SAP Extended Warehouse Management
Operational Excellence in Warehousing
Growing the business while satisfying customer demand is getting tougher
What does “better” mean to you?

Customer service

Inventory costs

Process automation

Warehouse transparency

Reduced labor costs

Compliance
SAP Extended Warehouse Management (SAP EWM)
Mission and strategy

Mission

The **world’s best** warehouse management solution
The **thought leader** in supply chain execution

- **Warehouse management leadership**
- **Integrated and connected processes**
- **Verticalized offering**
- **Best-in-class solution**
### History (1994–2014)
A long history of warehouse management business, process, and IT expertise

<table>
<thead>
<tr>
<th>1994</th>
<th>2007</th>
<th>2014</th>
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</thead>
<tbody>
<tr>
<td>SAP R/3: warehouse management functionality (SAP R/3 2.0–4.7)</td>
<td>SAP Supply Chain Management (SAP SCM) SAP EWM application (SAP EWM 5.0–5.1)</td>
<td>SAP Supply Chain Management (SAP SCM) SAP EWM application (SAP EWM 7.0–7.02) (SAP EWM 9.1)</td>
</tr>
<tr>
<td>Goods storage Logistics execution</td>
<td>Distribution center logistics Advanced warehouse management</td>
<td>Best-in-class warehouse management</td>
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</tbody>
</table>
SAP Extended Warehouse Management
Best-in-class warehouse management solution

- World-class analytics
- Built-in optimization
- High-performance execution
- Comprehensive integration with SAP Business Suite applications
- Leading-edge warehouse technology integration
- High degree of flexibility and adaptability
Overview of SAP Extended Warehouse Management
A complete and integrated solution

- Inbound processing
  - Transportation unit processing
  - Goods receipt mgmt. and optimization
  - Inbound quality management
  - Yard management

- Storage and operations
  - Physical inventory
  - Replenishment and rearrangement
  - Kit-to-stock management

- Outbound processing
  - Outbound planning (route, wave, bin, cartonization, and so on)
  - Picking optimization, packing, staging, and load management
  - Value-added services

<table>
<thead>
<tr>
<th>Analytics</th>
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<tr>
<td>Labor management</td>
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<td>Cross-docking</td>
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<tr>
<td>Compliance</td>
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<tr>
<td>Native technologies</td>
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<tr>
<td>Implementation tools</td>
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</tbody>
</table>
Overview SAP EWM Customer & Market Status
Strong customer growth and implementation momentum

Facts and figures

600 Customers
15 Industries
24 Countries

Sample customers

Dansk Supermarked
Coca-Cola Enterprises

Live customers and live sites

Customer geographical coverage

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World-class analytics with SAP EWM
Comprehensive stock and process transparency

Supply chain manager
Cross-warehouse performance monitoring

Warehouse supervisor
Comprehensive, central warehouse operation monitor
Alert and exception monitoring
Drill-down and direct-action triggering
Built-in optimization
Wave management, labor management, and slotting

- **Wave management**: Optimized work orders; efficient pick path
- **Labor management**: Reduced labor costs; improved labor planning
- **Slotting**: Advanced storage concept; ABC goods classification
- **Cartonization**: Automatic shipping-unit determination
Leading-edge warehouse technology integration
Increased accuracy, efficiency, and visibility

Material flow system (MFS)
• Programmable logical controllers (PLC)
• Pallet and case conveyors

Native technology integration
• Mobile radio frequency (RF)
• Pick by voice
• RFID
Native integration with SAP Business Suite
Comprehensive, smooth, and real-time process integration

**Sales and distribution**
- Order processing
- Customer relationship management (CRM)
- Back-order processing (global available to promise)
- Advanced claims and returns management
- Track and trace

**Procurement**
- Advance shipping notification (ASN)
- Inbound quality management

**SAP Manufacturing**
- Comprehensive production supply support (process orders and crate parts)

**SAP Environment, Health, and Safety Management**
- Dangerous goods handling
- Storage and document printing

**SAP Global Trade Services**
- Compliance with import and export regulations
- Customs; bonded warehouse
### Verticalized offering
Examples of support for in-depth industry-specific processes in SAP EWM

<table>
<thead>
<tr>
<th>Automotive</th>
<th>Chemicals</th>
<th>Consumer products</th>
<th>Retail</th>
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<tbody>
<tr>
<td>• Production supply</td>
<td>• Batch management</td>
<td>• Catch weight</td>
<td>• Merchandise distribution cross-docking</td>
</tr>
<tr>
<td>• Kit to stock</td>
<td>• Dangerous goods</td>
<td>• Batch management</td>
<td>• High-volume throughput</td>
</tr>
<tr>
<td>• Kit to order</td>
<td></td>
<td>• Best-before handling</td>
<td>• Best-before handling</td>
</tr>
</tbody>
</table>

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<thead>
<tr>
<th>Service parts</th>
<th>Transportation and logistics</th>
<th>High tech</th>
<th>Life sciences</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Slotting</td>
<td>• Transportation cross-docking</td>
<td>• Serial numbers</td>
<td>• Batch management</td>
</tr>
<tr>
<td>• Kit to stock</td>
<td>• Dangerous goods</td>
<td>• Production supply</td>
<td>• Best-before handling</td>
</tr>
<tr>
<td>• Kit to order</td>
<td>• Transport integration</td>
<td></td>
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</tbody>
</table>
High flexibility and adaptability
Tailor SAP EWM to your specific needs

