

15. Structured FINANCE

27.-28. NOVEMBER 2019, ICS INTERNATIONALES CONGRESSCENTER STUTT GART



Digitalisierung eines
Finanzbereichs im Großkonzern

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Referent



Gastgeber





Structured Finance

Digitalisierung eines Finanzbereichs im Großkonzern

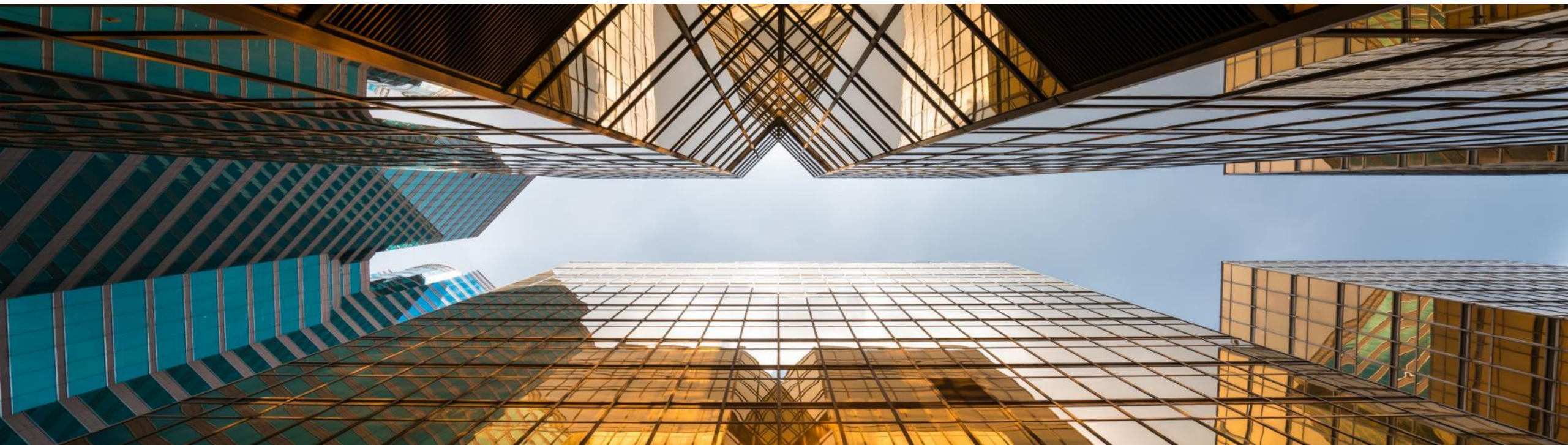
Steffen Diel, SAP SE
Senior Vice President, Head of Global Treasury
28. November 2019

