Directly integrated: warehouse automation and production connection with SAP EWM / MFS

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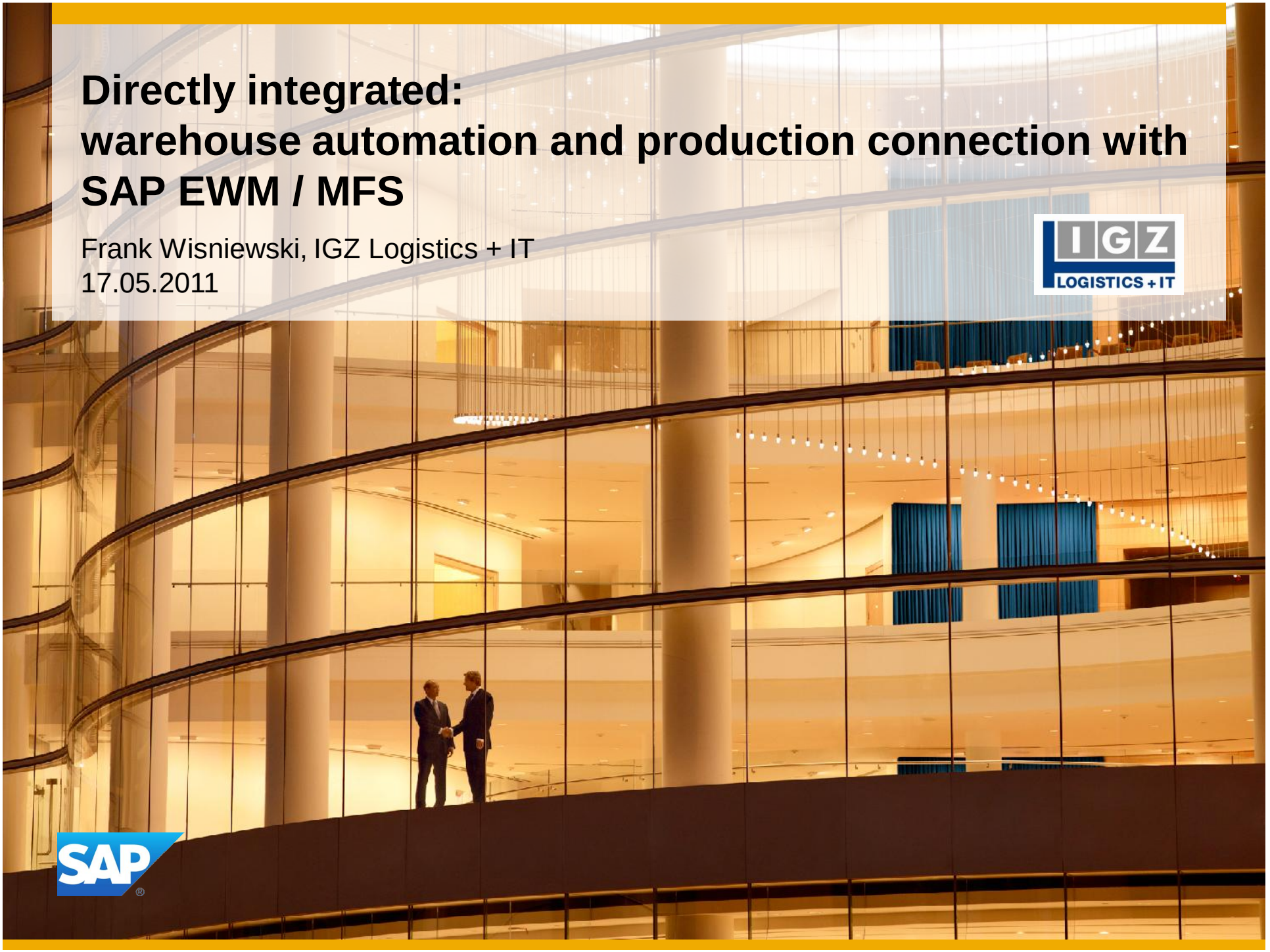


Agenda

- **Company introduction**
- Initial situation
- Solution finding
- Implementation SAP EWM/MFS
- Integration results
- Conclusion project progression

heristo AG

- Established approximately 100 years ago
- Family-run company in the food industry
- Four strategic business areas
  - **The Stockmeyer Group**: meat processing
  - **fine food alliance:** delicatessen and convenience foods
  - **saturn petfood:** pet food
  - **conSup convenient supplies:** international trading

- Approximately 1.6 billion euros in group sales (2009) of which saturn petfood generated approx. 460 million euros
- Approximately 3.600 employees within heristo AG

