# 7 Supplier Development at Deere & Company<sup>1</sup>

On May 30, 2001, at one o'clock, an in-house meeting of the supplier development team for Excelsior Equipment Corporation and Deere & Company had just adjourned. Benjamin Aldrin, the project manager for the Deere group, was gathering up his materials. With the supply of crucial equipment and the long-term competitiveness of an established supplier in jeopardy, he was concerned about the effectiveness of the group's decision to force Excelsior to improve its antiquated manufacturing processes by lowering its prices.

## **Company Background**

Deere & Company was one of the world's major providers of agricultural equipment with offices, manufacturing facilities and suppliers located in 160 countries. In order to maintain its position as the one of the world's leaders, Deere relied on its global supply chain as a source of competitive advantage. Deere was committed to the concept of maintaining its supply chain by actively partnering with its suppliers. Many of these partnering activities focused on reducing suppliers' manufacturing cycle time—the typical amount of time from when a manufacturing order is created until the first, single piece of that order is delivered to the customer—to lower manufacturing costs and improve deliveries of finished products. At Deere, working closely with suppliers meant, among other things, designing or redesigning manufacturing facilities and operations to eliminate waste, providing and facilitating the use of software packages, training supplier personnel and providing onsite personnel for specific projects. The individuals responsible for helping suppliers improve their operations were in the supplier development group.

# **Supplier Development Groups**

The supplier development groups (SDG) consisted mostly of process engineers. However, members of project teams, such as the team assembled for the Excelsior Equipment project, included professionals from other areas. Each Deere division had an SDG. Company-wide, Deere had about 100 individuals assigned to SDG.

## The Charter

Deere & Company entered into an agreement (charter) with Excelsior in March 1999, delineating all of the terms and conditions and responsibilities of each party, the statement of work of the project, and how the resulting savings would be divided between the parties. The charter is shown in Exhibit 1.

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Exhibit 1		Charter Between Deere & Company and Excelsior Equipment Corporation
1.	Business Excelsior Equipment Corporation of Cedar Rapids, IA, is a major supplier to John Deere. In terms of annual sales, Excelsior is currently in the top 5 suppliers in annual sales to John Deere's Commercial and Consumer Equipment Division.	
2. 3.	Situation & Goal Statement For fiscal years 1999 and 2000, John Deere has limited Excelsior to price adjustments on material costs only. John Deere has declined to allow price adjustments on material costs for fiscal 2001. Excelsior has been unable to fully offset increases in value-added costs, resulting in a reduction of Excelsior's margins. John Deere's C&CE Division has a 5 percent price reduction goal for fiscal 2001. The goal of this project is to reduce Excelsior's cost so that current Deere prices on affected product lines can be reduced at least 5 percent and Excelsior's margins can be increased. <i>Mission and Vision</i>	
4.	Project Scope Primarily, Excelsior's commercial tractor attachment product lines sold to John Deere, although all similar Excelsior commercial tractor attachment products will be included in the project.	
5. 6.	Schedule & Deliverables Reduce Commercial tractor attachment Manufacturing Cycle Time from 8–9 months to 20–40 days. Streamline Deere-Excelsior order fulfillment process from 8–9 months to 20–40 days. Assignments and Roles	
Project Sponsors: • Samuel Mantgameny Deere Purchasing Agent - Outside Purchased Product		
	<ul> <li>Samuel Montgo</li> <li>Iames Franks</li> </ul>	mery, Deere Purchasing Agent—Outside Purchased Product Excelsior Vice President—Sales & Marketing
	Process Owner:	
	<ul> <li>Edward Smith, Project Manage</li> </ul>	Deere Manager—Supplier Development, C&CE Division rs:
	Benjamin Aldri	n, Deere Supplier Development Engineer, Horicon
7	<ul> <li>BIII Sanderson,</li> <li>Implementation</li> </ul>	Excession director of quality assurance
7.	a. Manufacturin material and b. John Deere so	g Cycle Time will be the primary focus of the project, but all opportunities for cost reduction will be explored. Specification changes resulting in lower /or processing costs will become part of the project. ervices will be provided at no cost.
8.	<ul> <li>Savings <ul> <li>Capital expense required to implement this project will be offset by withholding all cost reduction benefit until that portion of those capital expenses applicable to the production of product for John Deere has been absorbed.</li> <li>If savings are realized, they go toward both increasing Excelsior margin and reducing prices to John Deere. John Deere will receive 50 percent of the savings in the form of price reductions.</li> <li>Current commercial tractor attachment pricing is the basis against which savings will be applied, and such savings will be measured utilizing agreed-upon metrics taken before and after the project.</li> <li>No price reductions will be implemented until improvements are implemented and savings are confirmed.</li> <li>Windfall raw material cost savings resulting from the project will be passed on to John Deere after normal markups.</li> </ul> </li> </ul>	
9.	<ul> <li>Change Management Plan</li> <li>a. Excelsior will assign a Project Manager from its Manufacturing Group who will have overall project responsibility. This person, in conjunction with a John Deere Project Manager, will call in additional Excelsior and John Deere resources as needed.</li> <li>b. After analysis, a project plan will be developed and submitted to Excelsior management for approval.</li> <li>c. Only after the project plan has been approved may execution of it proceed.</li> </ul>	
10.	<ul> <li>Communication Plan</li> <li>a. Weekly progress meetings will be held with Excelsior management. Excelsior's Project Manager will chair them. Minutes will be published. The John Deere Project Manager will be a part of these meetings.</li> <li>b. Monthly progress reports will be generated and distributed to a commonly agreed-upon distribution list.</li> <li>c. Joint Excelsior-Deere meetings may be called at the discretion of project sponsors to review project status. These may be by phone or face-to-face.</li> </ul>	
11.	Confidentiality The project and the results are the property of Excelsior. Requests for project information from other parties are to be referred to the Process Owner.	
	(Sponsor- John De	ere) (Sponsor- Excelsior)
	Date	Date
	(Process Owner- Jo	ohn Deere)
	Date	

