

Nordisk Mobiltelefon is the operator with the best geographic 3G coverage in Sweden, thanks to the speed and agility made possible by Progress® DataXtend® Semantic Integrator and Progress® Sonic™ ESB.



CASE STUDY

CHALLENGE

Nordisk Mobiltelefon wanted to build and maintain a flexible and easily adaptable IT system—with components from different developers and support for different partners—under severe time constraints.

SOLUTION

The company chose Progress® DataXtend® Semantic Integrator and Progress® Sonic™ ESB to create a flexible integration of the company's different systems.

WHY PROGRESS® SOFTWARE

The Progress solution had built-in support for the TM Forum's SID model and was perfectly aligned with Nordisk Mobiltelefon's need for flexibility and incremental development.

BENEFIT

Progress will enable Nordisk Mobiltelefon to integrate its different IT systems easily, and will also allow the company to add, change or exchange applications and systems quickly and at a minimal cost.

When the Third Generation (3G) licences were auctioned to telecommunications service providers in the late 1990s, unlike many other parts of the world, the EU chose to limit itself to using the Universal Mobile Telephone System (UMTS) technology. As a consequence, the 3G operators in Sweden had to put up an enormous number of base stations to build a network that could reach the required population coverage target of 98%. Unfortunately, reaching 98% of the Swedish population only necessitates around 30% geographic coverage. This has led to patchy reception and reduced mobility for the end users. The EU decision thus indirectly led to the founding of Nordisk Mobiltelefon.

The people who founded Nordisk Mobiltelefon saw a business opportunity—with a combination of advanced 3G technology and the old NMT 450 MHz frequencies. They would be able to offer significantly better geographic coverage and increased mobility for users at a significantly lower cost of investment. This would be possible owing to the larger reach of a 450 MHz base station compared with a UMTS equivalent, and at this time there were already examples of advanced 3G networks built with NMT 450 MHz frequencies in both South America and Asia.

RAPID DEPLOYMENT OF NEW SERVICES

Operations started in Norway with mobile broadband in the autumn of 2006. Like Sweden, Norway is a country with many weekend houses and a geography that makes it extremely difficult to build a 3G network with UMTS technology that covers the entire country. The mobile broadband service was launched in Sweden in early summer, 2007.

But mobile broadband in Sweden and Norway is only the beginning. As of January 1, 2008, Telia has taken the old NMT 450 phone network offline, and Nordisk Mobiltelefon has started its own mobile telephony service in Sweden. This will soon be rolled out in other markets.

"We didn't want to repeat the mistakes the 'old' operators had made," explained Johan Jobér, CTO at Nordisk Mobiltelefon. "They are huge, inflexible organizations stuck in old IT systems that are nearly impossible to change. This means they can't react as quickly to developments in the market."



“When Progress called me, I had more or less resigned myself to developing an integration solution myself. What Progress showed me with Sonic ESB and DataXtend Semantic Integrator was exactly what I wanted, but much more advanced than anything I could have developed myself.”

— Thomas Norberg
CIO
Nordisk Mobiltelefon

“In many ways we are a virtual company,” said Jobér. “For example, when we needed to put up our base stations, we didn’t build our own masts. Instead, we rented space in Teracom’s TV masts. We concentrate on what we do best—identifying new opportunities in the market, and quickly developing offerings to match them. It isn’t really important to us who handles which of the steps in the value chain, us or a partner.”

Thomas Norberg, CIO, joined Nordisk Mobiltelefon in December, 2006 to build up its IT infrastructure. “The challenge for Nordisk Mobiltelefon is to integrate all the different partners so that they work together seamlessly as part of the organization. At the same time, we don’t want to become too dependent on a single partner. For example, we have our own customer database and billing system, but the operation and maintenance is outsourced to another company,” Norberg explained.

SPEED AND FLEXIBILITY

Another great challenge is that the integration of new services and partners happens under constant time pressure. Norberg explains that he neither believes in nor has the time for long feasibility studies and he can’t spend months on demand specifications. He has extensive experience in the telecoms industry and is determined not to repeat the mistakes he believes the big operators have made.

