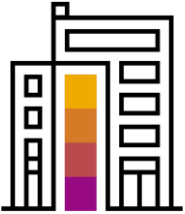




SAP® Innovation Awards 2020 Entry Pitch Deck

VW's E-Mobility for Millions Initiative Through SAP S/4HANA Efficiencies

Volkswagen Sachsen GmbH



Company Information

Headquarters	Zwickau, Germany
Industry	Automobile manufacturer
Web site	https://www.volkswagen-sachsen.de/de.html

In fiscal year 2018, the Volkswagen (VW) Group recorded sales revenue of €235.8 billion, employed 655.7K people, and delivered over 10M vehicles to customers. VW sees affordable mobility as a key green initiative.

Volkswagen Sachsen GmbH is a wholly owned subsidiary of the VW Group and is laying the groundwork to meet the company's commitment to sell more than one million electric vehicles annually by 2025. VW Sachsen GmbH is headquartered in Zwickau, in the German state of Saxony and operates production plants in Chemnitz and Dresden, employing more than 10,200 people across the three sites. On average, VW Sachsen GmbH manufactures 1,400 cars, 3,200 engines and 4,000 vehicle components every day.

VW Sachsen GmbH has been using SAP Business Suite for decades and chose to deploy SAP S/4HANA as the foundation for a new global finance system. The SAP S/4HANA implementation is to serve as a pilot to streamline financial processes worldwide for the Volkswagen Passenger Cars brand (12 brands/153 countries). IBM Services provided the SAP S/4HANA implementation.

VW's E-Mobility for Millions Initiative through SAP S/4HANA Efficiencies



Volkswagen

Volkswagen Sachsen GmbH



“Electric mobility has to be affordable. With SAP S/4HANA, we have created a new technology platform that helps us to set new standards at Volkswagen.”

Kai Siedlatzek, Managing Director Finance and Controlling, Volkswagen Sachsen GmbH

Challenge

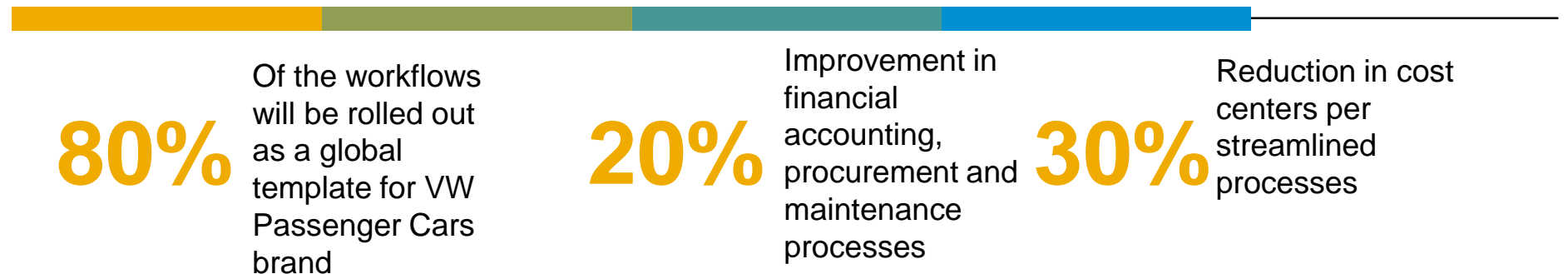
VW Sachsen GmbH's mandate of bringing affordable, emission-free electric vehicles to a global market marked its transition to eco-friendly e-mobility production. Thus the company sought a deeper insight into manufacturing profitability, optimizing efficiency, reducing manual workflows, and minimizing environmental impact at three production sites by consolidating separate finance and enterprise resource planning systems.

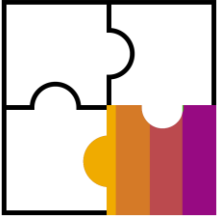
Solution

VW Sachsen GmbH engaged IBM® Services™ to implement standardized financial processes based on SAP S/4HANA®, laying the groundwork for a global template for the Volkswagen Passenger Cars brand (12 brands/153 countries).

Outcome

The company has standardized, digitized and automated its financial planning and controlling operations to provide instant, clear breakdowns of profitability across many dimensions and improved data quality on a single unified platform. The innovations in this environment help realize VW's electric mobility mission.





Participating Partner Information

IBM Services

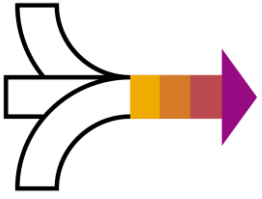
Implemented SAP S/4HANA



"Our goal was to implement a solution that fully integrates processes and applies the appropriate controls to enable Volkswagen to reach its 2025 goals. SAP S/4HANA will not only help bring electric cars to all parts of society, it will also protect and create jobs in the local area and open up new perspectives for staff that will help them thrive and grow."

