

# Bombardier Aircraft

## Delivery optimization

### MIE 463 - Team 7

The following executive summary will revolve around depicting the process which the team went through in order to primarily identify the as-is process of the aircraft delivery, identify the gaps within the process as well as provide feasible based on budget, technology and customer expectations. The report will firstly provide an insight into the business case, then explain the problem, the goals/objectives, the scope of the process, the process analysis, as well as the design solution.

### Background and Scope:

Bombardier wants to save costs and improve its relationship with customers by tackling the aircraft delivery unit of the organization. It specifically wants to reduce customer wait times in order to reduce catering/accommodation costs. In order to do that, Bombardier needs to find ways to better identify customer touch points while the aircraft is being built which entails better communication with the suppliers in terms of delivery and production schedule. The impact will be seen through reduced costs and better relationships throughout the supply chain resulting in long term relationships with customers and suppliers.

**The problem** which the aircraft delivery process faces is one which is related to on time aircraft delivery. Inconsistencies in the Production department result in delayed aircraft manufacturing. There is also no consistent process for the communication between customers and Customer Quality Reps (CQRs); the necessary information is not always transferred to the customer in a timely fashion. Thus, there is a potential to improve delivery scheduling to handle delays and consecutive airplane arrivals, and increasing customer awareness so that customer satisfaction survey scores are higher. **The goal** of this business process analysis is to reduce aircraft delivery wait times which entails creating better relationships throughout the supply chain and the mission is to The mission of this project is to ensure superior customer satisfaction in all facets of the aircraft delivery process.

Speaking in the context of the **scope** of this project, it will be conducted within Bombardier's Contracts & Legal Services department. The scope does not involve solving manufacturing issues directly but does include dealing with situations caused by manufacturing delays that affect the customer. The initial scope is to apply a radically new delivery plan to the airplane sales of small batches in order to reduce delivery delays. The final scope is to optimize and detail the new plan for the delivery of relatively big batches.

## **Process Analysis**

The process analysis firstly involved making the scope, objectives, mission and vision of the project very clear and concise. This was done through **1) Identifying the value chain of the aircraft delivery process including the inputs and the outputs 2) Identifying the primary customers and stakeholders 3) Identifying improvement opportunities and ranking them based on the benefits and costs of improvement.** After the first 3 steps mentioned above, the team implemented an approach through which it will communicate both short and long term plans and process improvement strategies to all those who both have direct and indirect effects/interests in the execution of these changes. This was done by **1) critiquing information and setting a new process vision 2) Setting performance measures and performance targets 3) Creating a work plan.** The results obtained from the steps mentioned above will in unison provide the team with some findings which shall be discussed in depth in this report.

## **Design Solution**

In this section, the PIT will go over the “To-Be” process of the pre-delivery, delivery, and post-delivery phase. The team is targeting the process to be concurrent and extending the enterprise by integrating customers and suppliers. By looking at the process, there is improved communication in the delivery phase between Quality and Contracts Operation departments. Strategic applications targeting IT solutions will be implemented which will revolve around explaining the strategy, describing it and speaking about the benefits it will have based on the vision and mission that the team has in mind. Furthermore, our client may face with several potential risks and barriers during the implementation period. These possible difficulties include some company policy, sponsorship and management related problems which will be explained in details through depicting the **1) Potential risks and barriers to implementation as well as the risk mitigation tactics and 2) The change management methodology steps as well as the successful strategies.**

## **Conclusion**

In observing Bombardier delivery process, the team decided to set its objectives after conducting in depth business process architecture analysis of the delivery process. The team had set the objectives to provide improvement in:

- On-Time Aircraft Delivery
- Pre-Delivery Customer Communication With Aircraft Delivery

After setting a short and long term planning regimen, criticising of the As-Is process and providing new process vision of the future, creating a to-be business process, identification of goals, performance measures and performance targets, the team identified major sources of issues, waste, delays, and supplier risk. These sources in detail include, issues regarding transportation, reworking to meet customer needs, costs of delays, supplier risk, and poor communication. Throughout conducting all of the research which will be provided in detail in the following report, the team recommends targeting the As-Is process to include further concurrency in processes, in addition to extending the enterprise through the integration of Bombardier and suppliers as well as reducing redundant information throughout the process.