MINDS E

Experience the Human-Centered Enterprise

November 2022

Embedded to Extended Analytics

Presented by Marcelo Berger





Mindset Product Strategy

We are an SAP UX Consulting company

bringing together experience, our people, technology and accelerators

- Finding solutions with Design Thinking at the core
- Delivering experience with integrations and digital platforms
- Using Accelerators (Mindset's pre built software)

to help you prepare, build, develop your digital transformation on SAP.





Today's Agenda

- A Brief History
- BTP & Analytics
- Typical Landscape
- S/4 Embedded Analytics
- SAC
- Q&A

© 2022 Mindset Consulting, LLC. All rights reserved.

alytics



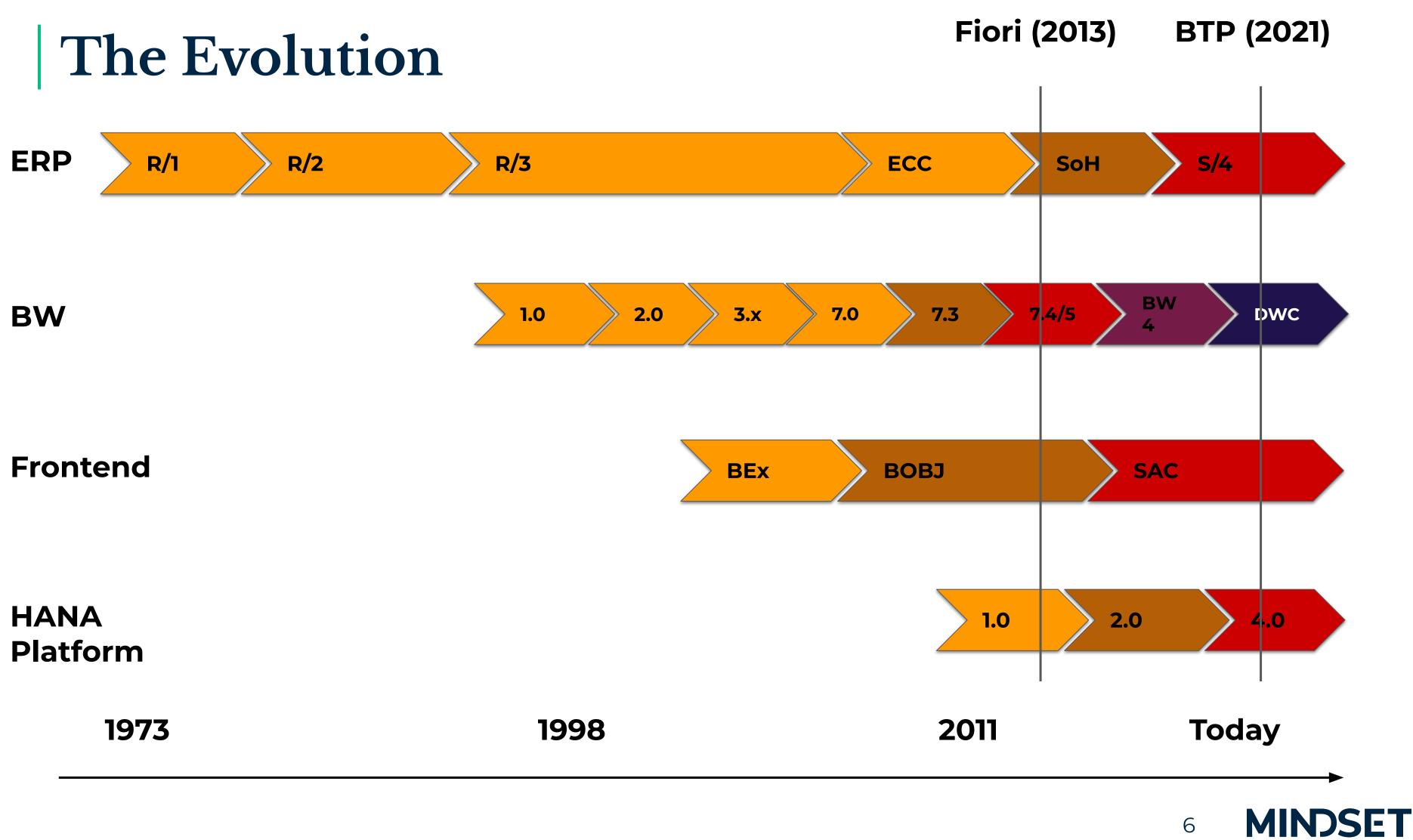
Today's Agenda

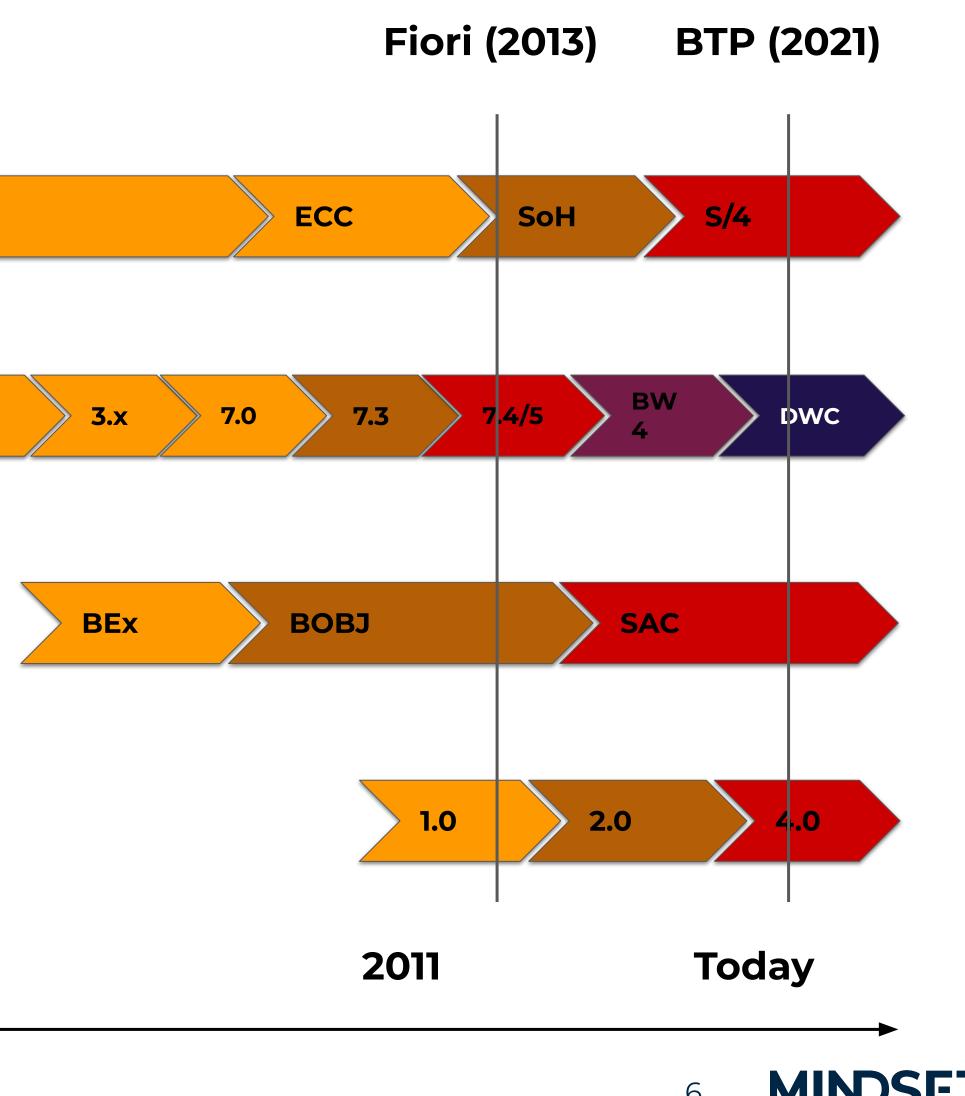
- A Brief History
- BTP & Analytics
- Typical Landscape
- S/4 Embedded Analytics
- SAC
- Q&A

© 2022 Mindset Consulting, LLC. All rights reserved.

