Becoming an Intelligent Enterprise

with End-to-End SAP Solutions from T-Systems
After the transformation is before the transformation

How did Heraclitus put it so succinctly?! Change is the only constant in the universe. This statement is completely true for SAP user companies especially in this age of digitalization. As soon as new technologies and systems have been implemented or business processes digitized, the next step then is to face the task of intelligently integrating everything with each other. Those who wish to tap the full potential of an intelligent enterprise should not rely on stand-alone solutions, but rather need an integrated overall concept – starting with connectivity beyond infrastructure and cloud solutions to digital SAP applications and sophisticated IT security concepts.

T-Systems will be your guide on your journey to becoming an intelligent enterprise. With a comprehensive end-to-end SAP portfolio – starting from consulting to the transformation of existing SAP systems to SAP S/4HANA® or into the cloud over rolling out SAP® Leonardo and of course application management and service integration. Bearing your IT and corporate strategy in mind, we will jointly develop initial ideas, test them in a Proof of Concept (PoC) and implement them into the existing ERP landscape. You benefit from the long-standing expertise of the only global end-to-end SAP service provider with hybrid cloud approaches, standardized SAP S/4HANA® transformation packages and a global DevOps offering.

Hosting power meets transformation expertise

- Biggest SAP hosting provider worldwide operating more than 820 TB of SAP HANA® databases for clients in all industries
- Implementing over 1,000 SAP transformation projects annually
- Supporting more than 600 clients worldwide
- Hosting the world’s largest single SAP system with 850,000 SAPs
- Operating the largest certified SAP HANA® installation with 45 TB memory
Content

Be inspired by selected client cases and learn how our end-to-end SAP solutions and services can benefit your business.

<table>
<thead>
<tr>
<th>Company</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Celulose Irani</td>
<td>Starting the digital transformation towards Industry 4.0 with SAP S/4HANA®</td>
<td>6</td>
</tr>
<tr>
<td>Zuellig Pharma</td>
<td>Accelerating the digital transformation with SAP HANA® on Microsoft Azure</td>
<td>8</td>
</tr>
<tr>
<td>IT.NRW</td>
<td>World’s second-largest payroll processing system implemented on SAP HANA®</td>
<td>10</td>
</tr>
<tr>
<td>Seat, S.A.</td>
<td>Future-proof SAP landscape for growth strategy</td>
<td>12</td>
</tr>
<tr>
<td>Continental</td>
<td>Hybrid cloud for maximum business flexibility</td>
<td>14</td>
</tr>
<tr>
<td>Fraport Brasil</td>
<td>SAP S/4HANA® as digital core optimally supports the airport’s growth plans</td>
<td>16</td>
</tr>
<tr>
<td>Schettino</td>
<td>Transition of business processes to SAP S/4HANA® ensures lasting company success</td>
<td>18</td>
</tr>
<tr>
<td>Transnet</td>
<td>Data warehouse consolidation for real-time analytics</td>
<td>20</td>
</tr>
<tr>
<td>Jenoptik</td>
<td>Fit for a dynamic and successful future with Dynamic Services for SAP® Solutions</td>
<td>22</td>
</tr>
<tr>
<td>Deutsche Telekom AG</td>
<td>Save millions – in real-time. Big Data for Purchasing</td>
<td>24</td>
</tr>
<tr>
<td>Stara S/A</td>
<td>SAP AMM as a professional carefree package</td>
<td>26</td>
</tr>
<tr>
<td>Jungbunzlauer</td>
<td>Automation of IT service management processes with SAP® Solution Manager</td>
<td>28</td>
</tr>
<tr>
<td>Deutsche Telekom AG</td>
<td>End-to-end processes based on a common ERP system</td>
<td>30</td>
</tr>
<tr>
<td>SAPPI</td>
<td>SAP Services from the private cloud for dynamic resource provisioning and use-based billing</td>
<td>32</td>
</tr>
<tr>
<td>Transnet</td>
<td>Drones and Big Data for greater operational transparency</td>
<td>34</td>
</tr>
<tr>
<td>Zur Rose Suisse AG</td>
<td>Into the future with optimized data</td>
<td>36</td>
</tr>
<tr>
<td>Flensburg department of public works</td>
<td>Template allows new architecture to be implemented in record time</td>
<td>38</td>
</tr>
<tr>
<td>German airport corporation</td>
<td>Into the digital age with SAP Consulting</td>
<td>40</td>
</tr>
<tr>
<td>Multinational oil and gas corporation</td>
<td>Satisfy the need for speed with Dynamic Services for SAP HANA®</td>
<td>42</td>
</tr>
</tbody>
</table>
Celulose Irani was founded in 1941 in Rio Grande do Sul, Brazil as a family business. With around 2,500 employees and six production sites all over Brazil, Celulose Irani is now one of the most important national players in the paper and packaging industry.

The company’s Enterprise Resource Planning (ERP) system could not keep up with the rapid business growth while maintaining the simplicity and the integrity of the information. So, Celulose Irani decided to implement – together with T-Systems – SAP S/4HANA® as the company’s digital core.