Presence saturn petfood in Europe

represent

establishing

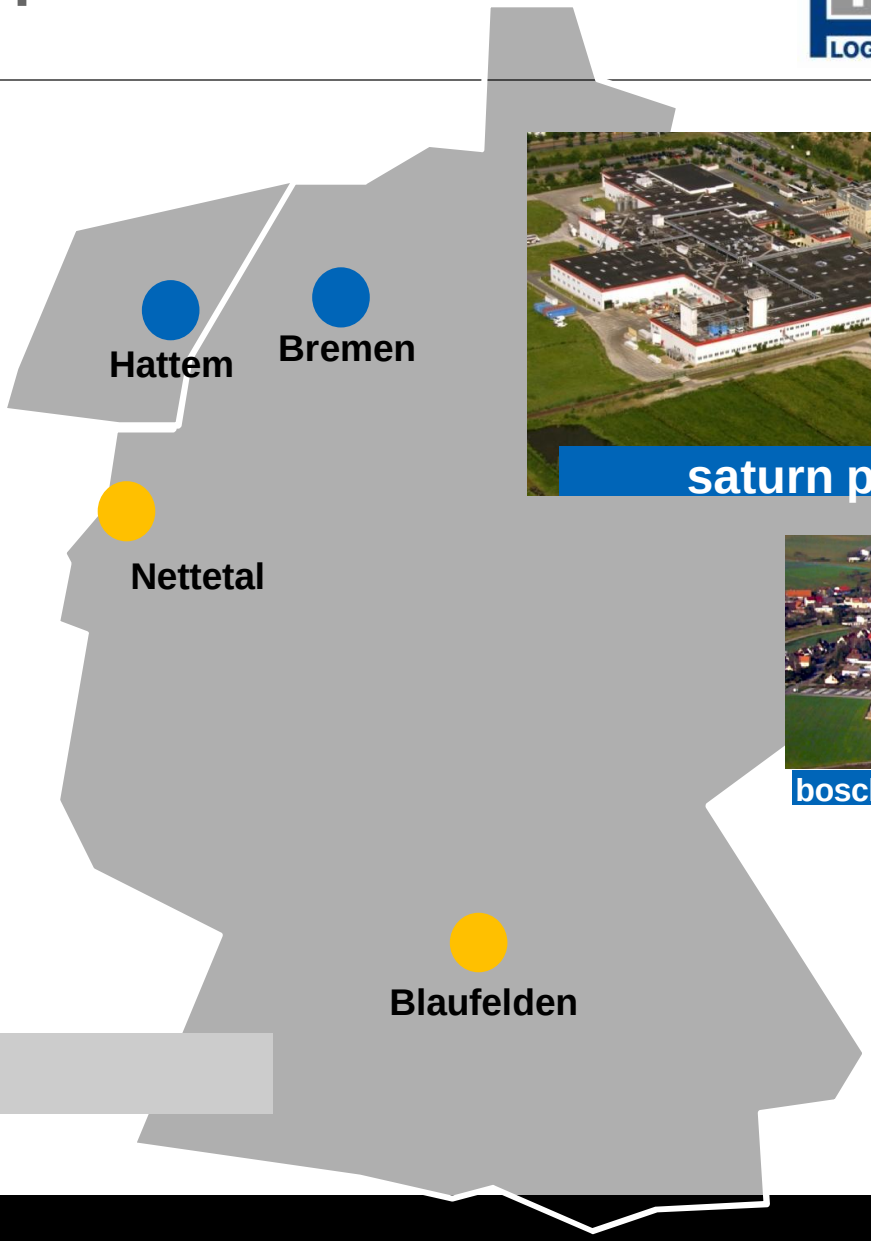
Key Figures: Scale and Range of Supply

- Total number of products: 1,335
  - Animal groups: pets - dogs and cats
  - Categories: private label, premium, standard
  - Wet food, dry food, snacks and bakery products
- Delivery notes processed per year: 38,100
- Average number of pallets: 21 Euro storage positions per delivery
- EDI rate: > 40 %

Locations saturn petfood

saturn, petfood, Hattem (NL)

bosch saturn, Nettetal



saturn petfood, Bremen

bosch Tiernahrung, Blaufelden

Own logistics subsidiary: serv.io

serv.io **gmbh:** Established January 2004

Dienstleistungen serv.io

- **Warehouse management**
  Warehouse structure, stock management, control of stock movements, inventories
- **Goods receipt and goods issue processes for finished goods**
  Goods receipt / goods issue posting, putaway / stock removal, picking, process support by connecting external systems
- **Planning and monitoring picking and packing**
  PACK services (product range creation, controlled stacking), rough workload forecast, Warehouse Activity Monitor and control of fully-automatic high-rack storage areas
- **Integration of/connecting with saturn systems**
  HU (handling unit) management, batch management, interfaces to service providers and sales/production planning, production, quality management
- **Transportation processing**
  Transportation planning / implementation, calculation / billing of freight costs

