Simpler IT speeds up new service provision, drives take-up

Summary: Mobitel, Slovenia's biggest wireless communications service provider, operates in challenging conditions. It is facing increasing competition, is heavily regulated and must comply with complex governmental processes before it can provide customers with new products and services. In addition, Mobitel's OSS/BSS applications were developed in silos and it relied heavily on manual processes. Nevertheless, it has transformed itself, now delivering unique and customized products and services to the market, and will do so even more as it merges with its parent company, the incumbent fixed communications services provider, Telekom Slovenije (see page 26). For example, it will begin to offer combined fixed and mobile bundles starting July 2011. Little wonder Mobitel decided to adopt a service oriented architecture along with TM Forum's Frameworx and streamline its IT and application infrastructure. It worked closely with IBM to gain greater operational flexibility, business agility, and the ability to respond to customers more rapidly. Mobitel reaped benefits almost immediately.

Mobitel was established in 1991 and is the biggest provider of mobile communications in Slovenia. Mobitel is part of Telekom Slovenije, which has some 3 million subscribers across five countries. Mobitel itself has about 1.5 million subscribers, but what it lacks in size, it makes up for in innovation. Arguably, it leads the world's service providers in many application areas.

The telecoms market in Slovenia started out as a heavily regulated industry. Mobitel, under its parent company Telekom Slovenije, was the original mobile service provider in Slovenia. At the end of 2003, Mobitel had approximately a 73 percent market share, and competed against three other providers.

As Mobitel faced increasing competition, the company realized it must reduce costs and streamline its processes to enable it to react to competitive threats quickly. It needed to be able to launch new products and services in days, not weeks or months. The executives at Mobitel decided the best approach was to implement industry standards and service oriented

architecture (SOA) principles – and TM Forum's Frameworx is an enabler of SOA.

Mobitel has now automated and manages its complex processes, SOA-based integration to various systems, and OSS/BSS applications after adopting a business process management platform (IBM's Dynamic BPM), combined with IBM WebSphere Telecom Content Pack (WTCP). WTCP provides prebuilt accelerators aligned to TM Forum's Frameworx, and an SOA-based approach to accelerate its time to market and optimize the business costs involved in generating new products.

Boštjan Robežnik, IT director, Mobitel, led the push to implement an SOA. He says, "I approached Mobitel's executives with the idea that SOA is a clear 'must' for the future. You have to have an SOA to enjoy a clean IT structure. SOA enables us to orchestrate the entire IT landscape and all its applications using a single business support system. It was

only after we had obtained funding and implemented the SOA technology that we began to realize the potential for business optimization."

Mitja Stular, CTO, Mobitel, agrees with Robežnik: "SOA increases our efficiency. It brings a kind of organized distributed modularity into our network. Previously, we had many, many modules which were programmed in Java and C++. "

The new approaches are already proving beneficial, as Mobitel is merging with its parent company Telekom Slovenije, which provides fixed line services in Slovenia, and starting in July 2011, will offer fixed and mobile service bundles. To do that and offer new and innovative services and other bundles, the merged entity will rely on the new products and concepts enabled by the transformed order management process.

As Klavdij Godniè, CEO, Mobitel states, "We implement the services of the future today, bringing the convergence of voice, data, Internet, video, television, advertising, local services and social networks. We achieve this by integrating with many established technologies, products and service suppliers in the industry."

Selection process
Mobitel's primary reason for adopting a BPM and SOA approach was to separate business processes from the business applications so that business agility could be improved. TM Forum's Frameworx was adopted as the basis to provide a standards-based implementation model based on SOA and telecom industry standards, enabling Mobitel to reduce the risk of a vendor-specific implementation model.

Mobitel then prioritized the business processes that needed to be transformed, focusing on the those that were most important to meeting its core business objectives. SOA maps IT services to business goals to help rationalize and optimize business processes by identifying and minimizing redundant or inefficient tasks. It also reduces operating costs, which in tough economic times is very important. With the promise of business optimization and the cost reductions it brings, Robežnik obtained buy-in from Mobitel's business units.

One of the first aspects of its business that Mobitel chose to transform was order management, specifically customer order handling. Right from the start, Mobitel was committed to using

TM Forum's Frameworx in its IT transformation program and chose IBM as a partner to convert its existing infrastructure using its Smart SOA approach.

Tangible benefits
The IBM WTCP provides prebuilt process models, business services, messaging schemas and other content based on TM Forum's Frameworx, and supports the WebSphere Dynamic BPM platform. By adopting this Frameworx-based approach, Mobitel has enjoyed the following benefits:

- 40 percent less expenditure on professional services;
- 80 percent saved through the reuse of artifacts;
- 45 percent shorter delivery cycle for the ongoing maintenance and new releases of processes;
- 40 percent reduced total cost of ownership.

Mobitel began work on the customer order management function after a business value assessment was completed in collaboration with a team of business and technical experts from IBM.

