

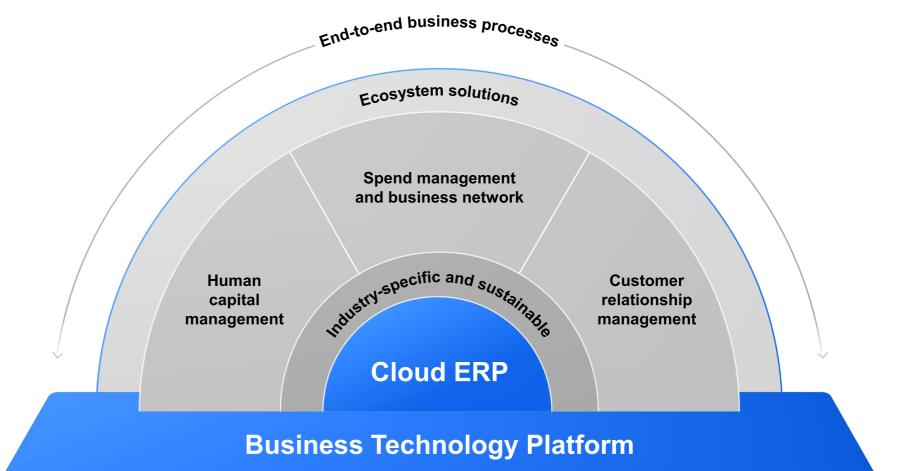
The SAP BTP Universe in a Nutshell - Analytics

Orla Cullen, SAP

Public



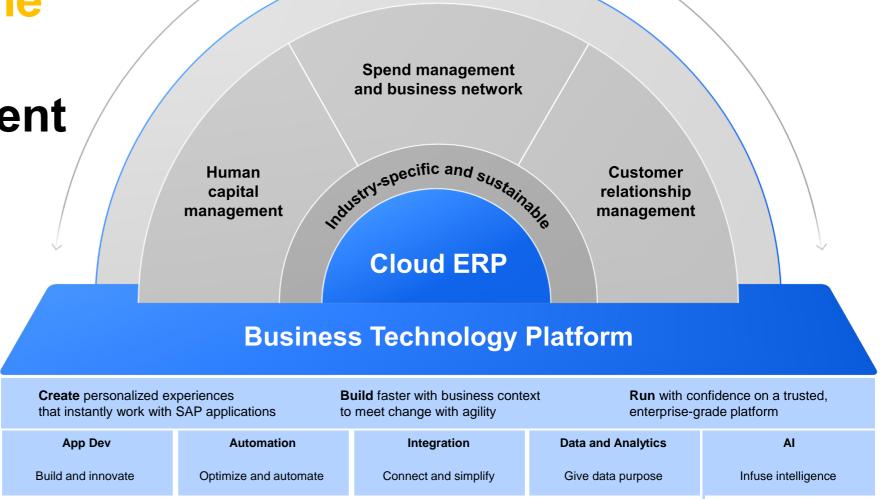
Enable every enterprise to become an intelligent, sustainable enterprise