SAP S/4HANA® replaces the current ERP system and for the first time enables integrated and standardized end-to-end business processes: from Order to Cash through Plan to Product until Procure to Pay.
**Trends & Drivers**

- SAP S/4HANA® as real-time ERP suite for smart business decisions
- **State-of-the-Art technologies** needed to enable Industry 4.0

**Customer Requirements**

**IT as engine for growth:**
Adapting technically and functionally obsolete IT systems to open up new business potential

**Becoming fit for the future:**
Using new technologies, for reacting more flexibly and faster to market changes

**Transparency, Simplicity and Integrity of Information:**
End-to-End process for smart business decisions – even in real-time

**Solution**

- Replacing the current ERP system by SAP S/4HANA®
- Design of a transformation roadmap, based on SAP Activate combined with SAP’s best practices, T-Systems’ accelerators and broad knowledge in the paper & pulp industry
- Agile implementation of SAP S/4HANA®

**Customer Benefits**

- **Risk-free transformation** to SAP S/4HANA® based on SAP Activate combined with T-Systems’ best practices
- **Agility and Stability** SAP S/4HANA® as digital core eliminates former barriers and redundancies
- **Faster time-to-market** Standardized business core processes improve control and productivity in operations
- **End-to-End** SAP S/4HANA® as digital core enables integrated business processes
- **Modern user interface** SAP Fiori® apps for an intuitive and user-friendly handling – on almost any device and even company-wide

Whether Greenfield, Brownfield or Landscape Transformation – T-Systems is your partner for a risk-free transformation of data and business process to SAP S/4HANA®.
Zuellig Pharma

Accelerating the digital transformation with SAP HANA® on Microsoft Azure

- Zuellig Pharma is one of the largest healthcare services groups in Asia pursuing the mission to make healthcare more accessible. The company serves over 350,000 medical facilities and works with over 1,000 clients, including the top 20 pharmaceutical companies in the world

- By moving all its core business systems onto the public cloud, Zuellig Pharma blazed the trail for accessible healthcare. In a first step, the company modernized its SAP landscape by migrating its enterprise resource planning system SAP ECC previously running on DB2 to SAP HANA®. Subsequently, a region-wide team from T-Systems got the infrastructure ready for the migration onto Microsoft Azure

- Within nine months the complete SAP landscape was relocated to Microsoft Azure. The result: Zuellig Pharma now has the biggest SAP HANA® installation on a public cloud in Southeast Asia – with 1 million SAPS and 10,000 users

Generating higher business agility
**Trends & Drivers**

- **Cloud solutions** as backbone for digital transformation
- **Moving beyond business limitations** by leveraging the benefits of a public cloud

**Customer Requirements**

**Technology as prerequisite:**
to reach the company's mission and exploit the full potential of data

**Modernization:**
of the existing and complex SAP landscape preparing for next generation SAP S/4HANA® with migration to the public cloud

**Solution**

- With SAP Database Migration Option (DMO) upgrade and migration of SAP systems to SAP Business Suite on SAP HANA® on Azure can be done at the same time minimizing the downtime
- Migration of the SAP landscape onto Microsoft Azure to M-Series servers which can run heavy ECC SAP HANA® transactions
- 40 terabytes of SAP HANA® database size, with 10 gigabits express route bandwidth for seamless customer access across 13 business units
- SAP HANA® systems are built with High Availability / Disaster Recovery (HA-DR) across multiple Microsoft Azure Availability Zones
- SUSE Pacemaker Clustering was configured for automated recovery of applications and real-time failover across Availability Zones
- Close collaboration with SUSE, Microsoft and SAP

*Being the world’s leading SAP Hosting Provider T-Systems supports its clients in finding and implementing the right mix of cloud ecosystems – whether it is a private, hybrid or public cloud.*

**Customer Benefits**

- **New innovative services**
can now be developed to actively shape the future of the healthcare industry
- **Precise forecasts**
due to real-time access of even large amount of data based on SAP HANA®

- **Higher flexibility and scalability**
  SAP workload can be quickly ramped up and down to match Zuellig Pharma’s business demand
Central statistical and IT services provider for North Rhine-Westphalia (IT.NRW)

World’s second-largest payroll processing system implemented on SAP HANA®

- The State Office IT.NRW is responsible for information technology and statistics for the State Administration of North Rhine-Westphalia and for the operation of the SAP HCM infrastructure (Human Capital Management)

- Working with T-Systems, IT.NRW and North Rhine-Westphalia’s State Office for salaries and retirement benefits (LBV) migrated the SAP HCM infrastructure from a high-cost mainframe setting to a high-performance and highly secure infrastructure based on x86 hardware and SAP HANA®

- A complex and business-critical project that does not tolerate a long downtime phase. Every month, the LBV handles around 676,000 transactions, which break down as follows: some 279,000 public sector employees, 190,000 other employees and 207,000 benefits recipients. Each transaction requires a separate calculation and authorization process. With the new system architecture, the state is setting the direction for its digital competitiveness - and also cutting the time for core payroll processing by 50 percent
### Trends & Drivers

- **Expiring maintenance contract** for the existing mainframe architecture
- **Reduce maintenance costs** and consolidate infrastructure
- **SAP HANA®** as the database of the future

### Customer Requirements

**Full-service solution:**
from concept design and project management to implementation

**Fast and secure migration:**
little time for migration and high business criticality of HR installation

### Solution

- T-Systems as main contractor and overall project manager
- Solution tailored to the requirements of the state, IT.NRW and LBV
- Design and implementation of a new system architecture based on stable, high-performance SAP HANA® certified x86 hardware from Dell EMC and a highly available, fast SAP HANA® database
- Almost noiseless migration of business-critical data from DB2 to SAP HANA® with a standard SAP tool by the partner SNP
- Safeguarding critical payroll processes through testing and redundant system configuration
- 3rd level support and system adaptations during operation by T-Systems

T-Systems migrates business-critical data reliably and securely to SAP HANA®.

### Customer Benefits

- **Minimum downtime**
  Migration of business-critical data on a long weekend

- **Maximum time saving**
  Time for core payroll processing reduced by 50 percent

- **Quick return on investment**
  After only one year thanks to significantly reduced maintenance costs

- **New insights**
  through advanced and reliable real-time analysis

- **Future-proof positioning**
  From 2025 all SAP products will run exclusively on SAP HANA®
Seat, S.A.

