

Homework 1 – Total 100 points (5 questions – 20 points each)

Instructions:

- Please read the following business scenario and answer the corresponding questions.
- Please answer each question with a maximum of 3 sentences.
- Please type your answers in Word or text option of the Blackboard (You can attach your files when you submit your homework).

Reading: Custom Fabricators Inc.

Ben Lawson as CEO of Custom Fabricators Inc., drove back to his home in South Indianapolis, he thought about the day.

I've done a lot of business with Orleans Elevator in Bloomington over the years, but just wonder how long this will continue. I have much invested in my manufacturing plant located right next to their plant, but now that United Technologies (the parent company of Orleans) is all into this FreeMarkets Internet purchasing system. I just wonder how long they are going to be interested in keeping me in the supply chain loop.

It's been a good business over the past few years. I was in the right place at the right time when Orleans got into just-in-time and lean manufacturing in the late 1980s. Initially I was just making the control panels for the elevators. It was interesting to walk into a new building, get on the elevator, and see my company's handiwork in that beautiful stainless steel panel that houses the buttons for the floors on the building. I could take a lot of pride in the craftsmanship even though it was largely a technology thing. That new numerically controlled machine tool that I purchased in 1985 made making the holes in those custom panels easy. We are still making beautiful panels.

Since that time, my company has gotten a lot of other business from Orleans. We now make all kinds of special brackets and panels for the plant. This has been great for us over the years. We have set up a very efficient process for fabricating exactly what the plant needs in these parts with very little lead-time. For most items, Orleans simply gives us the production schedule for elevators being shipped over the next months, and we make the required parts automatically. We know exactly what they need based on their schedule. Of course, it is easy to modify things for the specific needs of a particular elevator order.

The business has changed over the past few years, though. "Outsourcing" is now the big game. Orleans is much more interested in in whole subassemblies than just the parts. We now make that entire control panel, complete with the buttons and the wiring harness. One of our biggest moneymakers is the elevator motor housing. This is a massive box that contains the motor and control electronics for the elevator. The motor housing electronically connects to our control panel. We custom fabricate each of these in our shop and ship them directly to the site where the elevator is being assembled. The Orleans plant never sees them.

There is not much left at the Orleans plant site. In 1985 they were running a massive operation with over 400,000 square feet of production space spread over two buildings. Now all the production takes place in only 150,000 square feet. They still make some of the large sheet metal parts and fabricate some of the lighting fixtures for the elevators. The engineers still are located on the site. It's still a pretty big job to engineer the elevators for a large building. Everything associated with the design of the elevator is modular, so it's a matter of sizing the modules to the needs of the building and fitting them all together.

It is companies like mine that really represent the backbone of the U.S. manufacturing system. I was lucky to hook up with a major company like Orleans, since I never had to go public with my company. Orleans has always bought the raw materials that I need, so all I have needed to worry about is the lease on my land, my investment in the plant and equipment, and paying my employees. I was lucky to find that plant site. It was an old distribution center. After the tax breaks given to me by the county, the building is really inexpensive. I can easily maintain profit margins close to 30 percent of revenue.

I have a loyal group of employees; many had worked for Orleans and been part of the union. We are a lean shop and I pay my employees well. There has never been any interest in joining the union. My employees often joke about how much they produce compared to what they did at the Orleans plant. So far, I have never had to lay anyone off. We have just been able to pick up more and more business from Orleans as they continued to outsource manufacturing.

I am really getting concerned, though, with the future. This morning was interesting. Orleans is now trying to further reduce costs associated with its elevators. Now they are working on reducing the cost of raw materials. What they did was contract with a company known as FreeMarkets, now a part of Ariba, located in Pittsburgh, to conduct an auction for nearly \$20 million worth of raw materials and parts. The idea was to contract with Mexican suppliers. The thinking is that with lower labor cost in Mexico, costs should be much lower. Orleans did not feel it knew enough about Mexican suppliers to try to contract with companies on their own. FreeMarkets has developed considerable experience with this type of activity over the past few years, and has developed the contacts needed to attract Mexican companies to the opportunity presented by Orleans.

