Reshoring: Reassessing the Offshoring Strategy

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Abstract

This paper examines the motives behind the growth of the offshoring movement embraced by most American manufacturing firms beginning the late part of the 20th century. The motives behind the offshoring trend started as a basic move to reduce the labor costs of manufacturing. It later evolves into a new business model for organizational growth and expansion into the global markets.
But, beginning about 2010, the offshoring movement began to be replaced with a trend to bring manufacturing jobs back to the U. S. A. This became known as the reshoring movement. This paper examines the forces behind the reshoring movement as well as some of the reactionary forces and obstacles which the reshoring movement will have to address if it is be become and remain as a sustainable business strategy for American manufacturing.

Introduction

The United States has for a long time been exporting manufacturing jobs to Central and South America, Asia and Eastern Europe to take advantage of dramatically lower wage rates. This was a strategy many U. S. firms adopted to control their production costs and to remain competitive in the global markets. This "offshoring" trend was accelerated with the passage of the North American Free Trade Agreement (NAFTA) in 1994 and the economic reformation of the China through their embrace of capitalism and became a market economy in the late 1990's.
Offshoring continued to expand with little effective opposition until our Great Recession of 2007 when the net benefits of the offshoring strategy were questioned by the millions of unemployed workers and subsequently reassessed by many U. S. manufacturers themselves. Beginning in 2010, a number of major U. S. manufacturing firms such as General Electric, Whirlpool and Caterpillar Inc., for example, started announcing that they were bringing manufacturing jobs back home. This paper summarizes some of the significant forces behind the reassessment of the offshoring strategy and the resulting reshoring trend. Finally, this paper identifies and discusses some potential barriers to the continued growth of the reshoring movement which need to be considered and effectively dealt with for this trend to continue.

The offshoring movement

In the beginning offshoring in the U. S. was viewed as a way to reduce the high cost of operating; and, to remain competitive a growing global market. Many companies were exploring the world for location-based advantages with respect to manufacturing activities. The decision to implement an offshoring strategy was a "bottom line" decision, i.e., a labor cost saving tactic. This was the apparent driving force behind the passage of the 1994 North American Free Trade Act. The basic logic behind the Act espoused by President Clinton was that by

exporting American manufacturing jobs to Mexico the United States, with the reduced labor costs, could remain more competitive in the global market thus boosting the economy and creating more jobs than lost (Scott, 2013). In response to the worsening economic conditions of 2007, to remain competitive, many more businesses sought to gain a competitive advantage by outsourcing more jobs overseas to reduce he direct labor costs of production. GE, for example, was following the same path. In 2008, GE's CEO Jeff Immelt decided that GE would abandon their Appliance Park in Lexington, Kentucky. At one time, GE's Appliance Park's employed nearly 25,000 manufacturing workers and by 2007 the Park was down to less than 2000 workers. GE was prepared to shut the 900-acre property down and "spin it off" to real estate developers (Douglas, 2015).

Over time offshoring companies discovered those countries with low labor costs could also provide good worker productivity, lower energy costs, close proximity to their suppliers, and other unique resources. Supporting this position are the Duke University Center for International Business Education and Research along with Archstone Consulting. They joined forces in an ongoing study of 104 large and small American firms. What they learned suggests that it is not just cost saving that has been driving the offshoring trend. Figure 1 below reveals some interesting findings.

First, as no surprise, 97% of the participants of the study saw offshoring as a "cost reduction" strategy; 71% saw offshoring as an effective way of dealing with "competitive pressures"; and, 52% perceived offshoring as a basic "industry practice". But some other issues pointed out in this data suggest a more comprehensive business model or strategy has developed with offshoring, one that went far beyond simple cost reduction, competitiveness and industry practice.