Future-proof SAP landscape for growth strategy

- SEAT is a well-known Spanish automobile manufacturer and part of Deutsche Volkswagen Group. With a sale of 518,000 vehicles in 2018, SEAT set a record in the company’s nearly 70-year history.

- Digitalization is revolutionizing every industry. Megatrends such as electric vehicles, autonomous vehicles and Mobility-as-a-Service will fundamentally change the business models of automobile manufacturers, also reflected in the customer experience. As a result, SEAT has started a transformation program to make its SAP landscape ready for the future enabling the company to offer digital experiences and services to its customers.

- The first steps were taken in 2017 when SEAT migrated its legacy billing systems running on a DB2 database to SAP HANA®. SEAT needed to maintain its transformation rate while laying the technological and functional foundations for its infrastructure, on which all other applications would be deployed. Consequently, SEAT undertook an assessment and validated that SAP S/4HANA® is a mature solution suitable for covering its current business processes. Together with T-Systems, the automobile manufacturer successfully switched from SAP® R/3® to the digital core using a brownfield approach.
Trends & Drivers

- **Mobility solutions** will replace car ownership according to current studies
- **Customer experience** as key differentiator

Customer Requirements

**Smooth migration:**
 interruption-free transition during ongoing operations

**Reducing complexity:**
 by simplifying functional processes and removing obsolete features and duplications

**Improving competitiveness:**
 real-time insights into KPIs even from mobile devices allowing faster reaction to market demands

Solution

- Transition of complex business supporting systems from SAP® R/3® to SAP S/4HANA® using a brownfield approach
- Enforcing two available sandbox machines, allowing for the avoidance of stoppages and simultaneous operations in different environments
- Technical and functional execution of the system conversion: based on the methodology SAP Activate

T-Systems accompanies the switch of existing SAP landscapes to SAP S/4HANA® using SAP Activate combined with its own best practices.

Customer Benefits

- **Becoming a Mobility Service Provider:**
  SAP S/4HANA® supports the company's vision enabling new digital services
- **Mobile access**
  to KPIs thanks to SAP Fiori® apps

**Future-proof SAP landscape**
 as functional and technical foundation for implementing new technologies like Internet of Things, Blockchain etc.

**Improved business agility**
 for further growth
As one of the world’s biggest automotive suppliers Continental is running 400 sites worldwide with 240,000 employees. Innovation, productivity, and global profitable growth drive their value creation. Continental is not only serving automotive companies but a broad range of other industries like transportation, consumer goods and logistics.

Continental is following a hybrid cloud strategy to gain maximum reliability and business agility from its SAP systems. As exclusive hosting partner, T-Systems will implement Continental’s SAP cloud strategy over the next few years. Business-critical SAP systems will be run on private cloud, systems empowering innovation will be provided from the Public Cloud (MS Azure).

The hybrid cloud strategy enables a globally unified IT strategy and gives Continental a maximum of flexibility choosing the operations platform of best choice. Innovation and collaboration capabilities for a highly competitive business environment get boosted by the options of Public Cloud.
Trends & Drivers

- Hybrid cloud environments are the platform for innovation, agility and automating data services
- A long term customer relationship as basis for further IT projects

Customer Requirements

Minimizing latency, maximizing scalability:
Hybrid cloud as the ideal solution to support current and future growth as well as enabling innovation

From one source:
SAP as well as non-SAP systems shall be operated from one provider to enable a smooth interplay

Solution

- Adding SAP® Solutions on Microsoft Azure Cloud to the existing private cloud and classic hosting mix
- Global operations of 500 SAP systems with 2.5 mn SAPS and 1,000 Terabyte of data
- Harmonized processes for different platforms (One IT)
- High security standards on all platforms
- Optimization of hybrid platforms for SAP S/4HANA®
- On-demand billing model
- Service level up to 99.95 percent available

T-Systems manages and operates complex hybrid infrastructure and application landscapes and additionally offers related consulting and migration services based on its market-leading transformation methodology “SAP Cloudifier”.

Customer Benefits

- Improved innovation capabilities
  Faster rollout of SAP systems for temporary usage, greater scalability and fostering of future developments of the public cloud platform

- Closer collaboration
  Usage of a standardized platform simplifies data exchange with partners

- Higher flexibility
  Continental can choose the respective sourcing model and infrastructure platform on a case to case basis

- Reliable operations
  Provision of SLAs and high security standards allow platform usage for confidential data
Fraport AG is one of the international leading players in the global airport business and operates 30 airports on four continents, including Brazil.

Since the beginning of 2018, its subsidiary company, Fraport Brasil, runs the two airports in Fortaleza and Porto Alegre.

To optimally support its business processes, Fraport Brasil implemented SAP S/4HANA® as an intelligent Enterprise Resource Planning (ERP) suite. The broad and long-standing transformation expertise of T-Systems has been the reason why Fraport Brasil relied upon the ICT provider.

Within only two-and-a-half months, SAP S/4HANA® was successfully implemented following the greenfield approach. The formula for success, a clever combination of SAP’s best practices with T-Systems’ accelerators.

