

## KTP CASE STUDY

UNIVERSITY OF  
GLOUCESTERSHIRE

at Cheltenham and Gloucester

# DOWTY PROPELLERS

## IMPLEMENTING INTEGRATED SOFTWARE IN THE REPAIR AND OVERHAUL BUSINESS

### ABOUT THIS CASE STUDY

The Knowledge Transfer Partnership (KTP) collaboration between aerospace company Dowty Propellers and the University of Gloucestershire provided the company with the opportunity to implement a new integrated Enterprise Resource Planning (ERP) system based on new database technology. It also supported and promoted the re-modelling of core business processes across the Dowty Propellers organisation.

#### FAST FACTS

- » Implementation of a Syteline integrated Enterprise Resource Planning (ERP) system based on SQL server database
- » Re-engineering and optimisation of core business processes in manufacturing and aftermarket business streams in Dowty Propellers
- » Rationalisation of IT architecture and reduction in end-user legacy systems.
- » Compliance with Group IS strategy to provide integration with SAP Financials
- » Developed and honed project management skills of Associate as springboard for career development
- » Provided University with valuable case study material for teaching and research

### ABOUT THE SPONSOR

The project was sponsored by the Department of Trade and Industry who provided the bulk of funding for the KTP scheme until 2007. The newly formed Department of Innovation, Universities and Skills is now taking on this role acting through the Technology Strategy Board, who recently announced a doubling of funding for KTPs nationwide.



### THE COMPANY

*“The great value of the KTP Scheme is that it provides a dedicated resource to manage key initiatives to drive the business forward. The KTP Associate played a significant role in systems delivery”*

David Abbott, Finance Director, Dowty Propellers Repair and Overhaul

Dowty Propellers is a part of Smiths Aerospace, which in turn is a division of General Electric. Smiths Aerospace is a leading global provider of innovative solutions to builders and operators of civil and military aircraft. Dowty Propellers has over 60 years experience in the production of aircraft propeller assemblies. The company is recognised as the industry leader in the manufacturing of composite blades using Resin Transfer Moulding Technology. The company currently employs over 200 people split into the two main business units – the manufacture of Original Equipment (OE) and the Repair and Overhaul (R&O) business.

### About the project

The Syteline ERP system had already been installed in Dowty OE business. The R&O business was functioning under a different ERP system (Fourthshift), and hence the need to integrate it to the rest of the business. At the same time, Smiths Group IS strategy was to implement SAP (another ERP package) wherever practicable, starting with the SAP Financials module. The KTP project thus had to implement Syteline in the R&O business and ensure its integration with SAP Financials at Group level.

## Benefits

- » Business processes realigned to deliver Group business strategy (re-engineering to the aftermarket and manufacturing value streams)
- » Enhanced customer service by enabling one point of contact within Dowty Propellers
- » Reduced the complexity of the existing IT structure and architecture by integrating the two business functions (OE and R&O) supported by one ERP system (Syteline)
- » Streamlined operations and optimised the use of corporate resources
- » Consolidated and standardised data across the business, facilitating improved information access and reporting
- » Supported the Group's strategic requirements by preparing the Dowty business for the SAP Financials implementation, and also ensured the flow down of benefits from the SAP project to the Dowty company
- » Increased the span of control on business processes and IT support
- » Improved IT support by reducing the number of databases and systems requiring support

## THE ASSOCIATE

Gabriela Maldonado graduated from the Technical University of Monterrey in Mexico in 2001 with a BSc in Industrial Systems Engineering. Gabriela then moved to the UK and gained an MSc in Advanced Manufacturing Technology and Systems from UMIST in 2002.

As a KTP Associate, Gabriela completed a comprehensive training and development programme including:

- » NVQ level 4 in Management
- » PRINCE2 Foundation and Practitioner exams
- » Establishing a Process Improvement Programme (Project Management Institute)
- » Site visit to Smiths USA to study Syteline 7.0 implementation problems
- » Lecture to 3rd year undergraduates in Business Information Systems on Dowty Case Study

Gabriela is now Programme Systems Manager at Man ERF in Swindon.

## Results

The company has been able to develop an integrated business strategy instead of discrete, project-based activities managed as separate functions in various silos. This has enabled the company to achieve agility and drive revenue and competitive advantage. It also allowed Dowty Propellers to respond positively to the Group decision to implement SAP as its main financial package, without sacrificing profitability, transparency and internal control.

Integrating the two businesses supported by one IT technology on a single platform allowed the organisation to reduce its IT complexity and obtain more business value from their IT investment.

## THE ACADEMIC PARTNER



*'The KTP helped Dowty manage disparate systems strategies and integrate with overall Group IS strategy. It illustrates how Group strategies often need to be implemented in phases where compromises are necessary to ensure technical stability and business continuity.'*

Dr Martin Wynn, Reader in Business Information Systems, University of Gloucestershire Business School

## Benefits

- » Student projects at undergraduate level have assessed Dowty against mainstream models of IS and e-business adoption.
- » The KTP project provided a valuable case study for teaching at undergraduate level, first given by the KTP Associate in May 2006, and again by the academic supervisor in 2007.
- » The project provides valuable material for comparative research studies on systems strategy. This has already produced one publication: "Implementing Enterprise Resource Planning (ERP) Systems through Knowledge Transfer Partnerships: Two Case Studies", *International Journal of Management Cases* - Volume 9 Issue 2, 2007

For more details please contact Martin Wynn, [mwynn@glos.ac.uk](mailto:mwynn@glos.ac.uk) or Caroline Monk, [cmonk@glos.ac.uk](mailto:cmonk@glos.ac.uk).

You can view more information about the Business School's KTP projects at [www.glos.ac.uk/faculties/ugbs/research/ktp.cfm](http://www.glos.ac.uk/faculties/ugbs/research/ktp.cfm)