

SDBtransfer with SAP EH&S

Implementation project in preparation
in the chemical industry



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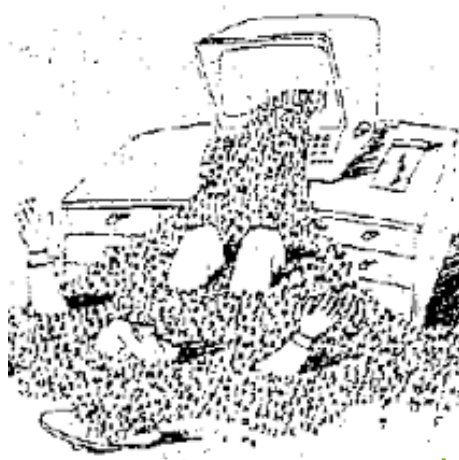
Pilot implementation of a model for safety data exchange in-to and out-of a SAP EH&S

- What is SDBtransfer?
- Who are the partners?
 - Who is DAW SE?
 - Why do we participate in SDBtransfer?



- Where are we aiming at?
- What has been done until now?

The reason why ...



... is information overflow

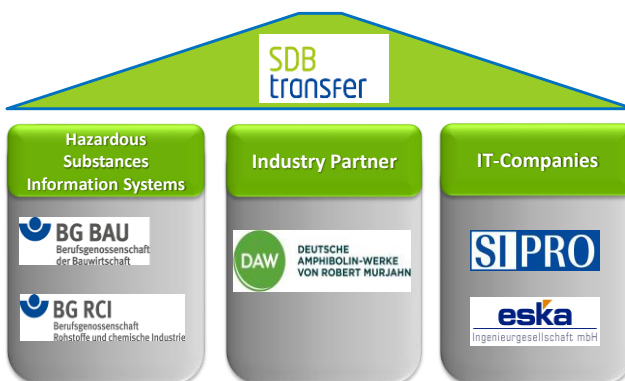
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Project Overview

SDBtransfer

Project Partners

- 2 Occupational Insurance Associations
 - BG BAU
 - BG RCI
- DAW
 - Producer of building chemicals
- 2 IT Companies
 - eska
 - SI PRO as partner in charge for implementation of a SAP based solution



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DAW SE

Paints & Plasters – Varnishes – Building Protection – Thermal Insulation

INNOVATIVE BESCHICHTUNGSSYSTEME SEIT 1895.



RMI
Assessing Quality



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Background of SDBtransfer

Current situation

- Suppliers submit SDS downstream
 - in the entire supply chain
 - all intermediaries
- Data of **first 16 sections** of SDS
 - ➔ realisation of measures for occupational safety, health and environmental protection
- Manual data extraction and re-input
 - ➔ enormous effort in every company of the supply chain
- Stakeholders in supply chain miss:
 - **eStandard** to forward content of **first 16 sections**
 - Interfaces for safety data import and export



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DAW's intention to participate in SDBtransfer:

- Make it possible to bring SDS content to our customers- dangerous substances and OSHA information.
- convenient for users - mainly craftsmen: As much as needed - as short as possible to reduce their expenses for storage of SDS
- Export, but also import of data contained in MSDS
 - avoid overload of project goals
- Import of primary data in-to an EH&S of SAP in order
 - to run rule sets
 - to generate secondary data
- Evaluation and separation of data: Import of only valid data
- Similarity of problems in EU



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DAW's intention to participate in SDBtransfer

Data management – incoming data

Data received

- Safety data sheets (SDS)
- Technical information (TI)
- REACH information
- Compliance information

Form of received data

- E-Mail (unstructured PDF)
- Fax
- mail (paper)



Quality of received data

- Ranges from excellent to very poor

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More intentions and motivation

Data management

More Problems of data exchange

- Printed information → IT-System
- IT data → Print on paper

Media disruption when forwarding information.



