

# Case Study

## Migrating a business-critical application



### Business Situation

DFDS, a large freight and passenger shipping company, depends on a bespoke application called Phoenix. Written over the course of a decade in Microsoft Visual Basic® 6.0 (VB6), it handles every aspect of their freight services, from pickup and shipping to delivery. It also deals with critical business functions, such as contracts and invoicing.

"It's mission critical," says Gert Møller, the CIO at DFDS, "it's really running the business for us."

However, mainstream support for VB6 ended on March 31 2005 and extended support ended in March 2008. This left DFDS exposed because they could not rely on Microsoft to fix bugs or solve problems. In addition, VB6 has some limitations which meant that DFDS's staff found it very hard to add new functionality to the application because it was already so large. Møller also worried that he might not be able to recruit, retain and motivate great staff to work on out-of-date technology.

DFDS faced the several choices: living with an unsupported application (not acceptable), buying a new application off the shelf (in fact, none existed), writing a new application from scratch (too expensive and time-consuming) or migrating Phoenix onto a new platform (the obvious way forward).

### Business Technology

Avanade proposed an automated tool to migrate the VB6 code to Microsoft .NET™. Using software from Avanade partner ArtinSoft, Avanade estimated that they could translate between 90-95 percent of the 550,000 line application automatically.

Typically, an automated translation is less than a quarter of the cost of rewriting from scratch. It is also much quicker. After an initial assessment of the code, Avanade offered a fixed price for the migration. This made the proposal very attractive for DFDS.

Avanade worked closely with the company through a part-time programme manager in Denmark. It also used an offshore team of 15 people at Avanade's Application Renewal Centre of Excellence in Delhi, India. Their job was to review code that needed human intervention and judgment: between 25-55,000 lines of code in all. With the offshore team delivering 94% of the migration work and the project management being delivered locally, Avanade combined the best of both worlds.

Because the new application and the previous VB6 version shared the same underlying database, both systems could be run in parallel for testing. The new version of Phoenix has the same user interface as the old one. This negated the need to retrain the 1,000+ users on the new system.



## Results

The migration took six months. Avanade delivered it on time and on budget. The combination of offshore resources, automated translation and onshore project management meant that DFDS had the best of both worlds: lower costs and high levels of local contact.

This approach yielded several important business benefits:

- Reduced risk thanks to a straight translation of existing functionality without any changes or additions.
- Reduced cost compared to rewriting and Avanade's fixed price contract.
- DFDS's own staff were able to concentrate on the immediate demands of the business, instead of the once-in-a-decade migration project.
- Using the latest technology, the new application is again under Microsoft's support umbrella.
- It is no longer subject to arbitrary limits on code size. DFDS can add more functionality as required.
- Avanade's approach provided clean code with no dependencies on proprietary libraries or modules (unlike other automated translation tools). This leaves DFDS in charge of its own destiny.

The project was a big success. "It was a good and open process," says Møller. "We were impressed by colleagues in Avanade. They really knew what they were doing and they worked very hard."

## About the company

DFDS A/S is a Danish shipping company that operates 50 vessels worldwide. The company has an extensive route network with a mixture of container, roll-on/roll-off (ro-ro) and passenger shipping, plus terminal and logistics services. Freight shipping accounts for 58 percent of the company's DKK 6.5 billion revenue. Founded in 1866, the company now employs 3,900 people. For more information see [www.dfds.com](http://www.dfds.com)

"We had a good feeling about Avanade and it turned out to be completely right. They were a good choice. They really delivered what they promised and even went a bit beyond it. We'd certainly choose Avanade again. They have been a good partner."

– Gert Møller, CIO, DFDS



### About Avanade

Avanade provides business technology services that connect insight, innovation and expertise in Microsoft® technologies to help customers realize results.  
[www.avanade.com](http://www.avanade.com)

©2009 Avanade Inc. All rights reserved. The Avanade name and logo are registered trademarks in the US and other countries.

### Europe

London  
Phone +44 0 20 7025 1000  
[Europe@avanade.com](mailto:Europe@avanade.com)

### Americas

Seattle  
Phone +1 206 239 5600  
[America@avanade.com](mailto:America@avanade.com)

### Asia-Pacific

Sydney  
Phone +612 9005 5900  
[AsiaPac@avanade.com](mailto:AsiaPac@avanade.com)