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Introduction to **SAP**



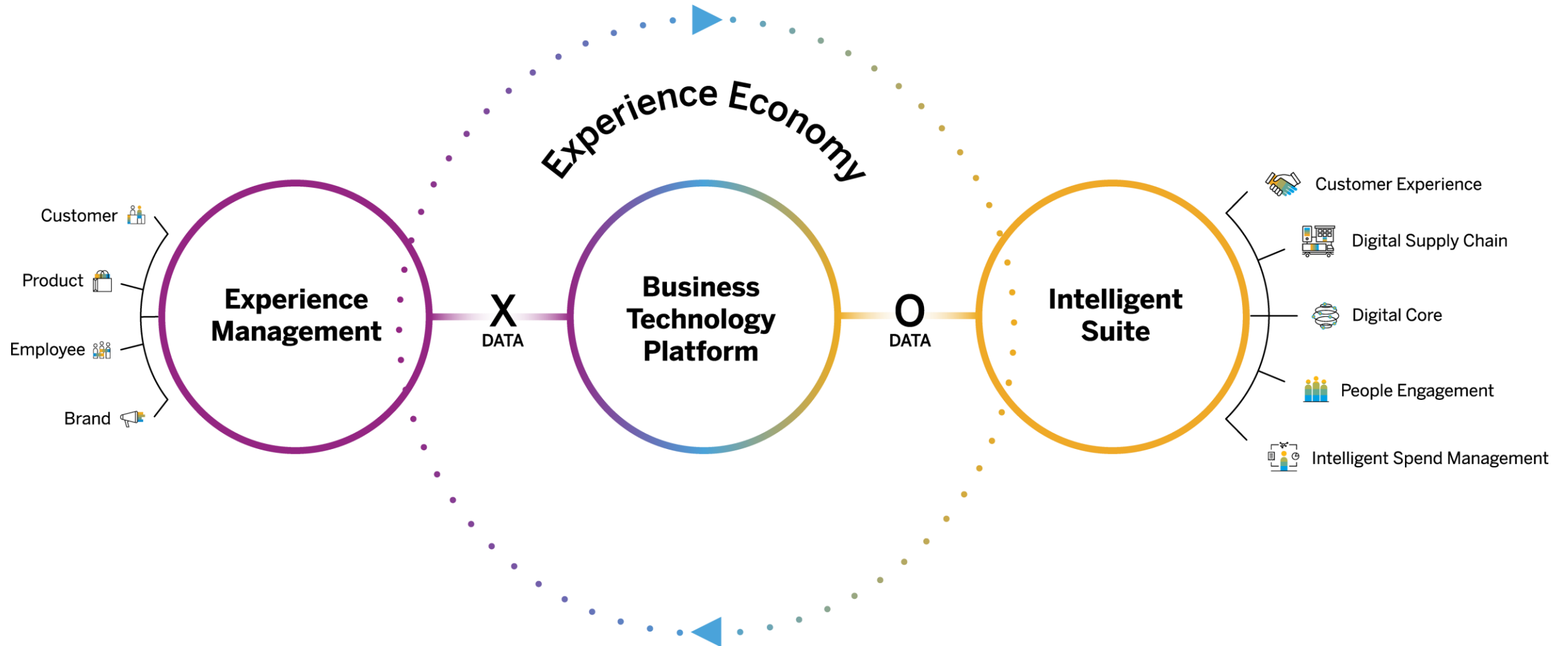
SAP Key Figures



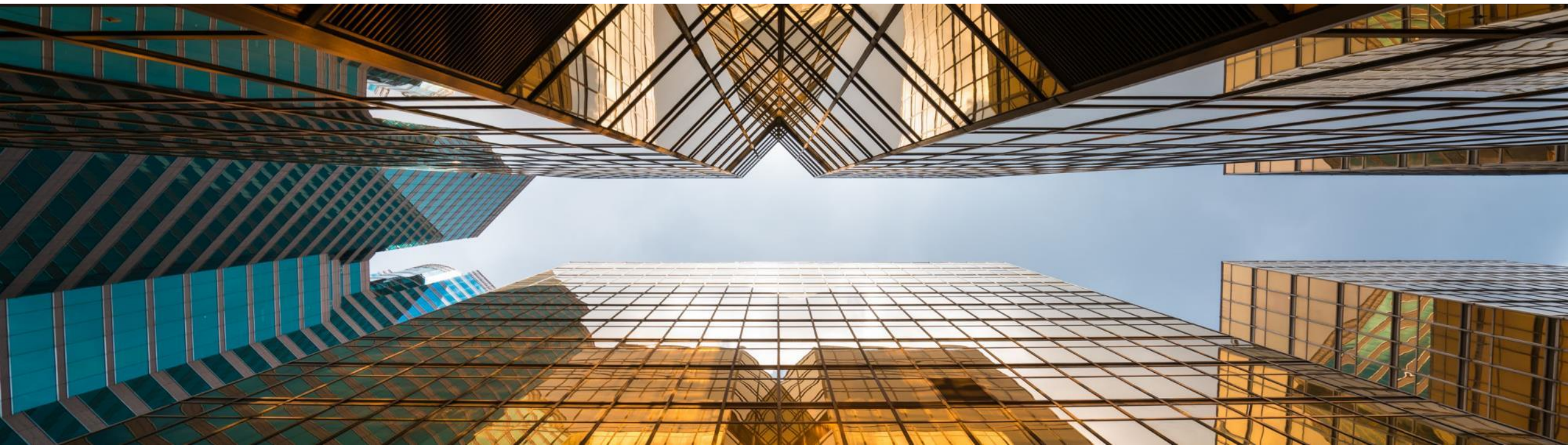
SAP overview

- Market leader in enterprise application software
- Leading analytics and business intelligence company
- 200 million cloud users
- Dow Jones Sustainability Index: Software sector lead for the 12th consecutive year in 2018
- > **437,000** customers in > **180** countries
- > **99,700** employees
- Total Revenue 2018: **EUR 24.7bn**
- Operating Cash Flow 2018: **EUR 4.3bn**
- Group Liquidity by Sept. 30, 2019: **EUR 5.6bn**
- Group Financial Debt by Sept. 30, 2019: **EUR 13.9bn**
- Globally, **77%** of all transaction revenue touches an SAP system

SAP is evolving its strategy to be “The Experience Company powered by the Intelligent Enterprise”



Overview **Global Treasury & Finance Transformation** at SAP



Global Treasury – Areas of responsibility



Global Cash Management

- Bank account opening and closing, automated bank account statements
- Daily cash disposition, short-term liquidity planning, cash centralization
- Worldwide bank connectivity, bank account administration, cash centralization



Dealing & Asset Management

- Dealing (FX, Money Market, Securities, Equity Derivatives)
- Investment strategy with current focus to avoid substantial negative yield



Subsidiary Support

- Liquidity & Working Capital Management
- Bank account and payment services
- Local financial business support (e.g. bank guarantees)
- I/Co financing (foundations, capital increases, loans)
- I/Co dividend payments



External Funding

- Acquisition financing & debt capital market strategy
- Credit rating
- Bank relationship management
- Debt Investor Relations (together with Investor Relations)



Financial Risk Management

- Liquidity risk management (3-Pillar Financing Strategy, long-term liquidity planning)
- FX risk management
- Interest rate risk management
- Counterparty risk management



