



IT TRANSFORMATION IS CRUCIAL FOR BUSINESS SUCCESS

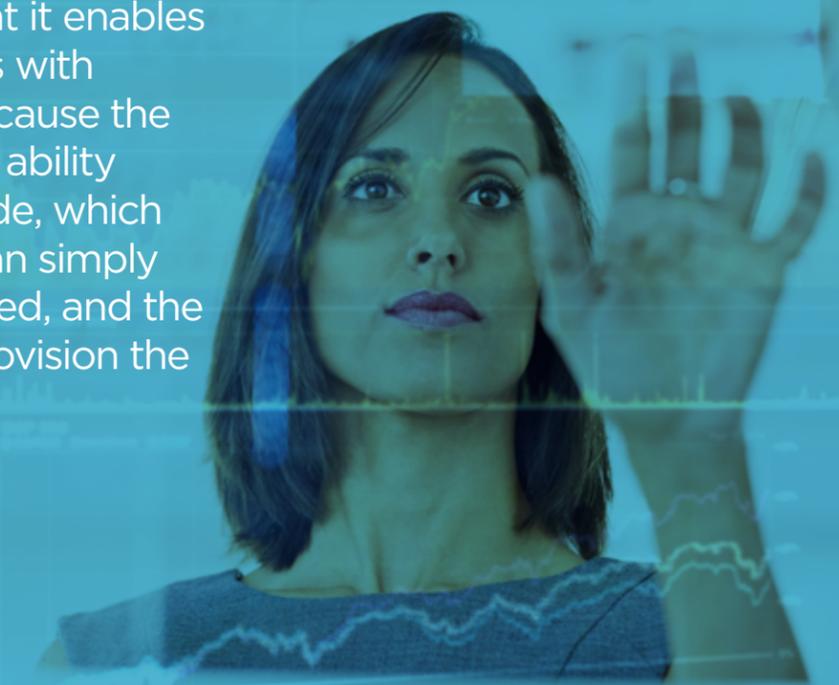
How Open Source Solutions from
SUSE Help You Deliver Better IT

The Fast and Furious Pace of Change

Dealing with the ever-increasing pace of change is one of the biggest threats facing organizations all around the globe. News headlines announcing the collapse of long-standing businesses with household names have become so frequent that the news is no longer shocking. The common factor linking the demise of these organizations is often an inability to adapt or innovate fast enough to deal with the rapid changes impacting their business sector.

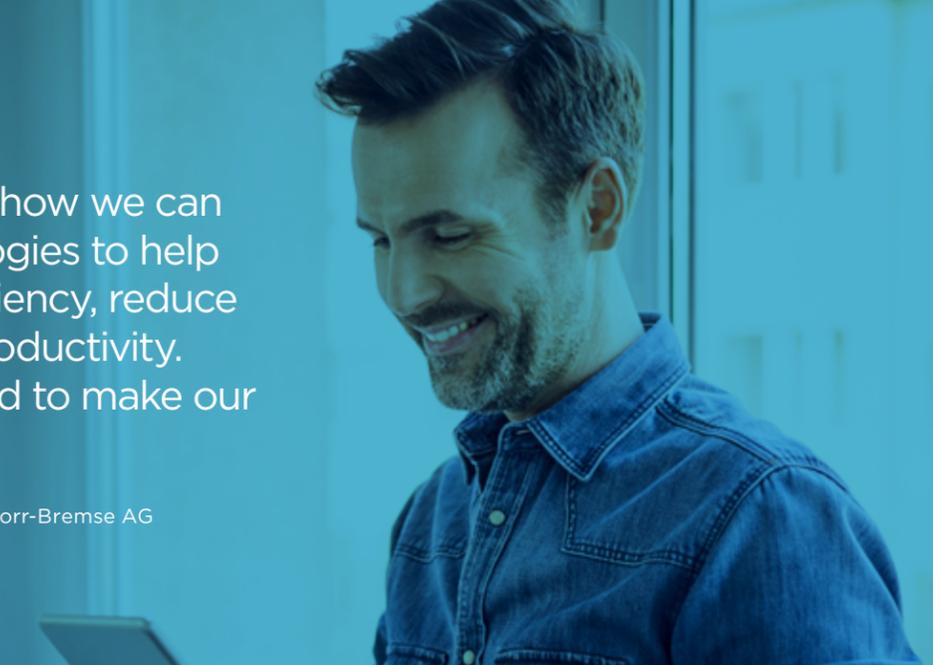
We all know that the pace of change is not going to slow down anytime soon. In fact, quite the opposite. It is widely recognized that technology is both a cause of the problem and a vital part of the solution. The digital revolution that we are experiencing is changing everything around us. Consumers are demanding instant access to new products, information or services and the competitive landscape is constantly shifting. To deliver on these demands, technology is evolving quickly and developing innovative new solutions.

