

SAP Automotive Services Portfolio

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SAP Consulting



Definition Consulting Solution

Consulting solutions can be characterized by

(Advance) implementations of an existing function from an SAP Automotive Best Practices or SAP S/4 HANA release

or

Project solutions by SAP Automotive Consulting that fill potential gaps in any SAP Automotive Best Practices or SAP S/4 HANA release



Customer Benefits

Solution

- Requirements known, concept and solution exist
- Proven solution already being used in production by several customers (best practice)
- Benefit from the industry know-how of SAP Consulting and SAP Development
- Solutions available with diverse releases, upgrade and downgrade capability
- Comprehensive documentation package



SAP S/4 HANA

Time

- Rapid implementation possible
- More efficient and shorter project runtimes
- Time savings lead to cost reductions, also internally for customers

Cost

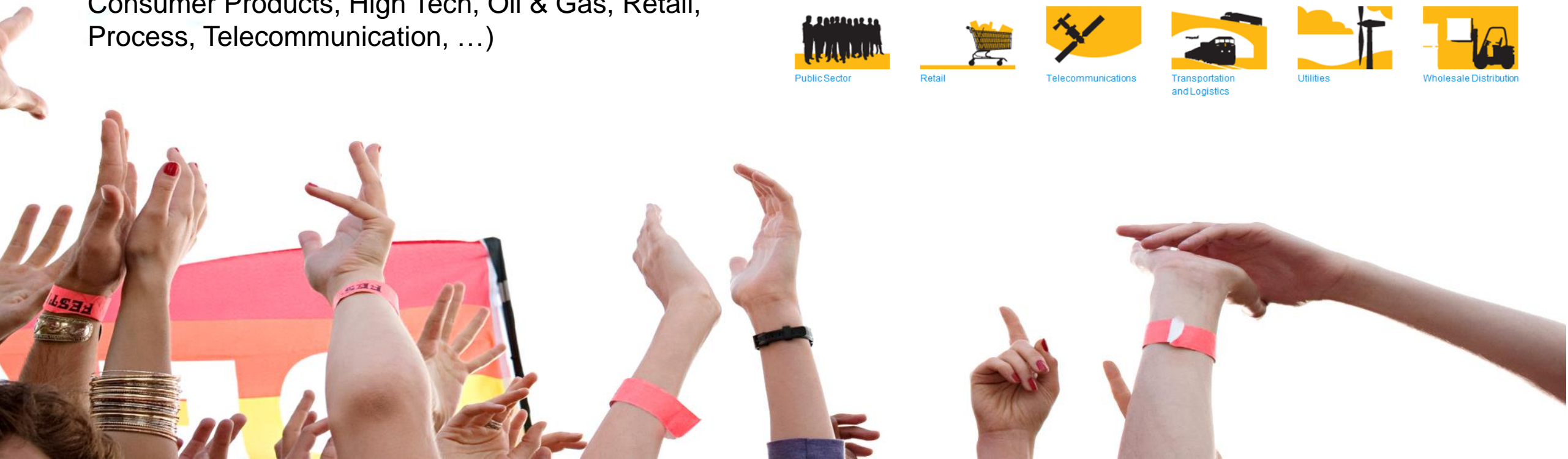
- Exact cost estimates possible (fixed-price implementation)
- No ongoing costs (such as maintenance fees)
- Up-front investments of SAP Consulting reduces cost risks



Added Value

Benefit from more than 15 years of SAP ACS experience

- ... from over 2,500 SAP ACS installations worldwide
- ... for more than 600 customers
- ... in over 40 countries
- ... not only for Automotive industries but also in diverse other industries (Aerospace & Defense, IMC, Consumer Products, High Tech, Oil & Gas, Retail, Process, Telecommunication, ...)



Some ACS Customer References...



