Commentary on the Current State of Manufacturing

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Subject Area: Operations Management

I am a CFO in an industry that is dying. And I've been in this field for over a decade. Or it is an industry dying if you believe all the rhetoric being tossed about.

In a recent survey conducted by Deloitte, (Deloitte, CIP Public%20View%2 Oon%20Manufacturing%20Study Report 2010.pdf), only 30% of the parents surveyed would encourage their children to pursue manufacturing as a career. Further, only 17% cited a career in manufacturing as one of their two top career choices. But conversely, in the same report, approximately three-quarters of the respondents feel the manufacturing industry is very important for our economic prosperity and standard of living. Roughly the same percentage of respondents also feel the United States needs a more strategic approach to the development of the manufacturing base and further investments in manufacturing.

What explains this schizophrenic approach to manufacturing? I would argue most people are mistaking manufacturing employment for manufacturing vitality. In the last decade, certainly the number of US citizens employed in manufacturing has decreased - certainly almost everyone knows or knows of a friend, family member or colleague who has lost his or her job in manufacturing, or has had their hours cut back. (http://www.bls.gov/iag/tgs/iag31-33.htm). On the aggregate level, approximately 5.5M manufacturing jobs have been lost in the US from December 2000 - December 2010, or almost 33%. So unequivocally, the number of people working the manufacturing sector has gone down in the last decade. But interestingly enough, productivity rose approximately 40% in roughly the same time (http://data.bls.gov/pdq/SurveyOutputServlet?series_id=PRS30006093&data_tool=XGtable) It appears a portion of the lost jobs is a result of continual process improvements and efficiency gains (think Six Sigma and Lean manufacturing), as well as investments by firms in automating or upgrading processes, thereby reducing the need for human capital.

But that's not the only reason. The last decade has continued to see (and has accelerated somewhat) the march towards moving manufacturing capability to lower labor cost regions, whether that is Mexico, Central and South America, Southeast Asia, or even old East Bloc countries in Europe. Some of this migration is merely following the customer – if your customers are located in, Hong Kong, say, it may make sense to have production facilities close to them to react to their needs quicker. But the bulk of this migration is to exploit the lower labor costs (Low Cost Regions, or LCRs) versus US domestic rates. After all, if I can pay an employee \$15/day in Mexico to build the same product whereas my US worker costs me as much as 10x per day, the case can become really compelling quickly, especially if a large volume of hours to assemble the product are involved.

So again we come to a somewhat counterintuitive point. Of the remaining staff employed in the US in manufacturing, productivity has been improving, and theoretically providing profitable returns to both firm and worker, even though the overall employment base has shrunk. Also, as firms migrate to LCRs, they capture a portion of the savings by employing labor wage arbitrage

(presumably, some portion of the savings would have to be ceded to the customer) and again benefit. In both cases, I would argue this augments manufacturing vitality.

The firm continues to enjoy returns on both its domestic and foreign workers, and depending on how the company is structured, may repatriate those profits to the US, benefiting the wider economy. But the company reaps a large portion of the benefit either way and lives to fight another day. Which is not to say that for various sectors of US manufacturing, they are simply gone and never returning, or will stay a mere shadow of their former selves. The classic and well-documented case is mass textiles manufacturing. The economic and political environment simply do not support being competitive in this space for most US firms. There are rare exceptions (think American Apparel), but by and large, if you check a label on an article of clothing to see where it was made, "Not in America" is the answer.

So what is a manufacturing firm to do? I don't have all the answers, but here is what has worked for me:

Rule #1: Face the facts and share them with your people.

When I started with my present firm in 2004, I was brought in as part of team to turnaround the largest facility (from a revenue standpoint) in the company, but was losing money. As I was introduced to the entire team (approximately 1,500 employees), my speech boiled down to this: "...My job is to help you keep yours. I pledge to you that every day I come to work, it will be with the goal of improving the viability of this site. I ask the same of you. And if I have to make decisions that will affect your employment, I will do so in a professional dignified manner you deserve. Our profit margin, after we pay ALL the bills – salaries, rents, materials – is, on a good day, 2%. So for every \$100 of revenue we ship, I get two cents to go towards capital investments or profit sharing. So when I say that each of you can help us make or lose money, I mean it...". Today that site employs approximately 10% of the staff they had when I gave that speech – but we are making money.

Rule #2: What are you selling? And how are you selling it?

The answer is NOT earth movers if you Caterpillar, or phones if you are Apple. That may be the product that physically leaves your dock and goes to a customer, but you are selling a solution or experience. The customer has a problem or experience that they want you to address. In some instances, it may be a cost problem, or perhaps it is a logistics problem, or a quality problem. Figure out what they want and craft your pitch and pricing to match it.

Rule #3: Costing and pricing are two different worlds.

Costs should be cold, hard numbers, not the numbers as we would like to see. Whereas pricing can be whatever you want it to be. If you want to price something below cost, there may be several reasons to do so - a loss leader to establish a relationship in hopes of gaining more (and presumably profitable business) in the future; overhead absorption; or perhaps the market pricing is such. But the decision to do so should be known and widely communicated to the relevant parties in the firm. If I decide to price business at a loss or sub-standard margins, unless I know my true cost starting point, I cannot adequately manage to achieve the result I desire.

As a child (and adult too, I will admit), I was fascinated by supernatural figures such as vampires and werewolves and their ability to cheat death. In several ways, I feel US manufacturing is doing the same – don't stick a stake in us yet.