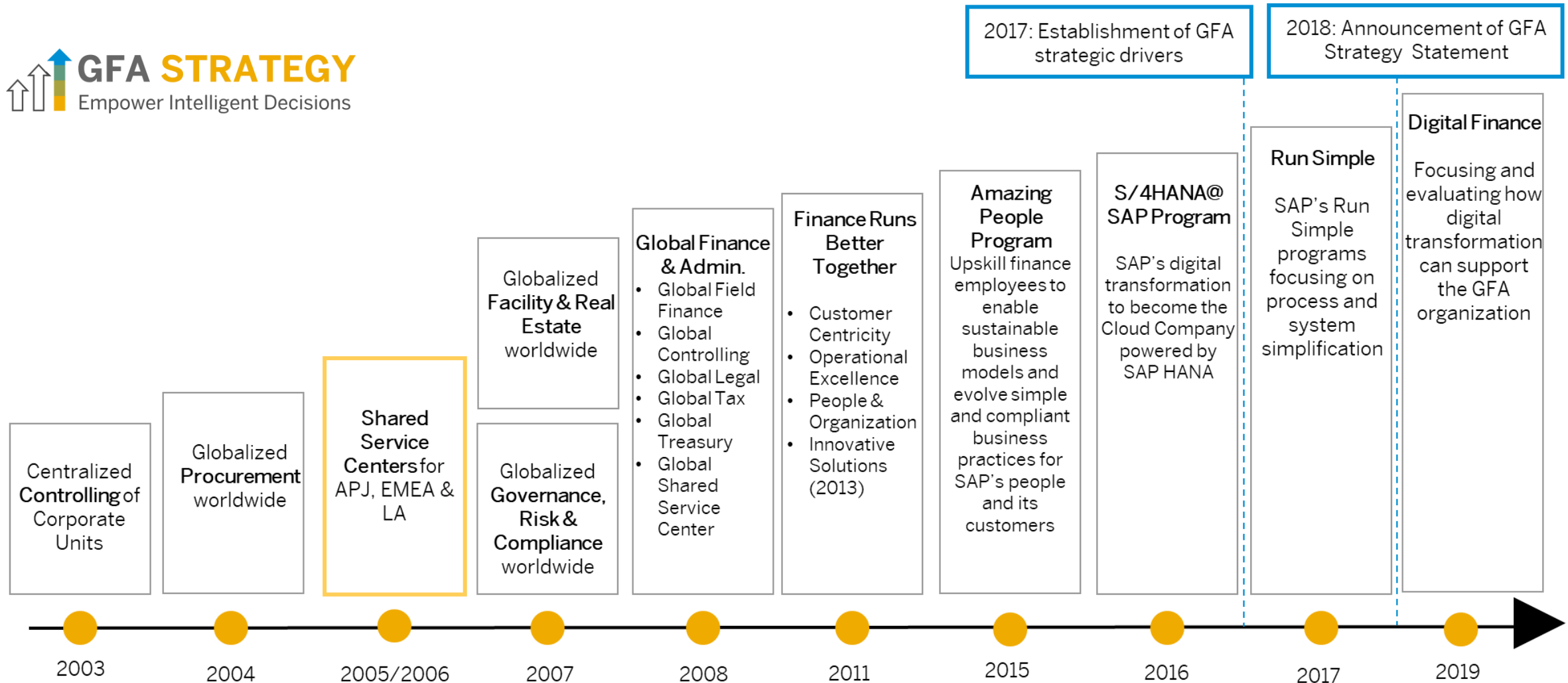
Other value-enhancing tasks

- Long-term liquidity planning
- Design of share-based compensation programs
- **Co-Innovation with Treasury Development, Analytics & IT**
- **Sales support: “SAP Treasury runs SAP” showcases**
- Deal-related support on FX structuring, guarantees, deal financing
- Thought Leadership (e.g. participation in working groups)
- Cross-departmental projects, e.g. with Global Tax
- **Development of Finance Talents / Future of Work / Digital Finance**

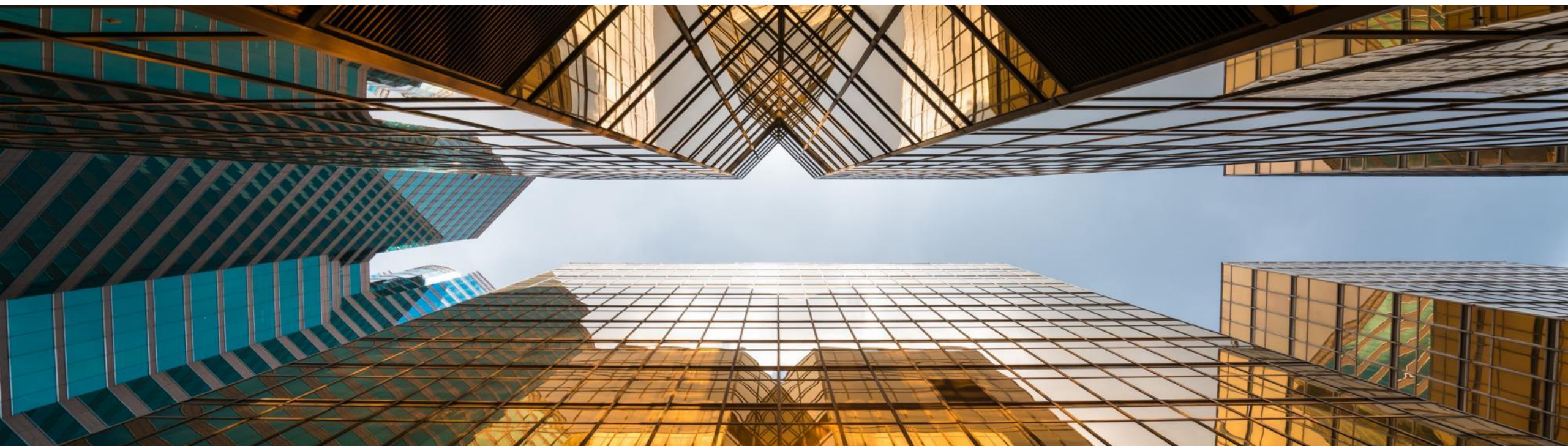


Global Finance & Administration (GFA)

Transformation Journey



Steering the **Intelligent Enterprise**



The digital transformation is forcing SAP to adapt internal processes & systems

Digital trends driving the transformation of SAP's business model



Cloud Computing



Big Data & Analytics



Internet of Things



Machine Learning



Augmented Reality



Blockchain



Social



Mobile

SAP needs to change business processes and adapt enterprise architecture

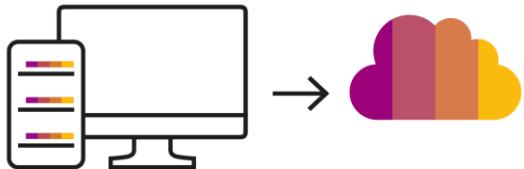


Growing number of different business models: on-premise, cloud, business network and new customer services



Big Data & Analytics

From manual reporting to processing big data real-time and turn insight into action