Jörg Baldauf, Partner, Automotive Industry, IBM Services



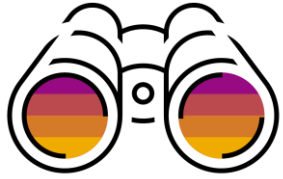


Business Challenges and Objectives

Driven by consumer demand for higher environmental consciousness, the appetite for sustainable mobility is growing rapidly. The VW Group wants to deliver e-mobility for everyone while minimizing the eco-impact. As part of its 'TOGETHER—Strategy' program, the VW Group plans to launch 75 purely battery-powered electric models by 2029. The group launched its e-offensive by converting its Zwickau manufacturing site into the largest competence center for e-vehicles in Europe to support the production of their first model based on the modular electric drive matrix. Zwickau already runs on green energy to minimize the environmental impact of car production and was selected to run a financial and production integration project.

To ensure a smooth transition to e-mobility and achieve growth in the new line of business, VW Sachsen GmbH must keep a close eye on profitability. VW Sachsen GmbH had separate finance and enterprise resource planning systems at three production sites, adding complexity to operations that already relied too heavily on manual workflows for reporting – including using spreadsheets to track and analyze manufacturing costs. VW Sachsen GmbH led the creation of a standard finance system, integrating the existing applications to increase transparency and productivity and improving analytics capabilities with the implementation of SAP S/4HANA.





Project or Use Case Details

Volkswagen Sachsen GmbH initiated an 18-month project with IBM (07/17-01/19) to identify and deploy the best technology options for the 'TOGETHER—Strategy 2025' program. Supporting the company's shift towards sustainable production and electric mobility, IBM analyzed their functionality using workshops modeled on the innovative Design Thinking approach.

The two companies also worked closely with SAP to develop custom integration code, enabling them to connect their core SAP S/4HANA solution with SAP S/4HANA Sourcing and Procurement. VW Sachsen GmbH took advantage of the SAP Customer Center of Expertise's value prototyping labs to build the interface based on SAP Best Practice templates, and further worked with IBM Services to reduce accounting complexity, resulting in 30 percent fewer cost centers. Additionally, organizational processes were optimized by 40 percent, further illuminating manufacturing costs and streamlining approval processes.



Benefits and Outcomes

Business or Social

Electric mobility is an environmentally sustainable alternative to help thwart climate change.

Reduced cost centers by 30%.

Improved organizational processes by 40%.

80% of the workflows will be rolled out globally.

Less staff are involved in order input processes, freeing time for other activities.

20% improvement in financial accounting, procurement and maintenance processes.

IT

Consolidated operations of three plants onto one-SAP S/4HANA system, providing a unified business view and simplifying IT.

Platform enables faster product innovation, prototypes building, testing and scaling from prototype to production.

80% of workflows will be rolled out as global template for VW Passenger Cars brand. The pilot has huge potential for the VW Group, paving the way for leaner, smarter planning processes.

Optimized organizational processes for faster information flows and more effective decision-making on all levels.

Human Empowerment

Electric Mobility for all – ID.3 is possible for millions of people, not only for millionaires. VW can deploy this new sustainable technology for the masses through better cost transparency and reduction of data complexity with the help of SAP S/4HANA .

Learning new skills and developing new professional capabilities helps the company to retain qualified staff and create new career opportunities for the brightest talents.