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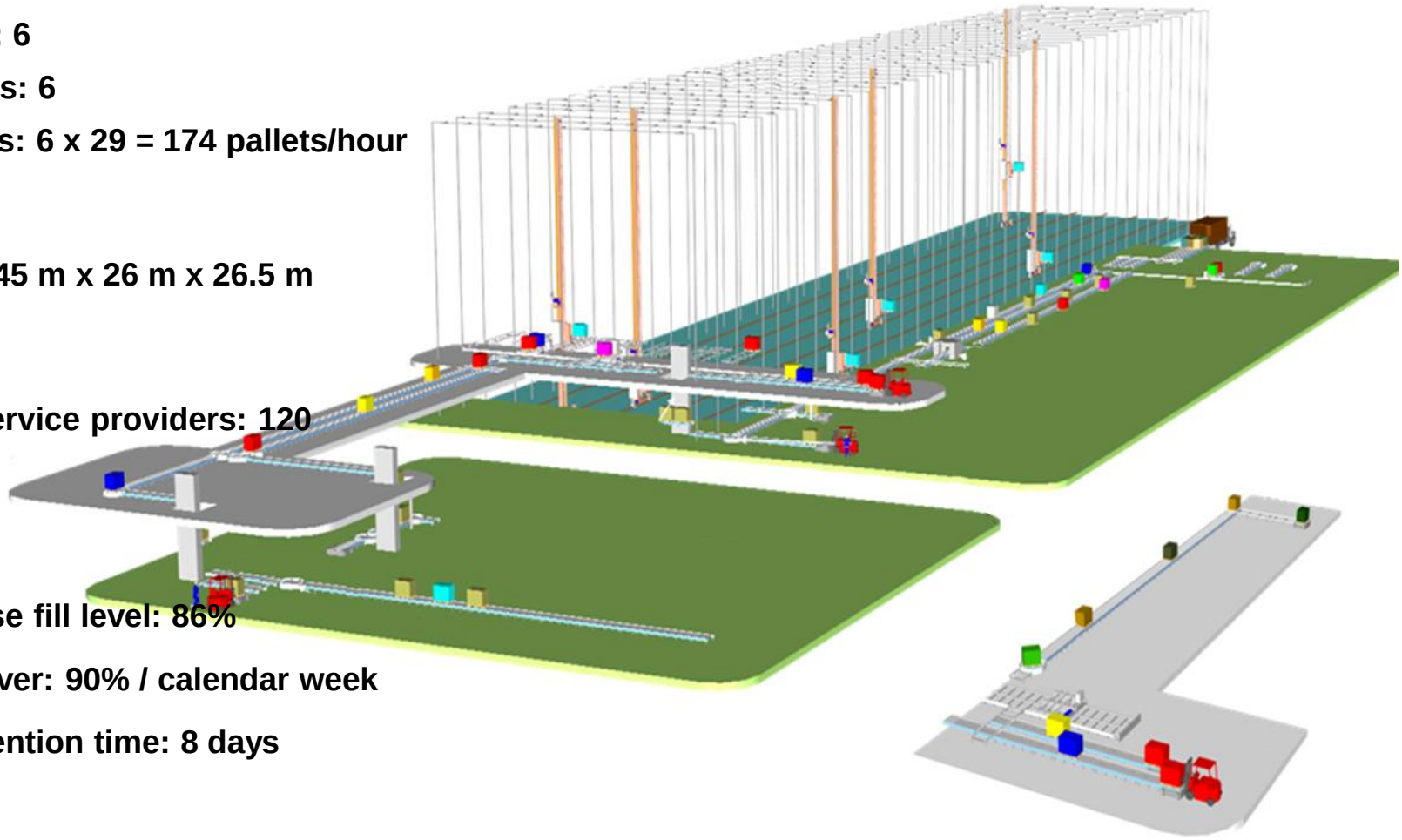
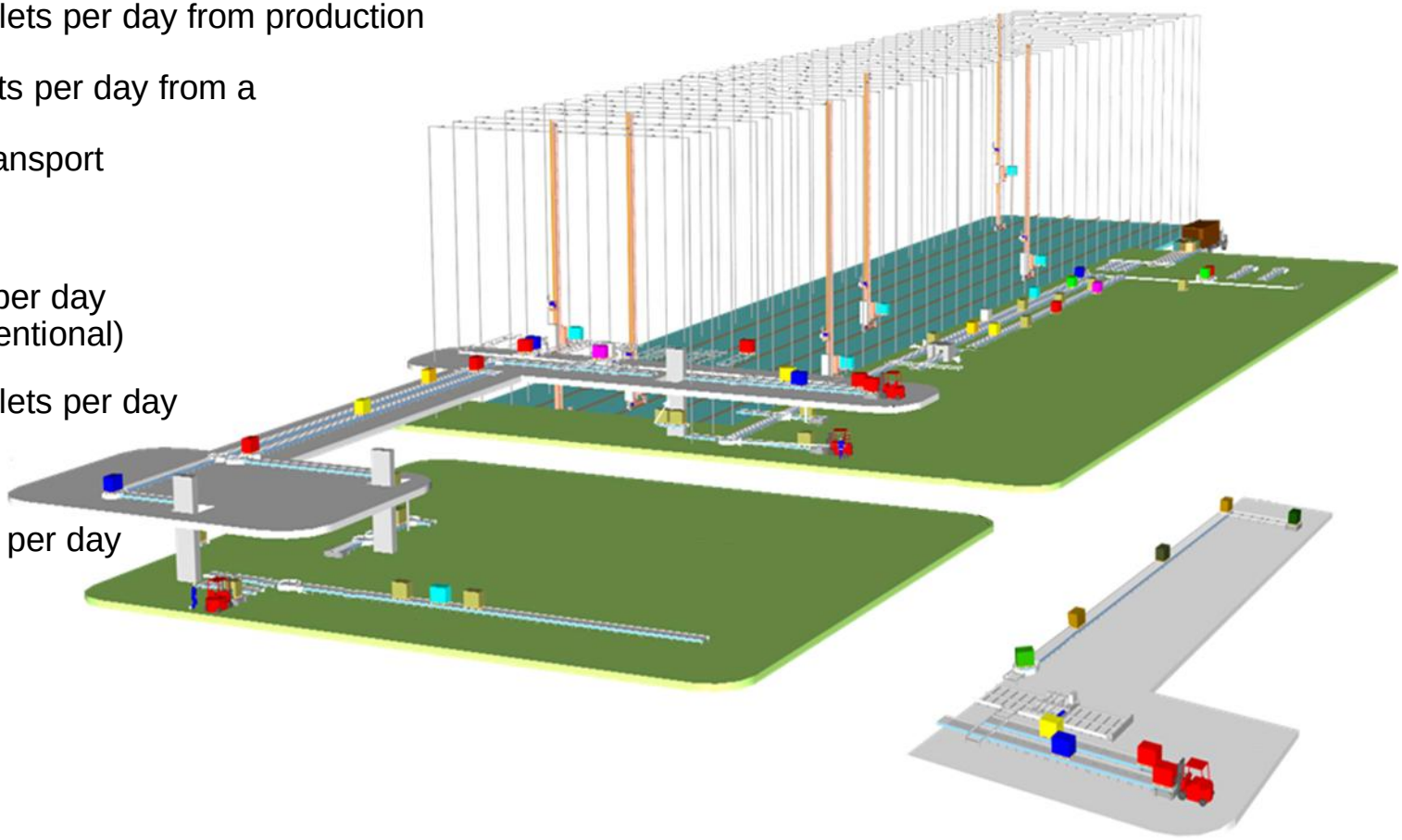
Key Figures for High-Rack Storage Areas

