

Nokia helps MobileOne Ltd. (M1) of Singapore maintain their leading position in the mobile market by leveraging on Nokia's cutting-edge test and development lab jointly setup with M1. Located within M1's corporate office, staffed by Nokia and M1 experts, FutureLab facilitates delivery of attractive and high-value 3G services through concept validation testing.

New service proofs of concepts are developed and go through end user feasibility trials at FutureLab before deployment. For example, high-speed Internet access, MP3 music downloads, live news broadcasts, video downloads and two-way video calls went through thorough testing before being rolled out to 3G users.

FutureLab has a full portfolio of different service platforms to carry out application testing while a dedicated, full-time team of Nokia experts support service development for both operator and third party developers to create revolutionary new services.

Originally set up to visualize how initial M1 3G services would look before M1's 3G network was up and running, FutureLab will continue as a test bed for new services with enhanced features.

Realistic testing and visualization of service concepts before deployment

FutureLab creates as well as tests service concepts to see if operator network can handle the service requirements and end user handsets can support new rich media application requirements. This validation activity is one step above functional testing of 3G technology. Both M1 and Nokia also evaluate new service ideas and agree on the priority of service development for the coming months through a steering committee.



A proposed IP Multimedia Subsystem (IMS) application is a good example of FutureLab's service concept visualization. This application enables end users to participate in community-based user group activities. Through their common interest, end users send and receive messages; and share images, voice clips and videos in real-time. The FutureLab team built an application prototype that enabled M1 to validate the service features and the end user experience before bringing it to the market.

Providing valuable marketing expertise through Nokia Business Value Consulting

As a part of FutureLab's value added service, Nokia Business Value Consulting is leveraged to provide industry-leading advice in the areas of services prioritization, marketing, usability, and developer coaching.

Highlights of the IMS application visualization and testing

- Stringent service validation before deployment ensures high-quality end user experience
- Focused testing helps steer M1 investments towards the most beneficial areas
- Close working relationship between both players brings vendor expertise in-house into M1 while Nokia receives valuable operator feedback for future product development
- Comprehensive evaluation covers Nokia as well as third-party products to ensure smooth development and delivery of services thereafter.

Nokia–M1 FutureLab brings the vision of new mobile services to M1

Nokia creates a joint development environment with M1 to ramp up 3G service delivery.

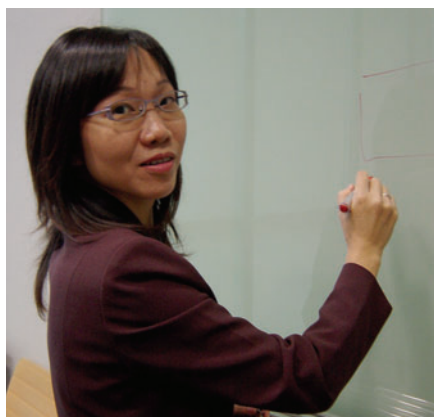
"Nokia consultants are facilitating the prioritizing of the end user services we want to offer," says Ms. Kate Sin, General Manager, Wireless Internet Applications/Future Lab. "They guide us through systematic and business-driven exercises to help us ensure our investments are focused in the most beneficial areas," she adds.

"Pekka Oilinki, our Nokia FutureLab Manager, also brings Nokia experts to meet and address our concerns and discuss the best ways to implement end user services through his extensive contacts within the Nokia organization," says Lau Seng Keat, Senior Manager for Wireless Internet Application/FutureLab at M1. "He also lets us in on the latest developments, especially the directions Nokia's future product development is taking," says Mr. Lau. "This benefits us as we develop our network and come up with future service plans," he added.

Getting real-world up-to-the-minute feedback for Nokia's product development

"It is important for us to get hands-on, customer feedback about products that are in the early development process," says Mr. Oilinki. "Receiving early feedback allows us to incorporate changes in product programs earlier, and also facilitates better designs in future releases," he added.

Ms. Kate Sin



Mr. Steven Chan and Mr. Wong Kum-Meng

Ms. Sin agrees noting, "Through the FutureLab team, we can give Nokia information about operator needs and end user expectations, thereby influencing Nokia's product design with real market feedback."

Developing new prototype technology

FutureLab improves existing platforms and applications as well as develops completely new technologies in its validation efforts. Ms. Sin says, "FutureLab facilitates the development of new services because existing technology cannot fulfill new requirements." She adds "FutureLab testing also creates a visual and tangible

Ms. Catherine Chew, Mr. Pekka Oilinki, Mr. Lau Seng Keat and Ms. Chin Hwee Chin



Nokia FutureLab

- Develops new service platforms
- Provides a dedicated Nokia support team
- Assists operators to rapidly identify new service opportunities existing as well as platforms
- Helps operators better understand the capabilities of new services

demonstration of how technology can be delivered to a simulated end user base."

Local application developers can utilize the FutureLab facilities or get support from the lab team. "Nokia offers the systems integration capabilities to help mobile operators create solutions that combine the best of Nokia and third party products," says Wong Kum-Meng, Nokia Account Director for M1.

"FutureLab has attained a recognized role in M1's Product and Services Development process. FutureLab has helped us conceptualize and demonstrate future services way ahead of its time. This allows us to maintain our innovative lead," says Steven Chan, Director, Internet Services and Product Development, M1.