JK Tyre and Industries Ltd.

Industry and Location
Manufacturing | India

Product(s) and Service(s)
SUSE Linux Enterprise Server for SAP Applications

JK Tyre and Industries Ltd. partners with SUSE to improve operating efficiency and create future innovation capability

Success Story

At-a-Glance

JK Tyre and Industries Ltd. was looking to refresh its IT infrastructure and needed a solution that could support core SAP applications while taking minimal downtime to implement. The company migrated from its legacy Unix system to SUSE® Linux Enterprise Server for SAP Applications with a VMware virtualization layer. JK Tyre boosted its system availability to 100 percent, and is now preparing for the next stage of its SAP adoption of new age technologies.

Introducing JK Tyre and Industries Ltd.

Founded in 1974 and headquartered in New Delhi, India, JK Tyre and Industries Ltd. is the undisputed market leader in truck and bus radial tires in India, with 138 selling locations and a 4,000+ strong dealer network served by nine plants in India and three plants in Mexico. With state-of-the-art modern production facilities in all of its manufacturing plants, the company produces around 32 million tires per year.

The company is widely recognized for its pioneering work in the manufacturing sector. It was the first Indian tire company to manufacture radial tires for the entire range of automobiles, including buses, trucks, light commercial vehicles, passenger cars, multi utility vehicles, and farm & OTR (Off The Road) vehicles. The company was awarded the 2010 Total Productive Maintenance (TPM) Excellence Award by the Japan Institute of Plant Maintenance (JIPM) for the

consistent efficiency of its manufacturing plants, and in 2017 it earned a Golden Peacock Environment Award for its work on sustainable rubber production.

JK Tyre and Industries Ltd. is widely recognized as being among India's most trusted and prestigious companies, as well as being 'India's only Tyre Superbrand', recently recognized as a Consumer Superbrand for the sixth time in a row. It is the preferred manufacturing partner of several leading automobile companies, including Volkswagen, General Motors, Maruti Suzuki, Nissan, Tata Motors, Ashok Leyland, Volvo-Eicher Commercial Vehicles, and Daimler AG.

Challenge

Making tracks
In a high-pressure, competitive industry like automobile parts manufacturing, companies must make use of every possible measure to keep costs low and efficiency high. This is no different for JK Tyre and Industries Ltd., which strongly defends its title as a global market leader in truck and bus radial tire production.

> "Although the project took place over four months, the actual downtime for the migration process was minimal—we only had to take systems offline for 36 hours, which really minimized the impact on our business operations."
>
> **Deepak Gupta**
> General Manager—Information Technology
> JK Tyre and Industries Ltd.

To produce and distribute tires and rubber auto parts to a wide range of customers all around the world, JK Tyre requires efficient manufacturing processes and low-friction methods of coordinating with Original Equipment Manufacturers (OEMs), as well as dealers and distribution networks. In the race to stay ahead of its competitors, the company has long relied on a variety of SAP ERP applications to support rapid, reliable business processes and streamline its supply chain management.

Many of these core applications rely on SAP HANA, which enables the business to provide smart, business-focused services—including an external data portal which dealers can access to feed in their order predictions.

Deepak Gupta, General Manager—Information Technology for JK Tyre and Industries Ltd., explained: "We have relied on a wide variety of SAP applications including conventional modules, New Dimension Modules and new age SAP Technologies like SAP Cloud Platform for our business applications for the last ten years.

"These applications have been indispensable in enabling JK Tyre to gain increased efficiencies and new planning capabilities,

and are critical to the smooth functioning of the business. To keep JK Tyre working, we need the right database and the right operating system infrastructure to support these applications."

JK Tyre had previously been running its SAP applications on an Oracle database, but the company realized that, within the next few years, this database could potentially not be supported by SAP. With this in mind, and due to ageing hardware, JK Tyre decided to make the move to SAP HANA, opening the door to further efficiency improvements and technology upgrades.

"As we were already on the lookout for a hardware change, and support for Oracle was running out, it seemed like the perfect time to move to SAP HANA" said Deepak Gupta. "As a proprietary software of SAP, SAP HANA allows us to make even greater use of SAP applications."

Wear and tear

The legacy IT infrastructure that JK Tyre used to support its SAP applications was approaching end-of-life, and could potentially have slowed down key business operations. To harmonize its planned software upgrade, the company was looking for a

complete hardware and software refresh that would provide a safe home for its SAP database and keep its crucial SAP applications running smoothly.

JK Tyre opted for a cluster of HPE servers as the hardware basis of its new systems, but it needed a stable, reliable operating system to tie everything together.

With 98 percent of its business applications running on SAP ERP, JK Tyre required an IT provider whose infrastructure was tightly integrated with the SAP architecture, for a rapid and simple migration of its systems. As many of its critical applications were SAP-dependent, the company also needed to maximize uptime both during the implementation and for long-term operations.

To continue to support these essential functions, the company wanted an infrastructure provider that could minimize downtime and provide tight integration with its existing SAP applications.

JK Tyre's previous system ran on HP-UX, an HPE operating system—so it would have been easy to simply opt for another HPE solution. But to ensure it was taking advantage of the best possible operating system, JK Tyre assessed a variety of different providers, including Red Hat, HPE, IBM and SUSE.

Deepak Gupta explained: "Our SAP applications run through the entire supply chain, and every department is in some way dependent on them; from procurement, to manufacturing, to collections, to sales. We needed a solution we could rely on to run our mission critical enterprise applications without any downtime, and we wanted something that would integrate tightly with these

crucial SAP systems, and remain available 24 hours a day, seven days a week. After considering all these factors, the SUSE solution just seemed like the natural choice."