...our services follow the process of our customers

Distribution

Monitor & control the entire distribution network efficiently and reliably

Asset Management

Monitors and maintains things of value along the complete supply chain

Warranty Management

Automated warranty claim submission and reimbursement



Inbound-Outbound Logistics

Interact and collaborate with customers and partners

Production

IoT and Lean Manufacturing Standards to gain maximal efficiency

Quality Management

Build collaboration and sustained quality control into your quality management processes

MI Industrialized Services

ACS Inbound-Outbound-Logistics



Description

ACS for **Inbound and Outbound Logistics** are representing a **list of functionalities**, which are **enhancing the SAP-Standard** with specific functionality, required by **Discrete/Manufacturing-Industry customers**.

These solutions are developed **together with customers based on concrete business needs**.

Target Customers & Industries

- Particularly Discrete Industry and Automotive from midsize companies (e.g. GETRAG or Hirschvogel) up to big enterprises (like Robert Bosch GmbH, CONTINENTAL, INA Schäffler, MAGNA, ...)
- Some solutions could also be used in other industries like the **ACS Vendor Evaluation** or **3rd Party Order Processing**.

Example Offerings by ACS Inbound-Outbound-Logistics

- ACS 3rd Party-Processing with Scheduling Agreements
- ACS Start-Up and Discontinuation Control
- ACS Delivery Service Level
- ACS Vendor Evaluation
- ACS Vendor Consignment
- Several ACS for Print out Forms and Labels

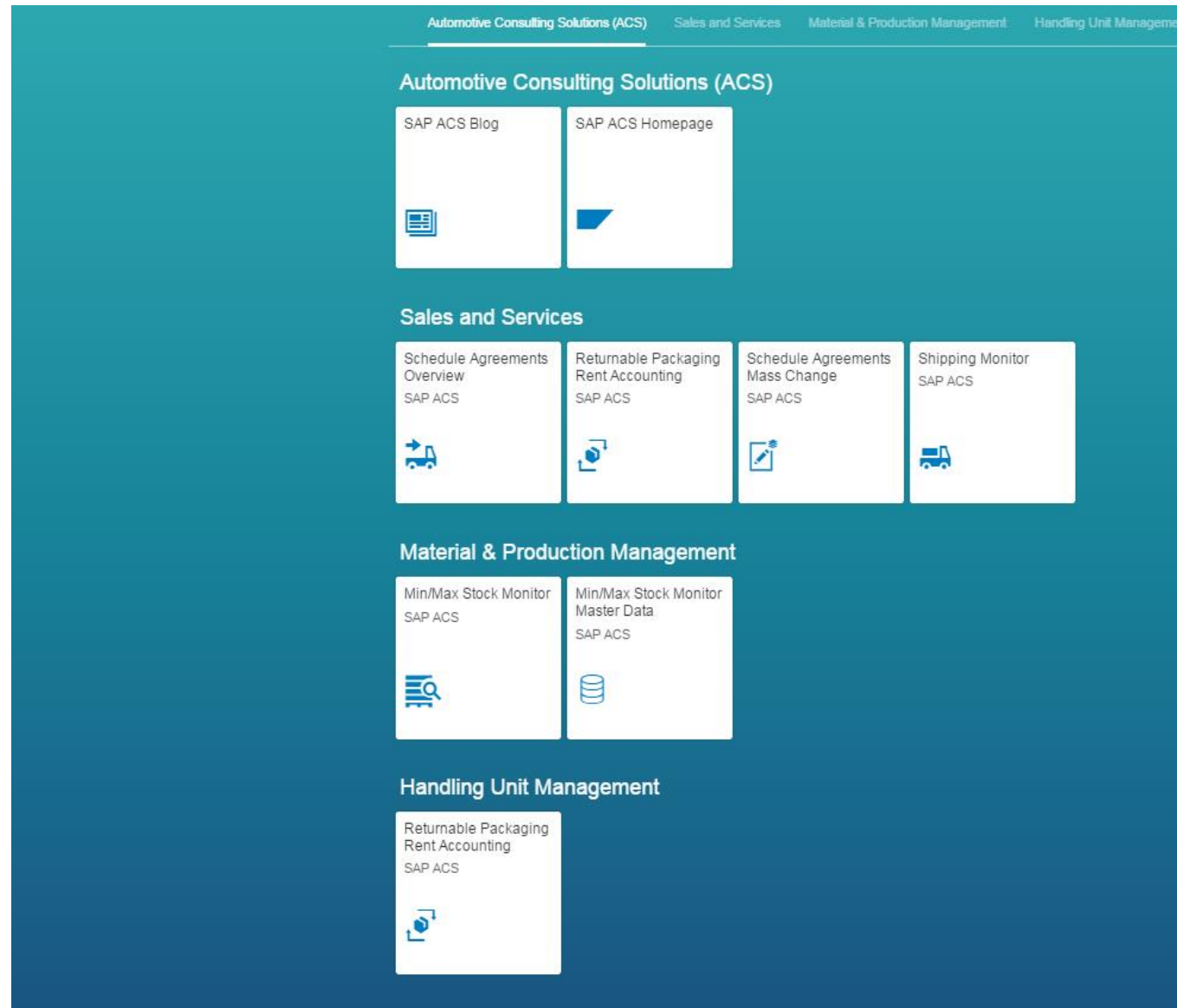
Customer Example: Sika Alliance Template

