



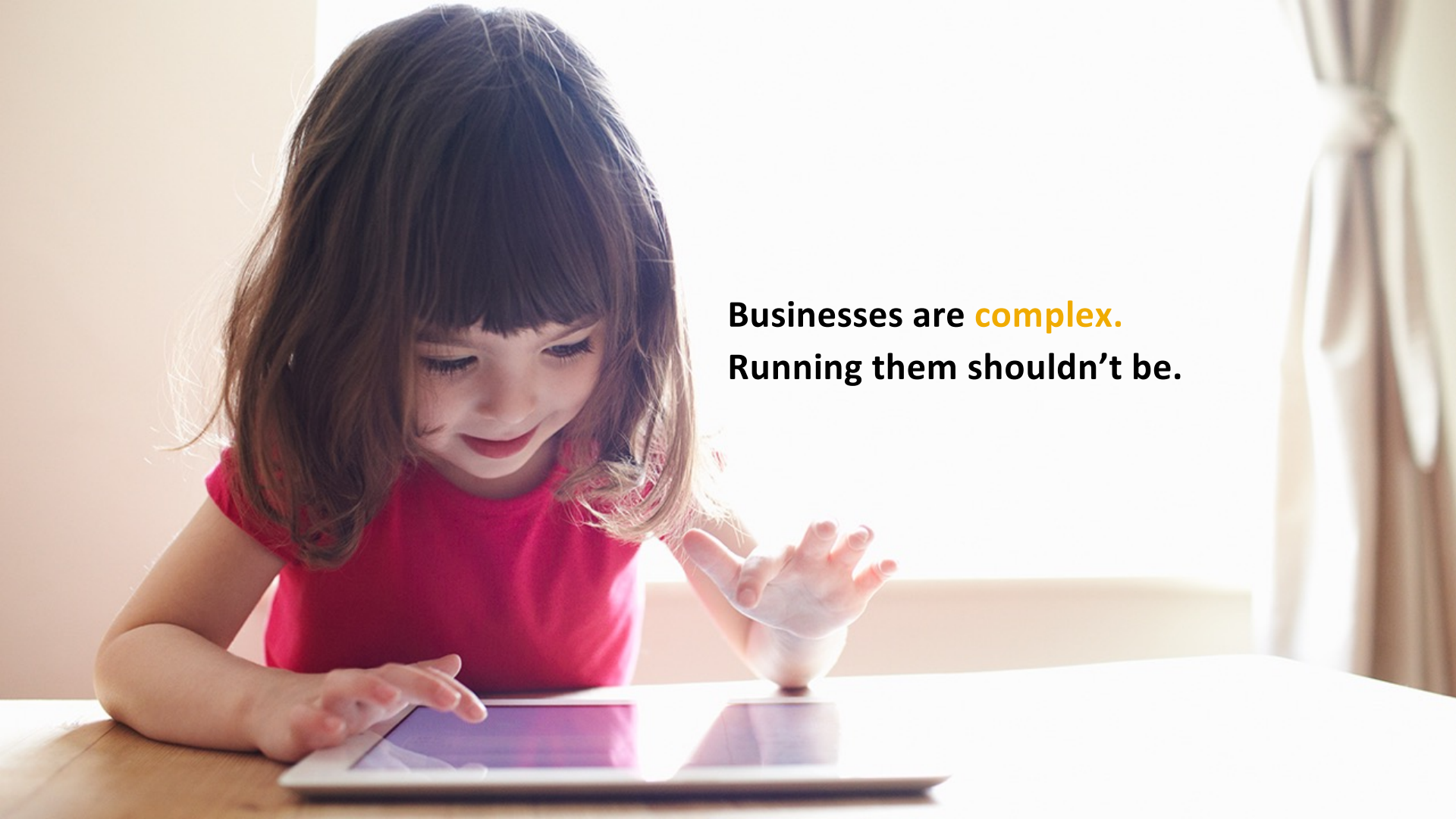
Systeme, Anwendungen und Produkte

Trends and Concepts of Business Application Architecture

Michael Perscheid, Ralf Teusner, Stefan Halpap, Werner Sinzig

Enterprise Platform and Integration Concepts

Hasso-Plattner-Institut



Businesses are **complex**.
Running them shouldn't be.



