Introduction to the
SAP S/4HANA - THE intelligent ERP

Jan Grimm Torstensen, SAP Norge
14th May, 2019
Digitaliseringen tre (modenhets-)nivåer

Kognitiv digitalisering

- ERP 3.0
  - Kjennetegn:
    - Storedata
    - Maskinlæring/Al
    - Systemet som "beslutningstaker"
    - Optimaliserte prosesser dominerer

- Interne brukere
- Eksterne brukere

- Prosessorientert digitalisering

- ERP 2.0
  - Kjennetegn:
    - Arbeidsflyt/Regelstyring
    - Roboter som brukere
    - Automatisert datafangst
    - Automatiserte prosesser

- Intern digitalisering
- Eksternalisert digitalisering

- Transaksjonsorientert digitalisering

- ERP 1.0
  - Kjennetegn:
    - Formatstandarder
    - Funksjonalitet
    - Manuelle prosesser dominerer

- BHC ©

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Intelligent Enterprises elevate employees to **focus on higher-value tasks**

![Graph showing the evolution of productivity and automation from the 1960s to 2020s.](image-url)

- **High Value Tasks**
- **Repetitive Tasks**
- **Automation**

- **1960s – 1980s**
- **1990s - 2000s**
- **2000s - 2010s**
- **2010s - 2020s**

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THE intelligent ERP – SAP S/4HANA

Process Automation
Full automation of business processes, from HR to payments processing, to workflow approvals for purchase orders and sales execution

Next-gen UX
User experience based on voice, vision and messaging will replicate how people interact in real life and increase business productivity

Smart Analytics
Proactive analysis of new data types and discovery of unfamiliar patterns that provide a new level of insights

60%
Of human tasks will be automated by 2025

97%
Image recognition accuracy today (better than human rate 95%)

95.1%
Speech recognition accuracy today (better than human rate 94.1%)

Source: SAP CSG analysis, McKinsey Quarterly Report July 2016, Google PR, Microsoft PR, SAP Market Model
The Intelligent Enterprise Framework

THE INTELLIGENT ENTERPRISE features 3 KEY COMPONENTS:
The digital core is the foundation to running a **Live Business**

**Immediate**
Empowering business users with insights to act in the moment.

**Intelligent**
Beyond automation, to predictive suggestion.

**Integrated**
Not only between your departments, but connected to the world.

**Unified data in real time**

**Intelligent, predictive tools based on patterns and trends**

**Fully connected to customers, suppliers and workforce**

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How many red do you see?
You’ll get 4 sec
Once again ..?
Simplifying database & table structures to prepare for scale

SAP Business Suite

MATERIAL VALUES
Valuation in MM or Valuation ML

Aggregates
Hybrid: Master Data with Valuated Stock

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<th>Material Document</th>
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ML QUANTITIES

Aggregates
MATERIAL QUANTITIES

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Stock Aggregates

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Inventory Movements

Hybrid: Master Data with Stock Aggregates

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Universal Journal - One truth
Indirect/direct Purchasing Data Flow

Ariba Network

SAP Ariba Buying

S/4HANA

Supplier collaboration area

Purchase Order
Order Change / Cancel
Order Confirmation
Advanced Shipping Note
Goods Receipt
Invoice
Status Update
Remittance Advice

Reconciliation
Order confirmation
Consumer-grade User Experience
Compelling User Interface – Easy-to-use from Macro to Detailed View
User Experience for SAP S/4HANA
SAP Fiori Design Evolution

Me-Area
Replacing former shell header menu
Shows recent activities now

Anchor bar navigation
Replacing group menu

Shell header
Revised, launching notification and me-area viewports and Co-Pilot window.
Provides navigation menu when app is launched by clicking on title

Notifications
Shown in separate viewport that opens on clicking respective icon in shell header

Me-area
Workspace
Notifications

Links
Option to show apps as links in a tile group

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Meet SAP CoPilot

Talking to CoPilot is simple and intuitive. CoPilot is where the user is, the first true digital assistant and bot integration hub for the enterprise. SAP CoPilot empowers you to get things done easier, quicker and more delightful.

