



FOKKER VALUE CHAIN SIMULATOR

INDUSTRY

Aerospace

APPLICATION AREA

Manufacturing

COUNTRY

The Netherlands

CHALLENGE

Verify cost calculations through insight into time, production and finance in order to set up realistic quotations and planning for clients.

SOLUTION

A user-friendly tool, which Fokker can use to quickly gain insight in the logistical and financial effects of certain choices made during the product design and production design.

KEY TO SUCCESS

With simulation software you can calculate a period of time and include several variations such as: learning curve, production volume and inflation.

How to get realistic insights into time, production and finance? INCONTROL developed the 'Fokker Value Chain Simulator' for Fokker.

FOKKER AEROSTRUCTURES

Initiated by the Fokker's R&D department, INCONTROL Simulation Solutions has developed a simulation application based on the software platform Enterprise Dynamics®. The so-called "Fokker Value Chain Simulator" is a user-friendly tool, which Fokker can use to quickly gain insight in the logistical and financial effects of certain choices made during the product design and production design.

Fokker Aerostructures is a recognized, first-class specialist in the design, development and manufacturing of lightweight structures, modules and landing gear for the aerospace and defense industry. From the first sketch of an (airplane) part up to the moment of its actual production, the part is subjected to many process steps in which various departments of Fokker are involved. During every step, choices need to be made concerning technique, logistics, production and finances. One of the first steps in this process is the technical product design. This design determines the resulting production process and its logistical control.

VALUE CHAIN SIMULATION

The Fokker Value Chain Simulator enables the user to model the production process in a fast and efficient manner. By doing so, the product designer will gain insight in the consequences of his (her) design and design choices at an early stage (e.g. insight is given into the production level, the needed resources and/or materials). The application takes into account all financial aspects of the process in order to create a clear perception of the cost price and the investments needed.

During the relatively short period in which the Value Chain Simulator has been used, the application has proven to be very useful. Plans have been made to further develop the application by integrating the goods flow control and by incorporating several supply chain aspects and quality management. Eventually this can lead to the development of an integral application that will be widely supported (and used) within the Fokker organization.

"When I was presented with the Beta version, I started using the application and I am becoming more and more enthusiastic about its possibilities. The application provides insight in numerous areas of the production process. The coupling with several financial aspects results in the immediate formation of a cost overview. The application offers the possibility to plan future production, providing us with insight in the future requirements concerning the resources and expenditures. In our R&D department we will use this tool to quantify the various technology choices."

– Marko Vreeling, R&D engineer, Fokker Aerostructures