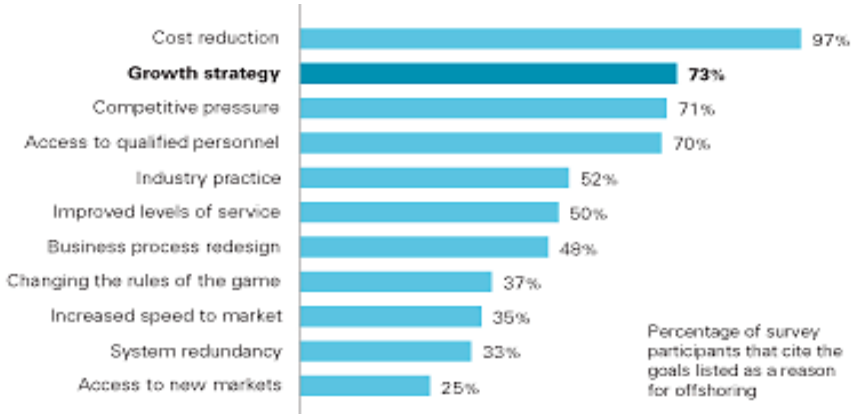

Figure 1: Percentage of survey participants that cite the goals listed as a reason for offshoring

The study revealed that 73% of respondents viewed offshoring as a comprehensive "growth strategy", i.e., expansion of production and markets without a major capital investment. The researchers suggested that firms who initially offshored manufacturing jobs were "often surprised by the quality of the work" and the existence of a "very able talent bank" that was available in China. This new awareness lead U.S. firms to seek additional growth opportunities relying more and more on Chinese engineers for process improvements and ultimately for suggestions for product development for the Chinese markets (Lewin and Peeters, 2015).

Offshoring as a new and growing business strategy was having a crippling impact on the American economy. One critically important index for the manufacturing sector of the U. S. economy is the Institute for Supply Management's *Manufacturing Index*. This index is a composite of several key indicators of the health of the manufacturing sector. An index score of greater than 50 suggests growth in the manufacturing sector of our economy. An index below 50 suggests a contraction; and, below 41 indicates a recession. By October 2007 U. S. manufacturing index had fallen to **38.9** down from 43.5 in September 2007. This was the lowest reading for the index since May 1982 (Rooney, 2008). The manufacturing sector of the U.S. economy was in recession.

The Reshoring Movement

With the Great Recession many working class and middle class Americans were suddenly unemployed with little prospect of finding a new job. The number of Americans with a job as a percent of the total population, the Employment-Population ratio, went from approximately 63% of the population 16 years and older in 2007 to 58% in 2010 as reported by the Bureau of Labor Statistics (BLS, 2015). The drop in this ratio represents a sharp rise in unemployment started a popular movement to bring those exported jobs back to the United States. Some politicians as well joined in the call. For example, in April 2012, U.S. Senator Debbie Stabenow introduced the Bring Jobs Home Act, which would provide tax incentives to assist with the cost of reshoring jobs. However, this bill and others like it never came to a vote, they were "killed in committee". (Govtrack, 2012).

But, even without the government incentives to bring jobs home again some business did begin the process. For example, Tim Cook, CEO of Apple, announced plans in 2012 to resumed manufacturing in the U. S. with a new $100 million facility. Similarly, GE reconsidered their position on offshoring and invested $800 million in the resurrection of Appliance Park, in Louisville, Kentucky. There GE opened a new assembly line to build high-tech, low-energy water heaters. Then GE started a second assembly line to make new high-tech French-door refrigerators. Jeff Immelt, GE's CEO stated at an event celebrating the return of these jobs to Lexington, Kentucky: "I don't do that because I run a charity, I do that because I think we can do it here and make more money" (Denning, 2012). Other major manufacturing business were also following this new trend. Whirlpool announced bringing mixer-making back from China to Ohio. Otis announced bringing elevator production back from Mexico to South Carolina. And Wham-O announced moving production of its iconic Frisbee back from China to California (Denning, 2012).

After decades prowling the world in search of lower labor costs, U.S. manufacturing organizations were finding that factories at home could compete with lower cost countries. As the U.S. economy continued to struggle for its slow and steady growth perhaps the best economic news was that "Made in America" was making its way back. Reflecting this trend, in April 2015, the ISM Manufacturing Index was 51.5. Readings above 50 for the ISM Index indicate an increase in manufacturing activity compared to the prior month (West End Advisors, 2015). The "Reshoring Movement" had established itself and was revealing its power to help fix the U. S. economy.

Is the reshoring movement sustainable?