Solution

- Data exchange using XML format
- Exchange of „hard facts“ – **first 16 sections**
- BG Bau hosts a data base – all safety information is available
- BG RCI creates a data import tool – transmitter of SDS content



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Intention and motivation

Maintain the existing + manage the incoming data

- 6.500 Raw Materials (RAWs) existing in IT-system
– data management according to SDS of suppliers
- 8.500 Filling Materials (different mixtures)
– data maintenance according to revised SDS of raw materials
- Qualified person copies data
– Risk of errors and „wastage“ of working power
- Increasing amounts of SDS due to legal changes and reclassification with GHS/CLP (2015) + REACH (2018)
- National laws over-compensating European Regulations



SDBtransfer in Progress

Accomplished Doings

- Definition of export and import interfaces
- Analysis of current process
- Definition of target process
- Definition of relevant assessments for import and export
- Comparison of export and import interfaces:
 appr. 170 data points in EDASxBAU
 vs. appr. 750 items in EDASxChem
- Definition of priority of interface development: export before import interface
- Definition of master data structure, e. g.
 - Definition of a staging process



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SDBtransfer in Progress

Accomplished Doings

Definition of data export

- Automatic generation of SDS in PDF A3
- Automatic export of files
- Document management system
- Creating log-files



Definition of data import

- Recognition: Raw material known or unknown
- Check if received SDS is latest version
- Input of necessary data (selective data input)
- Manual adaption of data from SDS



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Thanks to my team



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- Founded in Mannheim 1999
- SAP Service Partner
- SAP Validated Expertise Partner
- Focus: Chemical / Pharmaceutical / Consumer Industry
- Core capabilities: SAP Product Lifecycle Management, Recipe Development, SAP EHSM processes and tools
- Services: Consulting, implementation, standard software, application development and support/maintenance
- Locations: Mannheim, Berlin, Munich and New York City
- Team: More than 50 PLM/EHS experts with many years of relevant project experience
- Projects: More than 250 successful SAP PLM / EHS projects



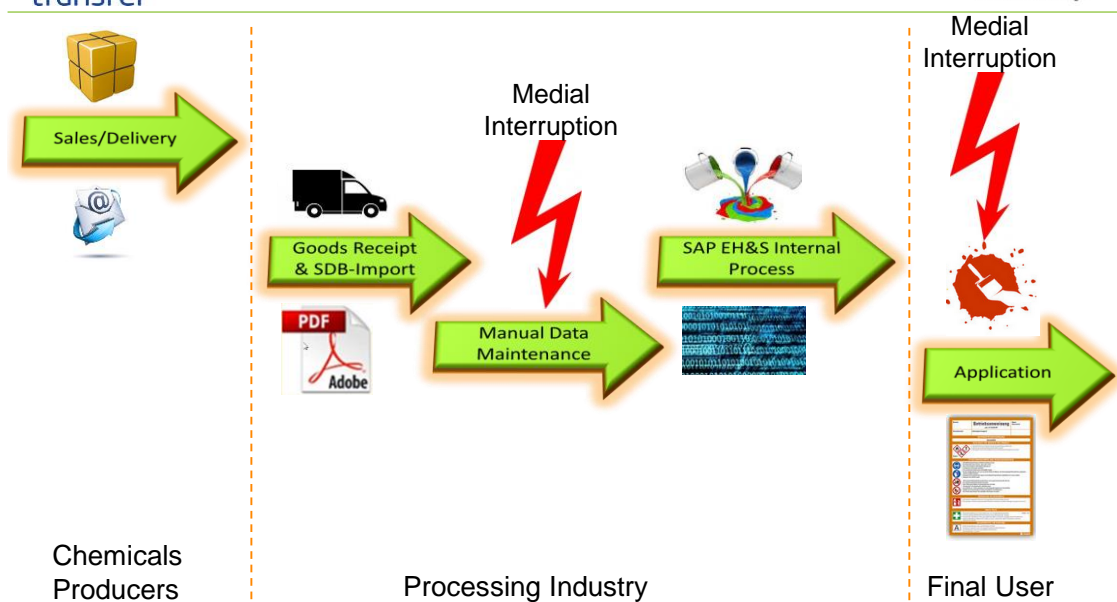
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Status Quo SDB Data Exchange