- **Storage positions: 20,000 pallets**
- **Rack aisles: 6**
- **Rack feeders: 6**
- **Interleavings: 6 x 29 = 174 pallets/hour**
- **L x B x H: 145 m x 26 m x 26.5 m**
- **Employees:**
  - serv.io: 21
  - external service providers: 120
- **Ø Warehouse fill level: 86%**
- **Stock turnover: 90% / calendar week**
- **Ø Pallet retention time: 8 days**



Key Figures for High-Rack Storage Areas

- **Goods receipt**
  - Up to 2,700 pallets per day from production
  - Up to 300 pallets per day from a conventional transport
- **Loading**
  - Up to 70 tours per day (shuttle & conventional)
  - Up to 2,800 pallets per day
- **Packing**
  - Ø 1,800 pallets per day



Need for Action

Decision:

Implementation of SAP ERP 6.0 at saturn petfood in 2010

- Because the “legacy system” was replaced by SAP ERP, a replacement solution for stock management and controlling picking and packing was required.
- It was necessary to connect the IT sub-systems for warehouse management and material flow control to SAP ERP (interfaces).
- Existing potential for optimisation in the high-rack storage and packing areas should be realised.
- Medium-term planning for handling third-party customers at serv.io requires new functions.
- At saturn, the serv.io logistics processes should be integrated at the same time as the implementation of the SAP ERP system (project risk).

Project Goals

- Align/integrate the system landscape based on SAP
- Reduce implementation risks (SAP logistics systems before SAP ERP)
- Reduce interfaces and sub-systems
- Reduce maintenance effort / costs
- Support value-added processes (picking and packing)
- Transportation planning (if necessary, also for other subsidiaries of heristo AG)
- Create prerequisites for future third-party customer business
- Optimise material flows by means of improved IT support
  - Stock removal from production / putaway (HRSA strategies, use of storage space)
  - Picking and packing (product range creation, controlled stacking, replenishment)

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Finding a Solution – Procedure (1)

1. Selection of SAP Special Expertise Partner: IGZ Logistics + IT

- Experience in distribution (SAP LES/EWM) and production (SAP MII/ME)
- > 100 references for SAP LES and SAP EWM
- > 100 SAP logistics specialists
- > 50 automatic HRSA (high-rack storage areas) / ASPSA (automatic small parts storage areas) in active operation with SAP EWM/LES
- No competitor products to SAP EWM and SAP LES (neutrality).

Finding a Solution – Procedure (2)

2. Implementation analysis for the SAP integration options for serv.io (HRSA)

- Carry out a feasibility study and implementation analysis
  - Assess ACTUAL situation (structures, processes, quantity structures)
  - Incorporate new, additional requirements
  - Outlay and time planning
- Create a rough target concept for SAP LES and SAP EWM
  - Compare the alternatives of SAP LES versus SAP EWM
  - Evaluation matrix of the solution variants
  - Differentiation according to the migration phases
  - Extend the project team to include active skilled personnel.

Finding a Solution – Procedure (3)

3. Create the bases for a decision in favour of implementing the project

- Scope of budget
- Migration strategy (big-bang versus phase concept)
  - Migration and go-live in an ongoing 3-shift operational process
  - Plant and system tests exclusively at weekends
- Project deadline scope
- Medium-term business strategy of serv.io
  - Extend warehouse and shipping capacities
  - Take on further logistics functions and services
- References (system solution, implementation partners)