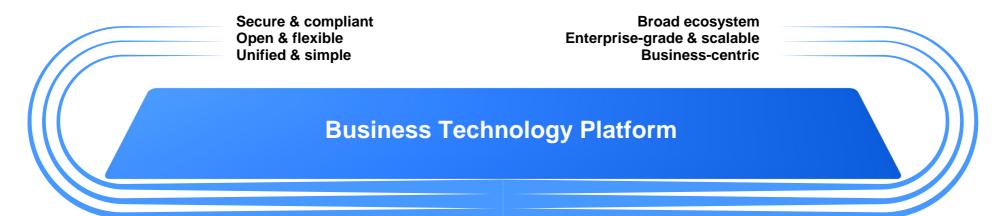
End-to-end business processes

Ecosystem solutions

SAP BTP is the foundation of the Intelligent Sustainable Enterprise

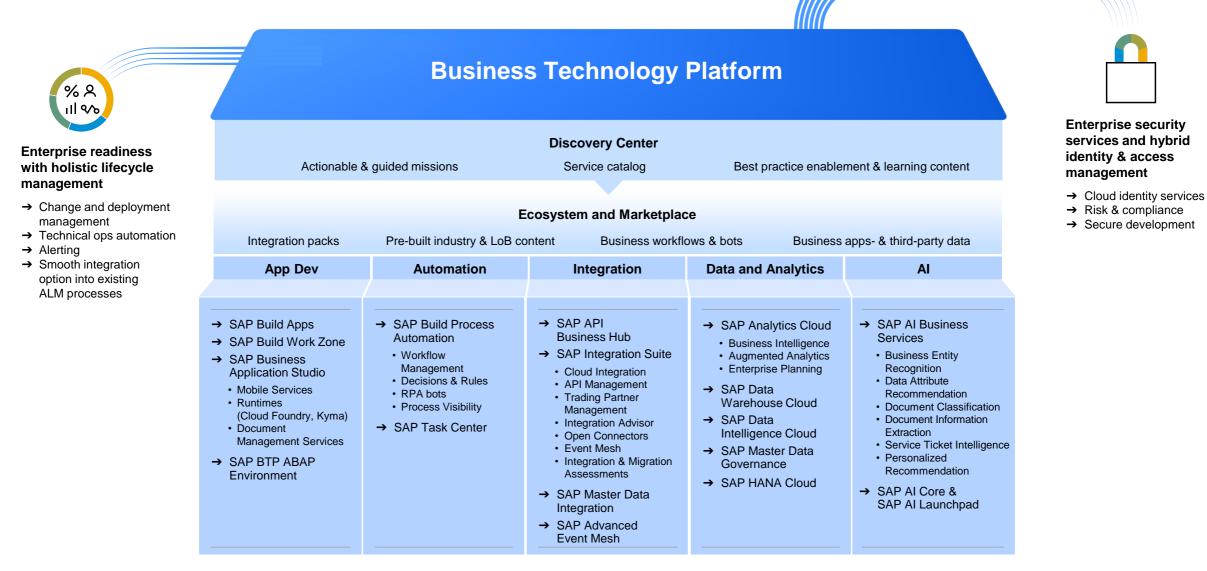


SAP BTP Cloud Capabilities

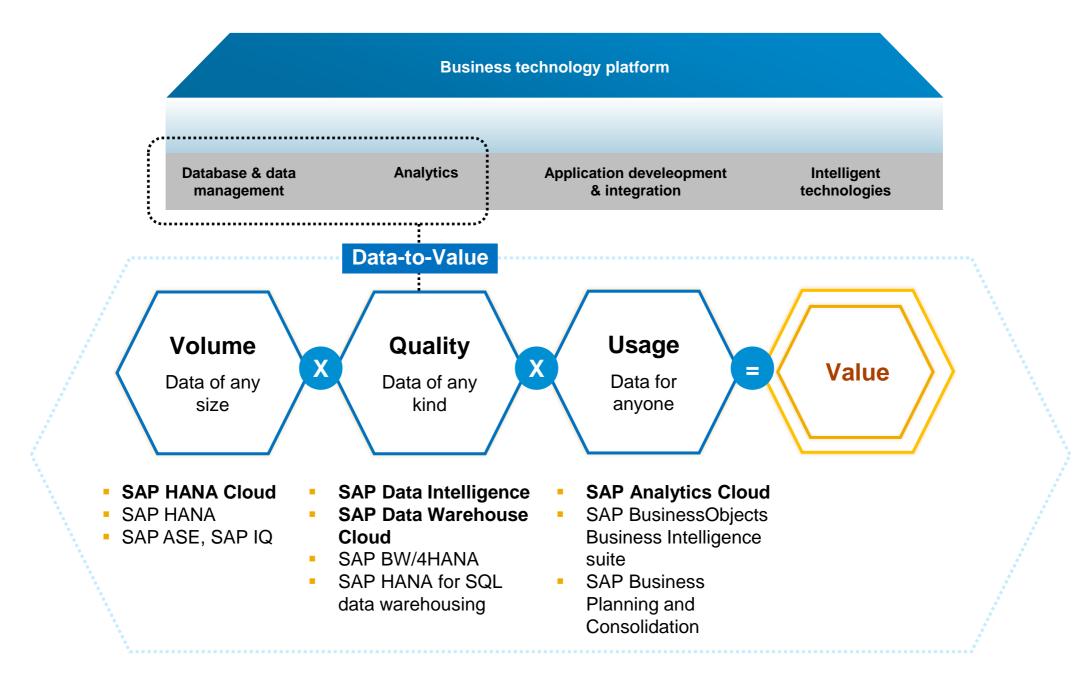


App Dev	Automation	Integration	Data and Analytics	AI
→ Visual Low-Code / No-Code experience	→ Workflow Management	→ Process integration	→ Database	→ Pre-built business AI models
→ Pro-code tooling	→ Robotic Process Automation	→ API led integration	→ Data management	
→ Digital experience	→ Process monitoring & analytics	→ Event based integration	→ Data warehouse	→ MLOps
→ DevOps	→ Automated document processing	→ Data integration	→ Analytics & planning	→ Responsible AI

