Once considered the “workshop of the world,” China now seems to be losing its cache as an unstoppable manufacturing powerhouse. Rising costs in China are forcing manufacturers to relocate their operations elsewhere to even lower cost labor countries such as Vietnam and Indonesia. For some companies such as Apple and GE, some production is moving back to its roots: the United States.

Even the US government and individual State governments are offering incentives and encouraging companies to consider reshoring. During the January 2013 State of the Union Address, President Obama announced the White House Initiative to support reshoring projects by US manufacturers. The camera panned Tim Cook, CEO of Apple, as President Obama described what Apple is doing to re-create domestic manufacturing jobs.

“As the consumer electronic world was never in America, it’s not about bringing it back, but starting it here.” said Apple CEO, Tim Cook. Mr. Cook proudly announced the return of manufacturing to the US, stating that some Apple products, such as the Mac lines, will be manufactured solely in the US in 2013.

The U.S. manufacturing sector has added 430,000 jobs since 2010; a small trickle of what we need to recover, but still a move in the right direction. Companies that are reshoring include some of the nation’s largest manufacturers: General Electric, Ford, Caterpillar and NCR. A 2012 study concluded that reshoring could add 2 million to 3 million jobs and an estimated $100 billion in annual output to a range of industries by the year 2015.
But bringing manufacturing back isn’t as easy as you may think. There are a host of considerations and analyses that companies must do to determine the costs and feasibility of reshoring. Several of the important factors in the original offshoring decisions have dramatically changed.

Cost Increases

These days, there is virtually no wholesaler, retailer or OEM in the industrialized world that is not sourcing some, if not all, of its products from China. All supply chains seem to start, lead through, or finish in China. The advantages of low cost production for export, a competitive and aggressive clustering of second and third-tier suppliers combined with the enormous potential of its internal fast-growing market has created amazing opportunities in China. From “Made in Hong Kong” in the 1970s to “Made in Taiwan” or “Made in Singapore” in the 1980s to “Made in China” the trend of outsourcing manufacturing has been relentless. We think it will continue to other low-cost countries only when there is a high labor content in production or high transportation and logistics costs due to weight or volume of your products.

Once automation is added into the production equation, the cost picture dramatically changes. Through the use of new technologies and software and innovation, costs can be brought down to a reasonable level. Add in the reduction in global logistics costs and suddenly, America looks pretty competitive.

There are other costs to be considered including your supply base which is likely to now be clustered around your Chinese manufacturing sites. These suppliers and tier 2 and 3 manufacturers will have to open shop near your proposed US facility. This is an often overlooked cost that may drive up the price of your raw materials and will certainly add to the complexity of the supply processes. It comes as a surprise to many companies that the supply base has disappeared from the US and will have to be rebuilt to support domestic manufacturing.

Your total landed cost calculations for US manufacturing should take these supply base and logistics factors into consideration, plus the regional cost of doing business in the United States. Some labor rates in the places like the Southeast and Northern US are considerably lower than the US coastal regions. In addition, States are starting to offer tax incentives and other assistance to locate manufacturing there. These offerings can make a significant difference in your decision.

Determining your tipping point when alternate manufacturing locations become cost effective is the first and probably the most important part of the analysis.

Innovation

The pace of innovation in new materials, increasingly sophisticated digital electronics and manufacturing technology such as 3D printing, has never been faster. To evaluate reshoring possibilities, you should consider the current state of your global manufacturing as well as the opportunities for manufacturing innovation.

First consider new projects and engineering improvements in the works. For example, are you implementing SAP or Oracle and will these systems provide new data or drive manufacturing efficiencies? What benefits will be derived from implementation in the US?
Consider what new automation or manufacturing hardware could be added to your production environment. As long as you are considering a new manufacturing profile, why not consider the latest machines and shop floor layout? These considerations will add to your overall efficiency and keep your costs at the lowest points. Evaluate the newest and most interesting break-thrus such as 3D Printing, which may make sense for part of your manufacturing line. 3D printing is the way of the future and should be given careful consideration. New equipment may qualify for special tax incentives making the upgrade even more attractive.

Innovation will help you remain competitive and create the lasting benefits that help to sustain manufacturing capabilities in America.

**Market Access and Localization**

You should not look at your reshoring decision as a binary one. It is not a matter of manufacturing here vs. there, but rather a more strategic look at global manufacturing locations. Manufacturing close to customers allows companies to reduce lead times and keep up with the market’s constantly changing demands through localization and customization.

China is a rapidly emerging major market for US-branded goods. The middle class alone is 350 million people and growing rapidly in China. Other Asian nations are also developing rapidly, resulting in Asia as the largest growth market by far, of any region in the world. These Asian current and future customers will be important to your company’s global sales. Your manufacturing strategy should take this market and others into consideration before making location decisions. A multi-region manufacturing strategy is the most popular approach.

Access to Chinese customers may require that you locate manufacturing inside of China. The US “Buy American Act of 1933” drives purchases of goods and services by the US government to American manufacturers and providers. Similarly, China has “Buy Chinese” law, as do many other nations of the world. If you are manufacturing inside of China and selling to the government or State Owned Enterprises (SOEs), you should consider keeping a significant portion of your manufacturing there. This will assure your future opportunities to sell your products in China.

Gathering and analyzing market data and determining key trends is critical to manufacturing location and localization decisions, particularly for consumer products. For example, you may be manufacturing and selling mint-flavored toothpaste in the US, and tea-flavored toothpaste in Asia. Localization decisions related to culture and taste may be obvious, while other localization decisions are not. You may want to produce a low-end product for the developing Chinese market, and a more sophisticated, precision product for the American market. You should take into account your entire product line and the perception of quality for your products in the global marketplace before making such decisions.

**Skills**

Manufacturers are finding that even though they want to manufacture in America, the skills and knowledge have been slowly offshored over the past 20 years. Some skills and know-how simply do not exist in the US anymore. This is particularly true for entry-level and mid-level jobs that require
specialized labor. These jobs were shipped overseas and no new skilled workers entered the US workplace. You may have to import workers to the US to teach local workers or develop training programs for specific jobs.

American Community Colleges in particular, have risen to the challenge of training workers in manufacturing skills that do not require a four-year engineering degree. It is critical to your evaluation to determine what skills will be needed and where the workers will get training. Partnering with local Community Colleges is one way to solve this challenge.

You may have been managing engineering and development in the US, separated physically from manufacturing in China. Leverage the knowledge of these people first, to define the skills requirements. You will also need to take into consideration your global organizational structure. Will Product Development and Engineering continue to be located in the US or is it time to consider a more global organization with vertical skills in every region?

Political Environment and Public Sentiment

We know tide of public sentiment towards outsourcing has sifted as a result of the economic downturn and lingering unemployment. Federal and State governments have jumped on this bandwagon with incentives and programs to support reshoring.

Although initiated by the White House, various federal initiatives to bring manufacturing back have bi-partisan support. Here are the main tenants:

• Partnering with businesses and communities to invest in American-made technologies and American workers through a network of new Manufacturing Innovation Institutes
• Ending tax breaks to ship jobs overseas and making the U.S. more competitive
• Bringing Jobs Back Partnership with Communities.
• Leveling the playing field and opening markets for American-made products

The tax and other financial incentives offered by State and Local governments are particularly important to your analysis of the total financial picture. Be sure to contact local organizations and governments for information in your area.

To rebuild a strong America, we need to bring our manufacturing underpinnings back. To do so, consider all aspects of the decision and think strategically about the future.