

**Industry:**  
e-business Solutions Provider

**Organization:**  
WM-data

**Description:**  
WM-data is a European consulting company with over 9,000 employees. It was founded in Sweden, which is also the location for its headquarters.

**Business Problems:**  
ASG Direct, a jointly owned company by ASG, a large transportation and logistics corporation and CityMail, a mail distributor company. ASG Direct needed a software solution to add logistics to e-commerce. The Internet may be the shopping mall, but there is still the need to physically transport the merchandise to the customers.

**Solution:**  
With the help of the Rational Unified Process, Rational Suite™ AnalystStudio™ and Rational Suite DevelopmentStudio, WM-data designed, developed and delivered a complete system in just 3-months with a 20-person team. The logistics system links into the e-commerce Web sites, presents delivery options and sets a delivery time. All deliveries are collected and optimized for most efficient delivery route by the WM-data system.

- Key Benefits:**
- Extremely fast time-to-market thanks to the Rational Unified Process, everybody involved in the project was able to work at maximum speed without losing quality
  - Very good customer involvement during the project thanks to iterative development
  - Robust solution based on industry standard processes and tools

## Delivery Service Developed in Record Time with the Rational Unified Process

You enjoy e-shopping from home, but how do you get your goods? Using the Rational Unified Process™ (RUP), WM-data and ASG Direct built a logistics system for a fleet of home-delivery vans in record time.

Internet shopping is great for the customer but creates a problem for the vendors: how to best deliver the physical goods. Since the major benefit of e-shopping is that you can do it from your home, you really expect the merchandise to magically appear on your doorstep.

“Using the Internet as a shopping mall means that the whole process changes from today’s ‘push’ to ‘pull’; instead of filling stores with merchandise in hope of attracting customers, you now wait until the order is placed before you get your delivery vans rolling,” says Anders Segerfelt, CEO of the new transport company ASG Direct, a joint venture between transport giant ASG and mail distributor Citymail.

To meet customer expectations, ASG Direct teamed up with the consulting company WM-data and developed a brand new logistics software system. Using Rational Unified Process, WM-data created a unique and tremendously successful application in less than four months.

“We contribute the fast, 3 1/2 month success to the Rational Unified Process because Object Technology cannot work in isolation from the process. You need to have something guiding you. RUP made an excellent backdrop for everybody in the project to go forth at maximum speed, without actually losing the quality,” explains Stefan Bogstedt, manager for Object Solutions at WM-data.

So how does it work? A customer goes shopping on an e-commerce Web site. When he or she is ready to order, the ASG Direct Web server displays a delivery details window, fully integrated with the shopping site. In the window, the customer selects a preferred delivery method and a delivery time. When all is set, the e-commerce company receives the order and information on the delivery.

Meanwhile, all merchandise that is to be delivered by ASG Direct is collected in “Split Centers”, where the company’s special couriers pick up their packages. Also, delivery routes and schedules are transferred to the couriers’ hand-held computers. That information is automatically planned and optimized using LogiX from DPS International and the system is interconnected with the application developed by WM-data. The hand-held computers also handle billing on delivery in the customer’s home.

“Thanks to the route planning system we can rapidly minimize the route length while at the same time maximize the number of deliveries for each courier and delivery van,” states Anders Segerfelt.

Since ASG Direct is a new company there was no need to merge old systems into the new solution. Instead, the development team could use state-of-the-art best practices everywhere in the system, creating a truly modern application. And using the Rational Unified Process, we made sure that every part is built on proven techniques.

“We used industry standards everywhere. The development work was done in Java with CORBA support. We chose object-oriented development to be able to quickly add new functions to the system,” says Pernilla Ramslöv, WM-data Project Manager.

In this case, the project decided to use RUP extensively and to its fullest capabilities to set up the project and guide all project members through the entire development process.

### Time-to-Market is Crucial

“The only thing the client cares about is time-to-market, and that is crucial, so we actually did the project in 3 1/2 months. We could never have done that without a good process to guide us on the way, and an integrated tool suite such as Rational Suite DevelopmentStudio. RUP is intuitive to use, it is almost like common sense,” says Stefan Bogstedt.



*“With Rational Unified Process, you have happy customers, building the right systems, the right way.”*

*“There is a strong economical incentive to standardizing our development projects on the Rational Unified Process. We are winning projects based on RUP and we are getting the projects done on-time, on-the-money and with the level of quality the customer expects.”*

The time-to-market issue is part of what is known as the “e-software paradox”, which states that for a software development company to be successful it must not only develop very high quality products but bring those products to market at “Internet speed”. So a short time-to-market is indeed crucial, but equally important are the benefits of an incremental development process with a series of releases, where more and more functionality is added. And this enables continuous testing and end-user feedback throughout the project, which guarantees high quality.

