

## **SAMPLE PROJECT SUBMISSIONS**

### **Business Case and Supply Chain for Make-to-Order Products**

#### **Project Description:**

This company manufactures both off-the-shelf and custom made products. The project objective will be to decide a manufacturing strategy for items (make-to-stock versus make-to-order) and the financial and operational impact of this decision. The main challenge will be to understand the manufacturing consequences and the impact on the supply chain. The objective is to increase manufacturing efficiency while reducing supply chain cost.

#### **Strategic Importance:**

The strategic implication of this project is a change to the “go-to-market strategy” for our custom made products. This is key to understand the growth opportunities and relative importance of custom made products.

#### **Project Deliverables:**

The project is expected to deliver a recommendation of which items should be standardized as make-to-stock products, which items should be rationalized, and the impact on manufacturing efficiency and supply chain costs and lead times.

#### **Engineering Content:**

This project requires a good understanding of the manufacturing process of custom made products.

#### **Business Content:**

This project requires a good understanding of the financial models to determine manufacturing costs. Rationalization of product will require an assessment of the impact on the business.

## **Next Generation Consignment Model**

### **Project Description:**

In an ever increasing effort to decrease total supply chain costs, our customers consistently request consigned inventory so that they might have immediate and complete access to parts that they demand and not pay for those parts until such a time as they consume them,. While this appears to reduce costs for the customer, it does not remove cost from the supply chain but rather tends to add additional inventory in the total system. It is the desire of this summer project to develop the next generation future consignment solution that can be offered as a feature versus a concession.

### **Strategic Importance:**

This project is help to design the supply chain capabilities to satisfy customers and increase competitive advantage into the future.

### **Project Deliverables:**

- An understanding of the current state and best in class operations for consignment and consignment-like functions in the industry.
- A detailed business process for a supply chain operation that ends with consignment.
- A data collection and process evaluation of options and alternatives including RFID data collection.
- A financial model which identifies the manners in which this company and our customers will use the data collected to improve business processes and inventory positioning.

### **Engineering Content:**

There will be a great deal of design, process definition and analysis of alternative methods of data collection and the business process design. Evaluating methods to use the data to develop optimization alternatives to better match inventory to consumption will be considered integral to the project.

Knowledge in RFID and other methods of data collection as well as business process modeling coupled with the ability to determine optimization methods to reduce overall inventory will all be part and parcel of this project.

### **Business Content:**

The business content will include the ability to determine the processes associated with planning and fulfillment in a consignment model coupled with evaluation of the business benefits to be derived from the availability of real time data. A total financial model to show the features and feasibility of the recommendation will be required. This will include evaluating both the benefits to the company and to the customer.