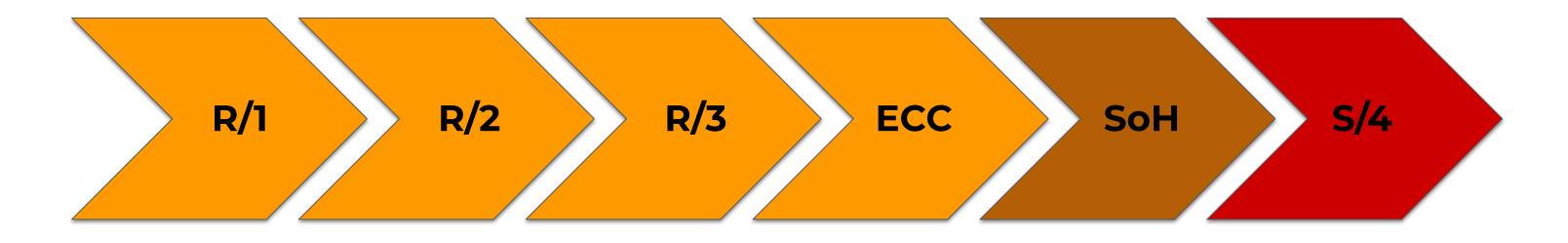
= nalytics

The Evolution





Evolution of SAP ERP

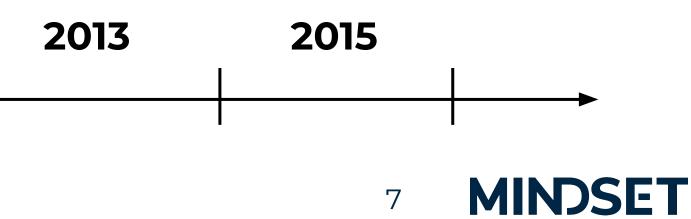


HANA

1973	1979	1992	2004	

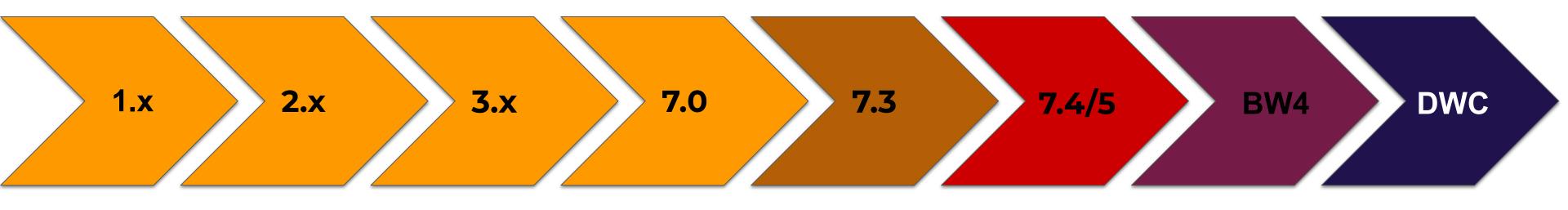
ECC on

Core applications simplified

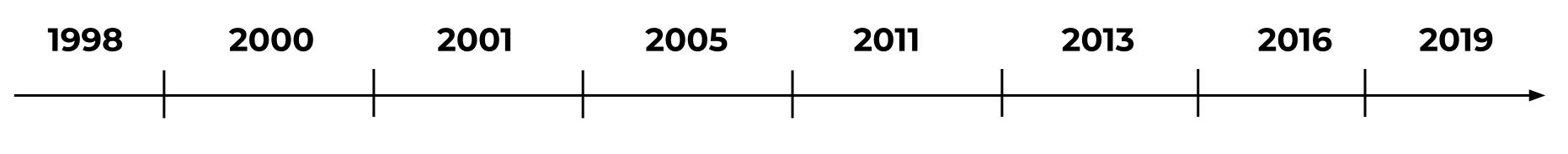




Evolution of SAP BW



BW Accelerator BW on HANA Performance optimizations

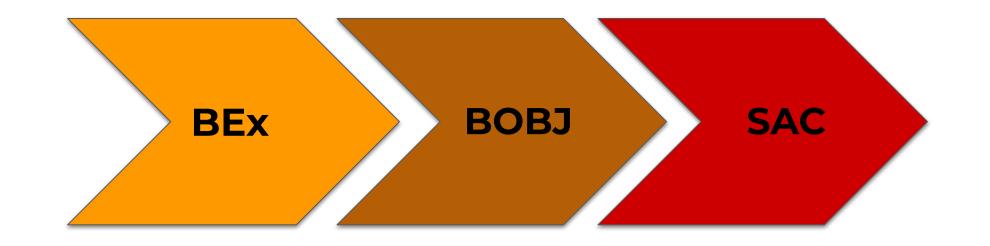


Simplification Virtualization Big Data Next Gen DW Cloud and On Prem IoT Full cloud DW



8

Evolution of Frontend Tools



SAP acquires BOBJ in
2008
Renames SAP
Business Objects

BOBJ (2015 Later re Analytic



BOBJ Cloud is released in

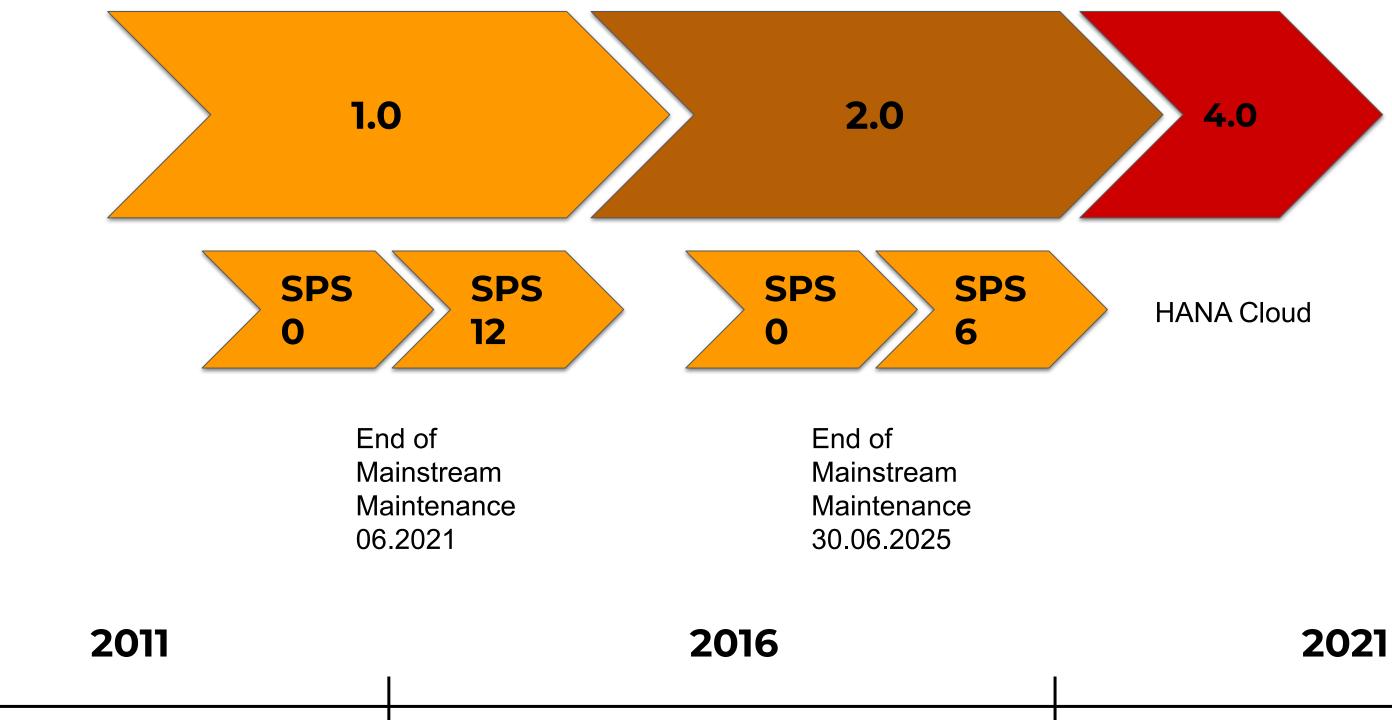
Later rebranded to SAP Analytics Cloud

2015



9

Evolution of HANA Platform









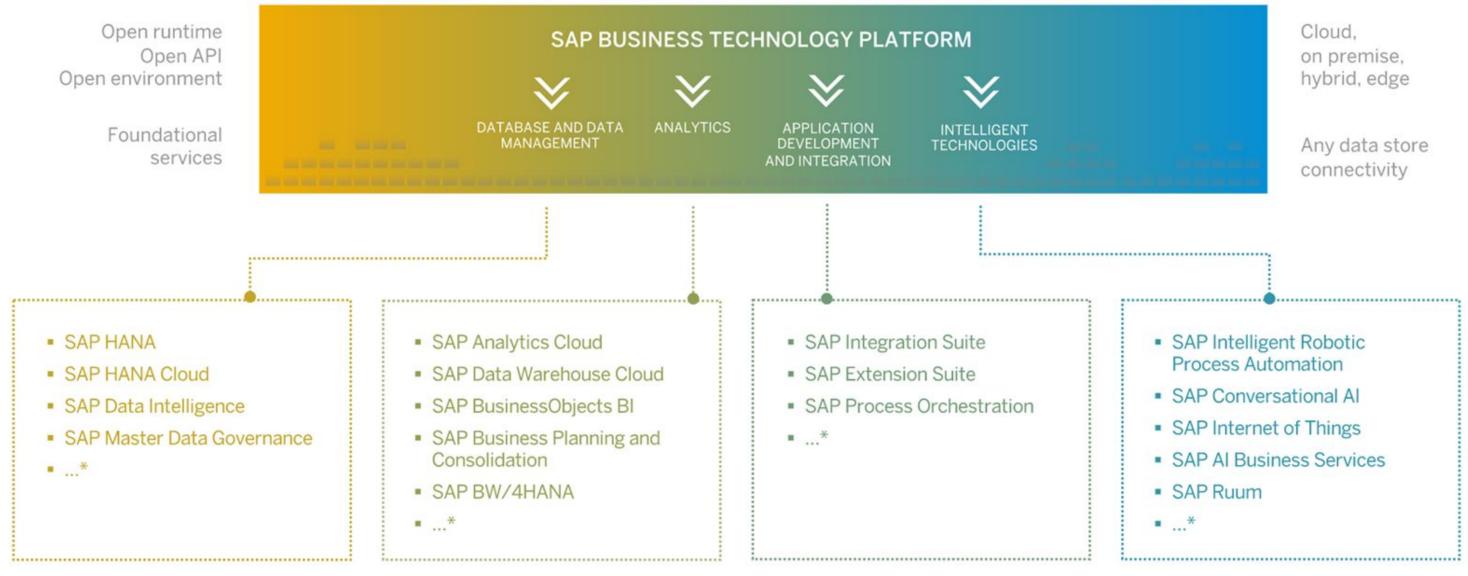
Today's Agenda

- A Brief History
- BTP & Analytics
- Typical Landscape
- S/4 Embedded Analytics
- SAC
- Q&A

© 2022 Mindset Consulting, LLC. All rights reserved.

= nalytics

SAP Business Technology Platform (BTP)

