market enables efficiencies of scale.

An outsourcing study by Pittiglio Rabin Todd & McGrath found 65 percent of companies that outsource manufacturing offshore are satisfied with their relationships.

Yet only 4 percent of the 150 executives surveyed were "very satisfied" with their offshore manufacturing relationships after less than one year. Even after five years, that figure barely doubled to 9 percent. Only after more than five years did the number of "very satisfied" customers rise to 23 percent.

It takes time and commitment to make Chinese manufacturing relationships work. In some cases, they may not work at all. As companies learn the hidden costs of outsourcing, they may find it does not yield the promised savings. This is especially true for products that require customization, proprietary technology, or quicker reaction to market trends.

Auto analyst Cole predicts that the flexible U.S. economy will adjust to China just as it adjusted to Japan during the 1970s and 1980s.

"When we studied how Chinese manufacturing impacted the auto industry in Michigan, we first saw China as a competitor," he said. "But you can't go head-to-head with China due to labor costs. Instead, we're now looking at China as a partner.

"The auto industry is in the middle of adopting a new business model that involves collaborating in real time across nontraditional boundaries," Cole said. "This creates threats and opportunities. The threat is that they will come after our markets. The opportunity is that China's new wealth will create a middle class market for us."

That is, of course, classic economics: Every country benefits from free trade. But that doesn't mean every industry and every business will benefit. The struggle of manufacturers to bounce back from the latest recession may be proof that a shakeout is in the works.

It is far from clear who the winners and losers will be.

Still Waiting for the Bounce

The United States' manufacturing trade deficit reached \$401.3 billion in 2003 and grew 17 percent during the first 11 months of 2004.

At the same time, U.S. manufacturing output rose only 7 percent in the three years since the end of the 2001 recession. That's about half the bounce following the 1991 recession, and far below the 20 to 30 percent rebounds that followed the recessions of the 1960s, 1970s, and 1980s.

Meanwhile, manufacturing employment, which reached 17.2 million in 2000, fell to 14.4 million by 2004. Although the U.S. economy created 2.1 million jobs last year, only 76,000 of them—less than one out of every 25—were in manufacturing. Unemployment rates among engineers are the highest in modern times.

Some economists claim that a more robust recovery will ignite a manufacturing boom. It will certainly help. Yet, if the past is any guide, an economy that grew 4.4 percent and generated 2.1 million jobs should have jump-started manufacturing.

Is outsourcing causing a fundamental shift in manufacturing? A recent study for the U.S.-China Economic and Security Review Commission, which monitors China trade for Congress, finds the United States lost 1.5 million jobs to China between 1989 and 2003. Initially, the greatest impact came in low-tech industries like apparel and shoes. Today, the greatest rate of loss is occurring in industries once considered relatively immune, such as electronics, computers, and communications equipment.

This echoes an earlier study completed by the commission in mid-2004. It found the pace of job shifts overseas has picked up over the past three years. It estimates that as many as 406,000 jobs may have left the United States in 2004, about double the number in 2001. About one-quarter of them went to China.

Alan S. Brown is a freelance writer and frequent contributor to Mechanical Engineering. He lives in Dayton, N.J. By the third quarter of 2008, the US entered into a severe economic recession. You and I are living through it.

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FEATURES DEPARTMENTS MARKETPLACE NEWS UPDATE

feature article

FEATURE FOCUS: GLOBALIZATION

building trust

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

by Mia Doucet

there's he U.S. Embassy in Beijing publishes on its Web site the information that, on average, 20 percent of the consumer products in China are counterfeit.

The site is an embassy service called the "IPR Toolkit," a handbook for protecting intellectual property rights in China, a country that got its first patent law in 1984.

China, the embassy site tells us, was the number one source of counterfeit products seized at the U.S. border in 2006. And China's counterfeiters are not only knocking off the products of Western companies. People in the know will tell you that the overwhelming majority of Chinese intellectual property rights cases issue from Chinese firms suing other Chinese companies.

The central government in China says that it is pursuing stronger policies and increased enforcement, and that it employs more than a quarter-million people to police IP, but the problem is getting worse, not better. China is a big country and, apparently, it is especially difficult to police intellectual property infractions at the local level.

Rather than waiting for Beijing's policy to trickle down to local government, a company can take its own precautions to protect proprietary technology. This starts with looking deep within the fiber of Chinese society to understand why IP problems occur.

Ideas in the Air

I was introduced to the Eastern viewpoint of IP by a thoughtful, sophisticated Chinese expatriate engineer. I

was discussing international trade with a group of executives. The issue came up about the lack of Chinese court protection for a company's proprietary secrets. At the end of the meeting, the 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."

There it was, in a cultural nutshell: How could a Western company, claiming long-term commitment to China, put a price on technology that could benefit the entire country? To the Chinese mind, an idea is not something you can own or sell. Ideas belong to everyone. In China, ideas are like air. Would you expect to pay for air?

Not only is there no stigma in sharing information, but it adds to one's social capital. People look for opportunities to share. That is why—until recently—no legal framework existed for protection by patents, copyrights, and trademarks.

Moreover, copying is embedded in the culture. Chinese students are taught to reproduce thoughts, right down to using a master's words without citation. (In fact, citations hardly are ever used, even in Chinese higher education.)

Finally, China's new culture of greed encourages getting rich at any cost. The Chinese are energetic and mercantile. They were poor and suppressed for so long that it is not surprising that some of them want to make up lost ground at any cost.



The Chinese can also prove to be very, very loyal

employees. In fact, China's business culture is based on trust, but a type of trust very different from the Western meaning of the word.

