

Swedbank Improves Consistency, Efficiency and Business Alignment with IBM Rational Unified Process and IBM Rational Development Tools

Overview

■ The Challenge

Swedbank's development team was using a number of disparate processes in a complex, multi-platform environment. Lacking a consistent software development process, the bank found it difficult to bridge the gap between business needs and IT development initiatives.

■ The Solution

The company adopted RUP® and a model-driven development approach to improve developer productivity, development efficiency and team collaboration. The Swedbank development team uses IBM® Rational Rose® XDE™ Developer together with WayPointer from Jaczone and IBM Rational® Application Developer for WebSphere® Software to support model-driven development, align IT efforts with business goals and shorten time-to-market.

■ The Benefit

Swedbank realized substantial improvements in efficiency and productivity as a result of using a consistent methodology and a common, industry-standard language. Based on the success of initial projects, Swedbank has decided to use RUP for all of its development projects going forward. The bank improved its ability to rapidly deliver solutions that meet customer needs.

Swedbank, or FöreningsSparbanken AB, is one of the largest banking groups in the Nordic area. The group has about 4.3 million private customers in Sweden and 4 million in the Baltic States. Swedbank customers have access to a comprehensive network of local branches, Sweden's largest telephone banking system, and Sweden's largest Internet bank. A unique combination of local presence and shared global resources form the foundation of the bank's strategy.

Comprised of more than 800 skilled development professionals, Swedbank's IT department is a driving force behind that strategy and the bank's success. While the team has always been dedicated to delivering

quality software, they have not always used a consistent development process. Recognizing that there was room for improvement, the bank's Executive Board recently decided to adopt a single, uniform process across the company, and selected IBM Rational Unified Process®, or RUP.

Margareta Baunge, Project Manager at Swedbank, recalls, "We were using several different processes. The business side worked with one process; and the IT side used another. There was no agreement on which process should be used. At that point the Executive Board decided that we had to have one consistent methodology throughout the bank for all of our platforms – and for both legacy systems and new development. The motivation was to increase productivity and efficiency in our projects."

Selecting RUP

Once Swedbank resolved to standardize on a single development process, the decision to use IBM Rational Unified Process was easy, according to Baunge. IBM Rational Unified Process is a customizable software development process platform based on proven best

practices that enables Swedbank to deliver consistent process guidance to its entire IT team.

Not only did Rational Unified Process meet the bank's most pressing need for a consistent methodology, it also provided Swedbank with advantages in working with consultants, customers and partners who were also using it. Baunge notes, "RUP is a standard that is used by many of our customers and business partners all over the world. When we work with consultants it is very important to have a shared terminology, and everyone knows RUP and its terminology. So that influenced the decision to adopt RUP here."

Supporting Swedbank's "Learn by Doing" Strategy

As a company, Swedbank values hands-on learning over traditional training courses, and has established a policy to encourage its employees to "learn by doing". Baunge explains, "We don't believe in putting people into a lot of classes to learn theory, without giving them the opportunity to do actual work."

To help facilitate the adoption of IBM Rational Unified Process, Swedbank used Jaczone WayPointer. WayPointer is an agent-assisted modeling product that provides Swedbank developers with non-intrusive help to build software with the Unified Modeling Language (UML) and the IBM Rational Unified Process. WayPointer fit the bank's hands-on approach by providing just-in-time mentoring, automation of common tasks and

continuous quality assurance guidance as the team learned RUP and UML. "Our developers are very focused on producing quality software, and they don't think that they have time to learn about process. With WayPointer they get guidance for what to do next, and how to do it. They are very comfortable with it, and they can each use it in their own way," says Baunge.

The Advantages of Model-driven Development

As Swedbank was standardizing on RUP, it also began to establish a model-driven development approach. Leveraging the power of IBM Rational Rose XDE Developer and UML, the bank is able to realize many of the advantages of this approach, including increased component reusability, simplified maintenance, and accelerated development. Perhaps most importantly, Rational Rose XDE Developer has helped improve team communication with use case models, analysis models and design models. This improvement in communication is critical to successful development in the bank's complex, multi-platform IT environment that includes Windows®, UNIX®, Java®, IBM AS/400® servers, IBM DB2® databases, and IBM WebSphere Application Server.

