

KPN Rapidly Builds and Future-Proofs Key Application Supporting its Mobile Networks

Facing the challenge of creating a new application to support the addition of 4G to its mobile service offerings, telecommunications provider KPN needed to move quickly to take advantage of a market opportunity. They leveraged the Mendix platform to build this new Radio Access Network Inventory administration application quickly and cost-effectively. Because Mendix has also reduced time to market for subsequent application modifications by 70 percent, KPN is able to roll out new service offerings months sooner than previously possible.



Challenge

To roll out new sets of services for its cell phone plans, KPN previously had to make extensive changes to a massive internal database and workflow application. This Radio Access Network inventory administrative application supported all the processes for KPN's 2G and 3G networks.

In 2012, KPN started developing a more advanced 4G network to provide high-speed mobile data services for its subscribers. But the creation of a new network posed a series of challenges. Internal developers determined that making changes to the old application to support 4G would be too time consuming and expensive. And building a new, separate app to support different technologies would increase maintenance costs, create data quality problems from data entry across multiple platforms and cause delays in roll-outs of future changes in the 4G network.

"The options we had ahead of us were just too risky for the organization," said Ton Verhoef, Product Manager, Radio Tooling & IT at KPN. "Customizing an off-the-shelf application would have required that we change our process and that would have

added a half year to the 4G network roll-out. Additionally, building a new tool internally, with our IT resources, would have taken too long and been too expensive. We decided to go a different way."

Solution

KPN chose to develop a new Radio Access Network inventory administration app using the Mendix platform. Verhoef said the company chose the platform for three reasons: its promise of a short development time, the flexibility it offers for future builds, and its cost-effective pricing structure.

"All things considered, Mendix was the perfect solution for our needs," Verhoef said.

To streamline the build process, KPN focused on business and functional requirements and teamed up with the IT services firm Tech Mahindra for development. KPN's internal team of one project manager and three IT architects worked closely with Tech Mahindra's development and implementation teams on an agile, scrum-driven process.

Verhoef said Mendix's visual, model-driven development environment, as well as social

collaboration and project management capabilities, helped Tech Mahindra's teams on-board quickly to the platform and speed up the development time.

"Plus, the way the Mendix platform is structured, it offers a really iterative development process, which gives us great flexibility for the future," Verhoef said. "Because the model is the working application, you can build prototypes, make changes quickly and seamlessly grow to the final production application. With Mendix, we can involve end users in the process and identify any issues early on. This helps us to come up with the right solution and have the flexibility to easily adapt in the future."

their bordereaux, as well as any pending tasks and activities, through a convenient online dashboard. Portal administrators are able to authorize, manage and control user access to all programs and risks using the Mendix App Platform's built-in security features.

Results

Using the Mendix platform, KPN and Tech Mahindra created a new, integrated application that supports 2G, 3G and 4G and replaces earlier platforms. The total project cost in the end was actually less than KPN had projected just to make alterations in the existing application.

The company also expects to bring new services to market faster based on the time saved using the Mendix platform. In the past, Verhoef said it took 6-8 months of development time on the old Radio Access Network inventory administrative app before KPN could roll out a new version of its network. Using Mendix, KPN can now update the new administrative app in less than two months, allowing the company to start a new service roll-out 4-6 months earlier than was previously possible.

"The mobile industry is evolving at such a rapid pace, we have to roll out new services quickly to stay ahead of our competition. Using the Mendix platform, we built a critical application much faster than we could have using conventional development methods."

Ton Verhoef

Product Manager
Radio Tooling & IT, KPN

Then there are the innovation costs. Verhoef said he expects the cost of future changes to the app will drop by 30 to 40 percent, helping the company respond to fast-moving market changes and offer competitive services more quickly.

"Mobile networks will continue to develop in the future, and we're going to need to develop new features," Verhoef said. "There's always another generation coming in the mobile industry, and Mendix provides us the speed and flexibility required to adapt our application as we go, so we can remain competitive and innovative."

About KPN

KPN is a leading supplier of telecommunications and ICT services in the Dutch, German, French and Belgian markets. KPN offers consumers total solutions for fixed and mobile telephony, internet and TV. For business customers—from multinationals to SMEs to home offices – KPN provides fixed and mobile telephony and data services.



Mendix helps enterprises achieve their digital goals. Our digital innovation platform empowers customers to bring new products to market, digitize customer engagement, and automate unique business processes. Facilitating an iterative, collaborative approach, the platform brings business and IT together to build and deploy innovative applications at the speed of ideas.

A recognized market leader, Mendix is helping hundreds of customers across dozens of industries achieve exceptional results. For more information, visit www.mendix.com and follow us on Twitter [@Mendix](https://twitter.com/Mendix).