Klemen Dragar, IBM client executive, says, "We created this assessment with staff from Mobitel working alongside our telecom industry experts to draw up a transformation roadmap. We needed to understand what Mobitel wanted to accomplish as a business and how quickly they needed to achieve their goals.

" We helped them assess the costs and lead times required for process transformation using their existing systems and compared that cost to using a SOA approach using IBM's Dynamic BPM capabilities and our accelerators for implementing Frameworx process models, data models, application maps and a technology neutral architecture. It was clear SOA would create big financial benefits and we would be able to measure the benefits to Mobitel."

Tackling the first process
Customer order management at Mobitel was a heavily manual process, which took a long time to complete and was prone to errors. In addition, Mobitel is obligated by law to provide a contract with the consumer, verified by a signature, before

provisioning or placing an order for any service.

In the past, this manual process meant that the store keeper had to call the credit card company to verify that the person was who they claimed to be, then the signature had to be sent to Mobitel's back office to be scanned and fed into the document management system. From there the customer information was manually entered into the order management system.

In addition to verifying the signature, the would-be customer's physical address had to be already listed in the government's database. Not surprisingly, on average, it took up to 45 hours for a customer to register for and receive a new service.

Electronic signatures

Now, after streamlining the order management process, the customer signs their name electronically on the new point of sale terminals (which have electronic forms built in that are filled in on screen) and provides all the other necessary information on the spot. This information is sent straight to Mobitel's back office with all the credit details.

IBM's WTCP helped accelerate implementing this new process, by providing out-of-the-box SOA-based business services that are mapped to the Forum's Application Framework (TAM) to abstract the functions exposed by the OSS/BSS systems. It also provides the business service interfaces from the Information Framework (SID) used by business data objects, and the business processes based on the Business Process Framework (eTOM).

The Information Framework was used to describe the process by which the electronic form and signature were sent to the order management system. It was implemented by integrating the existing order management system, Mobile Mercury, with the WebSphere BPM platform, using the same processes. Mercury allocated tasks to the back office staff, and then measured how long the process took. Every task was created in the business process management platform, and monitored and measured.

The whole business process is driven by a series of screens so that when all the manual steps are completed, the order handling process then invokes various technical processes.

These are exposed as business services in the service management and resource management layers, and had been deployed previously.

The Information Framework-based order process still requires some manual intervention for exceptions, but getting the right tasks to the right people has reduced the cycle time, as proven by the measuring and monitoring key performance indicators that are used iteratively to refine the process using the BPM platform.

Once Mobitel is comfortable with the initial deployment, the system will move to a higher level of automation. Approaching the project incrementally ensured continuity and helped staff develop their skills on the new tools. It also helped the team identify gaps in the process, enabling process re-engineering to meet the demands of the local situation.

The screens used by the back office staff are all wizard-based, making for a better customer buying experience in terms of consistency, and ensuring that Mobitel complies with government rules related to pricing and discounts.

Sustaining the change

Now, through a BPM and SOA competency center, Mobitel develops new business services that encapsulate the integration functions out of the OSS/BSS applications once and reuses them many times as developers access the services they need. The center has a big impact on the deployment of new processes and their upgrades, on the initial phases of modeling and service naming, and the use of appropriate standards.

Robežnik says, "By using the IBM WebSphere Business Modeler, the business people have a way of communicating with IT, providing ideas about what the business processes should look like. Our business people used the IBM WebSphere Business Monitor to measure our human tasks and our different key performance indicators. This bidirectional communication between IT and the business units gives us more agility in the market and helps us lower costs.

"Migration of services to the WebSphere platform has reduced the number of servers and operating costs. We also can introduce new services faster – such as a self-service portal, and a new billing and CRM application, so we're

providing better support to our customers, who are happier as a result."

Swami Chandrasekaran, Chief Architect, IBM Industry Solutions Services, adds, "The Frameworx standards including the Application, Information and Business Process Frameworks, and the WebSphere Telecom Content Pack were key enablers for Mobitel. These elements combined helped create the big picture, the vision, and allowed everyone to visualize the consolidated OSS/BSS target architecture, where we were going, to get their minds around it.

"A lot of education was involved – we built dedicated teams to work on the enterprise business architecture, all using standard interfaces and information models. WebSphere Telecom Content Pack is aligned with the Information, Business Process and Applications Frameworks, which enabled the Mobitel team to accelerate the deployment of the automated order management solution."

The future is exciting for Mobitel, as it prepares to merge with parent company Telekom Slovenije, and offer combined fixed and mobile bundles and yet-to-be-created product and service offerings. To do this, staff will use the standards-based processes and concepts that enabled it to transform the order management system to improve customer service and speed up order delivery times.

Robežnik concludes, "Adopting the industry standards means using the best practices from around the globe, which help us run optimally. Also, Telekom Slovenije owns other mobile operators that can now easily adopt our solution because it is based on industry standards. This means our knowledge can be leveraged for additional benefits."

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