As reported in a press release from the Institute for Supply Management on October 1, 2015: "Economic activity in the manufacturing sector expanded in September for the 33rd consecutive month, and the overall economy grew for the 76th consecutive month" (Cahill, 2015). This news is reassuring, our economy had significantly recovered from the Great Recession and the Reshoring Movement was a key factor in that recovery. But, the question now becomes "Can this Reshoring Movement be sustained?" "Are the forces which now underpin the Reshoring Movement sustainable?"

A number of factors have been identified which impact the strategic decision regarding reshoring vs. offshoring. The primary motive for the early stage of the offshoring movement was cheap labor. However, as reported in The Economist: "Since 2001, hourly manufacturing wages in China have risen by an average of 12% a year. Additionally, the Chinese currency has risen to an all-time high against a trade-weighted basket of currencies" (Jaixing and Yangon, 2015). The net effect of these two changes was that Chinese labor was growing more expensive.

On the other hand, in the U. S. real wages have been declining. "The U.S. Census Bureau measured the median male full-time worker made just over $50,383 in 2014 -- and if you measured the median male full-time worker in 1973 using 2014 numbers, they'd make more than $53,294." (Aol.com, 2015). While manufacturing wages are still much lower in China, these important indicators demonstrate that China's comparative advantage of with respect to the cost of labor had weaken considerably. Thereby making the prime motive for offshoring jobs to China less of a factor in the strategic decision to offshore manufacturing jobs.

Further erosion of the net economic advantage of offshoring to China is evidenced in an analysis of the supply chain. First, shipping costs have steadily risen since 2000, largely as a function crude oil prices. Since January, 2000 crude oil prices have risen from $38.43 per barrel to peak of $146.12 in January 2008. From January 2011 to September of 2014 the price floated around $100 per barrel. (Marco-Trends, 2015) Because fuel accounts for approximately 60% of operations costs for container service, even small increases in fuel costs impact dramatically the costs of shipping. (TSA, 2015)

Perhaps as critical as the cost factor in shipping trans-Pacific are two other issues: 1) the potential for disruptions in the supply chain; and, 2) the time it takes to receive finished goods shipped from China. Pertaining to the first point, in 2012 the west coast ports were all but shut down when some 10,000 longshoremen and other union workers decided to honor the picket lines of the 800-member clerical worker's unit of the ILWU. This resulted in a shutdown at 10 of the 14 container terminals in Long Beach and Los Angeles ports for 8 days (Whitecomb and Gorman, 2012).

Then in 2015, the owners of 29 West Coast shipping terminals and the ILWU reached a deal for a new contract, but only after nine months of negotiations that culminated in four days of meetings with Tom Perez, the Labor Secretary mediating the talks (DePillis, 2015). A work slowdown that went on during the negotiations cost the economy approximately $2 Billion per day according to Kevin O'Marah, the head of research for Supply Chain Management World, a group of senior supply chain executives from companies that include Barnes & Noble, Nike, Microsoft and Shell. (Strangler, 2015) To reduce the risk that of labor problems stopping the flow of goods coming from China, many offshorers began relying on the east coast ports which have a more stable history. The change of destination from west coast ports to east coast ports adds approximately two weeks to the shipping time and $1,200 to the costs for each 40-foot container (Petrov, 2015).

The increase in shipping costs due to the price of oil over the most of the new millennium; the potential of labor disputes in the west coast closing the ports or slowing the offloading; and, because of the added costs and shipping time for using the more reliable east coast ports, offshorers began to see the supply chain issues with offshoreing as problematic. And, they began to see reshoring in a more and more favorable light. Manufacturing at home provided shorter, more reliable and predicable supply chains and greatly reduced shipping costs. U. S. manufactures were viewing the reshoring strategy as more and more attractive.

A third factor in the Reshoring Movement was the hidden costs of Offshoring. For example, Harry Moser, founder of the industry funded non-profit Reshoring Initiative, posits that if U. S. manufactures need consider the added cost of shuttling engineers and executives to and from Asia; and, the added cost of carrying larger inventories as a hedge against disruption in the supply chain. Of course, larger inventories require additional warehousing expense and ties up a great deal of capital that would otherwise be available for more productive use. When these hidden costs are factored into the equation another significant portion of the savings associated with Offshoring disappears. (Hagerty and Magnier, 2015)

Conclusion

From the discussion presented above we can see how the Offshoring movement started basically as a strategy for reducing labor costs in manufacturing and remaining competitive in a global economy. Over time, U. S. firms realized that the offshore manufacturers had more to offer than cheap labor. Especially in China, manufactures gained a reputation for having not only quality production workers, but also talented production

and product development engineers. And, Chinese contract manufactures were seen as important gateways to new and lucrative global markets. With this realization, offshoring evolved into a widely adopted business model for expansion of production and entry into global markets.