In 1972, a group of colleagues
got together with an **idea.**




That idea became the world's most powerful business software.

77% of the world's
transaction revenue
touches an **SAP** system.

SAP





SAP customers distribute
more than **78%** of the
world's food.

SAP customers produce more than **82%** of the coffee and tea we drink each day.



SAP at a glance

SAP's purpose is to help the world run better and improve people's lives. As we work each day to fulfil this purpose, technology is at the core. Our vision is clear: we want to reinvent how the world runs as a network of intelligent, sustainable enterprises.

105,000+

Employees from 140+ countries

22,000+

SAP partner companies globally

€27.3B

Total revenue (Non-IFRS) in FY2020

400,000+

Customers worldwide

200M+

Subscribers in our cloud user base

100+

Development locations worldwide

#1

Software company in Dow Jones Sustainability Index for 14 years

92%

Of the Forbes Global 2000 companies are SAP customers

Best-run Businesses Are
Intelligent Enterprises
Are Integrated Enterprises

The Intelligent Enterprise

A hand holding a pen pointing at a digital screen displaying data. The screen shows various data points and graphs, with a prominent green bar chart. The background is dark with blue and green light trails, suggesting a high-tech or data-driven environment.


Sales and Distribution

Material Management

Finance


Human Resources

Enterprise Resource
Planning




Customer Relationship
Management

The Intelligent Enterprise



Enterprise Resource
Planning




Customer Relationship
Management


The Intelligent Enterprise



Human
Resources



Enterprise Resource
Planning


A photograph of three business professionals in a car dealership. A man in a dark suit and tie is on the left, a woman in a light grey shirt is in the center, and a man in a light blue shirt and tie is on the right, holding a pen. They are all smiling and looking at each other. A car is visible in the background.

Customer Relationship
Management

The Intelligent Enterprise

A close-up photograph of several people's hands stacked together in a circle, symbolizing teamwork and collaboration. The hands are of various skin tones and are wearing different types of jewelry like bracelets and watches.

Human
Resources

A blurred photograph of a digital screen displaying green data points and lines, representing enterprise resource planning or data analytics.

Enterprise Resource
Planning

A photograph of several workers in blue uniforms and white hard hats working in an industrial setting. They are surrounded by pipes, valves, and machinery. One worker in the foreground is using a tool on a piece of equipment.

Workforce Management



General Procurement



Customer Relationship Management

The Intelligent Enterprise



Human Resources



Enterprise Resource Planning



Workforce Management



General Procurement



Customer Relationship Management



Travel & Expenses

The Intelligent Enterprise



Human Resources



Enterprise Resource Planning



Workforce Management



General Procurement

SAP Ariba



Customer Relationship Management

SAP CX
(Customer Experience, CRM)



Travel & Expenses

SAP Concur

The Intelligent Enterprise



SAP SuccessFactors
(SFSF)

Human Resources



SAP S/4HANA
(ERP)

Enterprise Resource Planning



SAP Fieldglass

Workforce Management

Aerospace and Defense	Automotive	Banking	Chemicals
Consumer Products	Defense and Security	Engineering, Construction, and Operations	Financial Service Providers
Healthcare	High-tech	Higher Education and Research	Hospitality Services
Industrial Machinery and Components	Insurance	Life Sciences	Logistics Service Providers
Media	Mill Products	Mining	Oil and Gas
Pharmaceuticals	Postal Services	Professional Services	Public Sector
Railway Services	Retail	Telecommunications	Utilities

Since 2000, acquired companies (\$ publicly reported only)

- SAP: 49 companies for \$42B
- Oracle: 127 companies for \$57B
- Salesforce: 63 companies for \$65B
- Microsoft: 173 companies for \$72B
- IBM: 136 companies for \$58B.