For Asians, building trust takes a long time. You have to prove yourself over and over. Without that level of intensity, there is no loyalty. You either have trust, or you don't. There appears to be no middle ground.

Westerners trust more freely in business relationships. We've been taught to trust at home and at school. We're prosperous and haven't had to live by our wits to survive. And our legal system backs up our written agreements.

Chinese often do business through close-knit webs of trusted relationships. These relationships may span generations. This is called *guanxi* (pronounced "gwan shee"), or personal connections. *Guanxi* extends beyond the simple exchange of favors between two people. It is a form of currency that can be amassed and exchanged. One does the other a favor. This creates a tacit obligation for the other person to reciprocate at a later date.

Guanxiwang describes a complex network of interlinking exchanges or transactions that occur when other parties become involved. Person A owes an obligation to Person B, and fulfills that obligation through Person C (or D, E, F, and beyond). The system sustains itself through reciprocity and mutual benefit to both parties.

Let's say someone fails to honor a business commitment. Rather than rely on a legal action, you call on someone who owes you a favor. Until recently, all business was done through such relationships, because China had no legal or banking system that one could count on.

Some people would argue that personal relationships play a less important role in business today. Yet every single person I have spoken to in more than 2,000 hours of interviews believes that personal relationships are still the key to business success in Asia.

The get-rich-quick mentality is not unknown in China, but the majority of Chinese would rather do business with those they know well. Guanxiwang based on trust can be your protection against corruption. But always remember: If you don't take the time to put the relationship first and hang in for the long haul, you are likely to remain an outsider and fair game for reversals of fortune.

Differences in Eastern and Western culture can also play to our vulnerabilities. Take silence, for example. Silence is a natural part of Chinese communication. It is considered useful, a time to think and process information and explore what is being said.

The Meaning of Silence

Most Westerners find silence uncomfortable. Our impulse is to fill the voids in a conversation. What do most of us do when confronted by silence? We open our mouths and say too much.

Most Westerners would rather take shortcuts than miss out on China's booming market. A high-ranking official in the commercial section at the Canadian Embassy in Beijing told me that many firms cut corners in order to expedite the approval process for doing business in China:

"Many fail to take steps to protect their intellectual property rights and do not register their trademarks or their patents," the official said. "Some fail to carry out due diligence on partners, agents, and/or distributors, and others fail to include clear contractual protection for all intellectual property. In most cases, infringement is made by a partner, distributor, or former employee. In many cases, what appears to be only an IP problem turns out to involve contractual problems."

Protecting Property

There are many steps Western firms can take to protect their intellectual property. Here are some of them:

First, protect yourself legally. Whatever the shortcomings of Chinese intellectual property rights enforcement, this is where you start. Consult a law firm that does business in both China and your home country. Cover all the bases because your Western business instincts are unlikely to pull you through. And make sure you register your own intellectual property. Never allow a potential distributor or business partner to register your IP.

Second, do not rush to share your technology and

business secrets. In the early stages of a relationship, your hosts will be trying to learn as much as possible from you. Remember, anyone with whom you share information is a potential competitor. You need to understand what they ultimately want. What is their strategy? Where are they going with their request?

Short-term gain is not just monetary. You may, for example, hope to get the relationship going by providing a specification and hope that the Asian party will appreciate the favor and reciprocate. As a friend of mine says, "Ain't gonna happen." Don't feel you have to say yes to every request.



Third, protect your product knowledge. As a general rule, don't give specifications until you're well past the courtship stage of the relationship. In the early stages, make generic presentations that show relationships between concepts or percentages. Do not disclose

exact figures and specifics.

A potential client who asks for samples may want to copy them. If prospects need a sample, see if you can run a demonstration at your Asian facility. If you must lend samples, do so for a fixed amount of time—enough to verify performance, not enough for a teardown analysis. Do not share your validation and analysis tools.

If you e-mail drawings for quotation or approval, sanitize all identifying information. Remove business names, phone or fax numbers, engineers' names, device titles, part numbers, or any other information that someone could Google to learn more.

Fourth, hire carefully. The loyalty of your Chinese

employees may depend on your hiring practices. Do not hurry to hire. Screen more carefully than you ever have done before, and remember that people in support positions have access to vital information.

Covert, unofficial background checks are fairly easy to do in China. This is one area where a well-connected trusted liaison can be worth his or her weight in proverbial gold.

People with international degrees are more aware of acceptable Western business practices. It is an advantage to hire right out of school, so that you can instill your own company's values rather than inherit the work practices of others. Pay employees well, so they have a strong economic incentive to remain loyal.

Women are often overlooked for all the reasons they were once devalued in Western culture. Yet the consensus among Westerners who teach in China is that the women are focused and work hard.

When you hire senior managers, make sure their contracts make them responsible for protecting your trade secrets. Introduce policies that create personal connections built on trust, and spend time during and after work to reinforce them.

Fifth, train. Educate your Chinese employees in Western business practices. Indoctrinate them into your corporate culture. Educate your Eastern—and Western—employees with access to confidential information about the risk of IP theft and how they can personally protect against it.

It is easy to blame the Chinese for their IP transgressions. But the onus falls squarely on Western companies to do everything they can to keep their intellectual property safe.

Mia Doucet is the founder of Asia Mastery, a firm that advises technical companies dealing with cross-cultural issues in Asia. She is based in London, Ontario, and operates a Web site, www.miadoucet.com.

This article is abstracted from her forthcoming book, Are You Giving Away Your Million Dollar Secrets? For more information on the book, contact the author at mia@miadoucet.com.

"IPR Toolkit: Protecting Your Intellectual Property Rights in China" can be found on the Web site of the U.S. Embassy in Beijing at http://beijing.usembassychina. org.cn/protecting_ipr.html.



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