Orleans invited me to the FreeMarkets bidding event this morning. We sat in a conference room at the Orleans plant and watched the bidding from the Mexican suppliers. The 20 auctions took over five hours to conduct. The auctions were each started at different times with some overlap in the times. As one auction was ending, another was just starting and a second was about 10 minutes from completion. Auctions were scheduled to take 20 minutes, but if any bidding took place in the last 3 minutes, the auction was automatically extended extra 3 minutes. One auction took over an hour to complete.

Working with FreeMarkets, Orleans had identified approximately 50 potential suppliers. Orleans ran a prebid conference in Mexico six weeks ago for the group. Most of the potentials attended the conference where Orleans discusses the parts that were being bid and the process that would be used in the auction. Orleans

even brought many of the parts so that attendees could see the wide range of parts. There was a health exchange of information.

The auction involved 20 different “lots” of materials. Each lot consisted of about \$1 million worth of material for each year and had from 50 to approximately 100 different items. The lots were designed based on what Orleans felt might be groups of parts that would be attractive to produce for a particular company. One lot included all types of fasteners: nut, bolt, screws, washers, and the like. Another lot had different kinds of brackets that could be fabricated by cutting and drilling holes. A few lots included some more complex parts that required welding some pieces together.

For Ben Lawson, what was most interesting was to observe the auction for some parts that he used at this plant. The parts in this lot included some brackets that Orleans currently had made at a manufacturing plant located in Bedford, IN, a town about 20 miles out of Bloomington. The Bedford plant has made these brackets over 15 years. The Bedford plant purchased the bar stock for the brackets and fabricated the parts with some simple machining operations. The Bedford plant also heat-treated the brackets to make them very strong. The finished parts were sent to Ben’s plant, where they are used in the motor housing.

Ben was concerned about how well a Mexican plant, one located in central Mexico near Monterrey, could supply these parts. Over the years, Ben had some problems with the Bedford plant. Sometimes the quality was just not up to par due to poor welds, and the heat-treating process not being completed properly. When these problems occurred, it was easy for Ben to run down to Bedford and get things straightened out. Things simply could not be the same with the Mexican supplier. It would take at least a week just to transport the parts to Bloomington, and Ben did not even know Spanish, so there might be some major problems even communicating with the managers.

Of course, Ben realized that the production might not even move to Mexico, even if the bid was lower than the Bedford deal. Orleans had indicated a minimum or “reserve” price for the lot, but the Bedford plant would be given the opportunity to negotiate its price. In addition, pricing in the auction was specifically set up to exclude shipping costs, so there was some spread in what the Bedford plant might be able to offer due to its close proximity. There was no guarantee to the Mexican bidders that the contract would go to the lowest bidder. FreeMarkets indicated to Orleans, though, that if a pattern were developed where Orleans simply used the FreeMarkets systems to “leverage” its current suppliers, those companies might have little interest in Orleans auctions in the future.

Ben also was concerned about some bigger issues. What will Orleans do next? Might it begin seeking additional suppliers for his business? Ben knew it would be very difficult to reduce his labor costs, and there would be no way he could compete with the Mexican labor market on that dimension. He could see that one-reason things work so well in Bloomington was his proximity to the Bedford plant supplying him parts. Might difficulty with his working with the Mexican supplier give someone at Orleans or possibly in Mexico the idea of taking over his business and sourcing totally from Mexico?

Questions:

1. How does Ben Lawson's Custom Fabricators, Inc., create value for Orleans?
2. In the past, what has been Ben Lawson's competitive advantage in keeping the Orleans business?
3. Have Orleans' priorities changed?
4. Should Ben change his business model?
5. What should Ben do to ensure his company's future success?