Analyst firm IDC predicts that through 2022, 75 percent of successful digital strategies will be built by a transformed organization. In other words, IT transformation is business-critical. IT Transformation holds the key to delivering the infrastructure, applications and data architectures to help your business survive and succeed, while others businesses that stand still will sadly fail.



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Florian Amann | Technology Team Leader at Knorr-Bremse AG

Why IT Transformation is a Business Imperative

Transformation has become a somewhat overused term within the IT industry, leading to a feeling of “transformation fatigue” for some. However, having the agility and capability to quickly adapt and adjust is the only way to cope with whatever business challenge comes next. IT Transformation is all about altering, remodeling, adapting, re-shaping and even revolutionizing our IT infrastructure and systems to deliver more flexibility, innovation and a competitive edge.

Most organizations are already convinced of the need for IT transformation and recognize that it must address one, or both, of these two key objectives:

1. Improving the customer experience

As technology advances, consumers are constantly looking for new and better products. Consumers expect fast and easy access to data, information and services, often delivered directly to their mobile or smart devices. The banking, retail and entertainment industries are examples of business sectors that have undergone major transformations in order to address and satisfy these changing customer expectations.

2. Delivering genuine and measurable business benefits

In today’s ultra-competitive environment, every organization wants more efficiency, better productivity, higher performance and lower costs or overhead. IT transformation can help to deliver on all of these requirements. It can also provide the automation needed to handle mundane and time-consuming tasks, freeing up valuable staff resources to focus on delivering more innovation.

IT transformation programs that meet these objectives are not simply “business-as-usual” projects. For example, when hardware or software reaches its end of life or support phase, a mandatory IT refresh is required. This is part of normal lifecycle management, rather than a genuine IT transformation. However, a compulsory refresh event like this can also be a convenient trigger or catalyst for considering a wider, more comprehensive transformation program to deliver improved customer experience or additional business advantages. Since a more comprehensive transformation will involve additional funding investments, the additional benefits must be articulated in terms that business leaders and stakeholders can approve; and they need to be tied to measurable return on investment (ROI) targets in a business contract.

Different Approaches to IT Transformation

While the importance of transforming IT systems and infrastructure is widely accepted, it is also clear that there is no single methodology that will be the best option for every situation. After all, every organization is different and faces unique challenges. For example, organizations operate in a variety of business sectors or geographies. Some organizations are well-established businesses with important existing IT investments, whereas others are startups that are beginning from scratch and are able to adopt a completely fresh approach. While it is impossible to cover every situation, here are some examples of how IT transformation can be tackled.

Estimates suggest that 7.4 million data centers will still be around by 2021. These data centers represent a significant investment for established organizations that simply cannot be ignored or wiped off the balance sheet. However, traditional hardware-centric data centers are typically rigid and difficult to adapt, slowing down reaction times and hindering agility. By contrast, migrating to a software-defined infrastructure (SDI) frees up the application software from any direct dependence on the underlying hardware. A SDI also enables resources to be managed as dynamic pools of compute, storage and networking that can be quickly and easily provisioned. For many companies, transforming existing data centers into SDI-based private clouds has proved revolutionary, leading to greater operational agility, automation and efficiency. These private clouds can then be combined with public cloud offerings as part of a multi/hybrid cloud strategy.

In mainstream manufacturing sectors, companies might be faced with making the most of expensive legacy factory equipment that has a lengthy investment lifecycle. In these environments, IT transformation can involve employing Internet of Things (IoT) and robotics technology for monitoring and automation tasks, helping to improve efficiency, raise productivity and lower costs. Knorr Bremse AG took this approach when it deployed Raspberry Pi IoT solutions, combined with SUSE Linux Enterprise Server for ARM, for advanced data collection and monitoring.

