

# **Executive Summary - Messier-Bugatti-Dowty (MBD)**

## **Identification and communication of risks at the product development phase of Messier-Bugatti- Dowty: 17 steps Innovation Approach**

### **Executive Summary**

Messier-Bugatti-Dowty (MBD) works in the aerospace industry as a leading designer and manufacturer of aircraft landing gear systems. In order to manufacture some of the parts for the landing gear system, MBD initiates Build-to-Specification (BTS) projects, where after receiving their contract from the customers, MBD will outsource parts to 'N-suppliers' and manufacture the landing gear. This process consists of three phases: Supplier Selection, Product Development and Production & Ramp-up.

Our APS 1013 team was consulted to give our advice regarding communication problems that aroused in the development phase at MBD. This is the most important phase that is considered as the key criteria to decide the program level effects. In addition to this we were asked to design the communication tool in such a way that it was easy to use.

We conducted several interviews with key members of the MBD project team to gain a better understanding of their perspective of their role in this BTS process and their input on any shortcomings that they perceived. From this data, we were able to develop a risk identification and communication tool. This tool explains the quantitative assessment of different failure mode by calculating the risk priority numbers. A response action plan was set up in this tool that makes the concerned authority to take the necessary step to solve an issue at different department inside MBD.

The concerned authority for each project (e.g. Project Manager) will have the responsibility of developing or modifying the communication tool within the BTS project team. Based on these finding we also recommended that a cloud-based solution will serve them better and help mitigate and manage risk associated with the product development at BTS process.

In addition to that, we performed a risk assessment in the product development phase. The final tool was designed in such a way that it is a combination of Human Resources Management, Information Management System, Communication Management and of course the

Risk Management. Our key deliverable for this project was to create matrix that would list out the risk associated with that project by calculating the risk priority number (RPN) using the quantitative assessment of the failure modes. Our tool provides them with a clear idea of planning a response plan for each failure and helps in recording the cause for each risk. The designed tool provides MBD with a graphical representation of history of RPN vs Time over the completion of the project. This graphical representation provides MBD to keep a track on how the risk has been decreased over the end of the project.