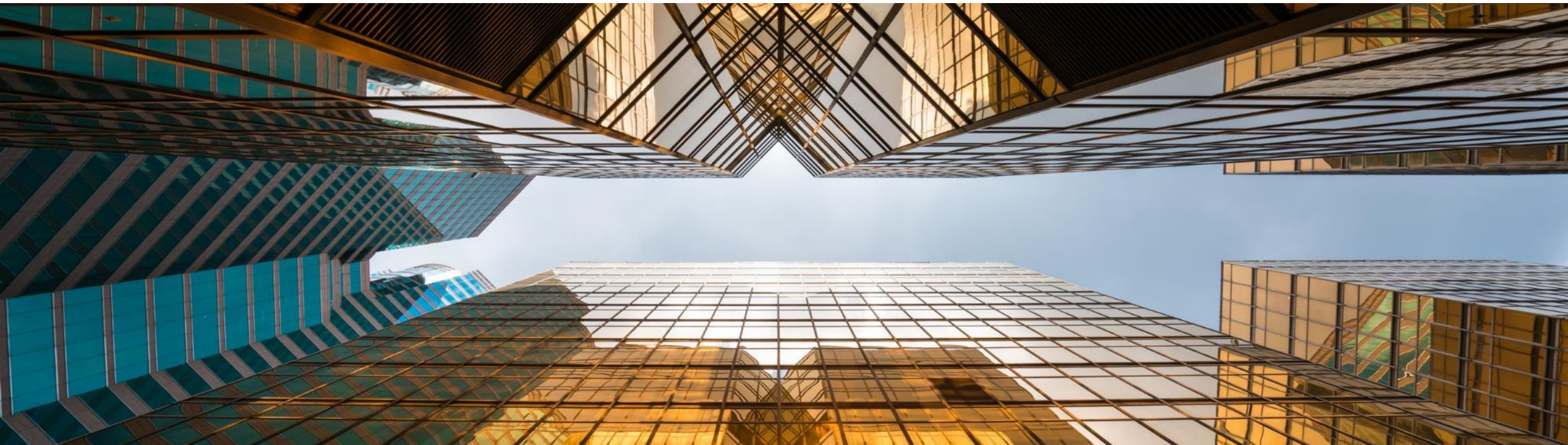
From human high-touch to automated, integrated & intelligent system landscape with a modern user interface

The SAP Digital Boardroom



- Real-time insight into operating development of the company based on extremely fast data access via **in-memory database and S/4HANA technology**
- Visualization of internal and external content in **SAP Analytics Cloud**
- Embedded value driver tree provides **scenario analyses and simulation** “on the fly”
- The Digital Boardroom collects and analyzes data from different internal and external sources (HR, Finance, Sales, Financial Market Data, Financial News)
- In-built predictive analytics capabilities

The **digitalization journey** of SAP Treasury

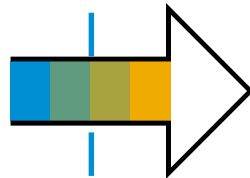


Digital Transformation at SAP Treasury

Increasing complexity and limited resources require new technologies

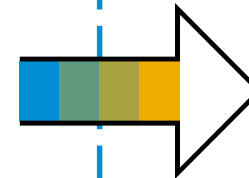
Past

- Manual and repetitive tasks
- Low degree of automation
- Custom coded solutions
- Inflexible processes



Present

- Simplified processes
- Standardized S4HANA Core
- From batch to real-time processing
- From physical systems to virtual platforms



Future

- Perform sophisticated analytics
- Strategic decision-making
- Significant change of job profile: from task-driven to intelligence-guided activities
- Deliver the Intelligent Enterprise

The digital mindset – understanding the potential value of new technologies (rather than technical details)

Requirements

Core modernization



Working in **AGILE mode & Swarms**



Use of **cloud platforms**



Robotics & process automation



Visualization, reporting & **analytics**



New organizational set-up

Exponentials



Advanced Analytics



Artificial Intelligence / Machine Learning



Distributed ledger technology

Interactive SAP Treasury Dashboard

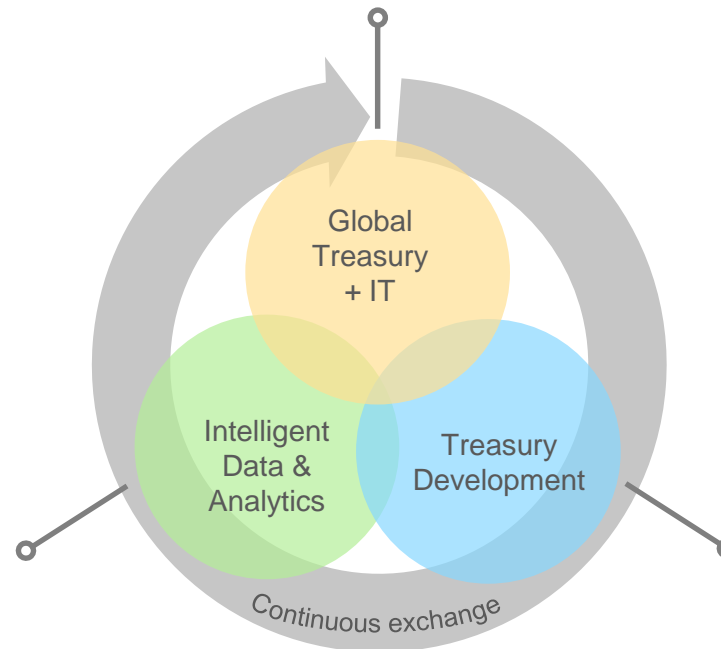
Project set-up



Starting position:

- Treasury system available in most relevant countries
- 97% of bank statement posted automatically on a daily basis
- Intraday statements for most relevant cash management banks
- Centralized bank account management