## **Excelsior Equipment**

For more than thirty years, Excelsior, a 150-employee company located in Cedar Rapids, Iowa, supplied a major tractor attachment to Deere. Excelsior was a vertically integrated company with very little flexibility. As time progressed, and Deere purchased more from Excelsior, it became more and more dependent on Deere as a customer. For instance, in 2000, Deere's purchases accounted for over 95 percent of Excelsior's revenue. Similarly, Deere found itself growing dependent on Excelsior. For example, there are very few manufacturers of tractor attachments Deere buys, and Excelsior owned the design of those attachments that Deere purchased. At the time of the signing of the charter, James Franks, vice president of sales and marketing, and Bill Sanderson, director of quality assurance, were the key contacts at Excelsior working with the SDG project team. These individuals authorized the charter with Deere. It was their responsibility to accept/reject, implement/not implement the changes recommended by the SDG.

### The Problem

Each party considered the business relationship important. Excelsior relied on Deere for most of its sales. Deere wanted to keep Excelsior as a supplier because it would be cost prohibitive for Deere to make these tractor attachments in-house. Deere also believed that if it had to find another supplier for all the equipment purchased from Excelsior, Deere would have to make a significant human resource effort and incur significant risk.

The manufacturing cycle time for Excelsior's antiquated processes was 250 days. This created problems for Deere and its customers in terms of delivery and price. In an effort to reduce cycle time from about 250 days to 20-40 days and cut costs by an estimated 10 percent, the SDG created a team to work on the project. The Excelsior Equipment project team was assembled in March 1999, and consisted of four key individuals. They were Benjamin Aldrin, supplier development engineer and project manager; Samuel Montgomery, in charge of purchasing; and Joshua Wilson, in charge of strategic sourcing. In March 1999, Edward Smith, the manager of the SDG, was a member of the team but was replaced by Robert Jammone in mid May 2000. The team's task was to work with Excelsior to redesign its manufacturing process to meet the cycle time and cost goals.

The team worked for 23 months, investing hundreds of man-days, and prepared and presented a report on February 24, 2001 to Messrs. Franks and Sanderson. The report showed that cycle time and cost reduction targets could be met. The basic parameters of the plan had been available much earlier, but the planning phase continued extending out, due to Excelsior's reluctance to make changes, in general, and its specific reluctance to adopt a plan advocating such a fundamental change to their manufacturing process. Consequently, the bulk of the 23 months involved gathering more information in an effort to justify the benefits of making the change to Excelsior management.

Excelsior Equipment personnel studied the report, and Franks and Sanderson contacted Deere on April 28, 2001. Excelsior's unwillingness to change its manufacturing process was the biggest obstacle faced by Deere in May 2001. Franks and Sanderson did not want to invest in the equipment and facilities recommended by Deere. According to their assessments, the maximum amount of savings that could be realized by restructuring their manufacturing process would be at most, less than 1 percent. In addition, based on Deere's accounting system, and contrary to its own estimation, Excelsior believed that its quality was better than IBM and it had world-class levels of work in process. Armed with these beliefs, Franks and Sanderson were reluctant to invest the U.S. \$5 million necessary to implement the changes recommended by the SDG. In their minds, the manufacturing process at Excelsior was about as efficient as it could be. Deere was getting pressure from its customers for quicker and more reliable delivery of the tractor attachments. Deere also wanted improved profitability on the attachments. This situation was important and of the highest priority to Deere, and the team needed to devise a tactic to get Excelsior to buy into the proposed manufacturing redesign. Deere management was also interested in getting a payback on the extensive level of support that it had invested in Excelsior.

#### The Meeting

Benjamin called today's meeting with the objective of determining the best way to solve Excelsior's objections. In this meeting, he reviewed the case for the redesign of the manufacturing process with the members of the project team. After considerable discussion, the team decided to utilize Deere's position and demand that Excelsior lower its prices at least 5 percent or half the amount Deere thought was obtainable by implementing the project. The team believed that Excelsior was interested in the stability of a new long-term agreement, and they knew that without the changes, Deere was not interested in extending its long-term commitment to Excelsior. The team thought this process would force Excelsior to make the appropriate changes to its manufacturing process. On the other hand, if Excelsior did give the price reduction and still refused to implement the necessary manufacturing flow improvements, Deere would have an indication that Excelsior was not a supplier that would remain viable in the long run. Deere would be forced to initiate activity to re-source the business at the end of the contract. It would take a significant amount of time and planning to find and develop a new supplier.

Benjamin knew that he and Joshua Wilson were in agreement with the plan. Samuel Montgomery, not wanting to anger his supplier, did not like the proposed tactics, but he agreed to go along with the plan. Robert Jammone expressed no opposition and agreed to go along and remain quiet. Even though the team agreed to the approach, Benjamin privately wondered whether it would work and whether it would be an effective way of getting Excelsior to improve its antiquated manufacturing processes.

#### **Discussion Questions**

- 1. Is Deere's tactic an appropriate one?
- 2. What are the implications of this tactic and the possible consequences, positive or negative?
- **3.** If it is not an appropriate tactic, what are some alternatives?
- 4. Is this an ethical approach?
- 5. What are some of the implications as far as human resource management is concerned? How can the group members better manage the consensus building to present an undivided front to Excelsior?