**Personalization**
- Role-based menus
- User-specific reports
- Role-based user interfaces
- Multilingual support

**Configuration**
- Warehouse layout
- Industry-specific warehouse processes
- Strategies (picking, putaway, and so on)

**Customer-specific extension**
- Open code for reuse
- Documented interfaces
- Modification-free extensions
- Upgrade security or upgrade-secure interfaces

**Service-oriented architecture**
- Development of composite applications
- Integration to legacy systems and third-party software
Solution architecture for SAP EWM
Deployment options

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SAP EWM on SCM Server

- SAP ERP
- SAP EWM
- SCM Server

SAP EWM standalone

- SAP ERP
- SAP EWM standalone

Recommended option

- SAP ERP
- SAP EWM

SAP EWM add-on

- SAP EWM
- SAP ERP

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SAP note [1606493](#) - SAP EWM Deployment Options Best Practices
Customer benefits of SAP EWM

- Increased warehouse productivity
- Greater transparency
- Increased accuracy
- Better service levels
- Reduced costs
- Flexibility and scalability
The best are leading the way with SAP EWM

**Dansk Supermarked**
- Increased **speed** and significantly reduced picking times

34% ongoing labor cost reduction

**FAW - VOLKSWAGEN**

**Humana Unternehmensgruppe**
- **Near zero** customer-complaint rate

**MAPLE LEAF**
- 20 warehouses live using the same template
Chinese joint venture between First Automobile Works (FAW) and Volkswagen Group

With SAP software, FAW-Volkswagen (China) reports a 20% increase in warehouse efficiency and resulting cost savings.

- 70% increase in real-time visibility of daily workload and the pick, pack, and load status of an order
- 34% ongoing labor cost reduction
- 13% ongoing packaging material expense reduction

SAP EWM and integrated RF technology achieved real-time visibility of warehouses.

Wave management greatly increased picking efficiency.
Precise bin management greatly increased accuracy.
So, is SAP EWM a rival to best of breeds? Yes they are.

SAP EWM: A Rival to Best of Breed Solutions?
Steve Banker, ARC Brief, October 14, 2010, p. 5

SAP has global go-to-market and deployment capabilities, in addition to its experience.

Magic Quadrant for Warehouse Management Systems
Dwight Klappich, Gartner, February 27, 2012, p. 21
The vendor has a compelling vision for SCE convergence… It reaches beyond transportation to include process integration, with areas such as manufacturing, order management, global trade and EH&S.

Magic Quadrant for Warehouse Management Systems

Dwight Klappich, Gartner, February 27, 2012, p. 21
Total cost of implementation: strategy for SAP EWM

Rapid-deployment solutions
- Complete solution that is ready to run
- Fixed scope, fixed cost, and 100% transparency

Migration tools
- Accelerated migration of data from WM in SAP ERP to SAP EWM
- Master data migration
- Migration guide
Services and ecosystem around SAP EWM
Strong service offering and ecosystem

**Service and support**
- SAP consulting practice
- 24x7 global support
- Quality assurance services and SAP Safeguarding
- Rapid-deployment solutions
- Custom development

**Partners**
- Global partners
- Expert logistics partners
- Local partners
- Complementary software products

**Education**
- Classroom training
- E-learning
- Certification program

**Ecosystem**
- SAP Community Network
- User group for SAP EWM
- Social networks for SAP EWM
Wrap-up

- Comprehensive, deep warehouse management expertise
- Best-in-class, integrated warehouse management solution
- Strong and growing customer base
- Strategic investment area for SAP
- Integral part of platform road map for supply chain execution
More Information on SAP EWM…

Landing page for SAP EWM
www.sap.com/ewm

SAP EWM on SAP Community Network
(SCN - External)
http://scn.sap.com/community/extended-warehouse-management

Application Help for SAP EWM
http://help.sap.com/ewm91
Thank you

Contact information:

F name Mi. L name
Title
Address
Phone number
Differentiators and value of SAP EWM
Comparison of SAP EWM with WM functions of SAP ERP

- SAP’s strategic warehouse management solution
- Strong investment and supply chain execution roadmap
- Enhanced process flexibility
- Full warehouse visibility
- Latest technology support
- Labor management
- Better performance

<table>
<thead>
<tr>
<th>Functional area</th>
<th>WM</th>
<th>SAP EWM</th>
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<tbody>
<tr>
<td>Manage stock at storage location</td>
<td>●</td>
<td>●</td>
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<tr>
<td>Bin management</td>
<td>●</td>
<td>●</td>
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<td>Placement strategies</td>
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<tr>
<td>Removal strategies</td>
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<tr>
<td>Pick logic – wave management</td>
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<td>●</td>
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<tr>
<td>Replenishment</td>
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<tr>
<td>Standard mobile RF technology</td>
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<tr>
<td>Handling / storage unit management</td>
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<td>●</td>
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<tr>
<td>Yard management</td>
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<tr>
<td>Enhanced configurable RF technology</td>
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<td>Task and resource management</td>
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<td>Material flow system</td>
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<td>Value added services</td>
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<td>Cross-docking</td>
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<td>Dynamic cycle counting</td>
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<td>Unloading of transport units</td>
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<td>Deconsolidation</td>
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<tr>
<td>Slotting / rearrangement</td>
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<td>●</td>
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<td>Labor management</td>
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<td>Multi client warehousing</td>
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<td>Flexible process modelling</td>
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Countries with active EWM deployments
Feb 14, 2014