“We decided with ASG Direct that in order to meet their time-to-market, we wanted to use an iterative, incremental approach. When we told them that we had previously been using the Rational Unified Process, they were excited. RUP is the leading process for iterative development, and they really liked the idea of using an iterative approach.” says Stefan Bogstedt and explains further:

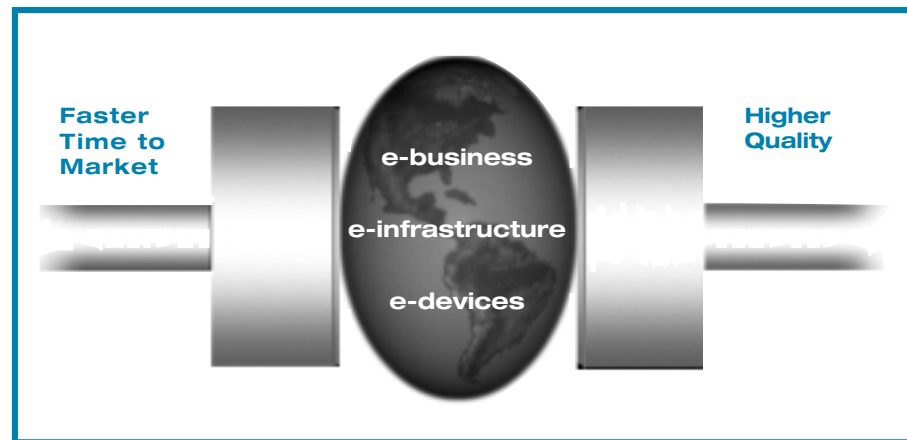
“Even if you bring in Object Technology and Java, the customers do not want to hear it’s going to take a year. They feel it’s too long to wait until the end before they see something. With RUP, we get the basic functionality up in about 40 % of the project time and constantly release in an iterative manner. Customers love that!”

Talking to the customer, it seems that Mr. Bogstedt is right about their enthusiasm. Ingvar Elmér, Vice President and Manager of Business Development at ASG Direct, was ASG Directs Project Leader in this project:

“From my perspective, there is not a single part of the system where we could have got a better solution. WM-data had the best and most interesting technical solutions. It has been exciting to be part of this project.”

### **A Global Standard Process**

The Rational Unified Process proved to be the right tool for the ASG Direct system, but WM-data does not leave it at that. They try to amend something to RUP with every project, using RUP’s customization and extensibility capabilities. After the transition phase, before the release, they have a “debriefing” phase where the development team sit down and go over everything, make a map of where the pot holes were, where they went wrong and what went well. In the next release, the mistakes are not repeated. In combination with RUP’s standard features, this method makes RUP a true winner for WM-data.



► Today, software development organizations face shorter development cycles, yet must produce higher quality in Internet time. This is what is often referred to as an e-software paradox.

## About Rational Software Corporation:

Rational Software Corporation (NASDAQ: RATL), the e-development company, helps organizations develop and deploy software for e-business, e-infrastructure, and e-devices through a combination of tools, services, and software engineering best practices. Rational's e-development solution helps organizations overcome the e-software paradox by accelerating time to market while improving quality. Rational's integrated solution simplifies the process of acquiring, deploying, and supporting a comprehensive e-software development platform, reducing total cost of ownership. Founded in 1981, Rational, one of the world's largest Internet software companies, had revenues of \$411.8 million for its fiscal year that ended in March 1999, and employs more than 2,000 people around the world.

"There is a strong economical incentive to standardizing our development projects on the Rational Unified Process. We are winning projects based on the process and we are getting the projects done on-time, on-the-money and with the level of quality the customer expects. The client is able to see the evolution and the fast results, allowing them to feel more in control and totally committed to the process. This helped make our decision to standardize on the Rational Unified Process across the entire company", adds Stefan Bogstedt.

And that is quite a decision. The "entire company" means some 9,000 employees in several European countries.

"We are an international company. We need a common language for systems development, and the Rational Unified Process provides this. We had our old process, but it is hard to develop and update, and it is not our core business to develop and maintain processes. So we chose RUP, which is a common denominator for all of us. We can actually work across the borders with great ease," explains Stefan Bogstedt and adds: "You can see the business value. With Rational Unified Process, you get happy customers by building the right systems, the right way!"

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