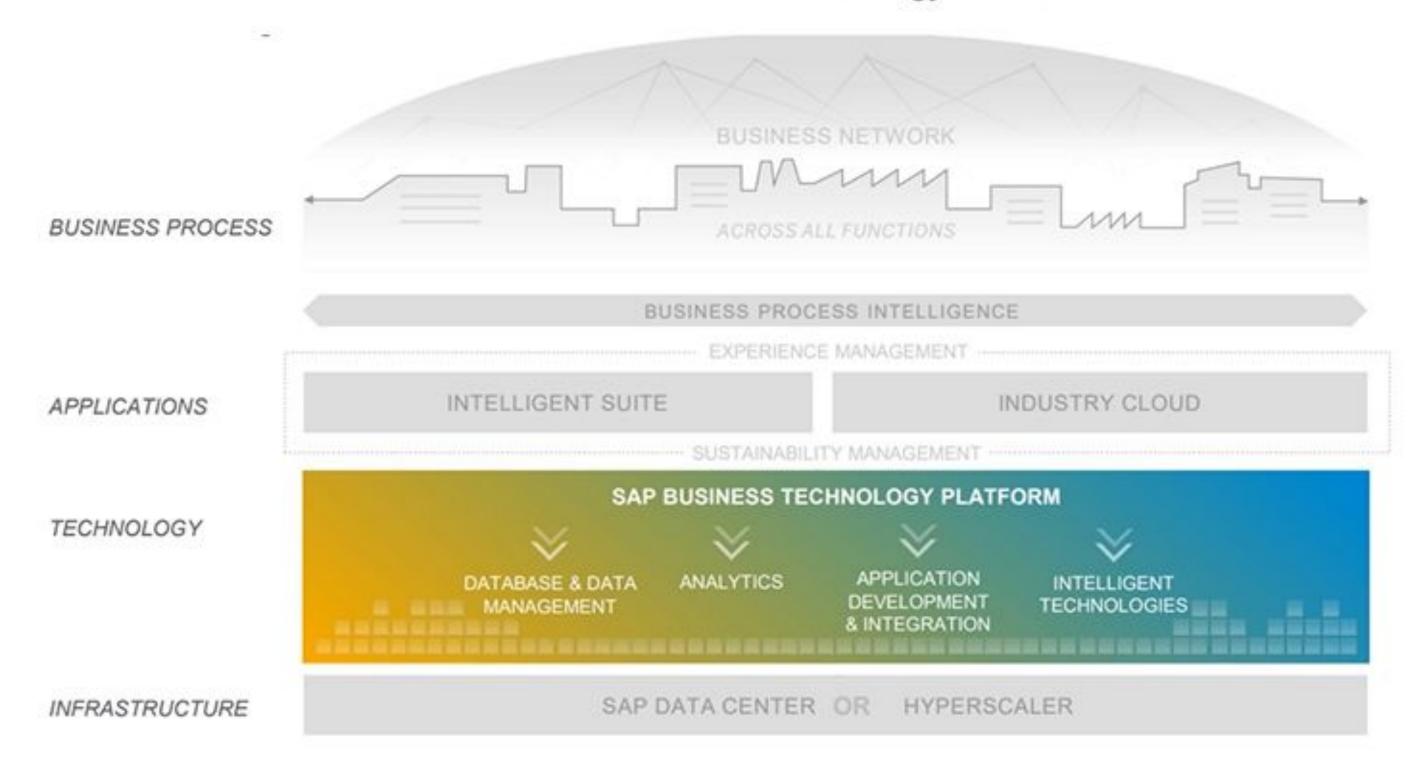


* Representative list; not exhaustive not inclusive of all offerings



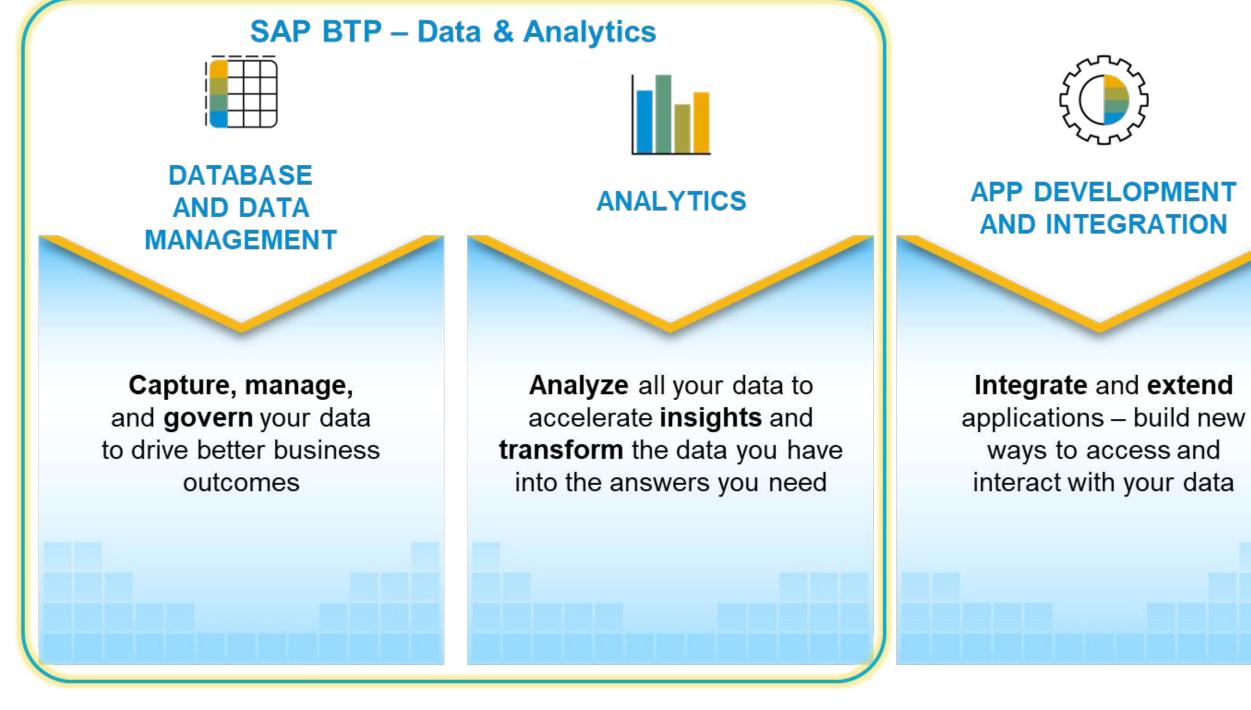
BTP Within the Intelligent Enterprise

SAP Business Technology Platform





BTP - Data & Analytics





INTELLIGENT **TECHNOLOGIES**

Data is the fuel propelling intelligent technologies forward optimizing processes, and igniting **innovation**







Today's Agenda

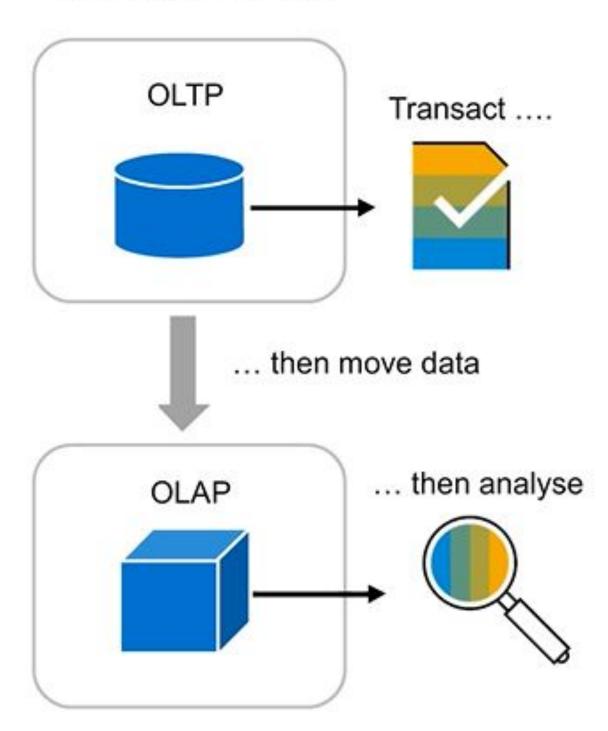
- A Brief History
- BTP & Analytics
- Typical Landscape
- S/4 Embedded Analytics
- SAC
- Q&A

© 2022 Mindset Consulting, LLC. All rights reserved.

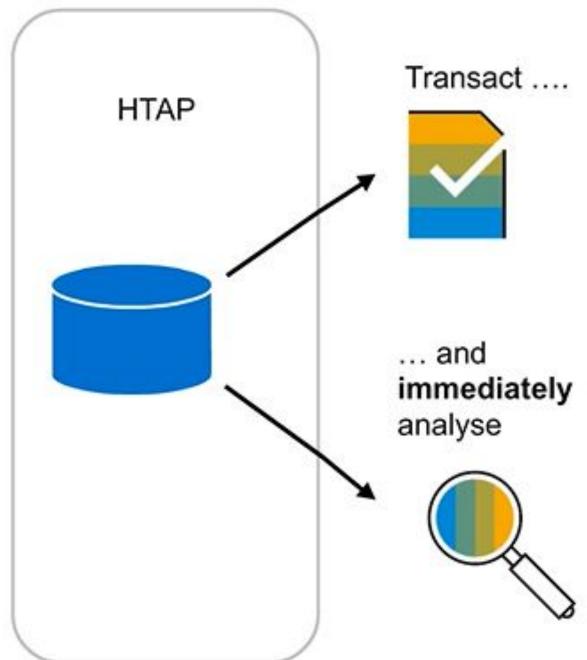
alytics

Typical Landscape

Traditional approach



SAP HANA approach



OLTP

On-Line Transaction Processing

OLAP

On-Line Analytical Processing

HTAP

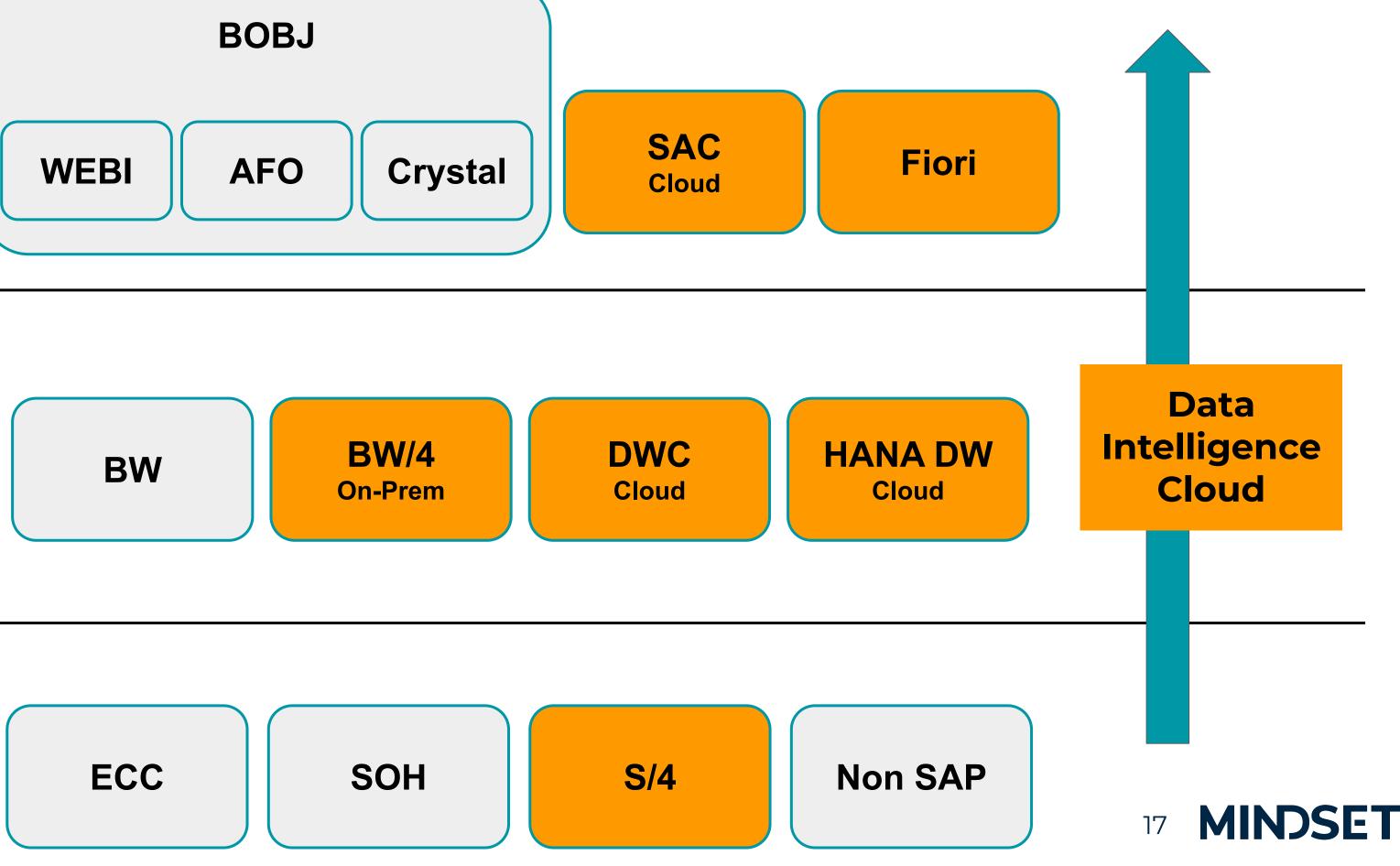
Hybrid Transaction Analytical Processing

