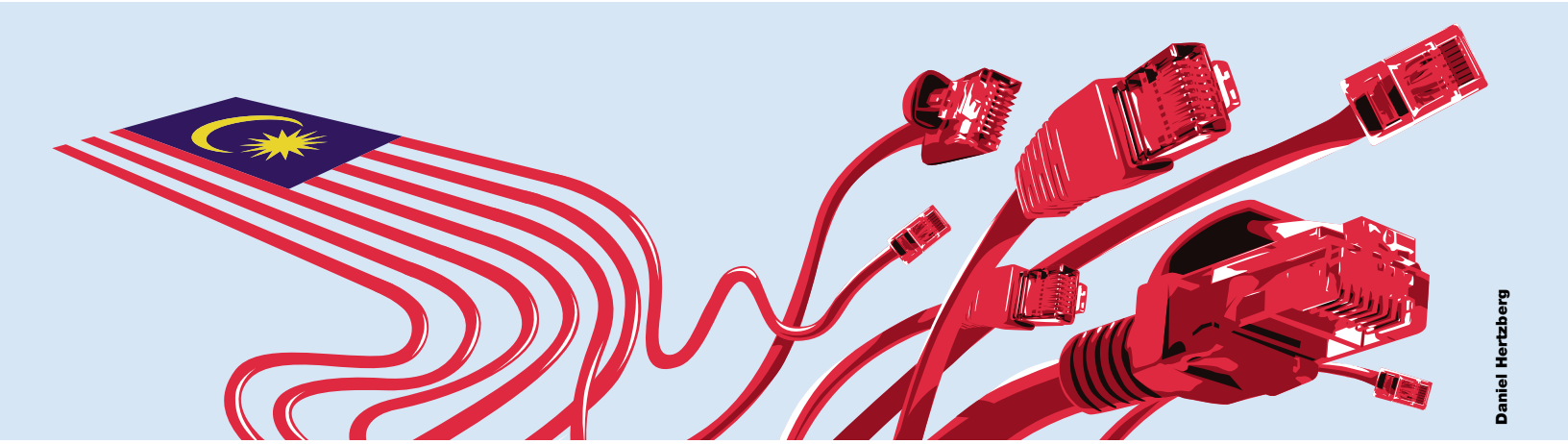

Daniel Hertzberg

Transforming a fixed-line incumbent:

An interview with Telekom Malaysia's CTIO

Giorgio Migliarina, the chief technology and innovation officer of Telekom Malaysia, took on one of the toughest challenges in his sector: to turn a fixed-line incumbent into a lean, competitive machine—and to do it quickly.

Javier del Pozo

Giorgio Migliarina was no stranger to challenges when he was appointed chief technology and innovation officer (CTIO) of Telekom Malaysia on May 1, 2009; he benefited from extensive global experience in the telecom sector. But every seasoned executive who has tried knows how hard it is not only to launch new network technology quickly while rethinking a legacy business, but also to change the mind-sets and behavior of thousands of employees. Migliarina is widely credited with having done exactly that. McKinsey's Javier del Pozo recently sat down with him to learn how.

McKinsey on Business Technology: *Could you provide some background on your experiences at Telekom Malaysia?*

Giorgio Migliarina: In the past few years, the company has been transitioning from its position as an incumbent operator to a player in a very competitive environment. During this transition, we have had to speed up our time to market and become more customer-centric, while introducing technology that enables us to leapfrog our legacy infrastructure.

We had problems with obsolete network technology. Our legacy IT systems and processes focused inward, rather than on providing a world-class customer experience. In response, we aggressively launched a brand-new fiber network and worked to change the collective mind-set and approach of our people.

To help articulate the transformation program, I decided to break the process down into three components: launching the new, transforming the old, and changing the mind-sets of our people.

McKinsey on Business Technology: *Regarding launching the new, you mentioned building a*

Takeaways

Giorgio Migliarina, Telekom Malaysia's chief technology and innovation officer, helped rethink the company's legacy business and at the same time changed employee mind-sets and behaviors.

In this interview, Migliarina discusses the process for building a fiber network and managing the program for doing so.