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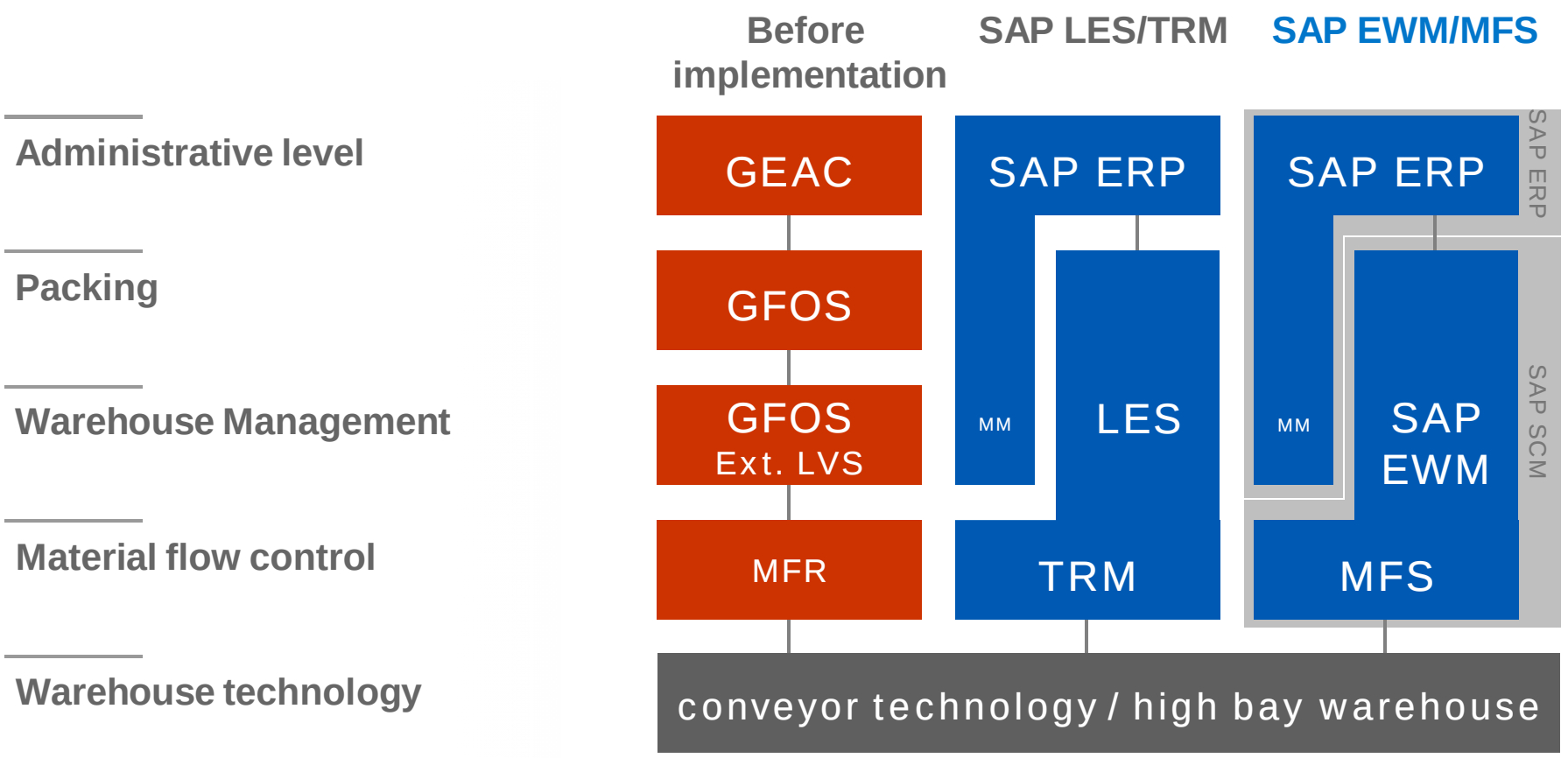
SCE architecture szenarios



Finding a Solution – Decision (1)

Key Factors in Favour of SAP EWM

1. **Complex interaction of GFOS legacy system with control level**
   → Legacy system: Hardly any support options from own IT department
   → SAP EWM: Open platform with PLC standard interfaces and own IT support provision

2. **Manual intervention required to synchronise stock**
   → Legacy system: duplicated stock in ERP and WMS
   → SAP EWM: comprehensive assurance that stock has been accurately entered since the system is fully integrated

3. **External support for controlling the legacy system is insufficient**
   → Legacy system: No guaranteed support / rectification of Priority 1 issues
   → SAP EWM: System support provided by own IT resources

4. **Lack of hardware compatibility**
   → Legacy system: system failure risks / problems sourcing spare parts
   → SAP EWM: optimum hardware compatibility

Finding a Solution – Decision (2)

Key Factors in Favour of SAP EWM

5. **Manual tonnage check without system support in the case of the legacy system**
   → Legacy system: overloading is possible and consequently there are liability risks
   → SAP EWM: system-supported tonnage check

6. **Stock transfers from HRSA with legacy system control not possible**
   → Legacy system: stock transfers would have to be carried out by the WMS
   → SAP EWM: provides fully-automatic stock transfer processes

7. **Further development of legacy system control not guaranteed**
   → Legacy system: further development only if the customer wishes it
   → SAP EWM: Very future-proof and high degree of investment protection

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Implementation of SAP EWM / MFS