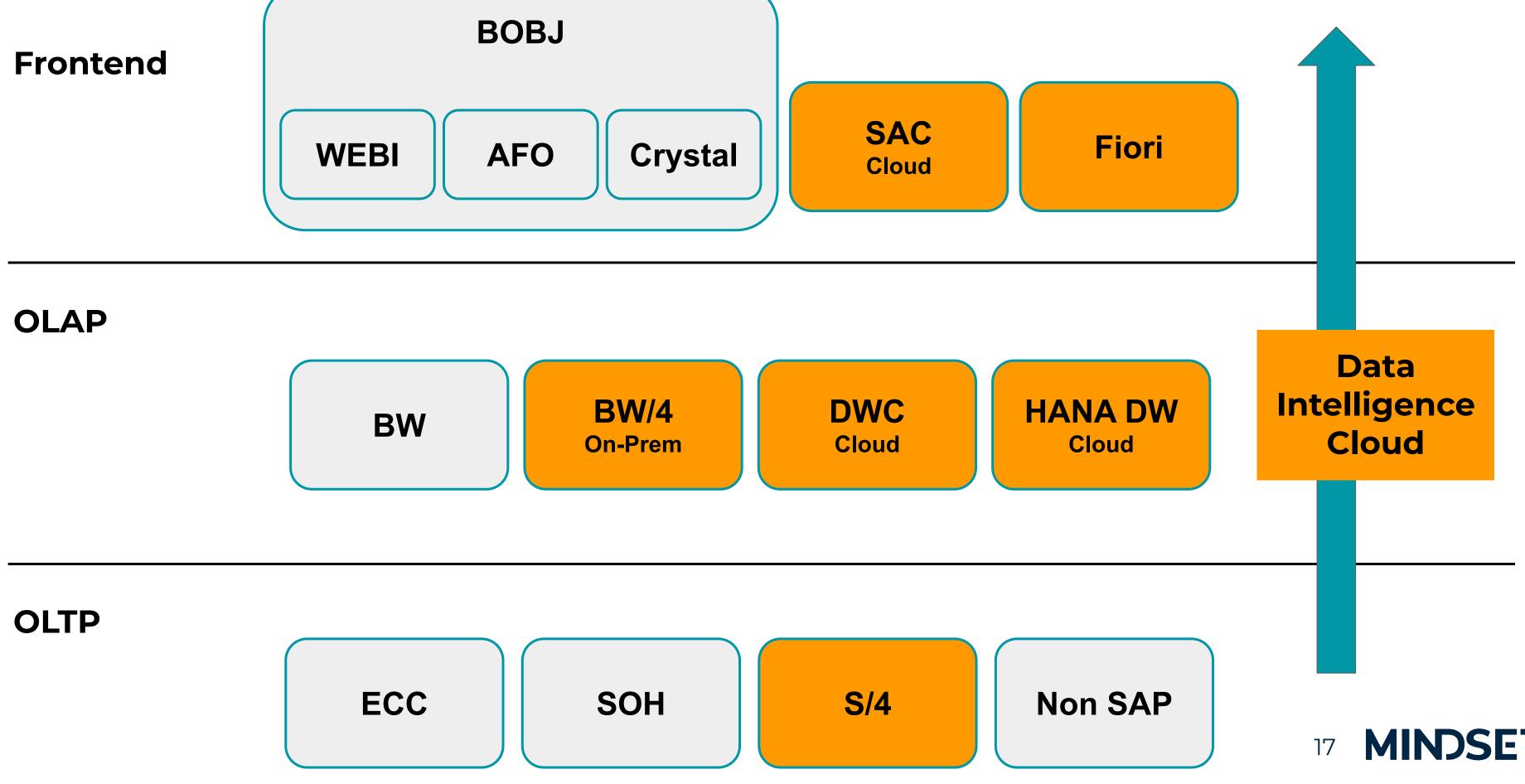


Typical SAP Landscape - Analytics in BTP











Today's Agenda

- A Brief History
- BTP & Analytics
- Typical Landscape
- S/4 Embedded Analytics
- SAC
- Q&A

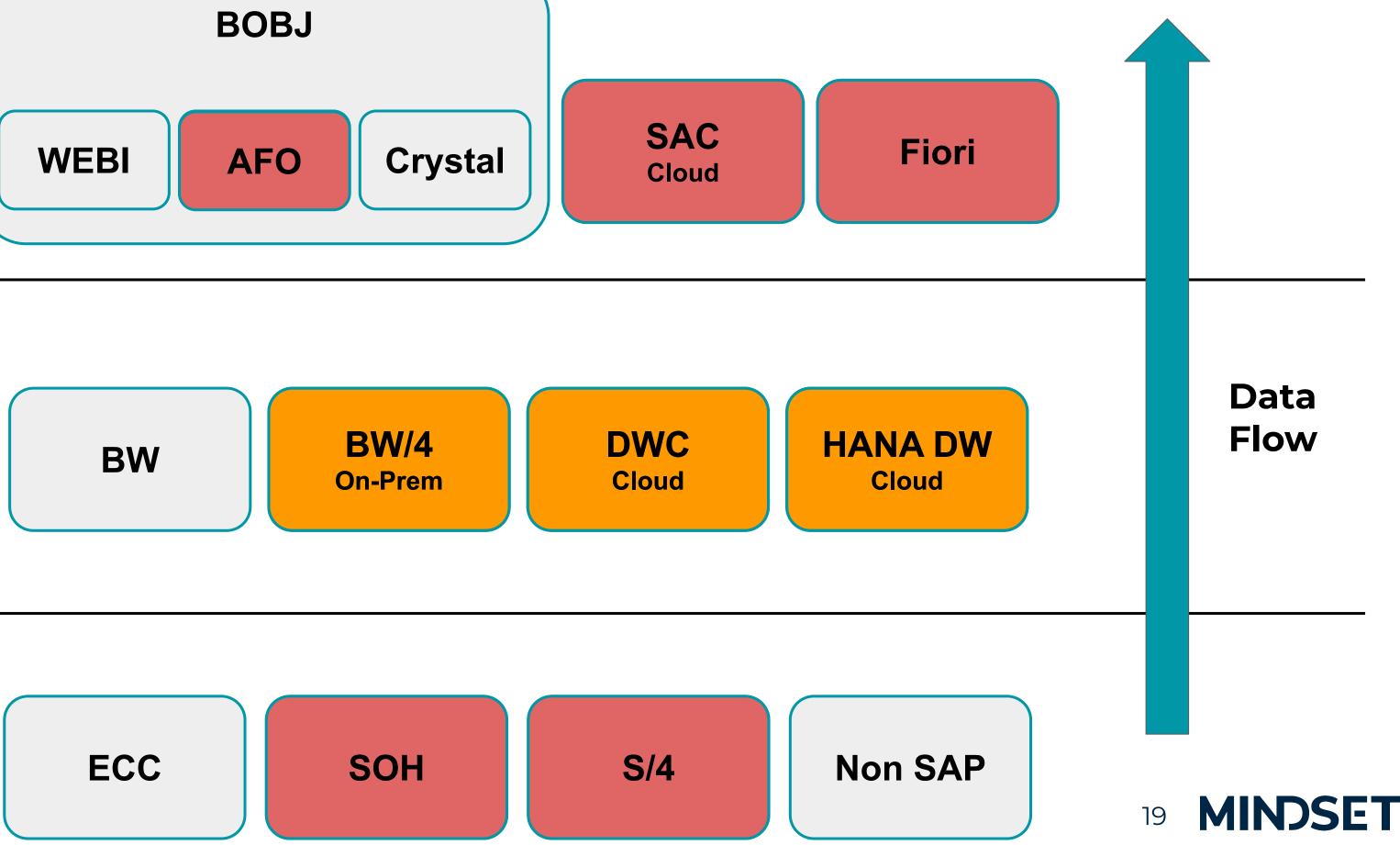
© 2022 Mindset Consulting, LLC. All rights reserved.