Faster time-to-market approach
Trends & Drivers

- **Standardized business processes** for an efficient growth
- **SAP S/4HANA®** as the springboard into the digital future

Customer Requirements

**Harmonization:**
of business processes for more agility and digital innovation
such as Internet of Things

**Technological leap:**
to SAP S/4HANA® as a company’s digital core for
consistent processes

**Corporate growth:**
is currently not viable based on the new business operating by
BPO model

Solution

- Implementation of SAP S/4HANA® 1709 based on SAP’s Best
  Practices and T-Systems’ accelerators for Accounting and Finance,
  Asset Management, Controlling, Sourcing and Procurement
  processes as well as integration with billing satellite system
- Processes and customizing adaptation according to the needs
  of the Brazilian market, legal and fiscal requirements
  (taxes & calculations, electronic invoice etc.)
- Hosted in T-Systems’ Data Center (T-Center) in Brazil

By combining SAP’s best practices and T-Systems’ accelerators,
the ICT Provider paves the way for a fast, risk-free and standar-
dized transformation to SAP S/4HANA®.

Customer Benefits

**Cost savings**
Due to higher productivity and faster
time-to-market cycles

**Enabling growth**
and innovation by implementing SAP S/4HANA®
as the company’s new digital core

**Real-time**
Access to KPIs provide the basis for proactive and
profound management decisions
Schettino

Transition of business processes to SAP S/4HANA® ensures lasting company success

- For more than 57 years, Grupo Schettino has been producing high-quality foods for the Mexican market

- Outdated IT systems and processes resulted in enormous cost and lack of transparency: The production process, for example, was controlled manually and business decisions were made based on hypothetical numbers

- Grupo Schettino decided to introduce SAP S/4HANA®, the successor to the SAP Business Suite

- As a result, the company was able to successfully digitize and modernize its business processes

Digitized business processes as a success factor
Trends & Drivers

- SAP S/4HANA® supports the Internet of Things (IoT), Big Data, mobility, real-time business, digitization, and much more
- Transactions in real-time thanks to in-memory technology

Customer Requirements

**Simplification:**
business processes and procedures must be radically simplified to eliminate redundant data and manual effort

**Future viability:**
use of new technologies to enable fast response to new business requirements

**Transparency:**
better and faster business decision-making through real-time insights and a user-friendly interface

Solution

- Development and implementation of a customized transformation roadmap based on the market-leading transformation approach “SAP Cloudifier” with subsequent implementation of SAP S/4HANA®
- Current core business processes – including procurement, production planning and finance – were standardized and optimized based on SAP best practices with the aim of integrating them end-to-end into the overall landscape

T-Systems is the ideal partner for risk-free end-to-end transformation to SAP S/4HANA®.

Customer Benefits

- **Risk-free transformation** to SAP S/4HANA® using an industrialized end-to-end factory approach
- **Run simple**
  Simplify business processes and integrate them seamlessly (end-to-end) into the SAP landscape
- **Instantaneous real-time analytics**
  at every level of detail and information with almost no latency enable real-time company management
- **Intuitive operation**
  More clarity and user friendliness with SAP Fiori® apps – on any mobile device, too
With around 49,000 employees, Transnet is one of the largest transport companies in South Africa.

Every day, Transnet transports tons of goods around South Africa.

Formerly, four separate data warehouses were used for data management, leading to data inconsistencies and excessive maintenance costs.

The customer carried out a comprehensive consolidation program with the help of T-Systems, and migrated 15 years’ worth of operating data to SAP BW on HANA®.

This laid the foundation for future initiatives to enhance competitiveness, such as predictive analytics.

Faster access times, optimized reporting and more efficient business processes.
Trends & Drivers

- **Digitization**: Big Data and Industry 4.0 pose new challenges for business warehouses
- **Real-time**: companies want a solution for flexible real-time analysis of mass data

Customer Requirements

**Performance improvement**: through the integration of in-memory technology with SAP HANA®

**Innovation**: through transformation of business processes towards real-time

**Improved competitiveness**: through enormous data processing speed, enabling analysis in quasi real-time

Solution

- Development and implementation of a consolidation program for the four established data warehouses
- Migration of the established business warehouses to a data warehouse platform based on SAP HANA® with simultaneous upgrade to SAP BW 7.4
- Implementation of Unicode conversion and an archiving solution for the historicization of data
- Support during performance and migration tests

Moving towards real-time business with SAP BW on HANA® – from proof of concept to migration and operation.

Customer Benefits

- **Driver of digitization**: Process and use large volumes of data quickly and flexibly with SAP HANA®
- **Available immediately**: Ad-hoc queries are answered in fraction of a second in “near real-time”
- **Lower fixed costs**: through nearline storage
- **Future viability**: Better, faster business decision-making thanks to real-time information
- **High scalability**: Use of “as a service” with an end-to-end approach
- **Reduced costs**: through optimized data storage
Jenoptik

Fit for a dynamic and successful future with Dynamic Services for SAP® Solutions

- Jenoptik is a global photonics group operating in more than 80 countries

- Locations distributed around the world, sensitive products and high market dynamics are some of the complex conditions faced by the company’s SAP system

- To achieve stronger positioning in the long term and to prepare for an Enterprise Resource Planning (ERP) consolidation project, Jenoptik decided to switch its ICT provider

- With Dynamic Services for SAP® Solutions from T-Systems, the global player is laying the groundwork for the use of SAP HANA®

- This also gives the customer the desired system flexibility to adapt services and the associated costs to business conditions

Reduced operating costs and rapid innovation for long-term business success
Trends & Drivers

- **The cloud** as the motor of digitization
- **Innovation capacity** as a guarantor for business success and stable sales

Customer Requirements

**Consulting:**
by demonstrated SAP specialists

**High availability:**
of data and rapid system recovery in the event of disaster

**Cost reduction:**
through flexible and dynamic use of resources

Solution

- Long-term contract for Dynamic Services for SAP® Solutions on the latest platform release
- Provision of scalable system resources, including for HCM, ERP, CRM, ADS, and GTS
- Disaster recovery solution with synchronous mirroring in the TwinCore data center
- DR systems: 99.7 percent availability at application level
- Migration of Oracle to Sybase ASE
- Establishment of a Business Warehouse (BW) system on SAP HANA®
- Follow-on topics as an extension of the main contract, such as Proof of Concept for a SAP HANA® scenario including a test of Simple Finance (SAP S/4HANA® Suite)

Dynamic Services for SAP® Solutions from T-Systems offer maximum security, cost transparency and performance.