For high-tech or data-driven businesses, the race is on for finding sophisticated and innovative ways to deliver new services to customers and end users. The focus for these organizations is on improving the speed of operations, increasing automation, removing manual tasks to increase efficiency and creating the environment to enable their development teams to innovate. Platforms to support the development, orchestration and management of container-based, cloud-native applications, as well as DevOps and CI/CD methodologies, are becoming increasingly popular vehicles for IT transformation for these companies.

“With SUSE CaaS Platform, we can streamline our DevOps workflows substantially and benefit from the Infrastructure as Code approach. Controlling deployments has become much easier, so we can now offer a state-of-the-art continuous integration and deployment solution to our developers, helping them to get new features to clients faster.”

David Mace | Senior System Architect at Smartodds.

Open Source Solutions for All Your IT Transformation Needs

Regardless of the approach to IT transformation that works best for your organization, open source solutions should be part of your decision-making process. Why? Because open source projects are at the forefront of practically every area of technology innovation. The trend towards open source is not purely driven by the need to reduce costs or lower the risk of vendor lock-in from proprietary alternatives. It is also because open source solutions are delivering all of the functionality and choice that is needed for the transformation journey. And bear in mind that it is not a journey with a single destination. Just as change is not going to stop anytime soon, neither is the need to transform. Transforming is an on-going process. That is why open source solutions are so important—they give you the flexibility to adjust and change course whenever needed.

As an open source expert and veteran, SUSE has a comprehensive portfolio of open source solutions to enable your IT transformation journey. SUSE has already taken care of the hard work of packaging these enterprise-grade open source technologies so that they are ready for deployment. And because these technologies dovetail together seamlessly, you can choose as many of the options as you wish, tailoring them to the needs of your business.

SUSE Linux Enterprise Server is the ideal enterprise foundation for even the most demanding business-critical workloads. With its multimodal common code base, it is the optimal choice for everything from IBM mainframes to cloud-native, containerized or embedded solutions. SUSE OpenStack Cloud and SUSE Enterprise Storage help to create an excellent software-defined infrastructure for building private clouds. SUSE CaaS Platform and SUSE Cloud Application Platform leverage Kubernetes and Cloud Foundry for application delivery solutions that take full advantage of SDI environments. These technologies enable you to deploy, run, manage and scale container-based applications wherever they are needed. SUSE Manager is the essential additional ingredient. It provides seamless patching and provisioning from a centralized console, helping to reduce the complexity of managing the entire environment. All of these products are backed by the SUSE world-class service and support.

Why not give SUSE a call to discuss your IT transformation needs?