- Third-party w/ Sched. Agreements
- FRC-JIT Comparison (ZRCMON)*
- Exit Control Framework
- ECF Logic: DELINS check of ECN (US)
- ECF Logic: Ford cum qty inbound (US)
- ECF Logic: Customer-specific fields inbound/outbound (US+)
- Sold-to Party Determination
- ASN Monitor (US)
- Shipping Monitor (US+)
- CHEP Idoc
- Consignment Monitor
- Delivery Service Level
- RTP Planning
- RTP Rent Accounting – SD
- Forms
 - OEM labels – US (>60)
 - ETI9
 - GTL Ford
 - GTL VW
 - PSA Delivery Note
 - VDA 4939
 - VDA forms (4902, 4912, ...)
- Finance
 - SBWAP Reporting
 - Idoc Monitor Payment Advice
 - Idoc Monitor Incoming Invoice
- In Progress
 - LMPC – Lean Manufacturing, Planning & Control

DSAG 2013



ACS Solutions based on SAP Fiori UI



ACS UI5 Example: New Min/Max Stock Monitor

SAP Min/Max Stock Monitor

Plant: ACS1 Material: Stor. Location: MRP Area: MRP Controller: Case:

Materials (189) Storage Location Stocks Stock Summary in Plant

Icon	Case	Plant	Stor. Location	Material	Description	Total stock	Min stock level	Target lower lvl	Target upp. lvl	Max stock level	Message Text
🔴	--	ACS1	0001	51	ACS Consignment Material 01	0	100	200	300	400	Stock below Min stock level
🔴	--	ACS1	Z3P1	1	ACS 3PP 01	100	100	200	300	400	Min stock level reached
🔴	++	ACS1	0001	104	Batch Material 01	4,320	100	300	500	1,000	Stock exceed Max stock level
🔴	++	ACS1	0001	94	ACS Single 3PP 01	61,570	1,000	3,000	5,000	10,000	Stock exceed Max stock level
🔴	++	ACS1	0001	132	VOLVO Material 02	99,985	100	200	300	400	Stock exceed Max stock level
🟡	+	ACS1	0001	1	ACS 3PP 01	326	100	200	300	400	Total stock between Max stock level and Target upper limit
🟡	+	ACS1	0001	116	Tissue for Seat left	4,997	1,500	1,700	3,000	5,000	Total stock between Max stock level and Target upper limit
🟡	+	ACS1	0001	131	VOLVO Material 01	99,990	10,000	30,000	50,000	100,000	Total stock between Max stock level and Target upper limit
🟢	✓	ACS1	0001	137	ACS GI-CUM in ASN	3,507	1,000	3,000	5,000	10,000	Total stock in target area
🟢	✓	ACS1	0001	120	Frame for Seat right	4,998	1,000	3,000	7,000	10,000	Total stock in target area