Customer Benefits

- **Competitiveness**
  Bring innovations to market faster through the use of SAP HANA®

- **High security**
  through mirroring of customer systems in TwinCore data centers, fulfilling German data protection and German data security standards

- **Transparency**
  through invoicing using the pay-per-use price model

- **Reduced operating cost**
  through fast, needs-based resource adjustment during ongoing SAP operation
Procurement is an essential element of any company’s cost structure today.

International corporations such as Deutsche Telekom AG process thousands of purchasing transactions every day.

Implementation of an in-memory solution based on SAP HANA® allows aggregation and analysis of procurement data in real-time.

Buyers can access all data for a particular supplier at the push of a button – from purchase volumes to conditions.

Complete transparency of suppliers, conditions and discount rates allows better control of outgoing payments, thus avoiding previously required cash reserves or short-term credits.
Trends & Drivers

- **Intelligent control** of central purchasing often poses challenges for procurement experts
- **Big Data** as a key to evaluating data at the press of a button and to drawing previously unknown conclusions from data

Customer Requirements

**Transparency:**
throughout the entire international “Procure to Pay” process

**Cost savings:**
through intelligent management of procurement data

**Consolidation:**
of the heterogeneous system landscape

Solution

- Implementation of an in-memory Readiness Assessment – IT upgrade
- Implementation of an in-memory solution based on SAP HANA® that allows aggregation and analysis of procurement data in real-time
- Spend analysis combines the latest in-memory and mobile technology
- Integration of the latest SAP technology into the procurement BI landscape (SAP BO, BW, BWA, NLS)

Smarter procurement based on Big Data technologies controls cash-out perfectly and avoids large cash reserves.

Customer Benefits

- **In-memory technology** enables real-time view of business and supports faster and better decision-making
- **Single point of truth** An unambiguous shared data foundation for all departments prevents data disparities
- **Real-time analytics** Content-specific keyword queries deliver quick results
- **Reduced IT operating costs** through optimized data storage and the smaller number of applications required
- **Future viability** Optimization of procurement costs and delivery times and ensured liquidity through an in-memory based Big Data system solution
Stara S/A

SAP AMM as a professional carefree package

- Stara S/A is one of the world’s largest manufacturers of agricultural machinery

- From its headquarters in Não-Me-Toque, Rio Grande do Sul (Brazil), the family-owned company exports to more than 35 countries

- As a result of its heterogeneous IT landscape, the company was no longer able to respond promptly to market requirements

- In response, Stara S/A undertook an evaluation of its Enterprise Resource Planning (ERP) system with the aim of identifying IT optimization needs

- In partnership with T-Systems, Stara decided to implement SAP ERP and to buy SAP Application Management & Modernization (AMM) services from the ICT provider

- This has resulted in an enormous increase in the speed of product delivery
Trends & Drivers

- **Heterogeneity**: highly complex IT landscapes and too many IT systems prevent companies from responding quickly to change
- **Modernization** of applications is necessary for new innovations such as Big Data, mobile, etc.

Customer Requirements

**Consolidation:**
of the IT landscapes for production and back office (finance, management, sales & marketing, etc.)

**Cost reduction:**
through avoidance of manual operations

**Optimization:**
of support services for business customers

Solution

- Implementation of SAP as comprehensive software to link all processes from production to after-sales
- Support for production and back-office modules
- Development of an application for Android devices that supports multiple instances and takes after-sales processes into account
- Screening of legacy system information and reorganization of data
- Remote support
- Definition of service levels and monitoring
- ABAP debugging support and ABAP programming for service requests

**SAP AMM services as the basis for satisfied customers.**

Customer Benefits

**Customer satisfaction**
Thanks to the use of SAP, delivery times have been cut and customer inquiries can be processed faster

**Cost savings**
through automated process operations and streamlining of the IT system landscape

**Business insight**
Reduction of Mean time to repair from 12 hours to 22 minutes, thus simplifying assessment of production strategies
Jungbunzlauer

Automation of IT service management processes with SAP® Solution Manager

- Jungbunzlauer is one of the world’s largest manufacturers of biodegradable ingredients of natural origin

- To provide the best possible service to customers, the company controls many processes using an SAP system

- To ensure that all SAP applications run smoothly, the company now manages them centrally with the SAP® Solution Manager

- This also includes the capture and processing of incidents in the SAP Service Desk, which is integrated into the SAP® Solution Manager
Trends & Drivers

- **Automation**: More and more companies want to automate manual tasks in SAP system management
- **SAP S/4HANA®**: The full scope of SAP S/4HANA® services can only be exploited with SAP® Solution Manager 7.2

Customer Requirements

**Optimization**: of Incident Management, so that any incidents or faults can be quickly captured and processed

**Flexibility**: through the introduction of standardized SAP solutions that enable future upgrades with minimum effort

**Transparency**: with regard to costs and IT resources through integration of time and expense tracking

Solution

- Implementation of the IT service management functions Incident Management and Change Request Management in SAP® Solution Manager 7.1
- Introduction of SAP standard processes with customer-specific customizations such as time and expense tracking
- Integration of the connected SAP systems’ transport control systems
- Training of key users

Control the Application Lifecycle Management efficiently and cut costs with the SAP® Solution Manager.