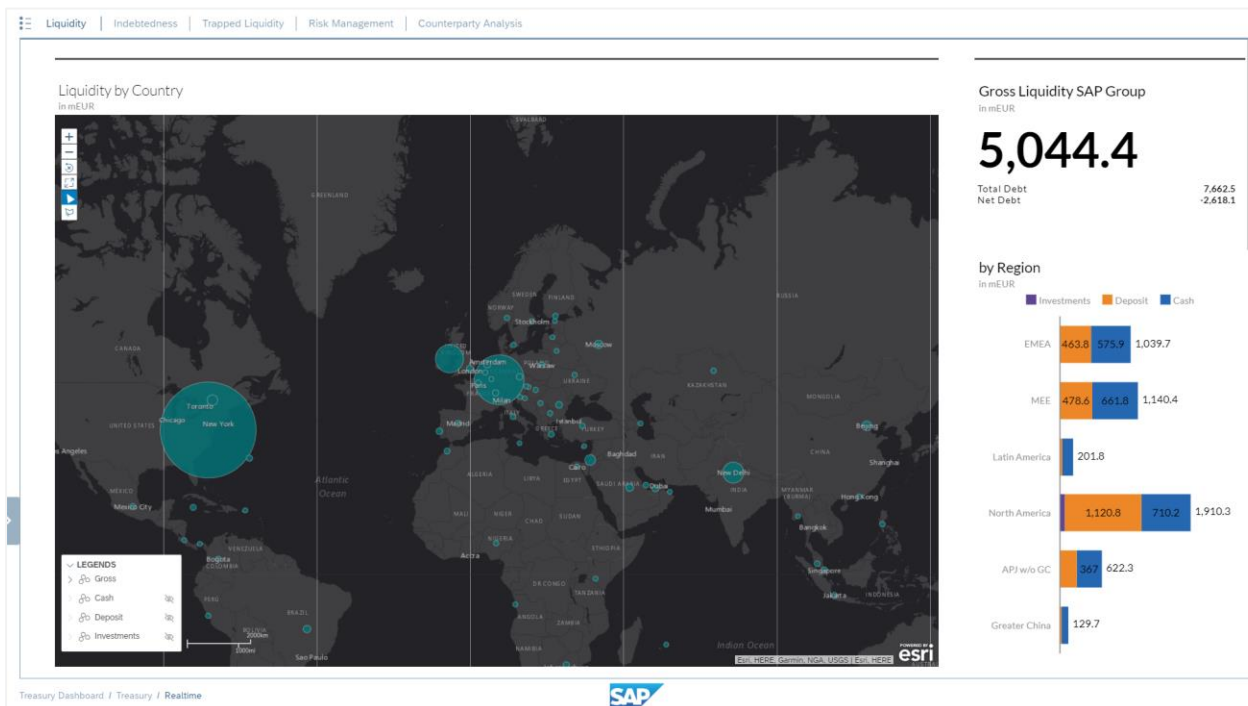
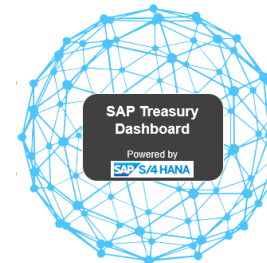
- Definition of goals and project scope
- Content development and user stories
- Driving backend integration and standardization
- Internal/ external exchange



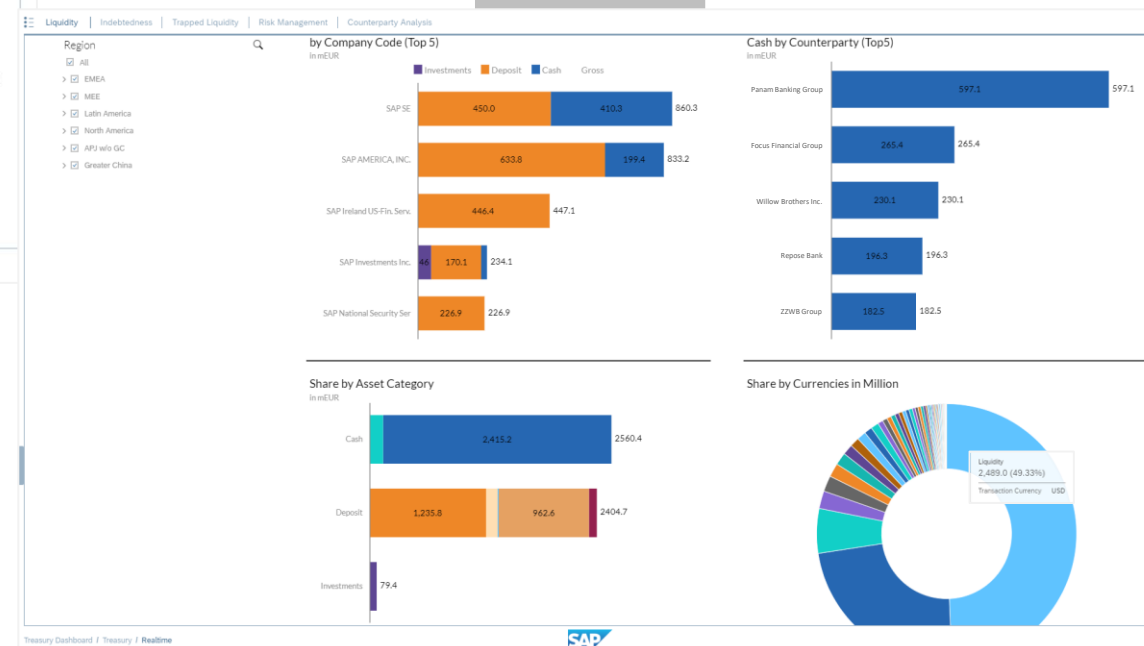
- Development of dashboard architecture
- Front-end design in SAP Analytics Cloud
- Integration of content into the Digital Boardroom
- Technical maintenance