MI Industrialized Services

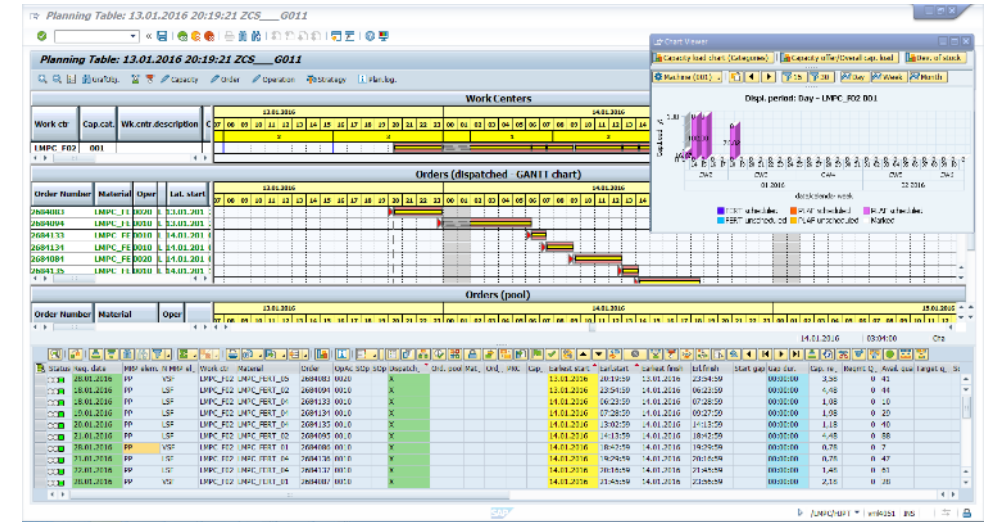
ACS Production Planning & Lean Manufacturing

Description

SAPs ACS in the area of Production Planning and Lean Manufacturing address topics and requirements related to **optimization, integration** and **implementation** of production planning and execution processes.

Target Customers & Industries

- All customers that manufacture goods
- All industries, especially automotive OEMs and suppliers
- E.g. BMW, Daimler, Bosch, ZF, Audi press shop, but also a lot of SME companies.



Example Offerings & Services

- LMPC – Lean Manufacturing – Planning & Control
- Enhanced Capacity Reporting
- EPEI – Calculation (Rhythm Wheel)
- Process Optimization for Planning and Manufacturing Excellence (SAP BTS)
- Implementation services for ACS solutions