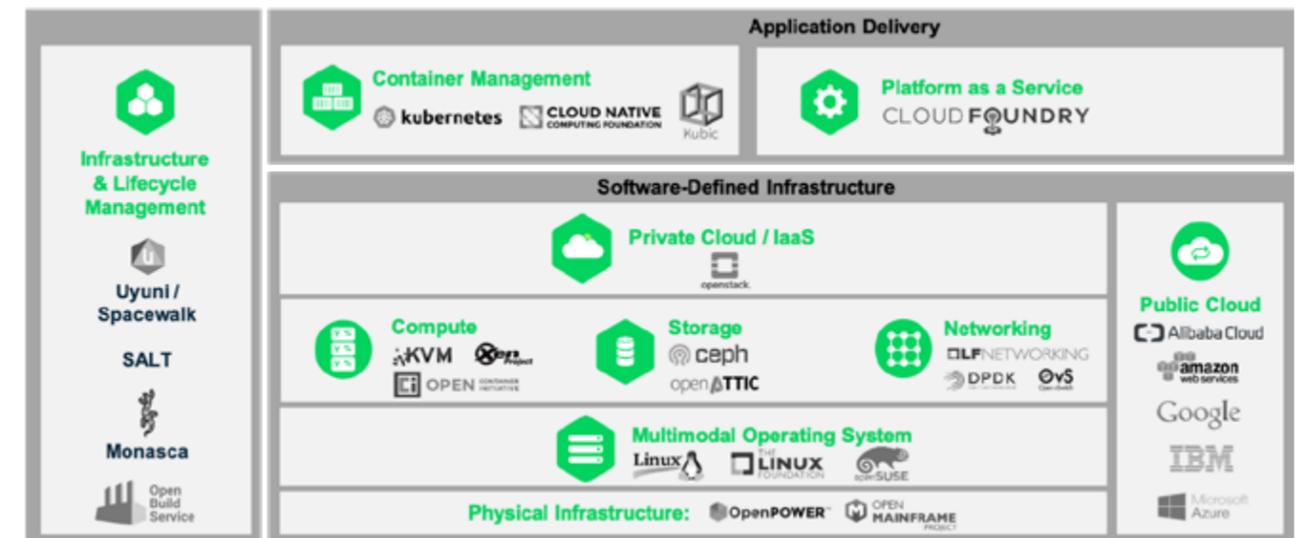


Figure 1: The SUSE Portfolio for Enterprise IT Transformation



IT Transformation with SUSE

Pacific Textiles

Based in Hong Kong, Pacific Textiles operates right in the hub of the “fast fashion” industry, where everything has to happen at breakneck speed. Fast fashion has taken the high street clothing market by storm by quickly turning trendy clothing first seen in the celebrity world or on the catwalk into affordable attire for the masses. The business model for this industry requires fabric manufacturers to be super-fast and responsive, in order to keep ahead of the competition.

“A growing appetite for fast fashion has put huge pressure on the supply chain to run more efficiently. Whereas previously, fashion retailers could afford to wait two to three months for our fabrics, they now expect these materials to be manufactured and delivered in weeks.”

Hubert Tsang | CIO of Pacific Textiles

With production time frames getting shorter and shorter, operations must run like clockwork, and there is no room for downtime. The IT team at Pacific Textiles is tasked with adapting and transforming their systems and processes to achieve greater agility and responsiveness in order to achieve these objectives.

“As an enabler for these ambitions, we have targeted a move to a software-defined data center [SDDC]. Our objective is to simplify and automate the provisioning of compute and storage resources, so that we can respond to the demands of the business more rapidly and cost-effectively.”

To meet these challenges, Pacific Textiles selected SUSE OpenStack Cloud and SUSE Enterprise Storage powered by Ceph as the foundation for its private cloud environment. This will support a range of enterprise systems, including a large SAP ERP landscape.

“We did assess other OpenStack distributions, but they just weren’t mature or stable enough. In contrast, SUSE OpenStack Cloud offered a reliable and usable enterprise-grade platform.”

“One of the most exciting aspects of SUSE OpenStack Cloud is that it enables us to deploy new applications with ease and simplicity. This is because the platform provides us with the ability to define infrastructure as code, which means that our developers can simply specify the resources they need, and the platform will automatically provision the new environment.”

SUSE technologies are enabling Pacific Textiles to respond faster to new business demands and to drive more nimble manufacturing operations, helping them stay ahead in the fast-moving and demanding fashion industry.

Knorr Bremse AG

Knorr-Bremse is a global market leader for braking, control, power supply and driver assistance systems for rail and commercial vehicles. As such, the company is keenly aware of how automation and emerging digital technologies are transforming the way manufacturers operate, especially in its business sector where safety and energy efficiency are critical factors.

“We are always looking at how we can best harness new technologies to help maximize production efficiency, reduce downtime and increase productivity. But to do this, we first need to make our factories ‘smarter’.”

Florian Amann | Technology Team Leader at Knorr-Bremse AG

In order to improve manufacturing efficiency, Knorr-Bremse needed the ability to collect factory-floor data in real time. While modern manufacturing machines capture reams of valuable information and data, older machines do not have the built-in intelligence to do this.

“Because product lifecycles are long in our industry, up to 20 to 30 years, so is the lifecycle of our manufacturing equipment. Many of our machines are over 15 years old and therefore do not have advanced data collection capabilities—so many things are done manually.”



Knorr-Bremse chose to deploy Raspberry Pi devices, small single-board computers for building connected IoT solutions, to collect the data needed.

“We wanted a small, inexpensive data collection system that we could simply plug into the machines to gather the information we needed.”

With good reason, Knorr-Bremse selected SUSE Linux Enterprise Server for ARM to support this innovative Raspberry Pi project. Specifically optimized for ARM processors, SUSE Linux Enterprise Server for ARM ensures high performance and delivers a built-in image for the Raspberry Pi, which assisted in getting this project up and running quickly.

“We are always looking at how we can best harness new technologies to help maximize production efficiency, reduce downtime and increase productivity. But to do this, we first need to make our factories ‘smarter’.”