- Delivery of broad data cube
- Collection and translation of customer needs
- Cooperation and co-innovation with Global Treasury

Business Insight – Treasury Dashboard: Liquidity & Investment Overview



- The liquidity can be distinguished by different criteria like e.g. by asset type (deposits, money market funds, etc.), currency or by counterparty
- Furthermore, the user will get information on average yields and durations on investments
- Another important information to CFOs is the share of liquidity which can be centralized and is available as well as which part is trapped




- The liquidity map shows how SAP's funds are distributed across the globe on a real-time basis
- The bubbles on the map give CFOs, risk committees or treasury employees a simple, transparent and comprehensive view on the geographical distribution of SAP's group liquidity
- The user is able to choose a certain region or entity level in which he has specific interest and receives deeper information on the type of liquidity


Interactive SAP Treasury Dashboard

Content



Liquidity and Investment Overview

- Overview Group Liquidity: Breakdown by 
 - Geographical Distribution/ Entity
 - Liquidity & Investment Type
 - Counterparty
 - Currency
- Liquidity Flows over time
- Trapped Cash
- Investments: Yields and Durations

Financial Risk

- Counterparty Credit Risk and Limit Utilizations 
- Foreign Exchange Management Summary

Indebtedness


- Maturity Profile incl. Cost of Debt 
- Fixed / Variable Interest Rate Ratio 
- Bilateral Credit Facilities
- Bank Guarantees
- Intercompany Loan Agreements

SAP Treasury Dashboard


Powered by



Market Overview

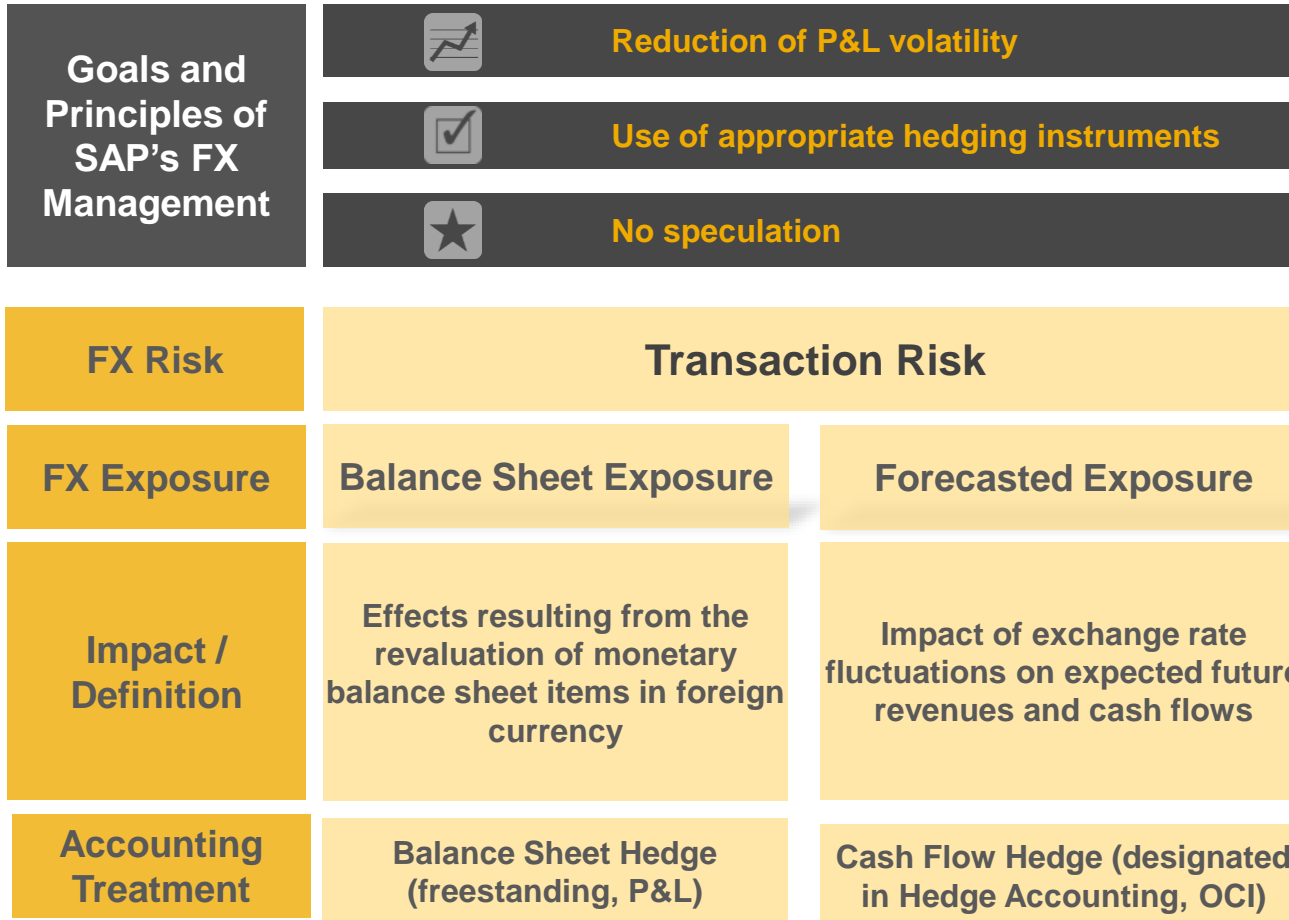
- Major Foreign Exchange Rates
 - Interest Rates
 - Peer Comparison
 - Share Prices
 - News Room
- 

