

RUCKUS® Wi-Fi and switches give Mamba Cement the strongest foundation for innovation

In 2015, **Mamba Cement** opened a state-of-the-art factory in South Africa. The company is a relatively new participant in the decades-old cement market. Yet Mamba has gained market share over well-established competitors. There are a number of reasons for this astounding performance: The company has established a strong brand based on product quality, low cost and a focus on the customer experience.



CHALLENGES

The head of IT believes that digital transformation is essential for innovation and a sustained competitive advantage. But the original Wi-Fi and switching equipment was reaching end of life. As more enterprise business applications came online, the network simply couldn't keep up with demand. The IT team was also frustrated because it couldn't get vendor support to help resolve problems. Poor service was completely unacceptable for a company that lives and breathes the highest levels of customer service. The decision was made: There was no future with the

outdated technology or the vendor relationship. It was time for a big change.

SOLUTION

After evaluating some of the top vendors, the Mamba IT department concluded that only RUCKUS® had everything they were looking for to modernize their network: performance, scalability, reliability, security and advanced technology. IT was also impressed with the simplicity of RUCKUS licensing and the affordability of the feature-rich solution. On top of that, the RUCKUS partner put customer service at the core of its mission.

Technology is a linchpin for business success in a competitive market

Mamba Cement isn't just a factory; it's a brand that tells customers they're getting the highest performing product. Customers trust the quality ingredients and exacting processes that produce every granule. The factory produces more than 1.2 million tons of cement per year—serving bulk-buying customers in the concrete, construction and cement blending industries, as well as selling bagged cement to retailers.



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Ernest Lamprecht
IT department head, Mamba Cement

From the beginning, Mamba has been an innovator: It’s the first cement company in Africa to install an on-site waste heat recovery system, which helps power the factory. This innovation has enabled Mamba to deliver a high-quality product at a lower cost.

Ernest Lamprecht, Mamba Cement’s IT department head, is part of a leadership team that believes a heavy industry shouldn’t be weighed down by old processes. This technology-savvy company is committed to being at the forefront of digital transformation. “Cement factories are harsh environments with a lot of interference problems for RF signals,” says Lamprecht. “They’re not typically associated with using wireless connectivity. But, in today’s world, connectivity is the key to everything—staff productivity, operational efficiency, supply chain management, asset tracking, and sales and service.”

Lamprecht recognized the trend toward handling more business on laptops, tablets and smartphones. He

envisioned a factory and administrative offices where people could access the information they needed, where they needed it, using any mobile device.

Unfortunately, the original switching network began to show cracks under the strain of handling more and more traffic from enterprise applications. “We understand strong foundations, and we knew we didn’t have one with our existing network. It didn’t have the capacity, coverage or speed we needed. Employees couldn’t reliably connect to the applications driving digital transformation,” says Lamprecht. “My team is responsible for a 24-hour production environment. We can’t tolerate downtime in operations or in the network that supports those operations.”

Lamprecht had a big vision for technology, and his standards for a new vendor were high. “I wanted technology that could handle enterprise applications on mobile devices in a factory environment. The network had to deliver rock-solid reliability and security down to the port level. It also had to be based on

forward-looking technology that would allow us to stay agile and flexible far into the future.”

It was a long list of requirements and IT was working within a tight budget. “In the end, the clear choice was RUCKUS. They had all the bells and whistles we wanted, with a far better licensing model and pricing than the other vendors we evaluated. I also wanted a vendor who put the customer at the heart of everything they do. Fortunately, we found everything we were looking for in RUCKUS.”

Here’s why IT made vendor expertise and support a priority

The Mamba IT team chose to work with Emtelle (Pty) Ltd., on design, procurement, deployment and training. Emtelle provides turnkey ICT solutions to companies across South Africa. In particular, Emtelle has deep expertise in designing and deploying RUCKUS networks. The company also puts support at the center of its customer relationships—exactly the philosophy Mamba wanted.

“They didn’t just come in with a plan to replace the old access points and switches with RUCKUS products. Our conversations started with our business strategy, which should be where all technology planning starts,” says Lamprecht.

From those strategy discussions, Emtelle developed a detailed design based on how users needed to connect to different applications. “A factory environment presents a lot of challenges to Wi-Fi,” says Dewald Pietersen, technical manager for Emtelle. “RUCKUS APs mitigate interference and perform flawlessly even in harsh environments.

We covered all the areas that required connectivity without overprovisioning APs.”

The RUCKUS ICX® switches are equipped with PoE+, which made it easier to locate RUCKUS APs anywhere without the added expense and disruption of running additional cabling. The RUCKUS ICX switches have given Mamba the combination of economics, high performance, scalability, security down to the port level, and support for advanced wireless technology. The converged network also gives IT end-to-end visibility, with the ability to reconfigure switches and APs remotely.

IT wanted to add outdoor Wi-Fi, which they hadn’t had with the original Wi-Fi. “We wanted to cover areas like the loading docks,” says Lamprecht. “We use an enterprise application called On Key—an asset tracking and management system. With the old network, we couldn’t extend real-time asset management everywhere. RUCKUS technology enables us to extend applications to connect employees to the information they need, anywhere they need it.”

Solid connections enable business agility and flexibility

The RUCKUS network doesn’t just support the factory; it supports Mamba’s entire business. IT has deployed enterprise applications like SAP, Office365, Microsoft Exchange, On Key, and advanced weighbridge operations applications. “We’re committed to digital transformation in every facet of our business,” says Lamprecht. “That’s the way we’ll drive efficiency, reduce costs, manage our supply chain, understand and serve our customers better, and be more agile in the face of changing marketplace demands.”



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“We wanted to make sure there were no login issues for users. No one should have to log in multiple times because connections drop. Roaming has to be seamless and access to applications uninterrupted,” says Pietersen.

Since the network has gone live, it has provided trouble-free operations. “The difference between the old network and RUCKUS performance is stunning,” says Lamprecht. “No matter how we load it up, it just runs. No connectivity issues. No congestion points. No signal disruption. Equally important, we have the capacity and scalability to confidently add new applications, users and devices.”

All set for IoT

“Even at the early stages of design, we were talking to IT about their plans for a large-scale IoT deployment,” says Pietersen. “They’ve already connected some of their assets over the RUCKUS network with absolutely no impact on the performance of the other applications.”

“The path forward for the industry is clear: Embrace digital transformation. A strong technology foundation facilitates a fully integrated value chain. The more we work with the RUCKUS technology, the clearer it is that there’s no equal in the market today,” says Lamprecht. “Thanks to our trusted expert advisors and their exceptional support, we’re able to realize the true potential of our business through this vastly improved network. We’re still exploring the full capabilities of the RUCKUS ICX switches and APs. As far as we can see—and we have a pretty ambitious vision—the sky’s the limit on the business we’re building.”

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About RUCKUS Networks

RUCKUS Networks builds and delivers purpose-driven networks that perform in the demanding environments of the industries we serve. Together with our network of trusted go-to-market partners, we empower our customers to deliver exceptional experiences to the guests, students, residents, citizens and employees who count on them.

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