Helmut Triller | IT Director Backend and Cloud Services at Knorr-Bremse

With these new real-time monitoring capabilities, action can be taken to promptly resolve issues, correct overruns and bottlenecks and avoid unplanned downtime. Knorr-Bremse expects production efficiency to soar.



Smartodds

Smartodds is a prime example of a technology and data-driven organization experiencing rapid growth. As a statistical research company, it specializes in big data analytics in order to provide advanced sports modeling services for professional gamblers, helping to maximize their winnings.

With a business model that relies entirely on IT, Smartodds faces a twofold challenge. First, the company is continually looking for ways to improve its analytical and predictive big data models by taking advantage of the latest technologies, tools and solutions on the market. Second, the company is focused on making the best and most efficient use of its IT resources and maximizing customer satisfaction, while keeping costs under control and maintaining a competitive edge.

“Our goal is to push our data through more sophisticated models faster and to generate more accurate predictive insights. We can only achieve this cost-efficiently by finding smarter ways to utilize our computing capacity and to balance our diverse workloads across our servers, delivering maximum performance when and where it is needed, without increasing management complexity.”

Liam McCafferty | Third-line Engineer at Smartodds

Challenge

The solution for Smartodds lay in adopting Linux containers, along with DevOps and Continuous Integration/Continuous Deployment (CI/CD) methodologies. This empowered the company’s developers by automating the tedious and time-consuming tasks involved in testing and deployment.

Having already standardized on SUSE Linux Enterprise Server in combination with SUSE Manager for all of its Linux servers, Smartodds chose SUSE CaaS Platform for its container deployment, orchestration and management requirements.

“We started with a custom-built solution to operate our growing number of Linux containers. At a certain point, we realized that we would be better off using SUSE CaaS Platform. The SUSE solution is an off-the-shelf, fully supported product, which offered much more stability than our fragile existing system.”

David Mace | Senior System Architect. Smartodds.

Smartodds knew it could rely on SUSE as a partner, having already been highly satisfied with the stability and performance of the SUSE Linux Enterprise platform. It was an easy decision to turn to SUSE again when they wanted an enterprise-class and production-ready container-orchestration solution.

“Working with SUSE reduced the adoption risk, not only because of the high product quality, but also because we knew that we could talk to highly competent support staff whenever we need to.”

CarrefourSA

CarrefourSA is a top grocery retail chain operating more than 615 hyper, super, gourmet and mini-market stores throughout Turkey. In order to stay at the top, the company must offer great value, as well as a seamless shopping experience for its customers. In today’s retail market, that means handling huge volumes of super-fast transactions and providing up-to-the minute insights into all its operations. That is no small task, especially when you are embarking on an aggressive expansion program to gain market share.

The challenge facing CarrefourSA was that it relied on multiple business systems to manage different aspects of its operations. Slow performance and poor integration with these existing applications were threatening to put the brakes on its growth ambitions.

To solve this challenge, CarrefourSA made the decision to refresh its entire enterprise application landscape. Rather than being a “business-as-usual” lifecycle refresh, it embarked on a major transformation program by introducing a comprehensive, integrated suite of SAP ERP solutions, together with SAP Business Warehouse powered by SAP Hana, for ultra-fast analytics and reporting.

“We knew that SAP solutions could help us keep pace with ever-growing business volumes and provide the deep insight we require to support smarter sales, distribution and stock management strategies.”

“We were going to be running the entire business on SAP applications, so it was critical to select an operating system that could deliver the best performance, reliability and availability.”

“SUSE Linux Enterprise Server for SAP Applications was our first and only choice. We required an enterprise-class operating system that was certified by SAP, and SUSE was the only provider that we trusted to support our critical SAP systems.”

Namik Kuruca | IT Operations Manager at CarrefourSA

This IT transformation project was a huge undertaking for Carrefour, especially as it continued to acquire and integrate new companies during the implementation. The results, however, have justified the effort and investment.

“We have a large SAP environment and manage huge volumes of transactions. SUSE Linux Enterprise Server for SAP Applications delivers excellent performance for our SAP workloads. We’ve never experienced any issues, even during times of peak demand.”

What's Next?

Please visit the SUSE website,
<https://www.suse.com/it-transformation>,
for more information about our IT Transformation solutions.