Bank Relationship 360°

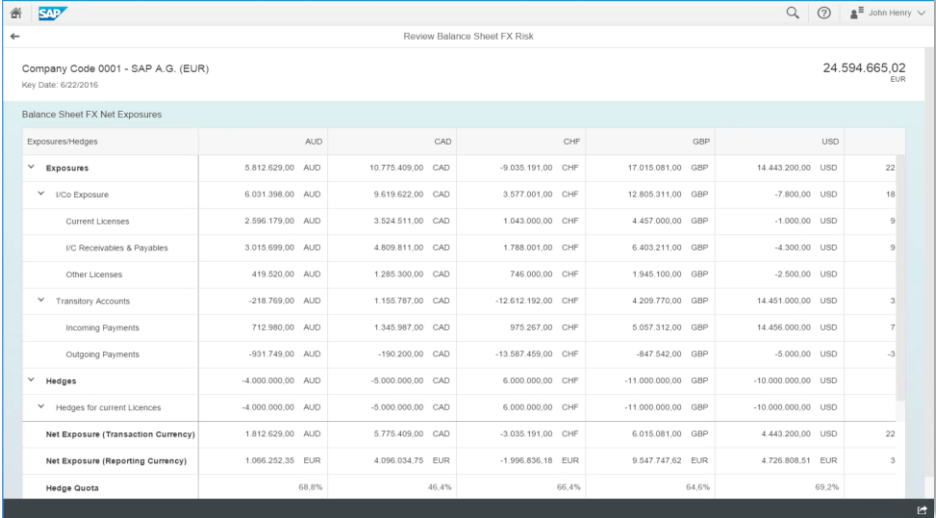
- Bank Profiles
 - Treasury business with banks
 - Banks as SAP's customer
- 

FX risk management

➔ FX Management at SAP Group is the management of transaction risk, as it can negatively impact SAP's profits and cash flows (hedges based on balance sheet and forecasted exposure)



Balance Sheet Exposure: Detailed reporting of balance sheet positions in foreign currency for all SAP Group companies



Review Balance Sheet FX Risk

Company Code 0001 - SAP A.G. (EUR) 24.594.665,02 EUR
Key Date: 6/22/2016

Balance Sheet FX Net Exposures	AUD	CAD	CHF	GBP	USD	
Exposures/Hedges						
Exposures	5.812.629,00	10.775.409,00	-9.035.191,00	17.015.081,00	14.443.200,00	22
I/C Exposure	6.031.398,00	9.619.622,00	3.577.001,00	12.805.311,00	-7.800,00	18
Current Licenses	2.596.179,00	3.524.511,00	1.043.000,00	4.457.000,00	-1.000,00	9
I/C Receivables & Payables	3.015.699,00	4.809.811,00	1.788.001,00	6.403.211,00	-4.300,00	9
Other Licenses	419.520,00	1.285.300,00	746.000,00	1.945.100,00	-2.500,00	5
Transitory Accounts	-218.769,00	1.155.787,00	-12.612.192,00	4.209.770,00	14.451.000,00	3
Incoming Payments	712.880,00	1.345.987,00	975.267,00	5.057.312,00	14.456.000,00	7
Outgoing Payments	-931.749,00	-190.200,00	-13.587.459,00	-847.542,00	-5.000,00	-3
Hedges	-4.000.000,00	-5.000.000,00	6.000.000,00	-11.000.000,00	-10.000.000,00	5
Hedges for current Licenses	-4.000.000,00	-5.000.000,00	6.000.000,00	-11.000.000,00	-10.000.000,00	5
Net Exposure (Transaction Currency)	1.812.629,00	5.775.409,00	-3.035.191,00	6.015.081,00	4.443.200,00	22
Net Exposure (Reporting Currency)	1.066.252,35	4.096.034,75	-1.996.836,18	9.547.747,62	4.726.808,51	3
Hedge Quota	68,8%	46,4%	66,4%	64,5%	69,2%	

FX risk management – End-to-End process

**Quantify
Balance Sheet
Exposure**



**Execute
Hedges**
Interface to 360T



**Deal checking
and settlement**



**EMIR
Reporting**
via Virtusa Polaris



**Deal valuation
and posting**

Balance Sheet FX Net Exposures	
Exposures/Hedges	AUD
Exposures	5.812.629,00 AUD
I/Co Exposure	6.031.398,00 AUD
Current Licenses	2.596.179,00 AUD
I/C Receivables & Payables	3.015.699,00 AUD
Other Licenses	419.520,00 AUD
Transitory Accounts	-218.769,00 AUD
Incoming Payments	712.980,00 AUD
Outgoing Payments	-931.749,00 AUD



Spot/Forward Transaction Display: Structure

Company Code: 0001 SAP SE Transaction: 4000100023472

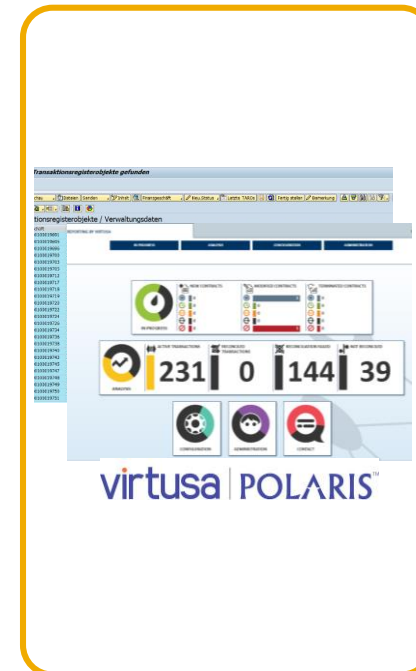
Product Type: 02 Forex (new) Activity: 2 Contract Settlement

Transaction Type: 11 Forward

Partner: 927409002 J.P. Morgan Securities plc / 25 Bank Street, Canary Wharf, London, E14 9EU