Phase Concept

1st phase: Ahead-of-schedule migration to HRSA on 01.04.2010

→ Minimisation of implementation risks for phase 2

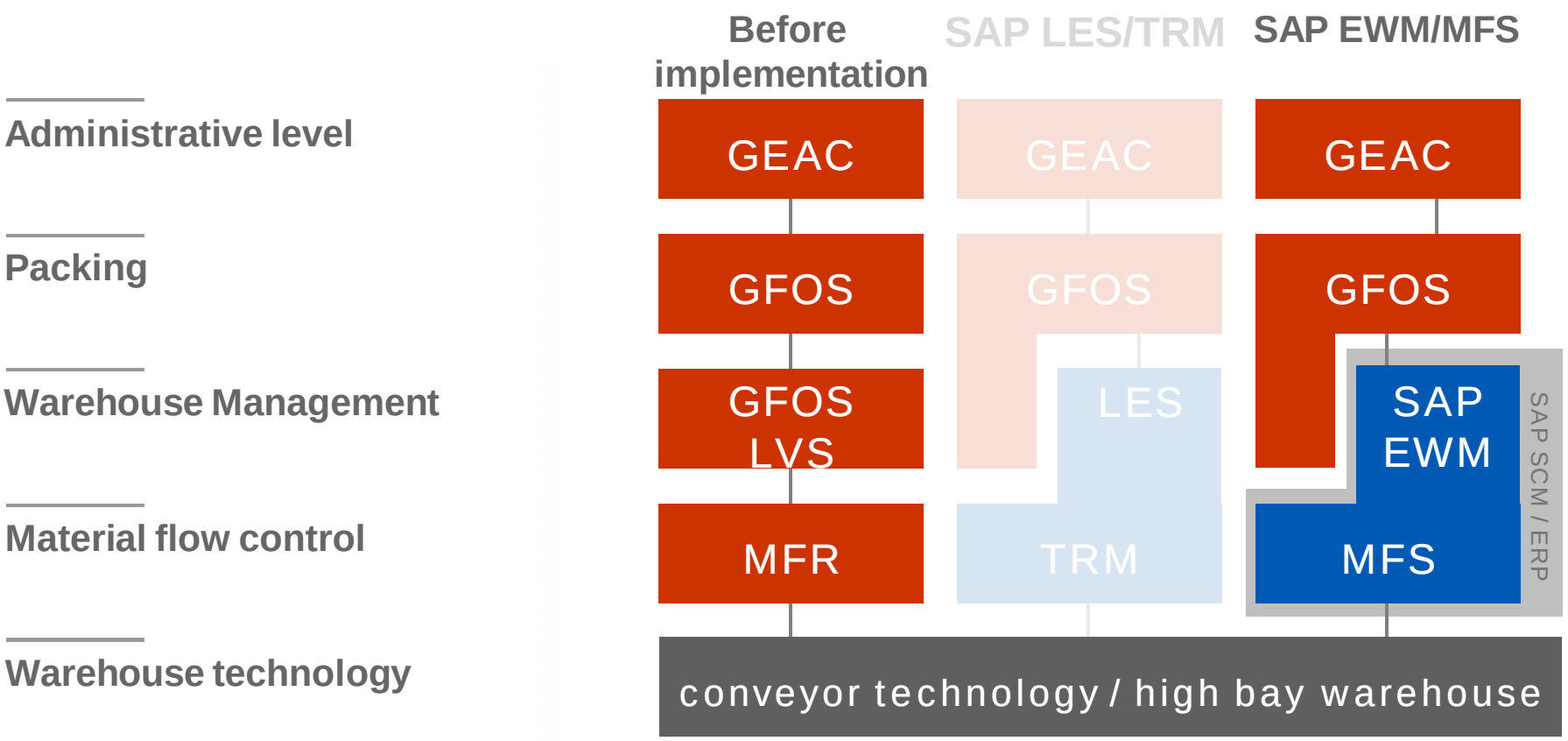
2nd phase: Implementation of ERP integration on 01.11.2010