Customer Benefits

- **Controllability** of all applications, both SAP and non-SAP
- **Speed** with innovations such as SAP S/4HANA®, mobile business and Big Data
- **Agility** thanks to flexible processes and fast customization and development
- **Stability** in operation through optimized Incident Management, which contributes to better evaluation and future avoidance of process and system errors
Deutsche Telekom AG

End-to-end processes based on a common ERP system

- Deutsche Telekom AG is one of the world’s leading service providers to the telecommunications and information technology industry

- More than 225,000 employees in nearly 50 countries ensure private and business customer and key account satisfaction

- Heterogeneous IT landscapes with many different Enterprise Resource Planning (ERP) systems in companies and some partially manual interfaces have led to inconsistent data and extremely high IT costs

- As one of the world’s largest SAP platforms, One.ERP allows Deutsche Telekom AG to achieve group-wide standardization of data models and business processes in the areas of finance, HR, purchasing, technology and key accounts
Trends & Drivers

- **Globalization**: International companies have great need to consolidate their heterogeneous ERP system landscape
- **New technologies** such as SAP HANA® offer simplification and innovations

Customer Requirements

**Automation:**
of the process landscape across all areas and national subsidiaries

**Standardization:**
through identical data structures and end-to-end processes based on a uniform standard

**Transparency:**
of business management through uniform representation of value flows

Solution

- Planning and implementation of one of the largest transformation programs for Deutsche Telekom AG
- Consolidation of the ERP systems through introduction of a common technical standard
- Implementation of standardized data and processes on the new, group-wide ERP platform supporting corporate functions such as finance, HR, procurement, production control and logistics, as well as business customers

Respond quickly and flexibly to changes in the market with an ERP system.

Customer Benefits

- **Available immediately**
  Accurate information available at any time

- **One figure – one truth**
  Business figures are now accurate and unambiguous – including internationally

- **Driver of digitization**
  Process and use large volumes of data quickly and flexibly with SAP HANA®

- **Reduced IT operating costs**
  through optimized data storage and fewer applications required

- **Future viability**
  Better and faster business decision-making thanks to real-time information
As the result of a series international business partnerships, South African Paper and Pulp Industries Limited (Sappi) has experienced continuous growth.

This resulted in the paper group’s SAP landscape becoming correspondingly complex and heterogeneous: Various corporate divisions and subsidiaries operated their SAP systems on a standalone basis, business processes were not integrated, and the diverse range of applications drove up costs.

To utilize its production sites efficiently and to optimize its value-added chain, the company sought to consolidate its SAP landscapes.

Sappi looked for an experienced and highly capable partner for the implementation. The two highly complex SAP landscapes – which consist of a total of about 30 mainly business-critical SAP applications, had to be consolidated and then migrated to a high-availability data center.

Respond immediately and dynamically to changing market and corporate requirements.
Trends & Drivers

- The cloud as the driver of digitization
- Sustainable IT standardizes interfaces and saves resources

Customer Requirements

Transparency:
regarding global capacity utilization based on business needs

Flexibility:
for future growth and rapid response to market changes

Cost reduction:
in application operation improves competitiveness

Solution

- Outsourcing of global SAP® R/3® management for 6,500 users to T-Systems
- Flexible pay-per-use price model with a cost reduction of around 15 percent
- Professional project services, such as the migration of all database servers from Oracle to DB2
- Database server migration means lower costs for license fees
- High-security, high-availability WAN spanning four continents
- Implementation of a new web presence including a social media strategy
- Improved cooperation with the MS SharePoint 2010 collaboration tool
- Entrepreneurial flexibility to adapt to changing market conditions
- Long-term future-oriented innovation partnership

SAP Services from the Private Cloud for professional, secure and failure-free operation.

Customer Benefits

- Reduced operating costs
  through fast, needs-based resource adjustment during ongoing SAP operation

- Maximum security
  through mirroring of customer systems in Twin-Core data centers to German data protection and German data security standards

- Transparency
  through invoicing using the pay-per-use price model

- Continuous innovation
  through consolidation of SAP services while, at the same time, making a leap to the latest platform release
Transnet

Drones and Big Data for greater operational transparency

- Transnet National Ports Authority is part of Transnet, South Africa’s largest logistics group.
- Transnet’s activities include operation of railways, ports, and pipelines.
- As part of the Smart People’s Port Program, Transnet is improving the efficiency and throughput of the nation’s ports, initially in the Port of Durban, South Africa (Phase 1).
- The focus is on optimizing the monitoring of persons, goods and vehicles.
- The system is based on a wide range of IoT devices such as air and water-borne drones, sensors, and telematics components.
- All visualization, control, and evaluation takes place via dashboards in the port’s control center based on SAP HANA® and Business Intelligence.
- Phase 2 involves potential roll-out in all South African ports.

Faster throughput times and optimized reporting improve efficiency.
Trends & Drivers

- **IoT and drones:** A fully digitized IoT infrastructure and the use of drones allow the acquisition of large volumes of data in real-time
- **Predictive Analytics:** BI / Big Data analytics deliver a high forecast quality to optimize efficiency

Customer Requirements

**Competitiveness:**
through optimized use of all transport modes and infrastructure (sea, rail, road) based on digital technologies

**Innovation:**
through various IoT components, such as drones and telematics solutions

**Higher throughput:**
through optimized analysis, control and handling processes on site

Solution

- Real-time tracking and monitoring of all activities, incidents, and available resources, such as gates, terminals, containers, and vehicles
- “Single Information View” through Real-time Integration, Case Management and Process Visualization
- Predictive Data Analytics based on a fully digitized IoT infrastructure (mobile devices and applications, sensors, air and water-borne drones)
- Maximum transparency in the operations control center through the intelligent interaction of KPI dashboards, GEO maps, data analytics, data visualizations and SAP HANA® data views

Most innovative logistics based on integrated real-time information allows the efficient and reliable management of all transport modes.