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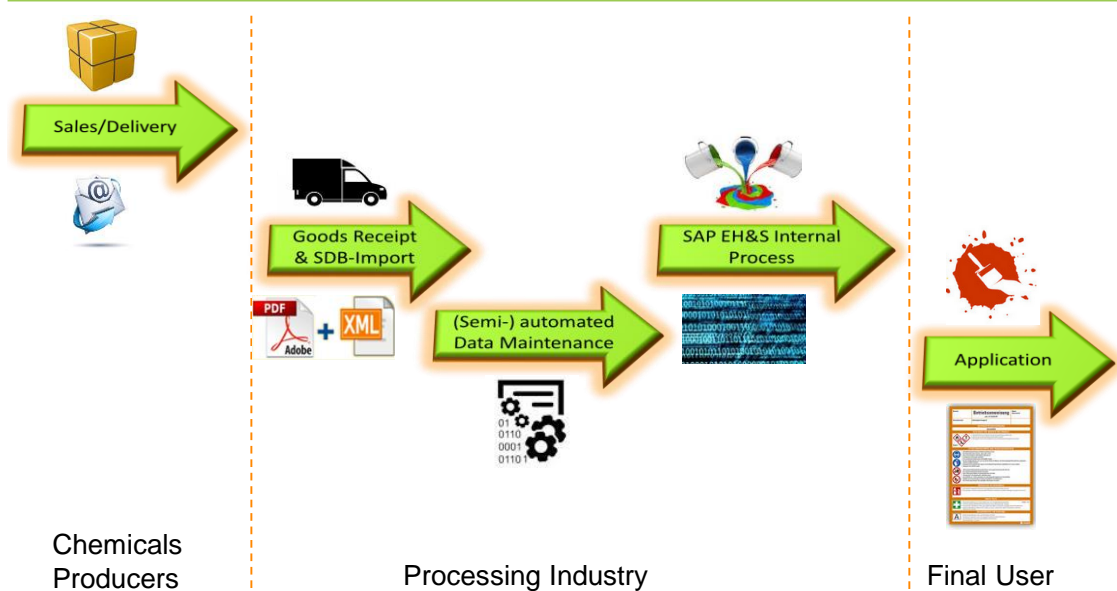
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SDB automated Data Exchange

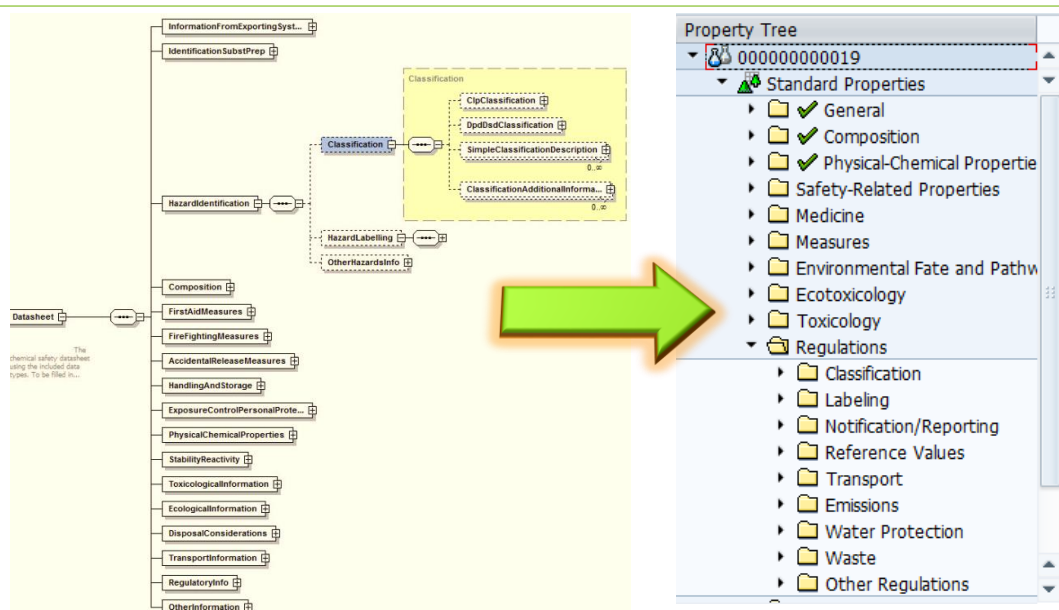
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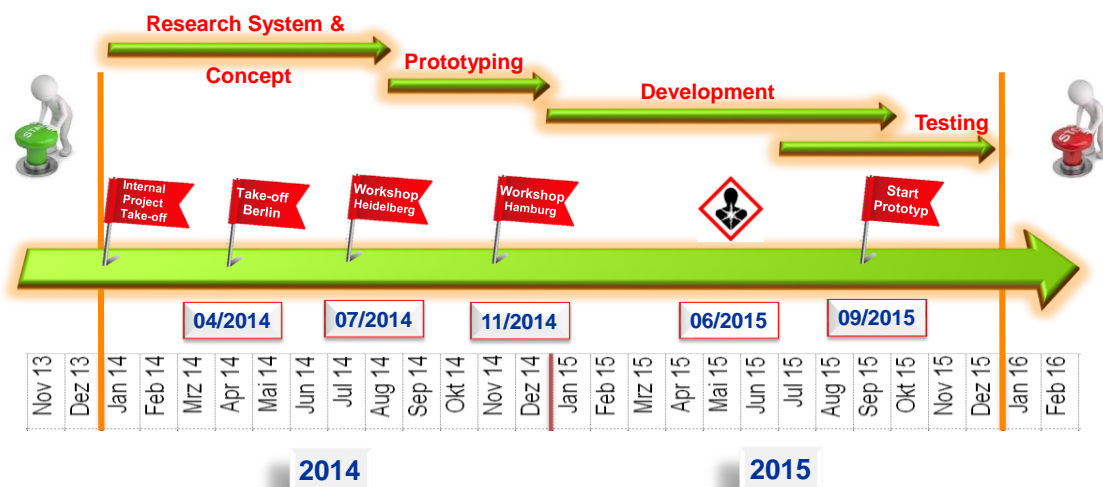
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Map XML to SAP EHS