He also explains how taking a lean approach allowed for quick wins and rapid change; success, Migliarina says, is largely the result of strong implementation.

fiber network. What did that process look like at Telekom Malaysia?

Giorgio Migliarina: The key issue was finding a way to provide the highest possible bandwidth and the most widespread telecom services in the country. We needed a brand-new fiber infrastructure.

The launch of the new fiber network was successful in three key ways: we rolled out fiber access in the densest part of the country, deployed a brand-new and complete Internet protocol (IP) backbone and IP multimedia subsystem, and created new operating and business support systems (OSS/BSS).

The Malaysian government understood that this program was very expensive to roll out in less populated areas. So officials decided to cofund up to 20 percent of the total costs, ensuring total coverage of the "home pass" that is approaching one-third of the households in the country.

McKinsey on Business Technology: *These problems are complex, and delays are typical. What was your experience in running this program?*

Giorgio Migliarina: According to some measures, Telekom Malaysia has achieved one of the fastest fiber rollouts in the world. After we signed the public-private partnership agreement with the government, we completed the launch of the service in about a year and a half. We took 5 months to set up an IPTV platform and 9 months to have a full OSS and BSS stack. Some 18 months after the signing, we managed to launch our triple-play services with a new core, new fiber, and new OSS/BSS.

McKinsey on Business Technology: *The new OSS/BSS is reportedly quite innovative.*

Giorgio Migliarina: We developed the new OSS/BSS stack by taking a suite of systems from the same vendor. One of our targets was to ensure that less than 20 percent of the solution would require customization—and we were successful. This approach essentially lessened the complexity of what we had to do. We now have a simple system that covers customer relationship management, billing, enterprise interfaces, and other operational procedures.

Most of these processes need only limited human intervention. For example, when we receive a request for triple-play service activation, we fire off commands that preconfigure the system to accept the customer. The field force then goes to the home and installs the set-top box and the fiber. The box and the fiber termination unit work without the need for further configuration, because the network has been designed to allow that.

McKinsey on Business Technology: *What were the greatest challenges you faced when launching these new IT systems?*

Giorgio Migliarina: The hardest part was managing three different but parallel programs, because each program had many structural touch points. One of the difficulties we encountered occurred during the development phase. We had four separate IT releases that we would normally work on in sequence; in this case, we had to work on them simultaneously. So, because of time constraints, we started the design and development work for the second release before we had launched the first release. At any given point, we had at least three separate teams working at an incredibly accelerated pace with our systems-integration group and our software vendors on the new releases.

McKinsey on Business Technology: *You mentioned earlier the second and third components of the transformation—that is, changing the old systems and the mind-sets of your people. How did that go?*

Giorgio Migliarina: Our flagship initiative, to deliver outstanding customer service in the most effective manner, was to deploy lean principles in an ambitious program designed to move us "toward operational perfection," or TOP. When I started, I definitely thought our goal was too optimistic. Now, a year and a half into this program, the improvement in customer service we have already achieved has been phenomenal.

For example, we reduced fault-resolution time by 80 percent, and we cut the time required to install a new line by 70 percent. These sizable improvements have also generated a lot of positive momentum within the network operational field force. Our technicians are very proud of what they have achieved. TOP has been the key driver for the change in mind-set within our rank and file.

The other core aspect involved rationalizing our "stovepipe" legacy systems.[1] While we were building OSS and BSS stacks for the new aspects of the business, we also had to rationalize the old system for the existing product portfolio. I am very pleased with where we are at the moment. This year, we rolled out an operations process that features a new IT system to address the legacy problems. The system supports about five million customers and has helped fulfill one million orders since it was launched last year.

Another aspect of rationalizing our legacy systems involved learning how we could use the access network's existing copper cables in a new way. Today, we clearly see how we can significantly increase speeds on the old copper lines and how we can use them to handle demand for increased bandwidth. This achievement was important to me, as data traffic in Malaysia is increasing by about 50 percent per year.