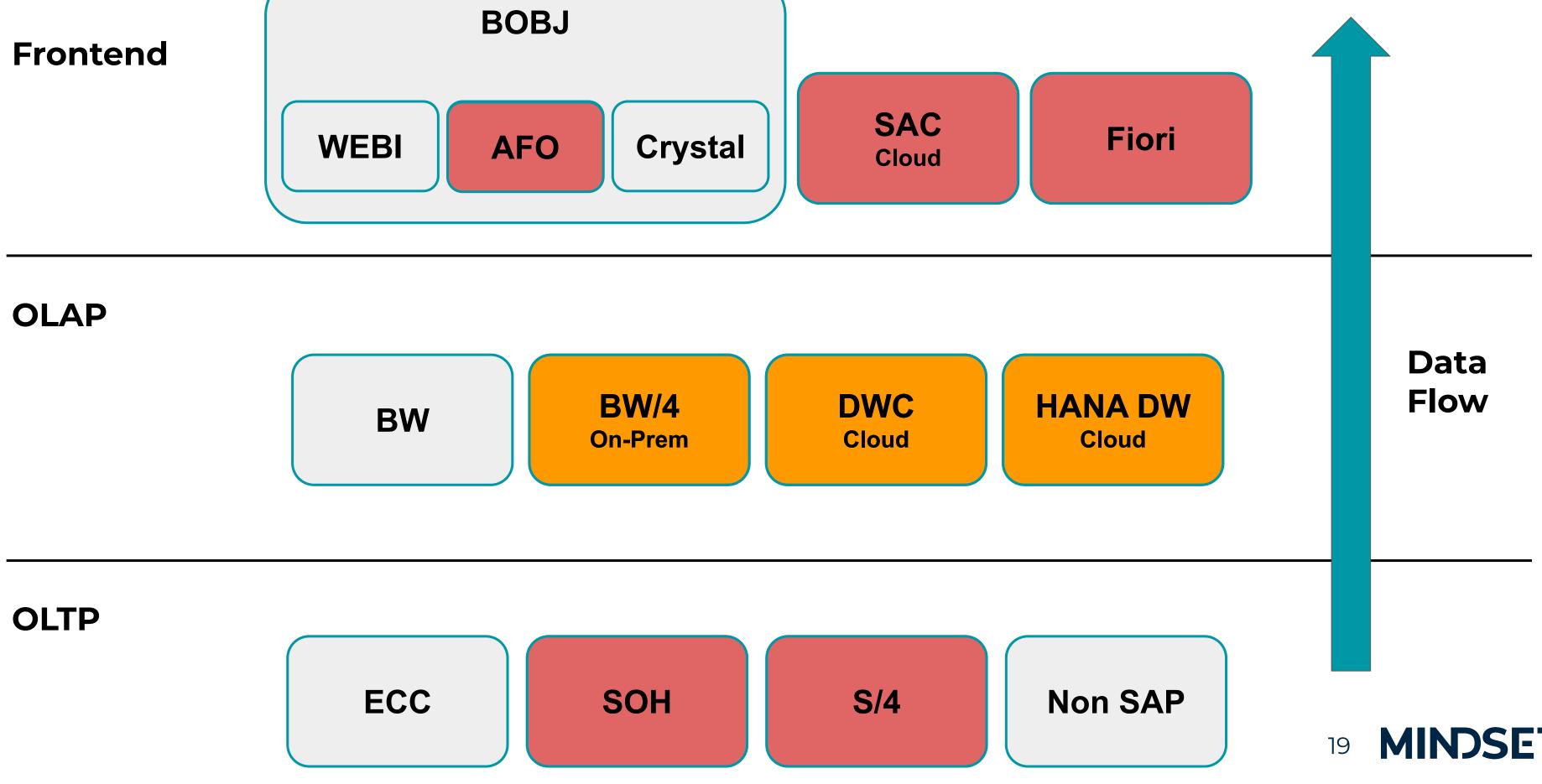
alytics

Typical SAP Landscape - Embydded ABTERytics

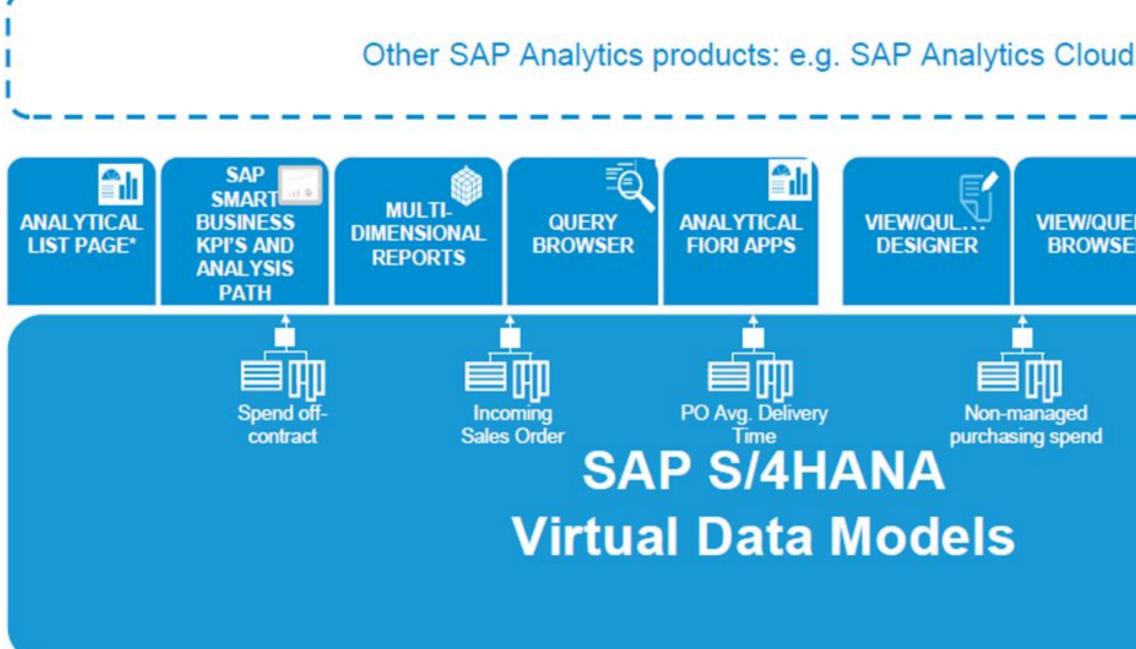






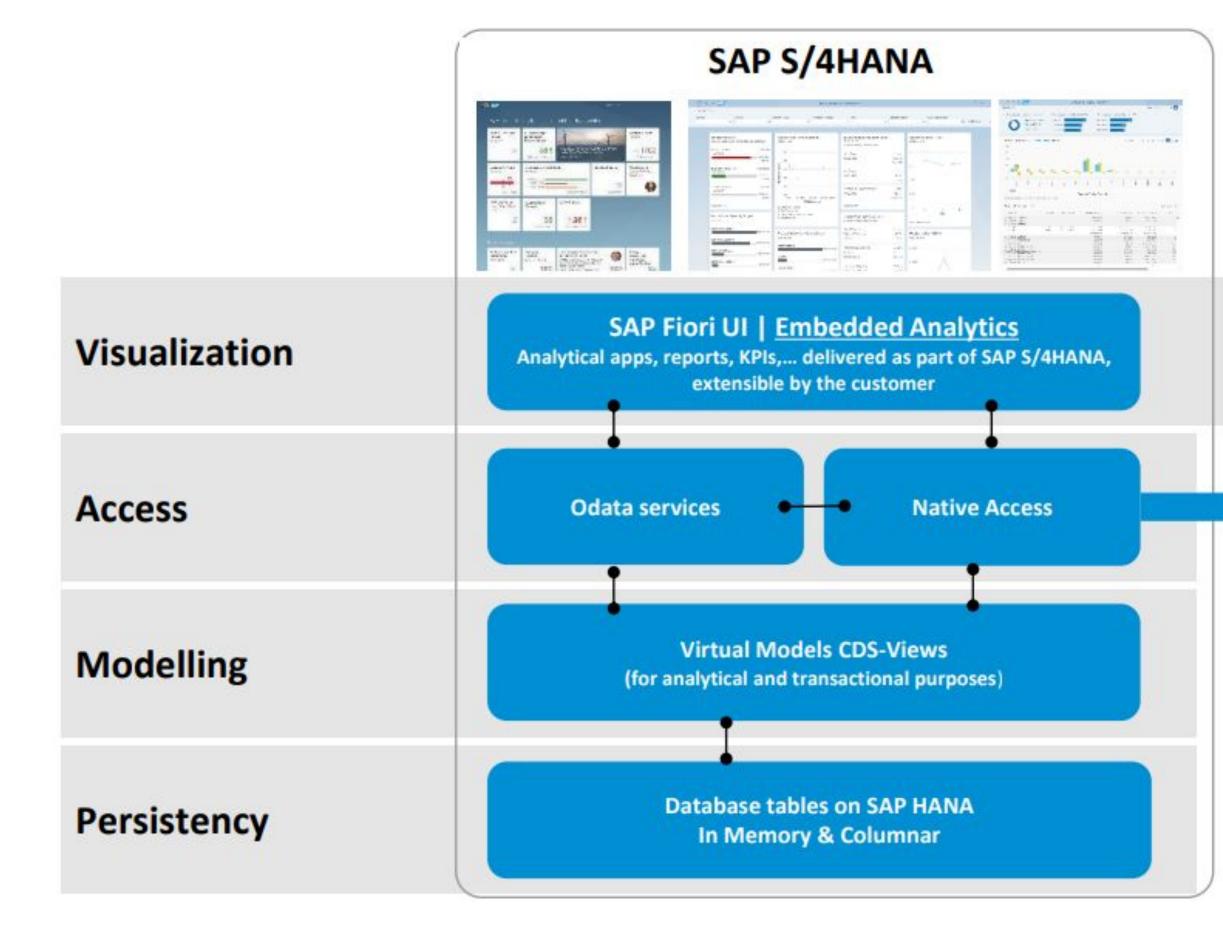


S/4 Embedded Analytics + Fiori = Translytics Other SAP Analytics products: e.g. SAP Analytics Cloud (SAP Leonardo), etc. **A A**ll SAP Q SMART MULTI-QUERY SAP FIORI BUSINESS ANALYTICAL VIEW/QUL VIEW/QUERY ABAP DIMENSIONAL BROWSER KPI'S AND BROWSER FIORI APPS DESIGNER **KPI MODELER** FOR ECLIPSE REPORTS ANALYSIS PATH Ť1 自加 SAP **BW/4** PO Avg. Delivery Non-managed Incoming Spend of purchasing spend Sales Order contract HANA SAP S/4HANA Virtual Data Models





S/4 Embedded Analytics - Architecture



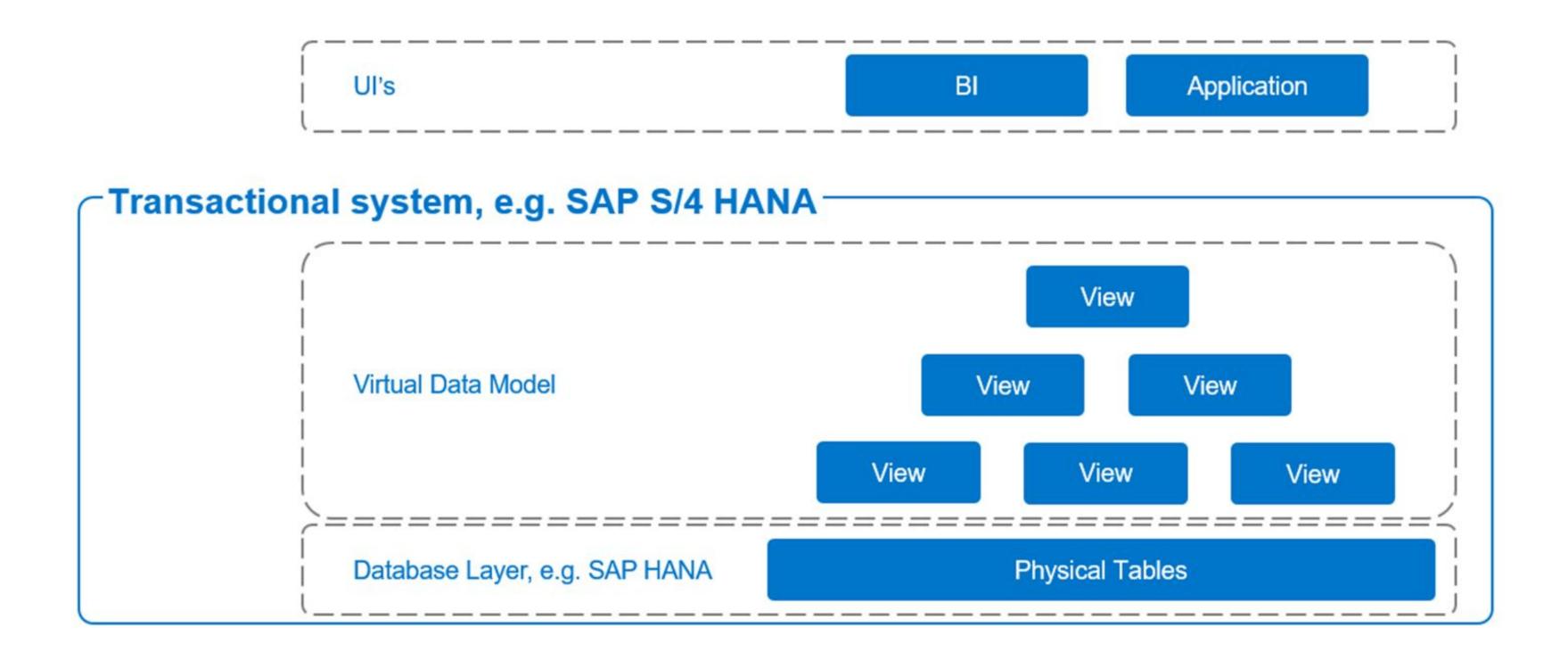




SAP Analytics Cloud LIVE Access SAP S/4HANA **OOB Content by LOV** Strategic Augmented Analytics