"With IBM Rational Rose XDE Developer, we have been able to close the communication gap between business and IT. The business side uses it for business modeling. They can see, talk about, and understand

the models, and they are very enthusiastic about it," says Baunge.

Using IBM Rational Rose XDE Developer to automatically generate code from models, the Swedbank team has been able save significant development time and effort, and adapt to changes in requirements and architecture more rapidly. Baunge explains, "One of our application developers estimates that IBM Rational Rose XDE Developer generated about 40 percent of the code for a particular application. In component development, it is estimated at about 50 percent."

She continues, "When you work in this way it is easier to make changes because you do all the changes in the models and then generate code again. And, you always know that you have all your documentation in line with the code. Before we used RUP and Rational Rose, there was the design model and then there was the code. Changes were made to the code, but they never got back into an updated design model. Now, we are focused on model-driven development, and the model and code are always synchronized and always documented. Using IBM Rational Rose XDE Developer together with WayPointer, which constantly checks our models for consistency, correctness and completeness, is a very effective and valuable solution. For us, it is an easy way to make changes and improve quality."

Driving Development with a Comprehensive IDE

Using generated code as a starting framework, Swedbank developers complete the code development in IBM Rational Application Developer for WebSphere Software – a comprehensive integrated development environment (IDE) for visually designing, constructing, testing and deploying Web services, portals and Java™ 2 Enterprise Edition (J2EE) applications.

Swedbank began using Rational Application Developer for WebSphere Software shortly after the Executive Board decided to adopt RUP. The bank saw Rational Application Developer for WebSphere Software as a way to help ensure rapid response to customer demand for new self-service products and functionality, while lowering IT development costs.

IBM Rational Application Developer for WebSphere Software provides a number of technical advantages for Swedbank. “One of the advantages of Rational Application Developer for WebSphere Software is that it is written in Java with a plug-in architecture. This means that we can build our own tools to solve specific problems and integrate these tools into the IDE. Other vendors develop their products as plug-ins as well, so our developers can access everything from a single environment. It is also easy to get started with Rational Application Developer for WebSphere Software – once it is installed there is

a minimal amount of training needed to be productive. And, an additional advantage of Rational Application Developer for WebSphere Software is that the base is open source,” Baunge reports.

From a broader perspective, IBM Rational Application Developer for WebSphere Software has helped simplify the process of integrating components and applications from the various platforms in use at Swedbank. “We develop and maintain systems on five different platforms. Being able to reuse components and functions as well as being able to integrate them has been very valuable – and we’ve shortened time-to-market as well,” says Baunge.

Business Benefits

In addition to helping the bank improve communication and team collaboration, IBM Rational Unified Process, IBM Rational Rose XDE Developer and WayPointer have enabled Swedbank developers to save time while improving the quality of the software they deliver – from the first project on. Baunge notes, “In the pilot project we really found that developers were improving their productivity – a typical estimate was by 30 percent. And we saved a lot of time during project reviews because of all the quality checks that were already built into the tools.”

Aside from boosting individual productivity, Baunge cites efficiency, consistency, and a more effective

relationship between business and IT as the top business benefits Swedbank has realized as a result of using RUP and IBM tools for model-driven software development. “They have really helped us to get more efficiency in the process, establish a consistent terminology and way of working, and close the gap between business and IT,” explains Baunge. Based on the success of these achievements, Swedbank has committed to implementing RUP on all of its more than 200 current projects, and all future development efforts.

Looking ahead, Swedbank also plans to evaluate IBM Rational tools for change management and other software development workflows. “Our next step is to get the tools to support the whole process,” Baunge notes.

Baunge concludes, “The usage of RUP, IBM Rational Rose XDE Developer and IBM Rational Application Developer for WebSphere Software improves our ability to realize and deliver optimal solutions for our customers. We have also improved our ability to develop systems and components that meet our customers’ requirements with a shorter time-to-market - without RUP and these tools this would not have been possible.”



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