The Offshoring trend was continuing to gain momentum until the Great Recession of 2007. It was the escalating unemployment that gave birth to a grass roots movement to bring manufacturing jobs back to America. Several notable corporations, GE for example, demonstrated how Reshoring could be successful and profitable.

But the critical question that is yet to be answered is "Is the current Reshoring Movement sustainable?" There are several recent events and/or concerns which could slow or perhaps even stall the reshoring movement: China's devaluation of its currency; falling oil prices creating downward pressure on trans-pacific shipping costs; a loss of a whole generation of manufacturing talent and experience; and the pending new Trans-Pacific Partnership between the U. S. and eleven other Pacific Rim countries. Each of these could be problematic with regard to the Reshoring Movement.

First, China's devaluation of their currency was an attempt on their part to slow or reverse the decrease in Chinese exports. The overcapacity in manufacturing that has beleaguered many developed countries has also hit China. In July 2015 Chinese exports to the United States fell 1.3%, while exports to Europe had fallen 12.3% and to Japan, down 13% (McCain, 2015). For China, the devalued currency made China's exports to the U. S., Europe and Japan more competitive. Additionally, the strengthening Chinese currency had been weakening the comparative advantage in the cost of labor for China significantly, and the reduced labor costs due to the devaluation serves to soften that impact on China.

Secondly, the recent trend in the falling cost of oil and an overcapacity in container shipping is creating a downward pressure on pricing of trans-pacific shipping. According to the Shanghai Container Freight Index there has been a decrease in the rates for shipping on the Asia-US West Coast routes of 12.6% from a year ago. With shift in the demand for west coast ports to the more favored east coast ports as discussed above, the fall in the Asia-US East Coast route fell in price only 2% (Petrov, 2015). This downward move in the cost of shipping combined with the devaluation could provide added pressure to slow the trend in Reshoring.

Third, the loss of a whole generation of manufacturing workers and professionals due to the offshoring of jobs. Once, manufacturing jobs were considered to be a career choice leading to a secure middle class life style. But, due to offshoring since the 1970's that perception has changed dramatically. "It is becoming increasingly difficult to get the younger generation interested in manufacturing…. because parents encourage their children to go into other professions such as medicine and law" explained David Lippert, President of Hamilton Caster and Manufacturing Inc. (Samarxhiu, 2014).

Similarly, Steve Jobs raised the issue to President Obama in 2010 declaring that Apple's manufacturing jobs had gone to China and they are never coming back! The reason being, Jobs explained, was America's undistinguished education system. Apple would need 30,000 industrial engineers to support its domestic manufacturing and "You can't find that many in America to hire…. If you could educate these engineers, we could move more manufacturing plants here." (Goldman, 2012) An insufficient supply of talented engineers represents a significant barrier for acceleration of the trend towards reshoring.

Finally, since 2010 the United States has been in negotiations with eleven other nations on the Trans-Pacific Partnerships (TPP). While the process has been cloaked in secrecy, it is thought that the agreement could come before Congress for a vote in 2016 (Ikenson, 2015). Labor unions in the U. S. argue that this trade agreement, thought to be modeled after the North American Free Trade Agreement (NAFTA), would have the same negative impact on employment in the manufacturing sector as did NAFTA (AFL-CIO, 2015). As reported by the Huffington Post, the TPP could set off a "new round of offshoring to countries with even more deplorable pay and environmental protections. And it would drive down U.S. wages by pitting American workers against those in Vietnam making less than 65 cents an hour and against forced and child laborers in Malaysia and Brunei" (Gerard, 2015).

From the discussions above we can fairly conclude that the forces for Reshoring are powerful and the movement has gained momentum. But, given the Chinese currency devaluation; the current reduction in shipping costs; the shortage of industrial engineers in the U. S.; and, the potential for the Trans-Pacific Partnership to open new sources of cheap labor for manufacturing the question has to be asked: Can the Reshoring Movement be sustained?

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