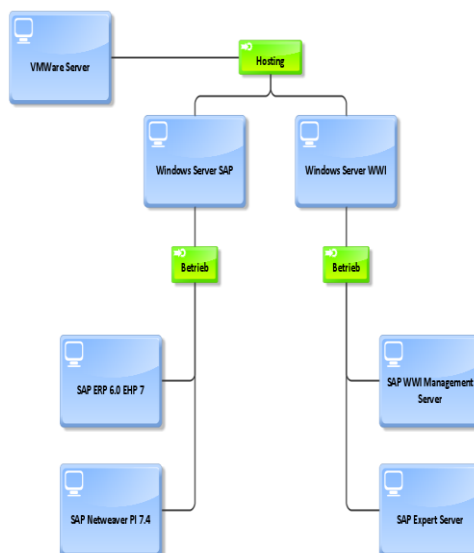
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Project Activities



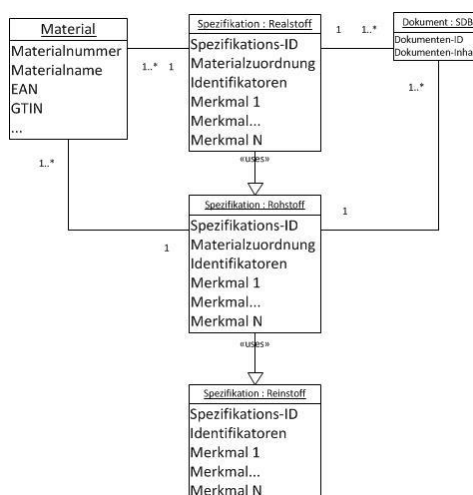
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- System Landscape setup of the Research & Development system is complet:
 - Planning
 - Procurement
 - Installation
- Virtualized Windows Server hosts:
 - SAP ERP System
 - SAP PI System
 - WWI Server & EH&S-Expert Server
- Enhancement and Service Packs are updated.
- Customizing is performed.
- SAP Regulatory Content is implemented.
- High approximation to the Industry Partner's system.