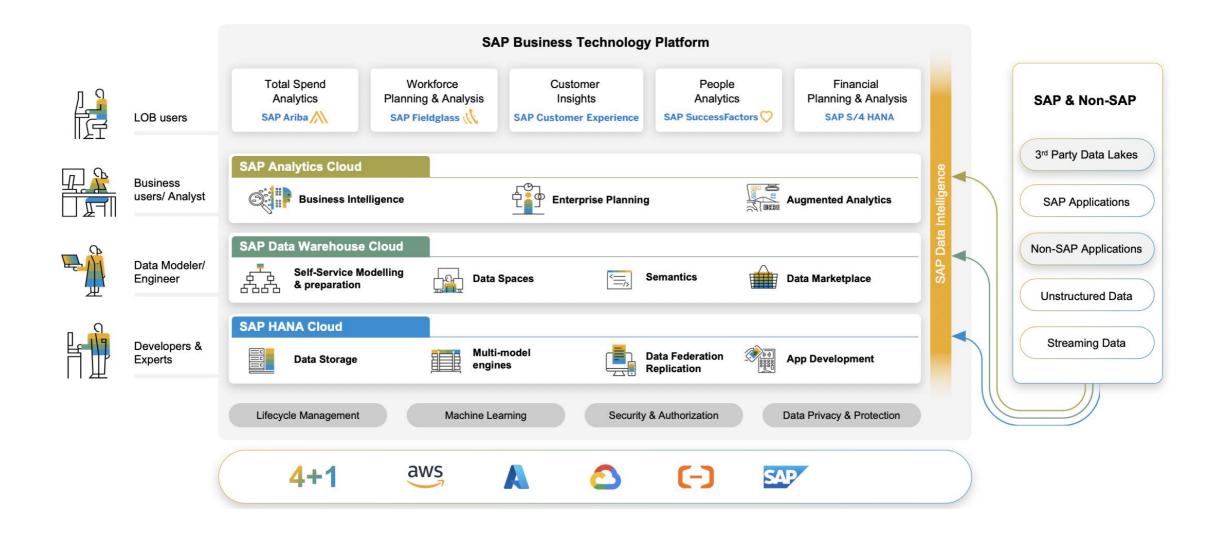
SAP BTP Cloud Services



Public



Data and analytics solutions as foundational elements of SAP BTP



SAP Analytics Cloud

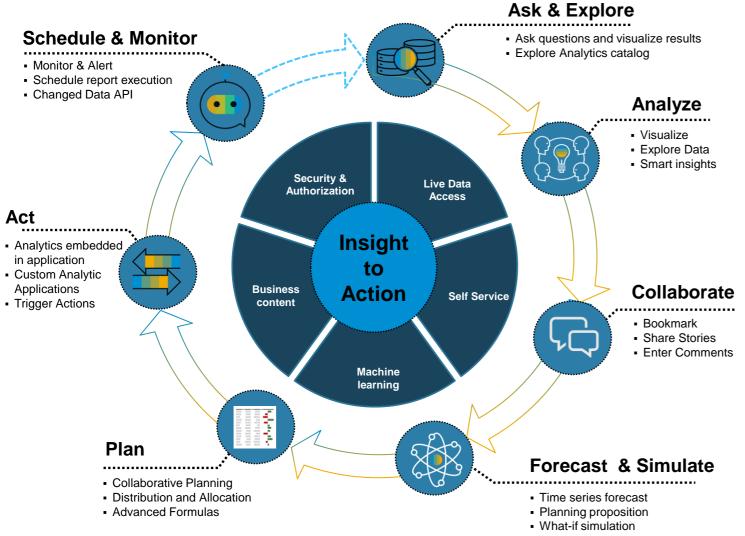




Decisions without Doubt

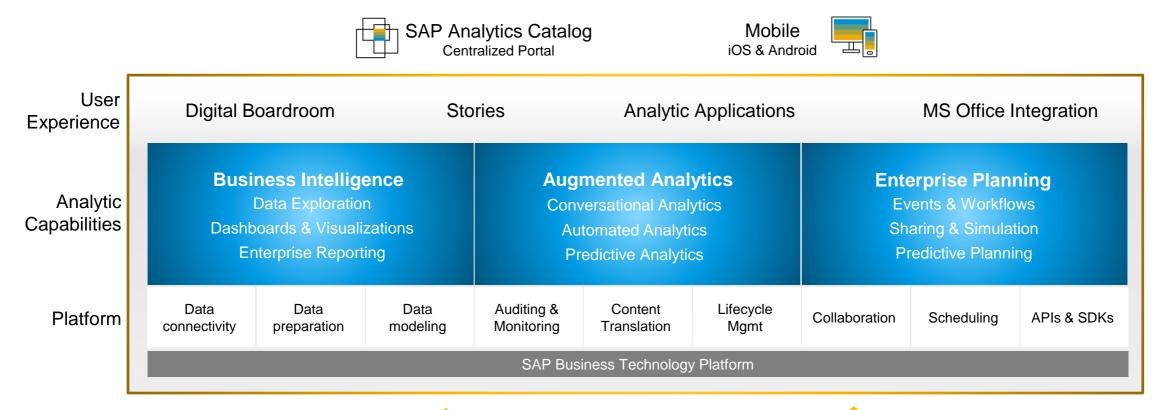
Support closed-loop decision making

SAP data and analytics solutions



- Increase agility with analytics and planning in one solution
- Utilize the full context of real-time SAP data
- Deliver high-performance analytics at scale
- Automate insights with machine learning
- Quickly compose specialized analytic apps
- Deliver analytics closer to the point of decision
- Connect financial and operational plans seamlessly integrated with SAP applications

SAP Analytics Cloud





and Applications

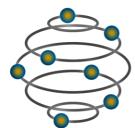


Applications

SAP ANALYTICS

Business Intelligence, Key Investment Areas

June 2022 Statement of Direction



INTELLIGENT ENTERPRISE



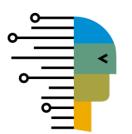
Enhance the role of SAP Analytics Cloud in the Intelligent Enterprise through Embedded Analytics and connectivity to SAP Cloud Applications.



ENTERPRISE READINESS



Focus on user productivity, time handling, performance and overall experience and interactivity for the users.