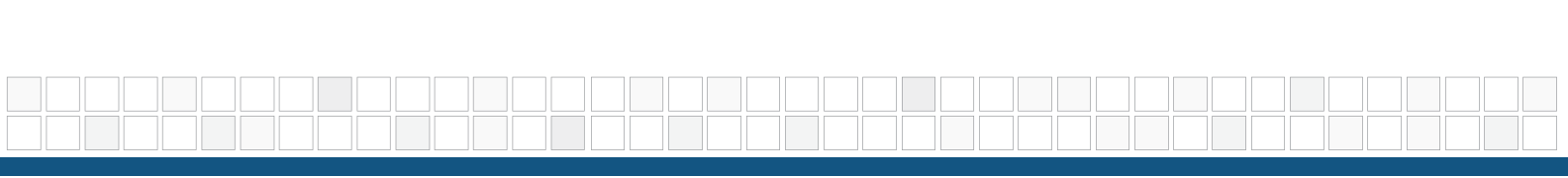
“They think in terms of separate processes, and there’s often a lack of support for systems from different departments to communicate with each other. The systems that are in place in the industry today can be likened to silos, where communication between them is very difficult to manage.”

“When a system from one process needs to communicate with another, they need to develop a customized connection to transform the data so that the receiving system understands it. As you start adding more and more systems, the number of connections starts to grow exponentially until it becomes impossible to gain an overview. When you lose the overview, making large changes to the system becomes an insurmountable task.”

A DIFFERENT SOLUTION

Norberg had an idea about a central system for the transformation of data, to which all services and applications would be connected. He likens his idea to a Lego® board. When you need to add a new system or application, it’s like putting a Lego brick on to the board. When it’s time to change it for another, you simply pull it out and add another.

“The key is to realize that it’s all about information—and how it relates to other information. The difficulty lies in finding a common model to which all parts of the organization can adhere,” Norberg said.



“Take something as simple as a customer. The definition of a customer can differ quite significantly depending on what department of a company you talk to. It may be something completely different to the logistics department than it is for the sales department. So you really need a common data model to facilitate communication between different systems.”

“I had been looking at a number of different integration solutions and was actually in the process of signing a contract—it wasn’t exactly what I wanted, but I needed to have something to integrate the different systems. That’s when Progress called and told me about their enterprise service bus, Progress Sonic ESB, and Progress DataXtend Semantic Integrator (SI), their common-model-based data services tool. I remember thinking: ‘this is exactly what I’ve been looking for’. DataXtend supports a common data model, with support for the TM Forum’s SID model which was developed for the telecoms industry,” Norberg continued.

The first pilot project meant integrating the web shop with the customer database, a process that until then had been handled manually. “We started the project at the end of May, with the systems online, and were able to roll out Sonic ESB and DataXtend SI and integrate them in less than four weeks.”

NEW OPPORTUNITIES

The speed was perfect for both Norberg and Nordisk Mobiltelefon. Norberg believes it would have taken three to four times longer to integrate the systems with traditional tools.

“The real advantage is the ability to make small, incremental changes. We usually decide to use a system and then deploy it immediately—not because we believe it will address all our needs for the foreseeable future, but because it will solve the problems we have today. When we have outgrown it, we simply exchange it for another, like a Lego brick on a Lego board.”

“At the moment, we’re looking at changing our customer database. We’ve used the old one since we launched our mobile broadband service in 2006, but since we’re now offering 3G mobile telephony we need to change it.”

The customer database is critical to a telecoms operator, and Norberg says that migrating the data can be a nightmare: “To most telecoms operators, exchanging the customer database is unthinkable, but with DataXtend SI it’s not a problem.”

Flexibility is what Norberg values most with Sonic ESB and DataXtend SI. But he also believes that Nordisk Mobiltelefon has gained significant increases in productivity as a result of the ease of integrating different systems.

“With traditional methods, we would have needed at least ten people working in the IT department at Nordisk Mobiltelefon—but we only have three. I handle architecture and planning, and I have two IT managers to help me with the day-to-day operations in Sweden and Norway.”

Nordisk Mobiltelefon has gone from being virtually unknown to being the operator with the best geographic 3G coverage in Sweden in less than a year. You would think that Norberg should be quite happy with how fast it happened.

“It’s fantastic,” he said, but added: “This was really just the start-up phase. Now it really begins.”

Worldwide Headquarters

Progress Software Corporation, 14 Oak Park, Bedford, MA 01730 USA
Tel: +1 781 280-4000 Fax: +1 781 280-4095
On the Web at: www.progress.com

For international office locations and contact information, please refer to:

<http://www.progress.com/worldwide>

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ABOUT PROGRESS SOFTWARE

Progress Software Corporation (NASDAQ: PRGS) provides application infrastructure software for the development, deployment, integration and management of business applications. Our goal is to maximize the benefits of information technology while minimizing its complexity and total cost of ownership. Progress can be reached at +1-781-280-4000.

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