MI Industrialized Services

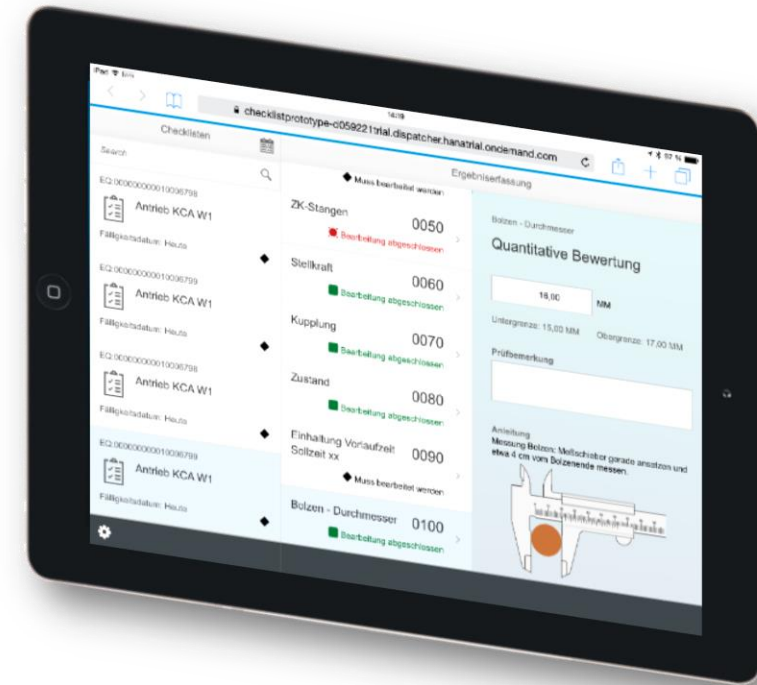
ACS EAM Checklists

Description

The EAM Checklist solution enables the customer to **inspect their assets with object-specific checklists**. With the solution the **whole end-to-end process** is supported: master data maintenance, generation of object lists, automatic creation of checklists for all relevant objects of a work order, various options for result recording, usage decision based on the results, documentation of the results, reporting

Target Customers & Industries

- Customers who have to do various different checks/inspections of their assets during their maintenance and service activities and using EAM (Enterprise Asset Management)
- All Industries



Demo

Example Offerings by ACS EAM Checklists

- EAM Checklists – Backend solution
- EAM Checklists – Mobile result recording with SAP Work Manager AddOn
- EAM Checklists – Mobile result recording with Fiori AddOn

MI Industrialized Services

ACS Quality Management

Description

- **Transparent mapping** and standardized development of QM complaints and reporting scenarios
- Integration of **modular terminal processes**
- **Full integration** into the SAP Standard (inspection planning, FMEA, PLP ...)
- **Process-driven interface usage**
- Support inclusive **Monitoring & Reporting**

Target Customers & Industries

- All customers that manufacture goods

SIEMENS
Automation
and Drives

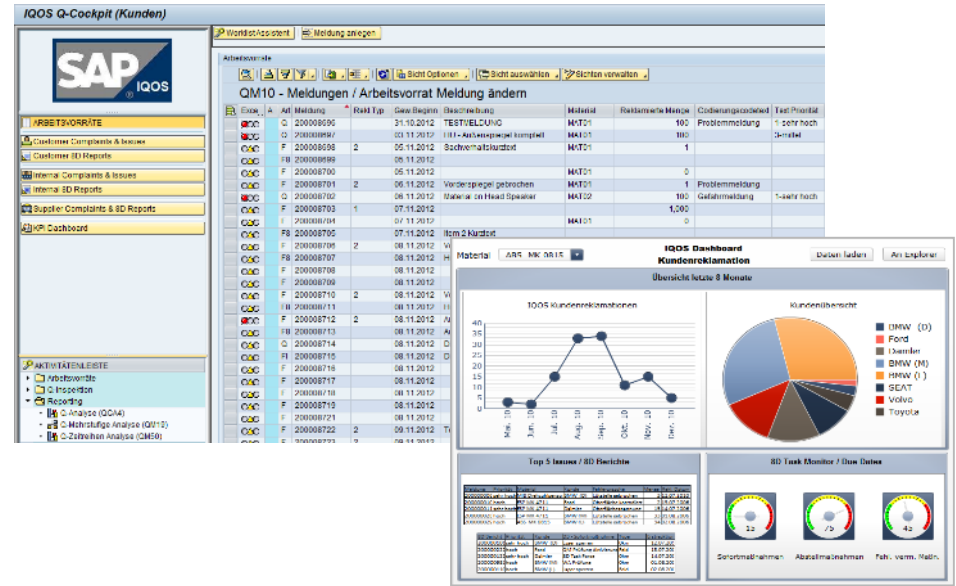


Continental



BOSCH

BEHR



Example Offerings & Services

- IQOS Notification Framework (Quality-, Complaint-, & 8D Cockpit)
- IQOS integrated Customer Complaint Handling & 8D (for internal/external Suppliers, Customers)
- IQOS QDX Portal Integration
- IQOS Quality Tracking Tool