The Intelligent Enterprise

**SAP S/4HANA
(ERP)**

Enterprise Resource
Planning



General Procurement

Ariba

Acquired 2012



Customer Relationship Management

Acquired since 2013



Travel & Expense

Concur

Acquired 2014

The Intelligent Enterprise Is Built On An Enterprise Cloud Platform



SAP SuccessFactors (HR)

Human Resources

Acquired 2011



SAP S/4HANA (ERP)

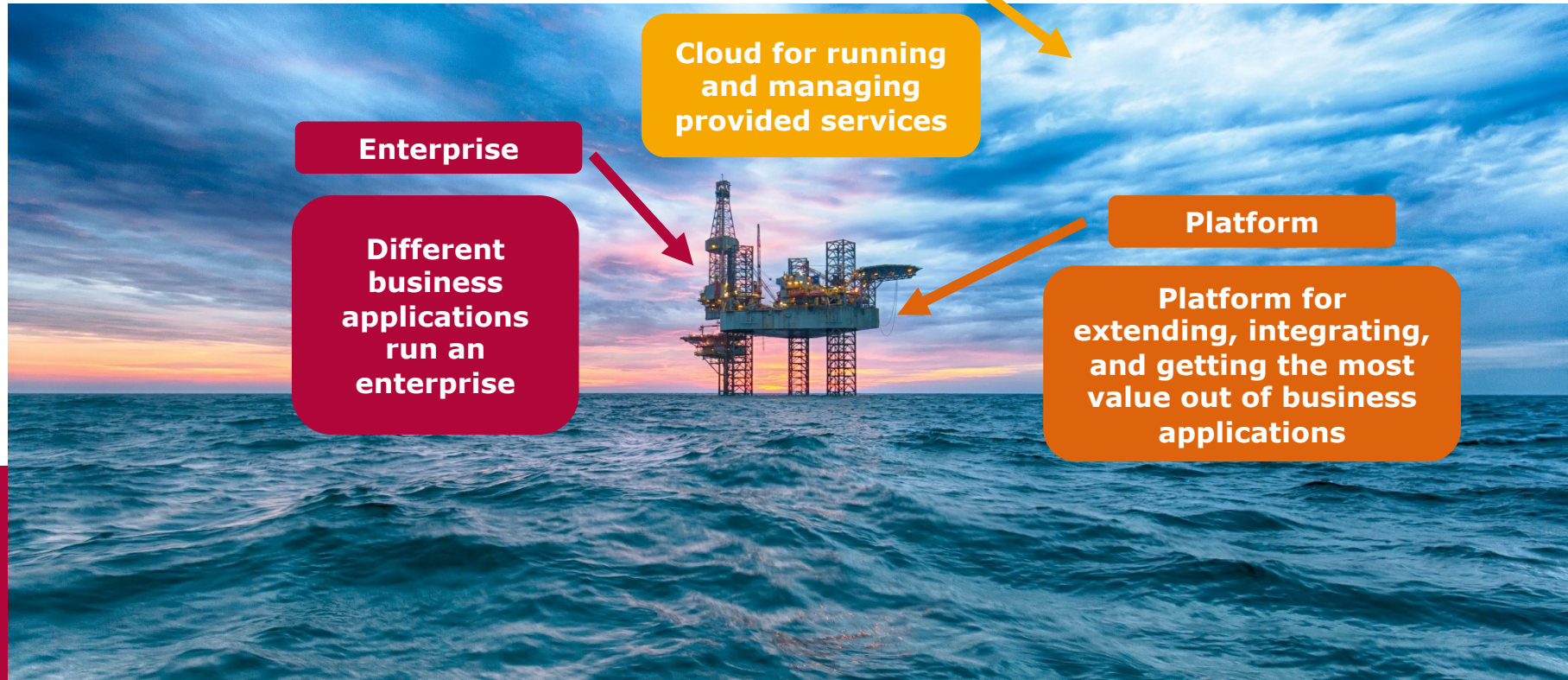