McKinsey on Business Technology: *Regarding TOP, to improve customer service, you had to change the mind-sets of thousands of employees. How did you reach so many people in such a short period of time?*

Giorgio Migliarina: As I mentioned, we deployed the lean approach. We knew there was no silver bullet for solving such a complex problem. The best approach is to be very humble and go into the field to understand the pain points for the field-force technicians, call-center agents, dispatchers, and so forth. I started from there. We then launched a pilot program and made it a success by bringing in people from other regions to observe progress. We rolled out training procedures. We created success and generated a positive vibe from these quick wins. We then leveraged these wins in other regions to spread acceptance and build a willingness to change. And then, all of a sudden, we discovered that

[1] A stovepipe IT architecture has a series of disconnected parts, or silos. Rationalizing such a system involves reconfiguring it so that all the parts are integrated and talk to each other.

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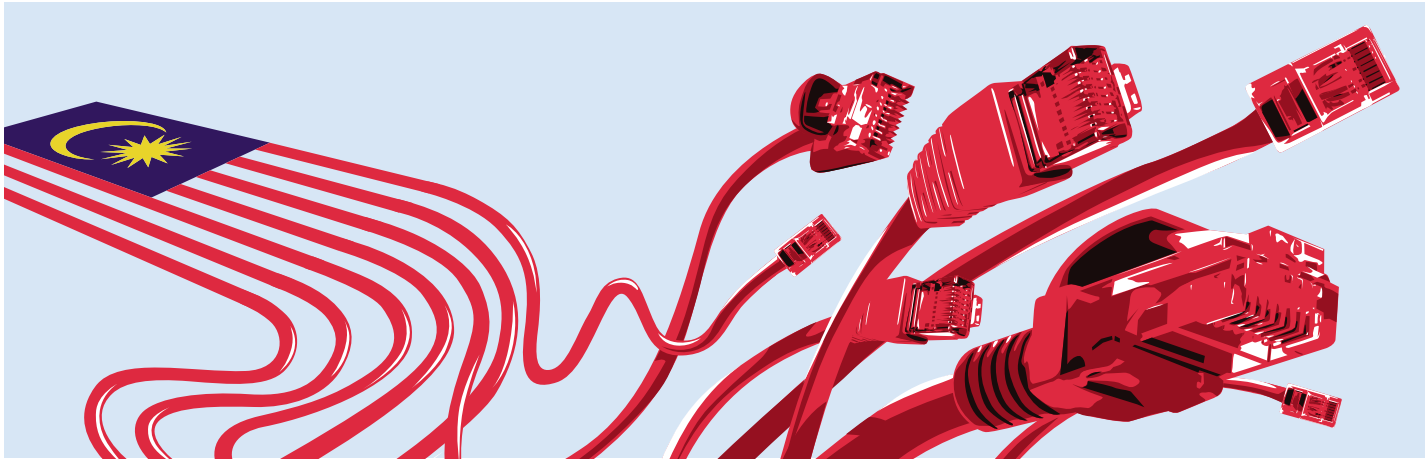

we had deployed these new practices across the country to 10,000 employees and probably another 6,000 contractors.

McKinsey on Business Technology: *What do you do to develop your best talent within IT and network technology (NT)?*

Giorgio Migliarina: Within my technical area, we work to identify talent, and then to structure special career paths for these talented individuals. In IT and NT, I created two rising-star teams—one focuses on TOP and another on technology innovation—that serve as accelerators and catalysts for new talent. These teams are made up of young people who leave their line jobs for two or three years. During this time, the rising stars work on very complex, critical, cross-functional, and technical projects. They are exposed to as many people in the organization as possible, including all C-level executives, and they later return to the line in leadership positions with a completely different perspective on how an organization can work.

McKinsey on Business Technology: *Final thoughts?*

Giorgio Migliarina: Ninety-five percent of our success resulted from strong implementation. You need to have strong task forces, with clear roles and mandates, led by very talented and ambitious team members. You also need active performance management in order to drive change at scale across an organization with more than 10,000 employees. Finally, although you might need to take some time to develop your strategy, once you define it, you should stick to it for years to come. As much as possible, don't change it. Serve as a role model every day, and communicate what you want simply and consistently. Your messages—even simple ones—may take many years to reach everyone in the organization in a meaningful way, so don't become discouraged. Be consistent, be persistent, and be straightforward in the way that you communicate important things.

Javier del Pozo (Javier_del_Pozo@McKinsey.com) is a principal in McKinsey's Kuala Lumpur office.