MI Industrialized Services

ACS Warranty Management

Description

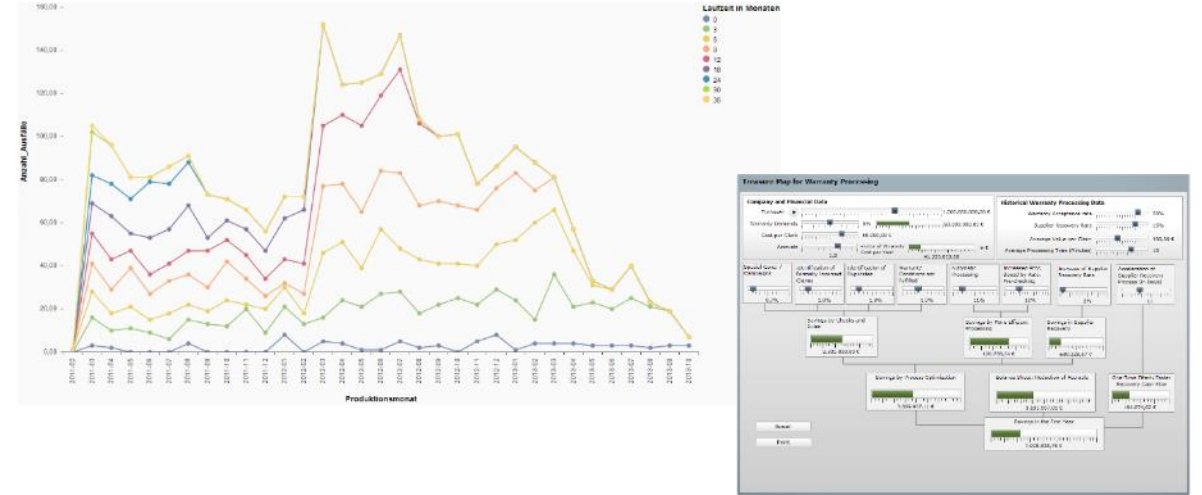
The **ACS Warranty Fast Start** delivers a quick and easy implementation of standard SAP Warranty Management (WTY) in a best-practice setup, **reducing implementation time and boosting customer value.**

For many companies, **warranty is an untapped potential**: Few IT-systems, high potential savings.

ACS Warranty is **ready to run on S/4HANA**, and **Warranty Analytics** is a focus topic for 2016.

Target Customers & Industries

- Automotive OEMs / Importers (e.g. MAN, NISSAN)
- Automotive suppliers (e.g. ZF, Continental)
- Manufacturing industries (e.g. KION)
- Air & Space (e.g. Honda Air)



Example Offerings by ACS Warranty Management

- **Fast Start** (“for all”) / **Fast Start for Automotive Suppliers**
- **Warranty Workbench**
- **Checks and Rules**
- **Supplier Recovery**
- **Recall Management**
- **Predictive Analytics (Weibull Analysis)**

TEST_ASD_CP111.xls(x) - Excel

FILE HOME INSERT PAGE LAYOUT FORMULAS DATA REVIEW VIEW PDF-XChange 2012

Clipboard: Cut, Copy, Paste, Format Painter

Font: Calibri, 11, Bold, Italic, Underline, Text Color, Background Color

Alignment: Wrap Text, Merge & Center

Number: General, Percentage, Decimals, Fractions

Styles: Normal, Bad, Good, Neutral, Calculation, Check Cell, Explanatory T..., Input, Linked Cell, Note