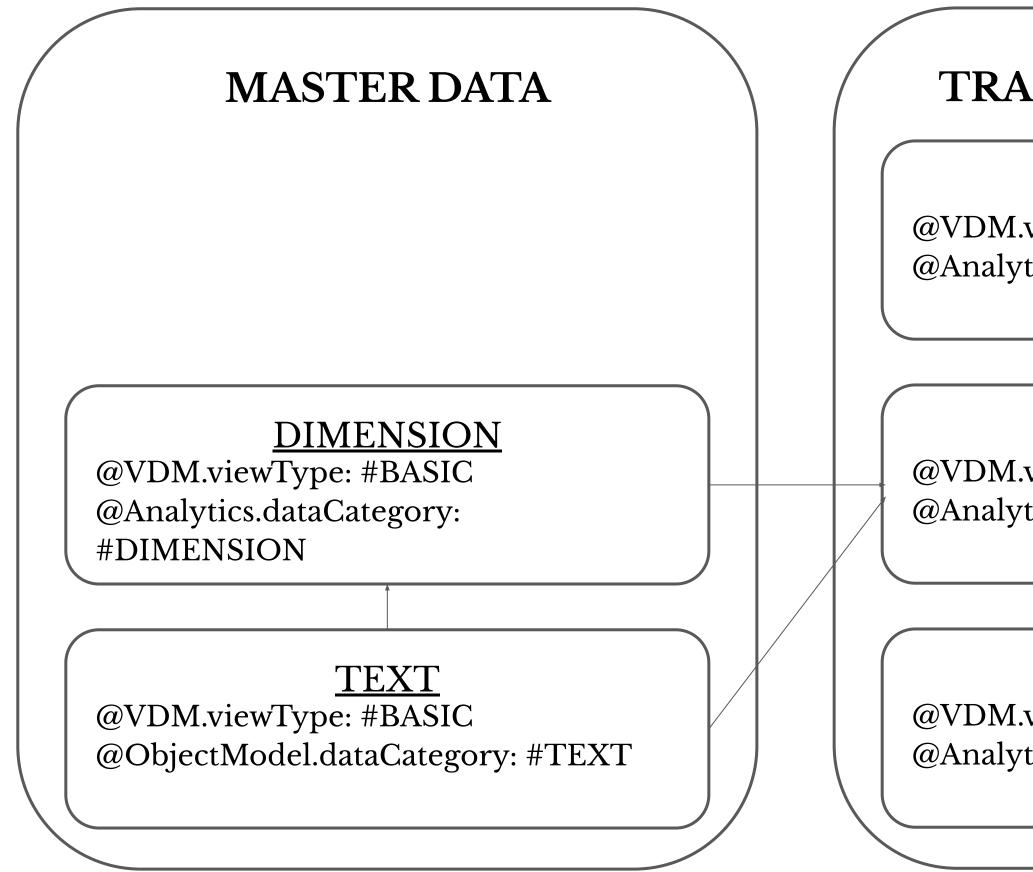


S/4 Embedded Analytics - Virtual Data Model





S/4 Embedded Analytics - Virtual Data Model



TRANSACTIONAL DATA

<u>CONSUMPTION</u> @VDM.viewType: #CONSUMPTION @Analytics.query: true

<u>COMPOSITE</u>

@VDM.viewType: #COMPOSITE @Analytics.dataCategory: #CUBE

<u>BASIC</u> @VDM.viewType: #BASIC @Analytics.dataCategory: #FACT



S/4 is NOT a Data Warehouse

S/4 HANA

Cross LOB

- **Operational SAP Data**
- Tactical

SAP LOB

- Real-time
- Out of the Box Models
- Extensible Models

- Historical SAP Data | Strategic
- Integration, Harmonization,
- Cross-system consistency
- Advanced Analytics

Data Warehouse

- 3 rd Party | Multi-sourced data



HANA Performance



Top Speed: 218mph / 350kmh

The moment two tables are joined, there will be a performance hit!!!



Top Speed: 100mph / 160kmh





Today's Agenda

- A Brief History —
- Typical Landscape _
- **BTP & Analytics** —
- S/4 Embedded Analytics _
- SAC
- Q&A

© 2022 Mindset Consulting, LLC. All rights reserved.



SAP Analytics Cloud (SAC)



SAP Analytics Cloud

is a next-generation software-as-a-service (SaaS) solution built from the ground up that allows business users to plan, discover, predict, and collaborate all in one place.

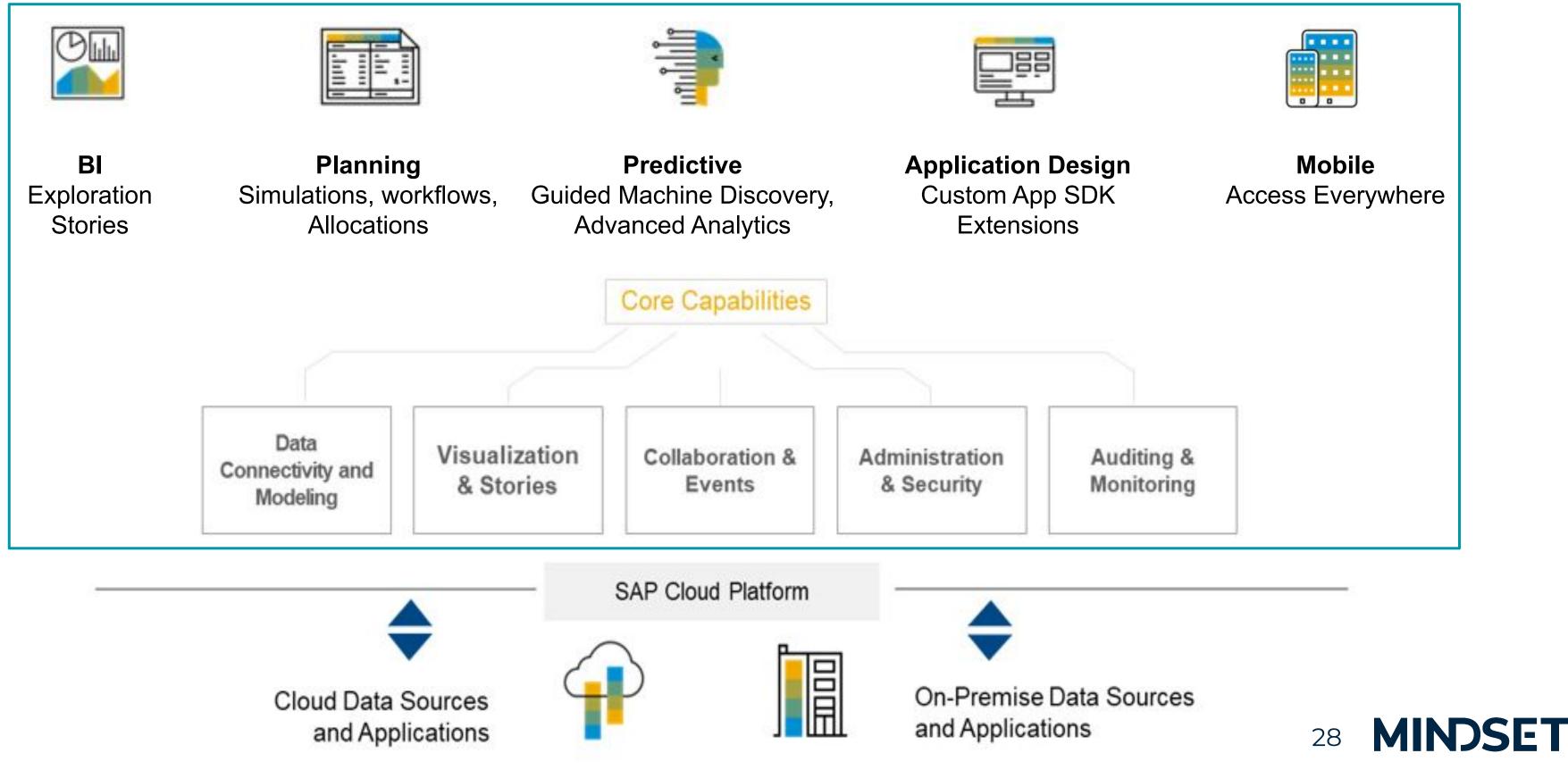
*SAC Solution Brief





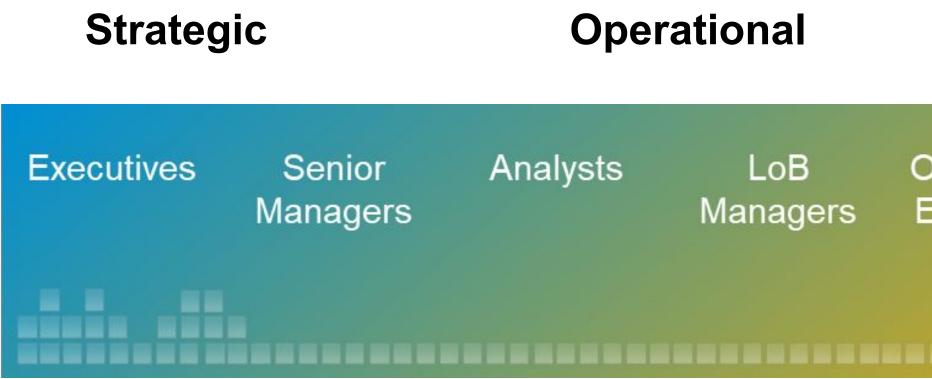
SAP Analytics Cloud (SAC)

Unified experience for Planning, BI and Predictive all in one service Live data connectivity enables SaaS for everyone End-to-end analytics for the Intelligent Enterprise



SAC - Personas

How do you account for the **diversity** of data, decisions, and decision makers?



Tactical

Operational Employees Front line Workers



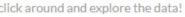
SAC - Business Intelligence

- Dashboarding and _ reporting
- Live connectivity for _ real time data
- Interactive
- Drill Down
- Can embed in Fiori
- Publishing —

Sample: Summary Q1 (2014) – Q4 (2016)

This page outlines sales for the fictional company "The Best Run Juice Company". Feel free to click around and explore the data!







