

# Order Management

## Tasks

A large international bank wants to develop a new order management system for payments. However, the existing transaction systems implemented in COBOL cannot be replaced because of two reasons: The code base is too large for any project team to tackle it within a reasonable time frame and some of the know-how about the legacy code has been lost. A first attempt to implement a new system based on the old code base fails. The project team lacks experienced COBOL programmers/designers and the system architecture is not modular enough. In order to save the project the project leaders take the following actions:

- Build the new system around the concept of a service-oriented architecture (SOA) in order to integrate old and new components.
- Automate development with model-driven methods (MDD/MDA). Services are modeled with class and activity diagrams. The code templates are extracted from existing legacy code.



## Highlights

- Since business workflows can be modeled with state diagrams, the business processes can be defined by domain experts without IT background.
- Most of the COBOL code is now generated from class and activity diagrams. Therefore, the need for highly qualified COBOL programmers diminishes significantly.

## Success

- Increased development speed by a factor of three
- Automatic requirement traceability
- Plug-and-play functionality for new components
- Up-to-date documentation
- Enforcement of best practices for architecture and design
- Optimised testing and simple integration