Cells: Insert, Delete, Format

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	B	C	D	E	F	G	H	I	J	K	L	M	N
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2	KRIAS												
3	12345678//90												
4	ASD												
5	Demo Supplier AG												
6	B708090CP111												
7	EUR												
8	71,13												
9	2013-04-29												
10	2013/04												
11	1												
12													
13													
14													
15													
16	Teile-Nr eingebaut (Original Teile-Nr.)	Teile-Nr ausgebaut (unverbindliche Systemzuordnung)	Teilebezeichnung	Arbeitspos	Bezeichnung	Schadensart	KD-Nummer	Teile-Nr	ZS	Rep.kennz	Anz. Def. a	Anz. eingel	Technische Fahrgestellnr.
17	7P6616019G	7P6616019G	LUFTFEDERDAEMPFER			0040	4366		2		1	1	80 VV0ZZY7P2BD0CP1
18	1K0907375AC	1K0907375AC	STUEGERGERA			0040	4545		2		1	1	55 VV0ZZY2K2AX1CP1
19	1K0611701K	1K0611701K	BREMSSCHLAUCH,VORN			0050	4726		2		1	1	5 VV0ZZY2K26X0CP1
20	1K0614517ACBEF	1K0614517ACBEF	ESP-AGGREGAT			0040	4530		2		1	1	80 VV0ZZY1T29W0CP
21	7L0698007E	7L0698007E	KOMPRESSOR			0050	XXXX		2		1	1	80 VV0ZZY7L27D0CP1
22	9P34567KRL	9P34567KRL	BATTERY			0040	XXXX		2		1	1	50
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SAP Service Catalogue for Automotive Industries

there is more to discover

Core Process Areas

01 Product Development, Design & Engineering

02 Marketing, Sales & Order Management

03 Logistics Planning, Project Management & Materials Planning

04 Procurement, Production & Assembly

05 Warehouse Mgmt & Distribution

06 Asset Operations and Maintenance

07 After Market Sales & Service

Supporting & Cross Process Areas

A – Corporate Strategy

B – Finance & Controlling

C – Portfolio Management

D – Analytics, Reporting & SAP HANA

E – Human Capital Management

F – Enterprise Mobility

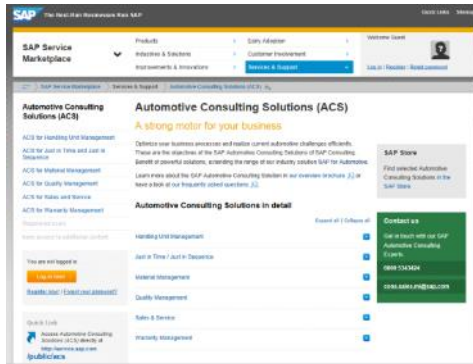
G – Quality Management

H – Corporate Services

I – IT Projects and IT Management (Solutions & Operation)

Information Sources

- **SAP Support Portal**
 - SAP Notes (search term: Automotive Consulting Solutions)
- **Internet (FAQ and overview/detailed/customer presentations)**
 - <http://www.sap.de/acs> (DE)
 - <http://www.sap.com/acs> (DE and EN)



- **Blog:** <http://scn.sap.com/blogs/sap.acs> **Twitter:** <http://twitter.com/sap>
- **SAP News Center** (<http://news.sap.com>) **ACS Newsletter** (via Mario Rebitzer)
- **Annual Events 2016**
 - **SAP Automotive Consulting Solutions Information Day (Sept. 28th, 2016 Stuttgart)**



Thank you

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Appendix

Some ACS Customers ... (II)



Overview – Sales & Distribution (I)

- EDI monitor for inbound forecast/JIT delivery schedules
- Tolerance check for inbound forecast/JIT delivery schedules
- Enhanced functions for inbound forecast/JIT delivery schedules
- Forecast/JIT delivery schedule analysis
- EDI monitor for inbound requests/orders/outbound delivery orders/order changes
- EDI monitor for self-billing procedure
- Third-party order processing with scheduling agreements
- Third-party order processing: completeness check and master data creation
- Multilevel third-party order processing with scheduling agreements and single orders
- Multilevel third-party order processing: completeness check and automated document creation
- ESP processing (classic) – special stock partner level (EDI monitor for inbound ESP goods receipt/withdrawal/stock messages incl. options to map stock in transit)
- EDL processing (classic) – plant level (EDI monitor for inbound ESP goods receipt/withdrawal/stock messages)

Overview – Sales & Distribution (II)