Rate/Value Date: 09.11.2014 Time: 09:54:58

Contract Data: Contract Date: 24.11.2014 / 09:14:03 Trader: SCHWID Contract Person: SWOT / 220499000 Extern. Ref.: 14942900

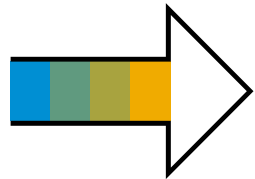


Transaction	Price/NPV t	Business Partner	NPV t	Net present value
400010001	Par Method	S0007@SAPI	EUR	5.591.211,09-
400010001	Par Method	S0008@SAPI	EUR	3.090.508,53
400010001	Par Method	S0261@SAPI	EUR	1.745.400,95-
400010001	Par Method	S0279@SAPI	EUR	1.116.745,78-
400010001	Par Method	S0279@SAPI	EUR	904.340,90
400010001	Par Method	S0002@SAPI	EUR	195.866,29
400010001	Par Method	S0035@SAPI	EUR	6.506,67-
400010001	Par Method	S0035@SAPI	EUR	504.294,07
400010001	Par Method	S0710@SAPI	EUR	1.206.578,74-
400010001	Par Method	S0700@SAPI	EUR	73.360,12
400010001	Par Method	S0700@SAPI	EUR	65.207,55
400010001	Par Method	S0700@SAPI	EUR	55.020,09-
400010001	Par Method	S0700@SAPI	EUR	49.163,49
400010002	Par Method	S0607@SAPI	EUR	169.913,23-
400010002	Par Method	S0007@SAPI	EUR	73.489,21-
400010002	Par Method	S0007@SAPI	EUR	37.518,17
			EUR	5.046.609,64-

Innovation needs more than one step

Requirements and milestones for a successful digital transformation:

- **Business process re-design:** Simplification and standardization of finance processes as the basis for core modernization / data source cleansing
- **Digital mindset:** On-boarding (buy-in) of employees and learning initiatives to tackle new challenges and drive digital change based on agile working modes
- This fundament enables the further **automation of end-to-end processes** (first phase) and the integration of **new smart technologies**, real-time reporting / steering to enhance intelligent decisions



The Digital and Intelligent Treasury

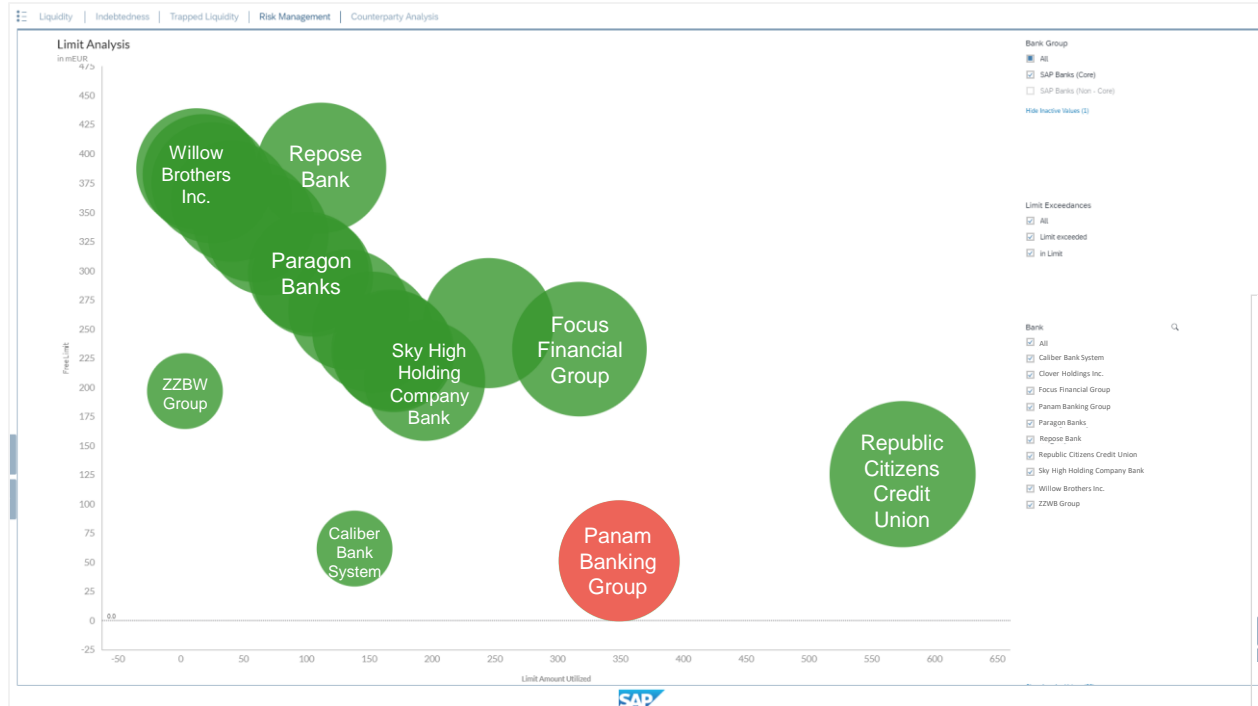


Appendix



Interactive Treasury Dashboard

Counterparty Credit Risk



If a bank shows a limit exceedance, the user is able to get more detailed information on the source of the exceedance, the exposure development over time and other bank specific KPIs.

Depending on the source of the exceedance, a treasurer can immediately initiate countermeasures in order to reduce the exposure



- Counterparty credit risk plays a central role in risk reporting and has gained significant importance since the global financial crisis and the default of Lehman Brothers
- This is why SAP Global Treasury defined limits for its core and non-core banks based on rating categories. The utilization of these limits is reflected per bank group on a compliance map which gives the user an intuitive view on limit exceedances and whether there is need for action

Thank you.

Contact information:

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