→ Recourse to experiences from phase 1

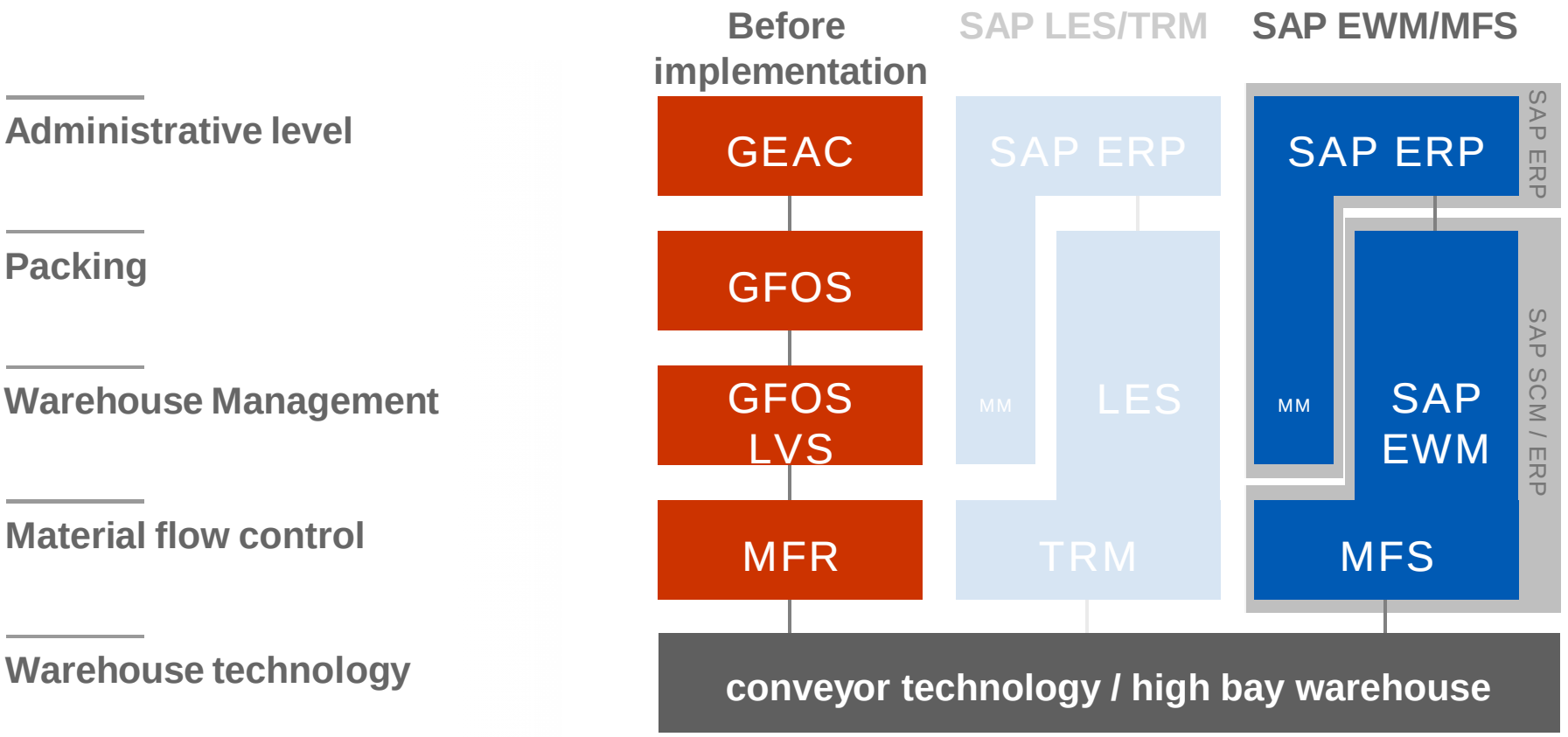
3rd phase: Use of further SAP functions

→ E.g. Transportation planning
→ E.g. Billing for services

Implementation Phase 1 – replacement LVS / MFS



Implementation Phase 2 – replacement GEAC / GFOS



Implementation of SAP EWM / MFS

Implementation of Phase 1

- **Migration of HRSA functionality to SAP EWM/MFS ahead of schedule**
  - Storage bin management and material flow control
  - Putaway / stock removal strategies
  - WMS evaluations / statistics
- **Basis for optimising high-rack storage areas in phase 2**
- **Not necessary to adapt GEAC/GFOS/PLC interfaces**
- **Planned go-live date: 01.04.2010**

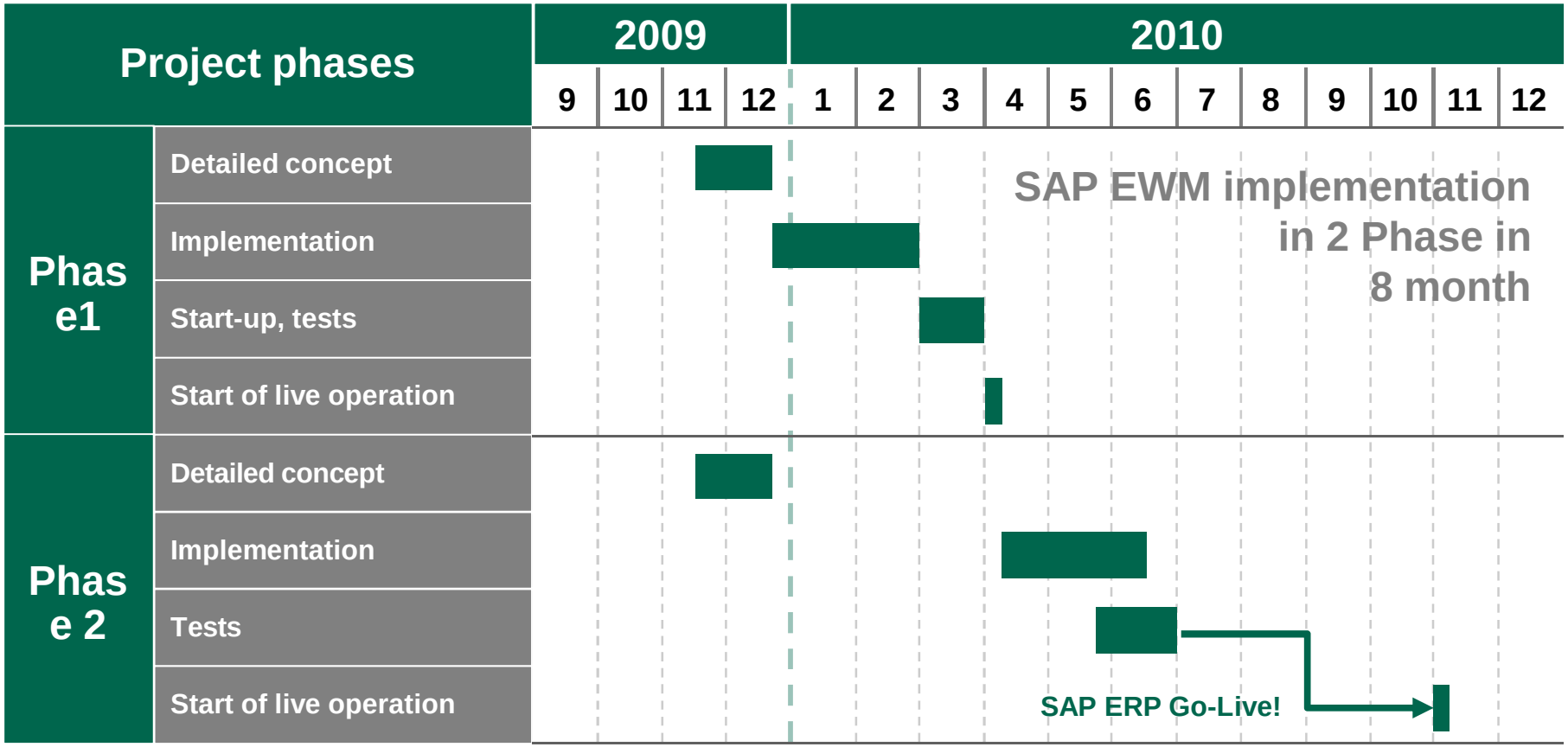
Implementation of SAP EWM / MFS

Implementation of Phase 2

- **Integration of SAP-EWM with SAP ERP (replacement of GFOS)**
  - Pick and pack functionality available in SAP EWM
  - Optimisation of internal material flow by way of more detailed information
  - Greater transparency since active movements are only in one system
  - Warehouse processes for internal picking and packing can be compared with warehouse processes for processing sales orders
  - No transitional IT solution required for picking and packing
  - Future independence from SAP ERP release upgrades

- **Planned go-live date: 01.07.2010**

Framework Schedule for SAP EWM



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Integration Results

Effects of the SAP EWM/MFS Implementation

- End-to-end integration from the SAP-ERP level to the PLC level
  → Streamlining of the system architecture
- Internal SAP interfaces tailored exclusively to each other
  → Operational reliability
- Middleware or sub-systems can be completely dispensed with
  → Independence, flexibility
- Reduction in maintenance costs for application and baseline support
  → Cost reduction
- Open platform for integrating further functions
  → Flexibility, investment protection
- Optimised warehouse fill level, maximisation of putaway/stock removal capabilities
  → Optimum utilisation of storage plant

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Lessons Learned

- **Extensive plant and functional tests before the migration are important (also bulk tests)**
- **Elaboration of and training for errors and malfunctions as early as the preparation phase**
- **Very important to have several days of on-site support in the run-up to the go-live date**
- **Competent consultants required for both “sides” of the interface (SAP EWM and SAP ERP)**
- **For a 3-shift process, a competent and communicative hotline provided by SAP is desirable**
  - Changing contact staff as a result of global OSS processing can create a long-drawn out and difficult situation if there are operational problems with the system.