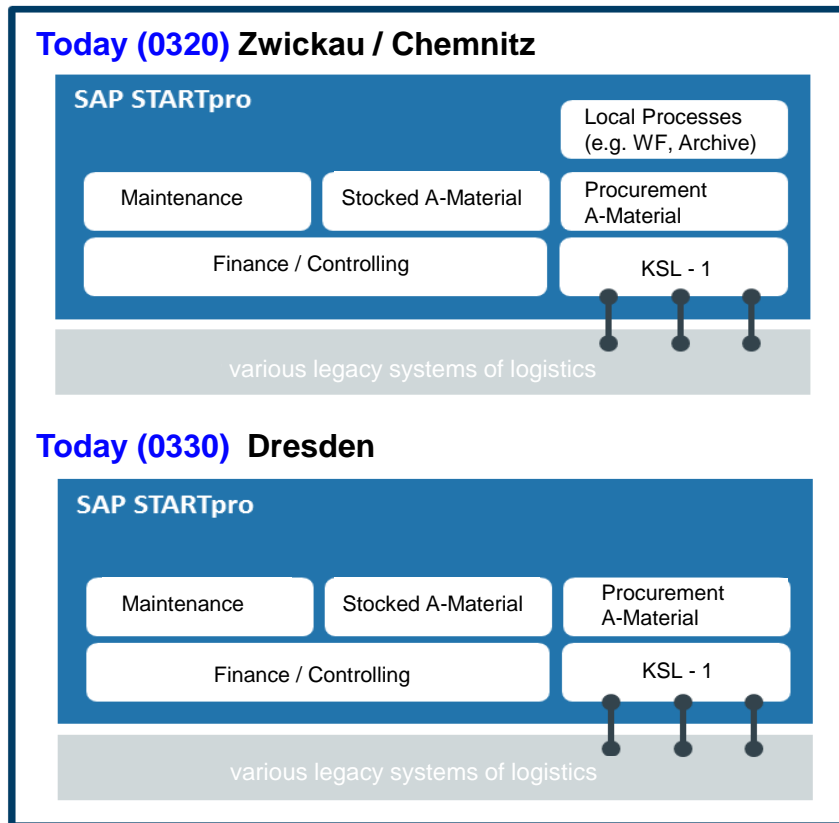
Empowered employees with data-driven decision-making abilities that led to new insights which extended to pride in an innovation culture.



Architecture

SAP project "STEP" - SAP S/4HANA replaces two SAP ECC clients

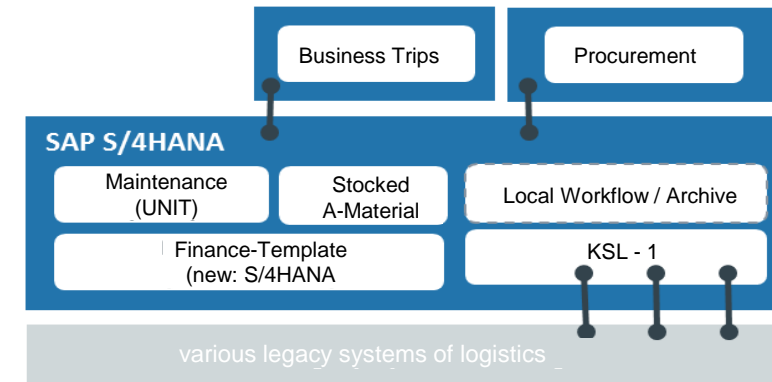
target image level 1



Interfaces



Target Image Level 1: Base S/4HANA
- A system for three locations





Deployment



Deployment status Live

Date 01/2019 Number of users 2,000

SAP technologies used:

	SAP product	Deployment status (live or proof of concept [POC])	Contribution to project
1	SAP S/4HANA	Live	Production platform
2			
3			
4			
5			

If you have used one of the services or support offerings from SAP Digital Business Services during the implementation or deployment phase, please select with ☒ one or more of the following offerings:

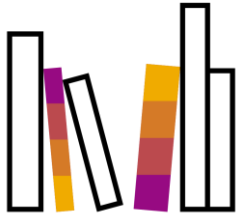
- ☐ SAP MaxAttention™
- ☐ SAP ActiveAttention™
- ☐ SAP Advanced Deployment
- ☐ SAP Value Assurance
- ☐ SAP Model Company
- ☐ Others:
- ☐ SAP Innovation Services
- ☐ SAP Innovative Business Solutions



Advanced Technologies

The following **advanced technologies** were part of the project.

	Technology or use case	Yes or No	Contribution to project
1	3D printing	No	
2	Blockchain	No	
3	Internet of Things (IoT)	No	
4	Machine learning or AI	No	
5	Conversational AI	No	
6	Robotic process automation	No	
7	Data anonymization	No	
8	Augmented analytics	No	



Additional Information

E-Mobility for All with Volkswagen Sachsen and IBM-video:

<https://www.youtube.com/watch?v=l8GH0wfyls0>

IBM-SAP-Volkswagen case study:

<https://www.ibm.com/case-studies/volkswagen-global-business-services-manufacturing-efficiency>

VW wants to bring an e-car with 250 kilometers range for less than 20,000 euros on the market, Spiegel article:

<https://www.spiegel.de/auto/aktuell/vw-will-elektroauto-fuer-weniger-als-20-000-euro-anbieten-a-1291348.html>

Successful implementation of SAP S / 4HANA at VW Sachsen is the basis for worldwide projects for financial and production integration, IBM press release:

<https://www-03.ibm.com/press/de/de/pressrelease/55189.wss>

IBM and Volkswagen Saxons pave the way for emission-free e-mobility, moneycab article:

<https://www.moneycab.com/it/ibm-und-volkswagen-sachsen-ebnen-weg-fuer-emissionsfreie-e-mobilitaet/>