- Evaluation of completeness check for ESP movements
- VMI processing with EDI integration
- Mass change for sales scheduling agreements
- “SBWAP” reporting – self-billing procedure
- Delivery service level and backlog reporting
- Start-up/discontinuation control for sales scheduling agreement processes
- Retroactive price agreements – retroactive billing
- Fiscal year change
- Orders on hand/incoming orders
- SMART ESP processing
- Loading space calculation
- EDI monitor for inbound payment advice notes
- Shipping monitor
- Monitor for outbound shipping notification statuses
- Release generation
- Scheduling agreements overview – SD

Overview – Sales & Distribution (III)

- Exit control framework
- Customer-specific processes: EDI shipping notification (outbound)
- Customer-specific processes: order and shipping (focus on American market)
- Web-based scheduling agreement functions
- Web-based forecast/JIT delivery schedule functions
- Copying of sales scheduling agreements
- Automated returns processing
- Automated creation of SD scheduling agreements via IDoc or Microsoft Excel
- Customer consignment – wait times report
- Sales-Tax-Complaint Confirmation of Arrival (Gelangensbestätigung)

Overview – Sales & Distribution (IV)

- VDA forms (delivery note, invoice, material tag,....)
- VDA 4939 forms
- VDA 4939 forms – SSC (OEM specific – VW, Audi, and so on)
- VDA forms – 2D-barcode material tags
- GALIA/ODETTE delivery note forms (Renault and Peugeot, for example)
- GALIA/ODETTE material tag (INVERS) forms (Renault and Peugeot, for example)
- Forms for AIAG global transport label
- OEM forms, specifically for General Motors (GM) – global transport label
- OEM forms, specifically for Volkswagen (VW) – global transport label
- OEM forms, specifically for Ford – global transport label
- OEM forms, specifically for KIA delivery note
- OEM forms, specifically for KIA material tags
- More than 200 different OEM/supplier-specific material tags for the American market

Overview – Just in Time/Sequence & Handling Unit Mgmt.

- **Just-in-Time/Just-in-Sequence**

- EDI monitor for inbound JIT calls
- Start-up/discontinuation control for JIT calls
- JIS self-billing procedure
- BMW SPAB - TACHO distribution control
- Forms for JIT/JIS: Renault L3PS
- JIS shipment lot planning
- JIS grouping
- Web-based summarized JIT call functions

- **Handling Unit Management**

- Returnable packaging rent settlement (in sales)
- Returnable packaging rent settlement (in materials management)
- Demand-driven packaging material planning
- Visualization of packing instructions
- CHEP EDI container data

Overview – Materials Management & Production

- EDI monitor for inbound order confirmations
- EDI monitor for inbound shipping notifications
- EDI monitor for inbound invoices (logistics invoice verification)
- EDI monitor for inbound shipment notifications
- Subcontracting with chargeable components
- Backlog list in materials management
- Supplier consignment
- Freight cost management – incoming freight
- Pick-up sheet process
- Material master copier
- Range of coverage monitor – materials planning
- Min./max. inventory monitor
- Vendor evaluation (quantity/date, quality, soft facts,...)
- Delivery and QM complaints
- Lean manufacturing – production & control (LMPC)

Overview – Warranty Management

- Fast start – warranty management
- Fast start for suppliers
- Claim copier
- Claim values
- Authorizations
- Extended warranty check
- Financial integration with OEMs
- Warranty claims in the equipment history
- Supplier subrogation
- Prices and conditions
- Productivity improvements by automated claim validation
- Parts to be returned
- Collective postings
- Workbench

Overview – Quality Management

- IQOS message framework (quality, complaint, and 8D cockpit)
- Integrated customer complaint handling & 8D process via VDA Microsoft Excel template
- Integrated internal complaint handling & 8D process via VDA Microsoft Excel template
- Integrated supplier complaint handling with bidirectional 8D data exchange via XML & VDA Microsoft Excel template
- Integrated supplier complaint handling with bidirectional 8D data exchange via XML & SAP Interactive Form by Adobe
- QDX portal integration
- DMS integration (documents for reporting)
- SD integration (credit memos & SD orders)
- KPI BusinessObjects dashboards
- Quality tracking tool
- Audit management according to VDA 6.3