Enterprise Resource Planning



SAP Field Service

Workforce Management

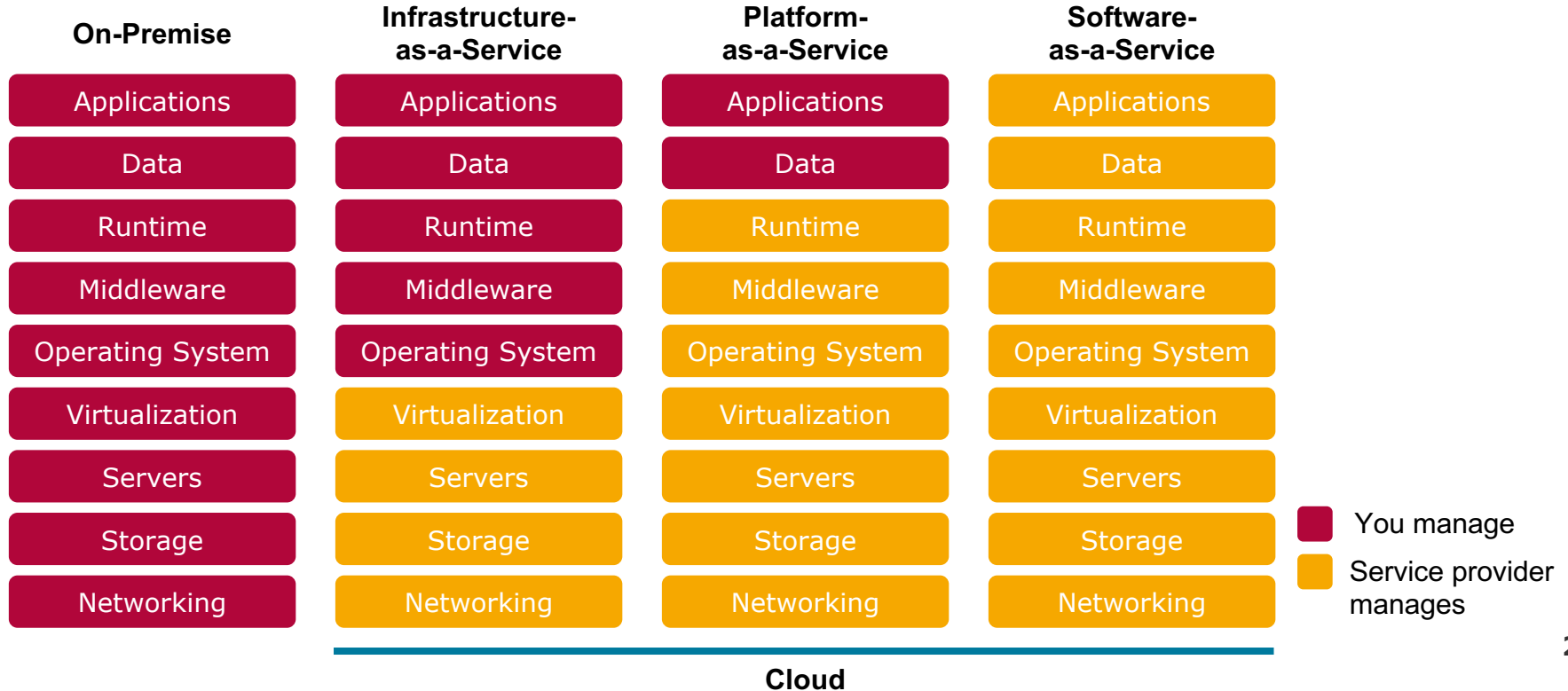
Acquired 2014



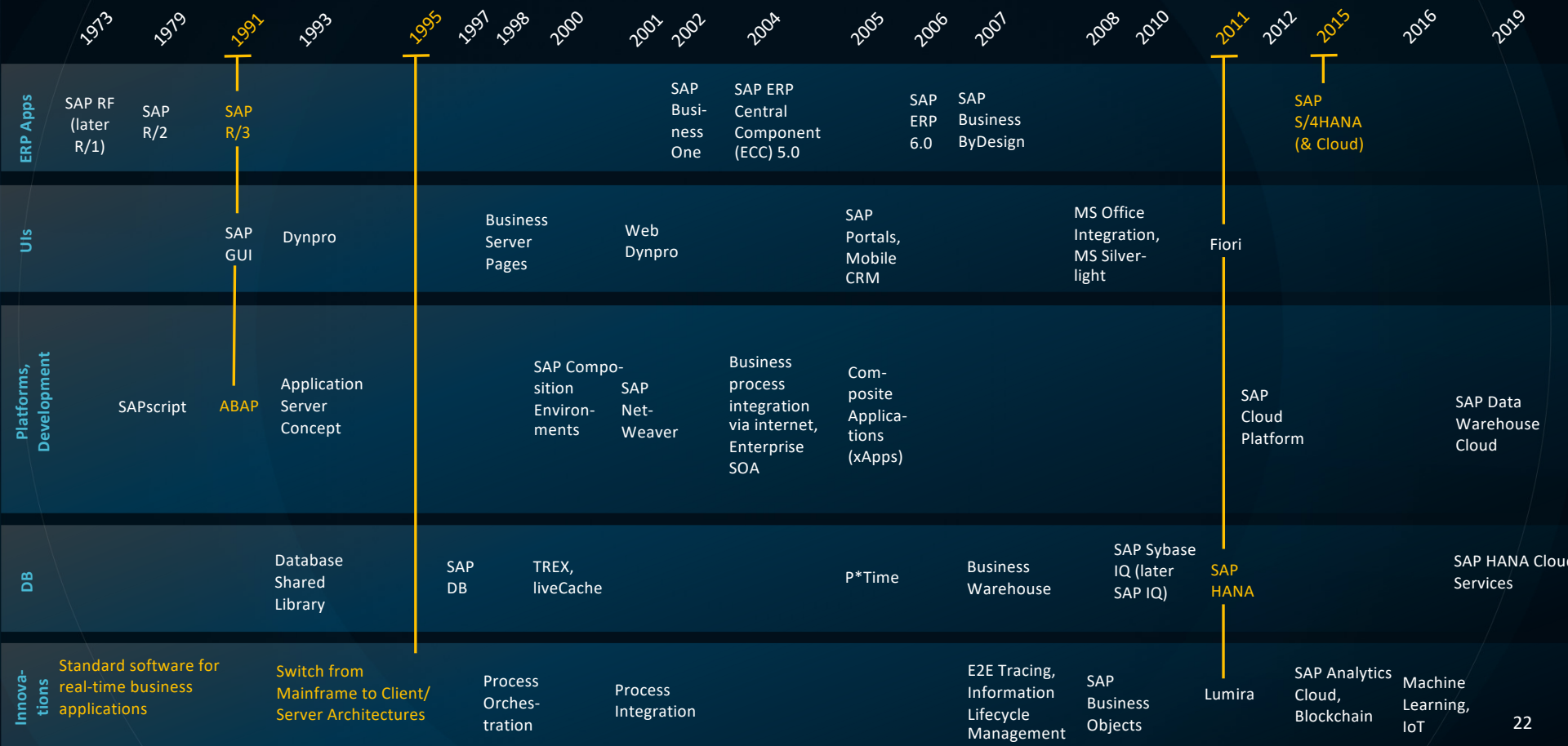
Enterprise Cloud Platforms

From On-Premise to the Cloud

- Extend
- Integrate
- Data-to-Value



SAP Creates Technology Since More Than 45 Years



Course Overview

Trends and Concepts of Business Application Architecture



- **Digitalization of Business Processes**
- Enterprise Resource Planning
 - Sales and Distribution
 - Finance, Accounting, and Controlling
 - Human Resources
 - Material Management and Production Planning
- In-Memory Databases for Business Applications
- Customer Relationship Management
- Enterprise Cloud Platforms for Integration and Extensions
- Block Week: Architecture Deep Dives



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