SAC - Plan Simple

- Rich modeling built for the business
- Powerful data entry capabilities
- Native collaboration and cell commentary
- Private versioning
- What-if simulations
- Predictive forecasting
- Single-click variance analysis
- Workflow and task assignment
- Allocations
- Smart analysis
- Excel integration

Revenue Bresildow a w ords	D.	
G& Accesse	Regions	Fraducts
) Greekenene	✓ Girbal	₩ All Produ
) Cruixe
		3 Mourta
) Raceg
		3 Youft
		3 Croin B
	> United States	✓ ALProdu
		> Cruite
		3 Horta
) Raceg
		3 Youth
) Cross B
200.93 	401.70 +0	117.31 1.1 *
	Feb	ter .
,185		
380 Q3 2028		01

dict

	Atal		Budget	Previous Forecast.	Smart Prediction					
-	¥ 2000	> 01 (2020)) 2020	> 2020	¥ 2020	> Q1 (2520)	3 02 (2020)	> 03 (2020)) 04 (2020)	
	1,167.00	1.187.00	5,775.98	5,000,15	4,537.72	1,181.00	L081-45	1.112.51	1.19L.70	-900.47
	434.96	434.94	1,607,86	1,855.47	1,336.50	434.36	253.66	299.32	100.74	-816.57
	125.05	125.09	3,473.34	1,412.33	1354.02	325.09	201.44	274.95	205.3.8	201.71
	173.06	173.04	724.26	729.27	779.15	173.06	196.34	201.04	201.63	103
	85.22	85.22	300.76	85.53	895.88	m.22	195.10	201.84	202.4.3	
	148.71	148.71	735.55	725.58	573.01	144.71	130.79	134.56	131.56	112.55
	483.22	483.22	1.234.02	2,075,43	1,514.90	465.22	337.28	342.87	101.50	-040.53
	177.07	177.07	708.17	715.H	(98.85	171.07	12 20	93.33	96.21	-296.31
	132.39	132.39	642.87	574.95	389.79	131.10	84.22	15.29	47.04	085.05
	71-45	20.m	235.78	300.05	255.13	71.45	60.20	6156	62.82	21.0
	34.69	34.05	157.33	148-88	229.38	34.69	40.30	61.56	63.63	20.3
	98.68	46.68	509.85	295.38	191.00	57.52	40.20	41.04	41.98	-10110

Lauger Strathedctor

210.70 -511	10154 101	325.59	965.16 305	104.55 -04	152.84 -300	331.45 109	985.39 -333	129.87 -09	339.37 \100	341.87 -42	1026.11	
Apr	May	Jun		,14	Aug	5ep		Qiz.	Nov	0ec		
92			92	Q3			03	Q4			Q4	
												1.1

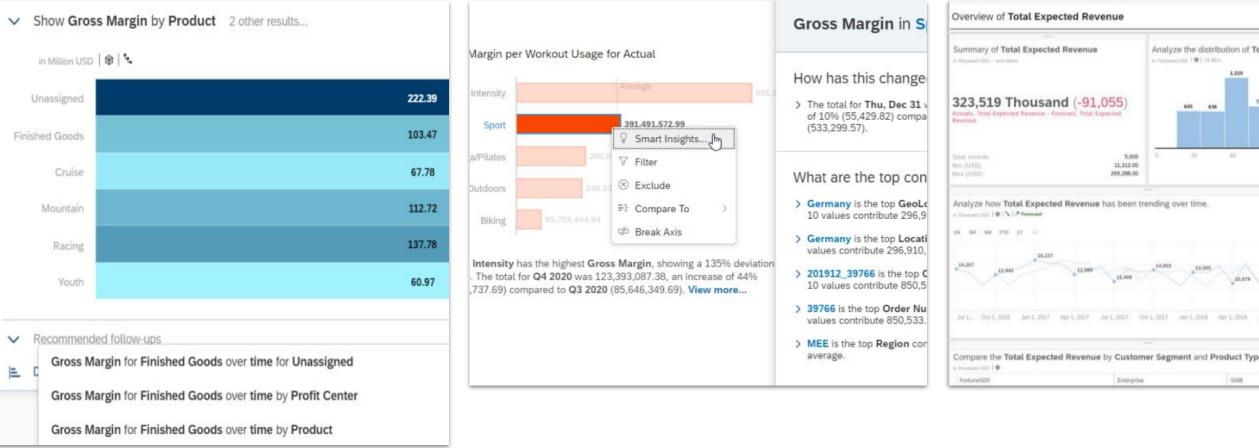
31 MINDSET

SAC - Augmented Analytics

Conversational Search to Insight

Automated Insights Smart Insights & Forecasting

Automated Discovery Smart Discovery



Ask questions conversationally and SAC finds and visualizes your answers Automatically add forecasts and find top influencers in your data, shown in natural language

Automatically generate stories that reveals trends, relationships, patterns, and outliers in your data

Information Worker

Global Performance Indicators Analyze the distribution of Total Expected Revenue to see the r Target Statistic Data Partit Target Cate Training Training Validatio Analyze the Validatio Influencer Contributions Influenc BODILY INJURY AMOUNT The Total E INCOME_CATEGORY AGE identify the INCOME ESTIMATE 8.95% DAYS_TO_REPOR 6.89%

Run regression and classification scenarios,and generate forecasts without data scientists

Predictive Analytics

Smart Predict

Citizen Data Scientist



SAC - Application Designer

Enables analytics application designers to create centrally governable analytic contents, ranging from guided analytics dashboards to sophisticated planning and smart applications

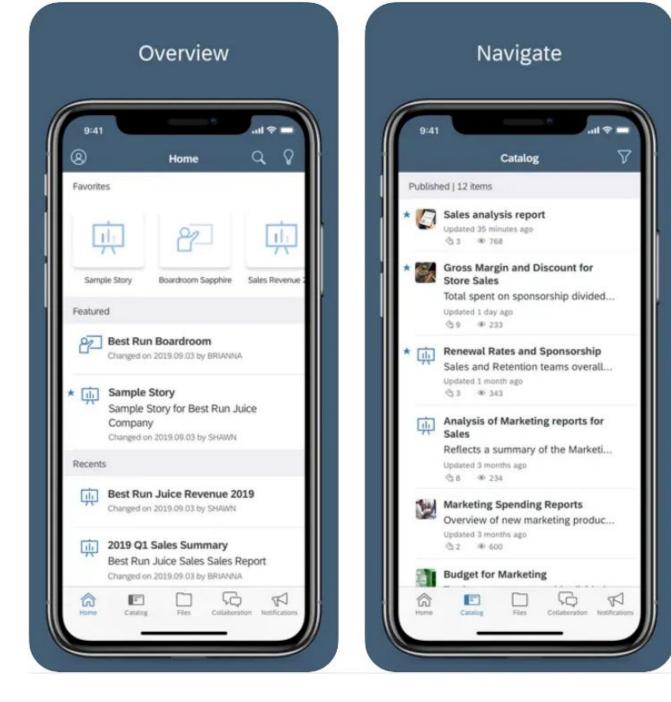
File Views 옥~ 명~ 립~ ペ~ 🏦	Insert	Tor	als Î0 ≦⇒		Data C ~
					0.
arch Q	💭 Canvas	Dropdo			
📓 lcon_Discount_Details 🌾			iox Group	3	-
📓 Icon_Gross_Margin_D(🎋	Gross Margin	Radio 8	Button Gro	oup	
🖃 Icon_Settings 🛛 🍂	in Thousand USD	📼 Button			
Table_Config		🖓 🛛 Filter L	ne		
AA Chart_Title	235,037 (+1	🖉 Image			
🛋 Chart 🔗		Shape			
🛗 Table 🍂	72.	AA Text		1	
Dropdown_Hierarchies /x			ader		
PropDown_Dimension: /x	procession and a second second	-			
T DropDown_Measure_C 🎊	Gross Margin	Sec. and	1.00		
E Chart_Gross_Margin	ellals to antine tout		lization		
Chart_Discount	Click to enter text	≣∔ Data A	ction Trigg	er.	
Chart_Quantity_Sold	in mousana	🕒 Clock			
	Gross Margin Plan Or	Ω Symbo	l.		Gross
A Header_Subtitle		66 Predict	ive Model		
AA Header_Title	\$226,246 \$3	141,933	\$212	833	\$2
AA Border					
Copup_Discount_Details					
	•				
✓ ☐ Popup_Discount_Details					
✓ C Popup_Discount_Details I Popup_Discour /x	1				
 Popup_Discount_Details Popup_Discourt_A Popup_Discount_De 	1				
Popup_Discount_Details Popup_Discount_A A Popup_Discount_De AA Popup_Discount_De					
 ✓ Popup_Discount_Details ☑ Popup_Discount_/x AA_Popup_Discount_De AA_Popup_Discount_De E_Chart_Discount_Details 					
 Popup_Discount_Details Popup_Discount_A APopup_Discount_De APopup_Discount_De Chart_Discount_Details Popup_Gross_Margin_D 					
 Popup_Discount_Details Popup_Discount_A APopup_Discount_De APopup_Discount_De Popup_Discount_Details Chart_Discount_Details Popup_Gross_Margin_D Popup_Gross_N /x 	雪 /Table	_	ħ.	110 97	// se
 Popup_Discount_Details Popup_Discount_A APopup_Discount_De APopup_Discount_De Chart_Discount_Details Popup_Gross_Margin_D Popup_Gross_Y /x 	P Dropdown_Hierarchies		A 1	98	var T
 Popup_Discount_Details Popup_Discount_A APopup_Discount_De APopup_Discount_De Popup_Discount_Details Chart_Discount_Details Popup_Gross_Margin_D Popup_Gross_N /x 	Dropdown_Hierarchies DropDown_Dimensions		^∧ ,∧ 1		var T var T
 Popup_Discount_Details Popup_Discourt_A APopup_Discount_De APopup_Discount_De Popup_Discount_Details Chart_Discount_Details Popup_Gross_Margin_D Popup_Gross_Y /x 	P Dropdown_Hierarchies P DropDown_Dimensions P DropDown_Measure_G		A 1	98 99 180 101	van T van T van T
 Popup_Discount_Details Popup_Discount_A APopup_Discount_De APopup_Discount_De Popup_Discount_Details Chart_Discount_Details Popup_Gross_Margin_D Popup_Gross_N /x 	Dropdown_Hierarchies DropDown_Dimensions DropDown_Measure_G DropDown_Measure_G Chart_Gross_Margin		^∧ ,∧ 1	98 99 180 101 182	van T van T van T van T
 Popup_Discount_Details Popup_Discount_A APopup_Discount_De APopup_Discount_De Chart_Discount_Dets Popup_Gross_Margin_D Popup_Gross_Y /x 	Dropdown_Hierarchies Dropdown_Dimensions DropDown_Dimensions DropDown_Measure_G E. Chart_Gross_Margin E. Chart_Discount		^∧ ,∧ 1	98 99 180 181 182 183 184	var T var T var T var T for (T
 Popup_Discount_Details Popup_Discount_A APopup_Discount_De APopup_Discount_De Popup_Discount_Details Chart_Discount_Details Popup_Gross_Margin_D Popup_Gross_N /x 	Dropdown_Hierarchies DropDown_Dimensions DropDown_Measure_G Chart_Gross_Margin Chart_Discount Chart_Discount Chart_Ouanthy_Sold		^∧ ,∧ 1	98 99 180 181 182 183 184 185 186	van T van T van T van T for (T }
 Popup_Discount_Details Popup_Discount_A APopup_Discount_De APopup_Discount_De Popup_Discount_Details Chart_Discount_Details Popup_Gross_Margin_D Popup_Gross_N /x 	Dropdown_Hierarchies DropDown_Dimensions DropDown_Measure_G Chart_Gross_Margin Chart_Discount Chart_Ouantity_Sold A Header_Subtite		^∧ ,∧ 1	98 99 180 181 182 183 184 185 186 187	van T van T van T van T for (T } Popup
 Popup_Discount_Details Popup_Discount_A APopup_Discount_De APopup_Discount_De Popup_Discount_Details Chart_Discount_Details Popup_Gross_Margin_D Popup_Gross_N /x 	Dropdown_Hierarchies DropDown_Dimensions DropDown_Measure_G Chart_Gross_Margin Chart_Gross_Margin Chart_Discount Chart_Ouantity_Sold A Header_Subtite AA Header_Title		^∧ ,∧ 1	98 99 180 101 182 183 184 185 186 186 186 188 189	var T var T var T for (T } Popup Popup
 Popup_Discount_Details Popup_Discount_A A Popup_Discount_Details A Popup_Discount_Details Chart_Discount_Details Popup_Gross_Margin_D Popup_Gross_Margin 	Dropdown_Hierarchies DropDown_Dimensions DropDown_Measure_G E. Chart_Gross_Margin E. Cha		/ 1 / /	98 99 180 181 182 183 184 185 186 186 187 188 189 118	var T var T var T for (T } Popup Popup Table
 Popup_Discount_Details Popup_Discount_A A Popup_Discount_Details A Popup_Discount_Details Chart_Discount_Details Popup_Gross_Margin_D Popup_Gross_Margin 	Dropdown_Hierarchies DropDown_Dimensions DropDown_Measure_C E. Chart_Gross_Margin E. Chart_Gross_Margin E. Chart_Gross_Margin E. Chart_Oiscount E. Chart_Oiscount E. Chart_Oiscount A. Header_Subtitle A. Header_Tible A. Border C. POPUPS	iroups ••••	^∧ ,∧ 1	98 99 180 181 182 183 184 185 186 186 186 188 189 118 111 112	var T var T var T var T for (T } Popup Popup Table Table
 Popup_Discount_Details Popup_Discount_A A Popup_Discount_Details A Popup_Discount_Details Chart_Discount_Details Popup_Gross_Margin_D Popup_Gross_Margin 	Dropdown_Hierarchies DropDown_Dimensions DropDown_Measure_G E. Chart_Gross_Margin E. Chart_Discount E. Chart_Duantity_Sold A. Header_Subtite A. Header_Title A. Border POPUPS V To Popup_Discount_D	etails	* ! * ! *	98 99 188 181 182 183 184 185 186 187 188 189 118 111 112 113	var T var T var T var T for (T } Popup Popup Table Table
 Popup_Discour /x A Popup_Discount_De A Popup_Discount_Det Chart_Discount_Dets Popup_Gross_Margin_D Popup_Gross_//x A Popup_Gross_Margin 	Dropdown_Hierarchies DropDown_Dimensions DropDown_Measure_C E. Chart_Gross_Margin E. Chart_Gross_Margin E. Chart_Gross_Margin E. Chart_Oiscount E. Chart_Oiscount E. Chart_Oiscount A. Header_Subtitle A. Header_Tible A. Border C. POPUPS	etails t_Details_Clos	* ! * ! *	98 99 180 101 182 183 184 185 186 187 188 189 118 111 112 113 114 115	var T var T var T var T for (T