Customer Benefits

<table>
<thead>
<tr>
<th>Future viability</th>
<th>Improved efficiency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basis for reaching better business decisions faster with up-to-date information on persons and freight flows</td>
<td>Optimal utilization of available capacity</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Security</th>
<th>Shorter response time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increased security through centralized drone-based monitoring of all activities in the harbor basin, locks and entrance gates</td>
<td>through real-time information</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Competitive edge</th>
<th>Single Point of View</th>
</tr>
</thead>
<tbody>
<tr>
<td>through reduced transport costs and transparent monitoring (optimum utilization)</td>
<td>for all logistics and infrastructure processes on site</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Digitization</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Process and use large volumes of data quickly and flexibly</td>
<td></td>
</tr>
</tbody>
</table>
The Zur Rose Suisse AG is the leading online mail-order pharmacy and wholesale pharmaceutical provider in Switzerland. Since its conception, it has revolutionized drug management for doctors and private clients.

In order to design their IT system landscape to be more homogeneous, they brought data together into one central SAP system.

For this purpose, they used a tool (Jivs Migration) that only transferred data that had already been cleansed.

Because of this, not only was the data volume reduced massively but the system also ensures lawful archiving (Jivs History).
Trends & Drivers

- **Transformation to SAP HANA®:**
  Migrate and historicize systems
- **Lawful archiving ensured**
  by JiVS History

Customer Requirements

**Two birds with one stone:**
Migration and simultaneous data cleansing

**Lessen the burden but keep the data:**
More simple access to data despite shutting down the old system

**Efficient and future-oriented:**
Consolidation of several ERP systems on one central platform: SAP HANA®

Solution

- T-Systems supports Zur Rose Suisse AG with advice and the cleansing, optimization and migration of data from several historic, evolved, heterogeneous old systems
- Current data from ERP, order processing and accounting are migrated to the new, central SAP system, based on SAP HANA®
- Medical data that is liable to retention and worthy of protection is archived with JiVS History locally and lawfully on the JiVS platform
- Zur Rose Suisse AG gets everything from one place: from first populating the new SAP system, including data cleansing and streamlining, to lawful archiving

As a full-service provider of data migration, T-Systems accompanies JiVS customers throughout the journey, from advice to transformation to SAP HANA®, implementation to operation.

Customer Benefits

- **Bring heterogeneous systems together on one platform**
  and archive medical data that is liable to retention and worthy of protection with JiVS History in a lawful manner

- **Simply efficient**
  The data is stored in SAP or the JiVS archive and can be easily found by employees

- **Highly efficient solution**
  for further dynamic growth and simple access

- **Cost reduction due to streamlining**
  The volume of data can be reduced by 30 percent, contributing to cost reduction
SAP for Utilities® is an industry-specific software solution for the supply industry

SAP for Utilities® is a process-oriented sales and information system for all services provided by supply and disposal companies

The Flensburg power company has rebuilt its entire IT landscape within a very short time using a template-enabled integrated solution provided by T-Systems on the basis of SAP for Utilities®

As a result, all energy-industry processes for grid and network use and the supply of electricity, district heating, water and natural gas both regionally and nationally, are modeled in a single IT system

Flensburg department of public works
Template allows new architecture to be implemented in record time
**Trends & Drivers**

- Template solution saves resources, time and money
- Customer base growth & high quality service supports the core of the company’s strategy

**Customer Requirements**

Modernization:
Avoidance of non-standard inhouse developments and manual processing steps

Streamlining:
Standardized IT system for the core of the IT architecture in the energy sector

Standardization:
Aligned with established market standards as the result of an SAP industry-specific solution

**Solution**

- Implementation of SAP for Utilities® as a template solution
- Middleware for market communication & WIM
- SAP Business Warehouse (BW)
- Connection of the solution to the SAP core system
- Web-based customer service portal
- T-Systems as a strong end to-end partner: from solution consulting to implementation and application management

Highly efficient, standardized trouble-free processing of business procedures for electricity, gas, district heating and water with a modern system landscape.

**Customer Benefits**

- **IT architecture**
  Streamlined and more efficient thanks to the right solution

- **Efficient business processes**
  Modern system landscape ensures customer base growth and high quality of service

- **Fast migration**
  Network operator system 8 months, supplier system 6 months

- **Template-enabled integrated solution**
  with end-to-end support – from consulting on the ideal system landscape for the template solution to production-ready implementation. The result: Market role templates prompt>L (supplier) and prompt>N (network operator) with robust, tried and tested standard interfaces
A German airport corporation’s SAP infrastructure has grown organically over many years.

The outdated SAP system landscape means that the customer can no longer respond flexibly or quickly enough to current business requirements.

Operating and maintenance costs are too high.

With the SAP Cloudifier, T-Systems identifies optimization potential and creates a path to a modern, future-oriented SAP infrastructure and application landscape with digital business processes – also from the cloud.
Trends & Drivers

- **New technologies** such as cloud computing, Big Data, social media, etc., have already revolutionized business
- **Digitization** of a company requires the conversion of legacy IT systems into a lean, data-centric cloud-based IT landscape

Customer Requirements

**Transparency:**
with regard to the current SAP system landscape

**Future viability:**
Ability to respond quickly to new business requirements

**Reducing costs:**
Reduction of the high operating and support costs caused by the complex and outdated SAP infrastructure and application landscape

Solution

- With the SAP Cloudifier, T-Systems supports customers transitioning to a modern SAP landscape: from system analysis (Assess) and definition of the optimal target landscape (Design) to transformation to the cloud and to SAP S/4HANA® (Transform) and operation of standardized IT systems and applications running in the cloud (Operate)
- Tool-supported analytics – such as Quick Check, 360 Degree Scan and AMM Maturity Benchmark – gives customers a rapid and detailed insight into their current situation and possible optimization potential
- Definition of the target landscape as well as development of a harmonization and consolidation roadmap for both systems and business processes

With the Cloudifier, the market-leading transformation approach, T-Systems transitions SAP customers safely and reliably into the cloud and to SAP S/4HANA® – and at fixed prices in “T-Shirt sizes”.