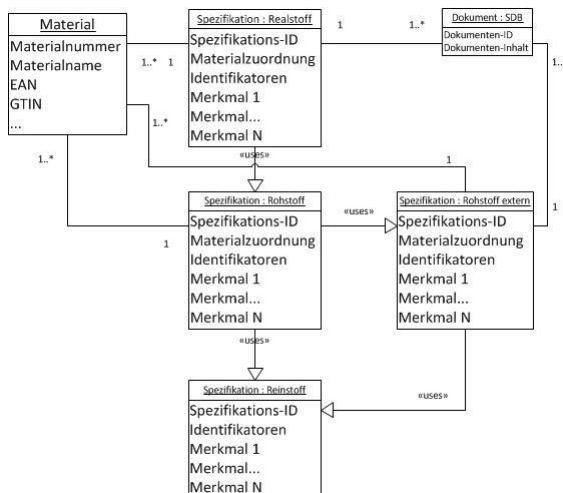
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- Master Data Model of the Industry Partner is analyzed.
- Purchased products are assigned to raw substances.
- Sales products are assigned to real substances.
- Documents can be stored as Inbound-SDB at raw substance level or as self-generated SDB at real substance level.
- Problem: internal raw substance data (used in EH&S-processes) must be separated from supplier's raw substance data.

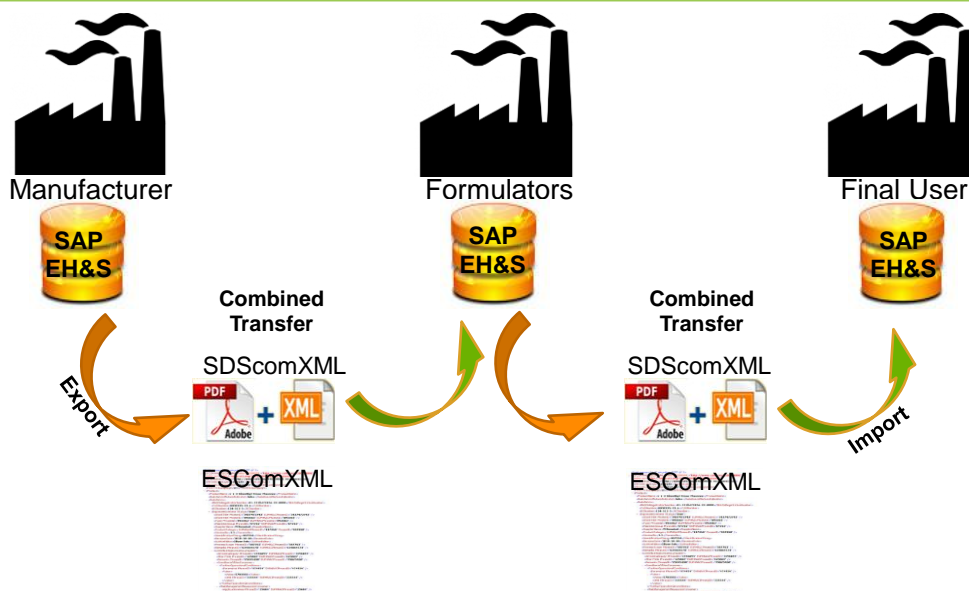


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- Extended Master Data Model with a new specification type – external raw substance.
- Received documents are stored at the external raw substance level.
- Data received via SDBtransfer import process is registered at the external raw substance level after verification.
- The external raw substance inherits its properties to the raw substance continuously used in the EH&S processes (secondary data determination etc.).



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SDBtransfer is part of the funding initiative **„eStandards: Geschäfts-prozesse standardisieren, Erfolg sichern“** – „eStandards: standardize business processes, ensure success“, which is funded within the scope of the program „Mittelstand-Digital – IKT-Anwendungen in der Wirtschaft“ – „Digital-SMEs – ICT applications in business“ by the Ministry of Economics and Technology (BMWi).

The funding focus lies on small and medium-sized businesses (SMEs) as well as on manufacturers, which are supported in the development and exploitation of modern information and communication technology (ICT).

„**Mittelstand-Digital**“ consists in following funding initiatives: „eKompetenz-Netzwerk für Unternehmen“ with 38 eBusiness-Pilots, „eStandards: Geschäftsprozesse standardisieren, Erfolg sichern“ with currently 16 funded projects and „Einfach intuitiv – Usability für den Mittelstand“ with currently 13 funded projects.

Please see **www.mittelstand-digital.de** for further information.

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