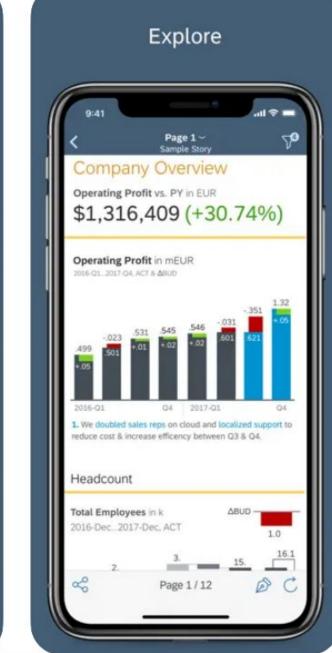
· 0~		Designer Run Analytic Application	
Discount ш in Thousand USD 303,132 (-17,788)	Quantity Sold 네 in Theusand USD 204,308 (-8,52	Show Styling Options For Table	
Product		Application Design Properties Name Table Context/Quick Menus Visible O	
Margin Original Sales Price Quantity sold	Gross Margin abs Dev 1	 ✓ Filter ✓ Sorting ✓ Ranking M Analytic ✓ Widget Background Color ⑧ ● ● ●	ic Application
<pre>st Nessures for Table TableHeasures = CheckboxGroup_Measure_Selecti TableFilter_Pattern_1 = "[Account_BestRun]_so TableFilter_Pattern_2 = "]"; TableFilter = ArrayUtils.create(Type.string); (var i=0; i<tablemeasures.length; i++){<br="">FableFilter.push(TableFilter_Pattern_1 + Curr</tablemeasures.length;></pre>	ld].[parentld].å[";	+ TableFilter_Pattern_2);	1
o_Table_Details_Chart_Dimesion.getDataSource(o_Table_Datails_Chart_Dimesion.getDataSource(e.getDataSource().removeDimensionFilter("Account e.getDataSource().setDimensionFilter("Account eMeasureFilter = TableFilter; ple.log("Table Measure Filter: "); ple.log(TableMeasureFilter);).setDimensionFilter("Account_Best nunt_BestRunJ_sold");		



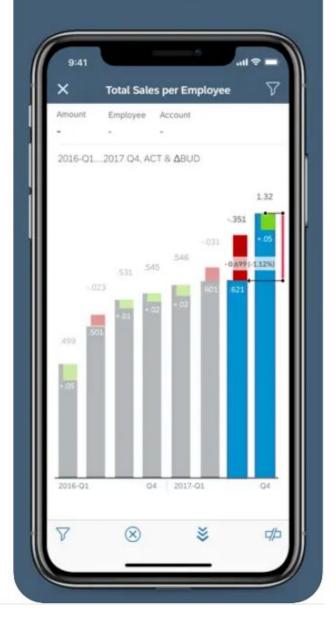
SAC - Mobile App

- Instantly mobilize your stories
- No additional development required
- IOs and Android





Gain insights





Business Content

Advanced Compliance Reporting Business ByDesign (Finance and Procurement) **Consumer Products Sales Planning** Financial Analytics Dashboard for SAP Analytics Cloud Environment, Health and Safety **Enterprise Contract Management** Entitlement Management Field Service Management Finance Finance Account Receivable – Invoice Payment Forecasting. Finance Contract Accounts (FI-CA) Finance Contract-based revenue recognition (CBRR) Finance for SAP S/4HANA Cloud Finance – Live based on Semantic Tags **Financial Compliance Management** Financial Products Subledger IFRS17 for S/4HANA Financial Consolidation for SAP S/4HC Cloud (BPE) Financial Planning & Analysis for SAP S/4HANA Cloud FI Operational Expense Planning Goods and Services Tax GST Analytics Group Reporting Planning for SAP S/4HANA (New) Human Experience Management Workforce Planning (New) Human Resources (SuccessFactors) Human Resources (SuccessFactors) – Simplified Chinese Localization Human Resources (SuccessFactors) (BPE) Human Resources Salary Planning HR Analytics for S4HANA Cloud and SAP SuccessFactors (SAP Best Practices) Intelligent Asset Management Integrated Business Planning & cross-model add-on (New) Integrated Financial Planning for SAP S/4HANA Integration Suite Liquidity Planning for SAP S/4HANA Cloud Logistics Execution Insights Dashboard Mobile Analytics (New) **Outcome-Based Business Insights** Order Management foundation SAP Marketing Cloud SAP Marketing On prem (2009) SAP Marketing On prem (1809)

SAP Marketing On prem (1909) Predictive Liquidity Planning (New) Process Control and Risk Management (New) Procurement Procurement: Contract Management Procurement: Enterprise Analytics for Procure Procurement for SAP S/4HC (BPE) Procurement: Order to Invoice (SAP Ariba) (N Procurement: Procure to Order (New) Procurement: Sourcing (New) Procurement: Spend Analysis (SAP Ariba) Product Carbon Footprint Analytics Product Cost Planning Product Footprint Management **Project and Portfolio Management** Project Budgeting & Planning S/4HC (BPE) **Project Staff Planning** Receivables Management for S/4HANA Cloud Qualtrics - Customer Satisfaction Score Qualtrics - Survey distribution and Analysis Qualtrics Touchpoint NPS Supply Base Optimization SAP S/4HANA for Financial Products Subledo SAP UI Logging Sample Content: "Guideline-based" Story Terr (Accessibility, Fiori, IBCS) (New) Sample Content: "What-if App" (New) Sales Analytics for SAP S/4HANA on-premise Sales Cloud for SAP S/4HANA (BPE) Sales Performance and Target Planning (CRM) Sales Cloud for SAP S/4HANA Cloud (BPE) SAP Sales Planning for SAP S/4HANA Cloud Service Cloud Analytics (CRM) Social Media Analysis Solution Manager: Test Suite Analysis Solution Manager IT Service Management Analytics Statistical Process Control (SPC) Toolkit

v)	Sales Performance and Target Planning (CRM) Sales Cloud for SAP S/4HANA Cloud (BPE) SAP Sales Planning for SAP S/4HANA Cloud Service Cloud Analytics (CRM) Social Media Analysis
ement (SAP Ariba)	Solution Manager: Test Suite Analysis Solution Manager IT Service Management
New)	Analytics Statistical Process Control (SPC) Toolkit SuccessFactors Workforce planning (BPE) Supply Chain Management: Life Sciences Dashboard Sustainability Control Tower (New) Sustainability Control Tower – lite (New) Supply Chain Management – Extended Service Parts Planning Transportation Management
ıd (BPE)	Trade Management Travel & Expense – Concur Treasury Management Vendor Management System (Fieldglass) Workforce Planning for S/4HC (BPE)
lger – Reporting	
mplates"	
e (New)	



THE INSIGHT

Marcelo Berger Associate Principal

marceloberger@mindsetconsulting.com



Our Solutions and Products

EXPLORE & DISCOVER

Accelerators Labs Industry & LoB PoVs Problem Finding DESIGN

Design Thinking Architecture Business Case Backlog DELIVER

Agile / Scrum DevOps Continuous Design

© 2022 Mindset Consulting, LLC. All rights reserved.

MANAGE

KPI Monitoring Support Backlog Grooming



mindsetconsulting.com