Solution

A tightly integrated solution
Following an in-depth evaluation of the potential operating systems, JK Tyre selected SUSE Linux Enterprise Server for SAP Applications, running on HPE hardware. Deepak Gupta remarked: "Throughout our research, SUSE Linux Enterprise Server always came out on top. SUSE Linux Enterprise Server for SAP Applications has the tight integration with SAP systems that we need to support our vital business applications, and SUSE had the competency we needed to reduce migration downtime for minimal impact on production.

"On top of that, the strong partnership between SUSE and SAP means it is possible for us to make maintenance requests to SAP via a window in the SUSE interface. Being able to access support for our SAP applications through a single pane of glass represents valuable streamlining, and it's a mark of how well-integrated SUSE is with SAP. That level of trust signalled to us that we were making the right choice by investing in SUSE Linux Enterprise Server for SAP Applications."

> "SUSE Linux Enterprise Server for SAP Applications has the tight integration with SAP systems that we need to support our vital business applications, and SUSE had the competency we needed to reduce migration downtime for minimal impact on production."
>
> **Sharad Agarwal**
> Head—Information Technology
> JK Tyre and Industries Ltd.

Over the course of the four-month implementation period, JK Tyre and its business partners carried out the migration of its systems and data from the previous Unix system onto SUSE Linux Enterprise Server for SAP Applications, as well as introducing a VMware virtualization layer to protect its applications.

"Although the project took place over four months, the actual downtime for the migration process was minimal—we only had to take systems offline for 36 hours, which really minimized the impact on our business operations," said Deepak Gupta. "We were also impressed by how smoothly the SUSE operating system integrated with our VMware environment. The stability and broad compatibility of SUSE Linux Enterprise Server for SAP Applications means that we can be confident about future expansions and updates to our IT infrastructure, so long as we have the SUSE solution as a base."

Results

Frictionless efficiency
With its migration to SUSE Linux Enterprise Server for SAP Applications complete, JK Tyre is now home to one of the largest enterprise computer systems in the automobile parts industry, with 27 terabytes of RAM, arranged into a three-tier landscape to optimize resources.

The move to running its SAP applications on SUSE Linux Enterprise Server has given JK Tyre an impressive boost to its efficiency and productivity, enabling the company to focus on staying ahead of the competition.

Deepak Gupta elaborated: "Since moving to SUSE Linux Enterprise Server for SAP Applications, we estimate that user productivity has gone up by between 20 and 30 percent. SUSE has delivered the reliability we were looking for—in fact, uptime has risen from 98 percent to 100 percent. While the low total cost of ownership for SUSE Linux Enterprise Server for SAP Applications meant it made up a very small fraction of our investment spend, it has had an enormous impact on the business."

Employees throughout JK Tyre are also enjoying the new operating system's ease of use. "The user experience for our staff is great, and this has made it even easier to carry out and monitor all of our crucial business processes," added Deepak Gupta. "The updates are slick, and it is very easy to patch and tweak systems. This positive user experience has had a knock-on effect, making interactions with our business partners much smoother, and bringing better products to our end-customers more quickly."

Supporting innovation
JK Tyre also enjoys technical support from SUSE itself, whenever the need should arise. Sharad Agarwal, Head—Information Technology at JK Tyre and Industries, remarked: "Our relationship with the SUSE team has been great, and we know we can rely on their top-class IT support. However, their product is so reliable, we have not needed any support from them as yet—we haven't experienced a single bug, problem or outage since deploying the SUSE solution! With this kind of reliability, SUSE Linux Enterprise Server for SAP Applications just works quietly in the background without us having to worry about a thing.

"What we do notice, however, is the superior function of SAP HANA, which SUSE has enabled us to enjoy. The superior compression, speed and agility of the database is already improving business efficiency. Process cycle times have dropped from three minutes down to just one, while reports that used to take 10 minutes are completed in just sixty seconds. This significantly improves the experience for the end user, helping our staff and partners to be more productive."

Moving to SUSE Linux Enterprise Server for SAP Applications has opened the door for JK Tyre to explore a new world of advanced SAP functionality. The company is currently evaluating a move onto SAP S/4HANA as a next step, and is investigating the possibility of leveraging AI, Machine Learning and Internet of Things (IoT) technology for new technological capabilities.

Deepak Gupta elaborated: "At JK Tyre, we take pride in being a leading organization that stays ahead of the curve. We are currently working on moving our systems onto SAP S/4HANA, to prepare the company for even more advanced technology. For instance, by using machine learning programs throughout the business, we will be able to further boost our productivity, and improve the level of service for our business partners and customers. We are also looking into the possibility of predictive maintenance for our machines on the factory floor, to address weak points before they become a problem, and reduce the risk of expensive production delays."

Deepak Gupta concluded: "With SUSE Linux Enterprise Server for SAP Applications supporting our growing network, and the SUSE IT team on hand to support us, we are ready to continue innovating and delivering increased value to our customers around the world."

Benefits

+ Boosts productivity by up to 30%
+ Ensures 100% availability
+ Supports core SAP applications for continued innovation

Find out how SUSE can help you become an innovation hero!

• Sales-Inquiries-APAC@suse.com
• Sales-Inquiries-EMEA@suse.com
• Sales-Inquiries-LATAM@suse.com
• Sales-Inquiries-NA@suse.com

SUSE
Maxfeldstrasse
90409 Nuremberg
www.suse.com

For more information, contact SUSE at:
+1 800 796 3700 (U.S./Canada)
+49 (0)911-740 53-0 (Worldwide)

Innovate Everywhere