Outlook

- **Implementation of SAP SCM platform (EWM/TM) for the service provider, serv.io**
  - Strategic SAP platform for the logistics service provider
  - Continuous development guaranteed by SAP
  - High flexibility and independence from ERP for service provider requirements
- **Planning for Phase 3**
  - Mapping of transportation planning with SAP TM
  - Carrying out service billing in SAP
  - Implementation of planning functions
  - Connecting external customers

Conclusion Regarding Course of Project

- The phase concept is the best approach because the different stages are spaced out with a specific timeframe and risks are minimised.
- Important !
  A strong SAP integration partner with several years of SAP EWM/MFS project experience
  - Reliability of project budget
  - Adherence to promised deadlines
  - Assurance that goals are achieved from a functional point of view
  - Benefiting from project experience from other SAP EWM/MFS projects

    (incorporation of implementation ideas in SAP EWM/MFS).

The result is quiet impressive

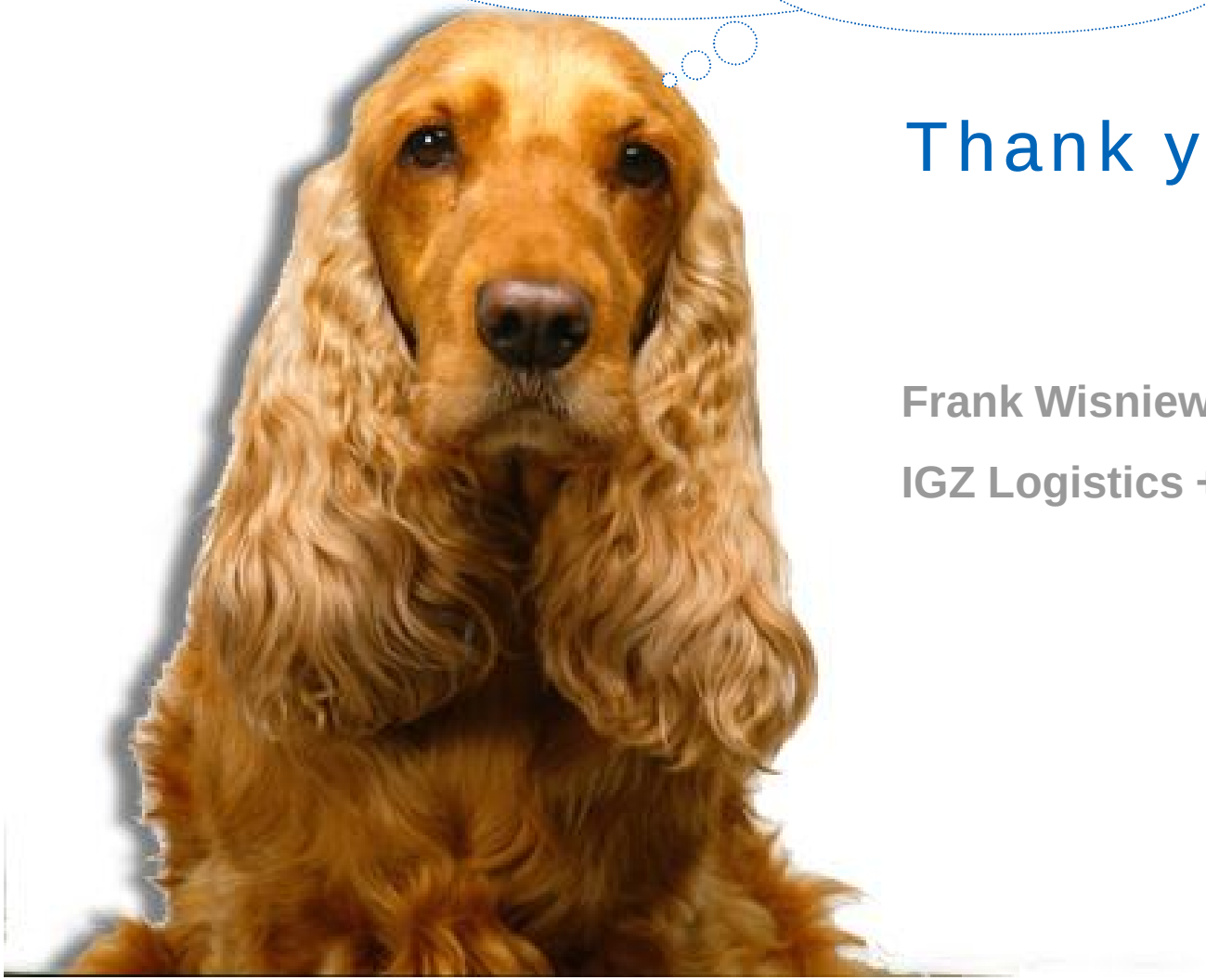
saturn petfood

IGZ LOGISTICS + IT

A successfull team for SAP EWM!

SAP

...that's what I think.



Thank you!

saturn petfood

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