Customer Benefits

- **Risk-free transformation**
to the cloud or SAP S/4HANA® using an industrialized end-to-end factory approach

- **Fast results**
through clearly defined modules (Design, Transform, Operate) and tool-supported analysis of applications

- **Promote innovation**
through short innovation cycles (Innovate)

- **Zero Outage**
Continuous Quality Management demonstrably ensures adherence to project timelines and service levels

- **Full flexibility**
Respond promptly to new business requirements with modern, future-proof SAP systems
Quality, performance and flexibility in solution development are essential criteria for a multinational corporation seeking IT services from a service provider.

While looking for new next-generation technologies, one of the world’s leading oil and gas companies was impressed by the innovative T-Systems cloud platform.

Since 2008, T-Systems has been supplying the customer with highly scalable platform, operational and data repository models.

As part of an expanded contract, the ICT service provider will continue to increase the degree of automation and agility. That is because the company wants to make decisions faster and on the basis of better information. In the end, the customer chose SAP HANA® for the implementation as a game changer for more than 20 core processes, with the goal of improving business-relevant analytics.

Decisions on the basis of real-time data give a competitive edge.

Multinational oil and gas corporation
Satisfy the need for speed with Dynamic Services for SAP HANA®
Trends & Drivers

- SAP HANA® as the basis for new, more agile business models
- Big Data: Fast, intelligent and productive analysis of huge volumes of data

Customer Requirements

Clarity:
with regard to all business data

Cost reduction:
through simplification of SAP processes

Performance improvement:
Faster decision-making through real-time analytics in key business areas

Solution

- Test migration of a system landscape including customer data
- End-to-end solution: Dynamic cloud platform migration and operation of the SAP environment
- Two- to four-week test period
- Optional installation of SAP Simple Finance
- Dynamic Services for SAP® Solutions as the basis: T-Systems provides more than 50 terabytes of HANA database capacity in one of its TwinCore data centers. The ICT service provider operates the entire infrastructure as a high-availability Fully Managed Service with an SLA of 99.9 percent. In addition, T-Systems plays a leading role in the customer’s HANA Center of Excellence

T-Systems Jump-Start on SAP HANA® allows a fast move to real-time business.

Customer Benefits

- End-to-end from consulting regarding the feasibility study to migration and operation
- No investment in own hardware thanks to migration to T-Systems cloud systems
- Data protection in accordance with German law and operation in the highly secure private cloud
- Best Practice & Expertise Extensive experience through operation of the world’s largest cloud platform for SAP, as well as system integration and migration expertise
On the way to real-time business.
You’ll get there safely with us.

With the T-Systems Jump Start packages, we offer a quick and standardized introduction to real-time business: whether you require an existing SAP landscape to be transformed to SAP S/4HANA®, Digital Analytics or a hybrid cloud model. We have the right offer for you:

T-Systems SAP® Leonardo
Initiation Package

Enter a new dimension of digitization with the T-Systems SAP® Leonardo Initiation Package, with regard to your SAP system world and far beyond. Find the optimum path for your company to discover new opportunities and possibilities regarding the Internet of Things, Blockchain, Machine Learning, Analytics, Big Data and Data Intelligence. With our proven method, we will determine your individual digitization possibilities and create a well-founded basis for the rapid and risk-free implementation of your digital business processes.

T-Systems SAP S/4HANA®
Transformation Packages

Obviously, switching to SAP S/4HANA® is not automatic. Transformation must be planned in detail. You cannot avoid making decisions regarding whether and to what extent migration makes sense, which data should be migrated or not. Whether it’s Greenfield, System Conversion or Landscape Transformation – with our standardized transformation packages, we accompany you on your journey to SAP S/4HANA®. In doing so, we use SAP Activate, SAP’s innovation introduction framework, combined with our best practices, based on many years of expertise in transformation.
DigiFront: Our dashboard solution for your real-time reporting

All the important business indicators in real-time, viewable on your tablet or even presented at the board meeting? This is what we can offer you with our Dashboard solution DigiFront, our comprehensive package for Digital Analytics. At the push of a button, you can call up your KPIs at any time and anywhere. If you need, you can even look at these in different levels of detail, which can be chosen with a simple click.

T-Systems Public Cloud for SAP® Solutions

Just quickly and simply ramp up your resources for better performance, test systems, accelerate projects, and turbocharge your analytics with SAP HANA®. With T-Systems Public Cloud for SAP® Solutions, you can use SAP applications flexibly and at any time. Test-drive SAP HANA® and the latest SAP S/4HANA® software, also as a perfect supplement for short-term requirements. A selection of SAP HANA® applications are available as fully functional appliances – complete ready-to-go solutions, not stand-alone components. Our pre-defined services are provisioned on a high-performance and SAP-certified IaaS on your preferred Public Cloud (Amazon Web Services, Microsoft Azure, Open Telekom Cloud)

Use the latest SAP software for hours, days, or any other self-defined time window. And you only are charged for what you actually use during each month – pay as you go.