**Humanized Next-Gen User Experience (UX)** with a Conversational UI using Natural Language Processing functionality

**Business Context Awareness** understanding the business situation and pro-actively suggesting solutions

**Self Learning** system using machine learning functionality to gain knowledge based on historic data and experience

**Cross Applications** with One Personality and One Memory across all SAP

**Open and Extensible** for Integration into SAP and Non-SAP solutions. Enabling customers and partners to extend CoPilot functionality via CoPilot Skills

This is the current state of planning and may be changed by SAP at any time without notice.
SAP S/4HANA Search
SAP HANA enterprise search in SAP Fiori Launchpad

**SAP HANA enterprise search** is a powerful search solution that provides **full-text search**, **navigation**, and access to **structured** and **unstructured** information across multiple systems.

**Key capabilities**
- **Full-text search** for business **objects** and **documents**
- **Results ranking** along business criteria, e.g. user’s organizational context
- Access to information **across multiple systems**
- Direct **navigation into source** systems/transactions
- Integrated support for **SAP authorization concepts**

**Benefits**
- Efficient **information access** and **user-centric** discovery through a simple user interface
- Take advantage of **real-time data** for decision making
- **No additional costs** or 3rd party systems
Machine Learning Apps in SAP S/4HANA

**Moderate ML requirements** like Forecasting, Trending, Influencers using Algorithms like Regression, Clustering, Classification, Time-Series etc. can be handled **embedded in S/4HANA**

**More complex ML requirements** with also external data and more complex Algorithms and requirements including also Image Recognition, Sentimental Analysis, Natural Language Processing and Deep Learning are typically offered **side by side in Leonardo / SAP Cloud Platform**.

The process typically follows several steps and can result in different patterns to improve and automate business processes.

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**Data**
- Collect Data, Prepare, Calculate & Consolidate

**Model**
- Increase the **predictive confidence** and **predictive power** during continuous evaluation, validation and fine tuning

**ML Application Patterns**
- **Predictions** of future data based on past data patterns
- **Categorization and Classifications** Assign datasets to predefined groups
- **Conversational UI** Smart Interaction based on natural language
- **Recommendations** Propose datasets/actions based on current context
- **Clustering** Discover new groups and distribute data between them
- **Relevance and Ranking** Evaluate the relevance of datasets in a given context
- **Matching and Merging** Assign relationships/detect anomalies in a dataset

**Predictive Stocks in Transit**

**Smart Collaboration with Co-Pilot**

**Recommendations in GR/IR Cockpit**

**Relevance & Rank items to Propose Contracts**
## Overview: Intelligent ERP Scenarios for SAP S/4HANA 1809

<table>
<thead>
<tr>
<th>ID</th>
<th>Scenario</th>
<th>Technology</th>
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* planned
Intelligent Procurement Today

- Assist users with Invoice Payment Block
- Predict future consumption of contracts
- Automatically propose Material Groups to casual users
- Propose creation of contracts for most frequently ordered materials
- Reduce free-text items with recommended catalog items
- Predict Delivery Date for Purchase Order Items
- Protect RFQ Biddings via secure Blockchain
- Proactively track missing Order Confirmations
- Propose most optimal Contracts as SoS
- Save spend via Cash Discount at Risk warnings
- Alert about Invoices blocked for Payment
- Alerts for expiry and consumption of central contracts
- Reminder about missing confirmations for SSP PRs
- Overdue central Purchase Order Items
- Delivery Deficits in Purchase Orders

Intelligent Insights for Procurement

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Organizational overview

Company A

Company B

Company C

Level 2a

Level 3a

Level 3b

Level 3c

Level 3d

Level 2b

Authorization

Board/Management

One Source
Thank you.

Contact information:

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