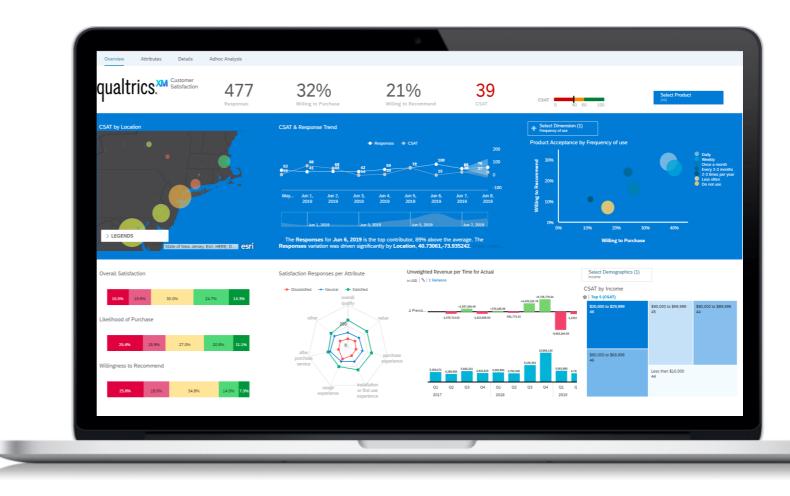
AUGMENTED ANALYTICS

Enhance the richness of our automated insights, and prioritize support for live data sources

Dashboards & Visualizations

Design and deliver stunning, interactive enterprise dashboards across all lines of business

- Extensive visualization library, geo maps powered by ESRI and custom R visualizations
- Define custom calculations, calculated dimensions, aggregations and more
- Display variance, dynamic text, custom tooltips, CAGR and more
- Easily comment, collaborate and share content via document link with other users



Data Analyzer

Query your data directly and perform ad-hoc analysis in a pivot-table style analysis view

- Supports SAP BW Live queries, SAP HANA Live views and SAP Analytics Cloud models
- Users can find a list of recent insights on the Data Analyzer start page
- Open an existing Insight or discover new insights by starting a new data exploration

×	SAP Analytics Cloud	Ξ	< SAP	🎽 🖓 Data Analyz	er		
俞	Home	Dat	a ✓ CC C		isplay Tools		
	Files	V ₊			3		
App	5		PM_SALES	oduct Category			
ф,	Stories				Calendar Year/	01.2020	02.202
					Measures	Net Value stat curr	Net Value stat cu
(📫	Analytic Applications		Country	Product Category	Product		
			FR France	Mobile Devices	PDA Professional	1,126,482	1,937,29
2	Data Analyzer				PDA Standard	506,945	804,59
	Data Analy	/zer		Monitors	Compact Screen	2,124,354	1,324,35
2	Digital Boardroom				Large Screen 21	1,045,481	1,456,79
				Notebooks	Notebook Standa	1,962,335	2,117,81
Fe	Datasets				Notebook Standa		855,48
			DE Germany	Mobile Devices	PDA Professional	576,795	1,538,63
	More	>			PDA Standard	2,111,970	1,686,61
000				Monitors	Compact Screen	3,245,578	2,703,25
					Large Screen 21	1,545,394	1,367,77
				Notebooks	Notebook Standa	344,065	1,584,24
ė,	Workspace Manageme	nt			Notebook Standa	1,514,347	794,79
			GB Great B	Mobile Devices	Easy Hand III	869,800	257,70
	Content Network				Easy Hand V	800,877	692,07
				Monitors	Ergo Screen	701,598	985,01
₽	Security	>			Flat Future	1,659,870	945,97
				Notebooks	Notebook Basic 15	701,598	287,04
ŝ	Transport	>			Notebook Basic 17	674,045	253,20
ম্প	mansport		US USA	Mobile Devices	PDA Professional	3,698,583	1,639,15
	0 ×				PDA Standard	2,053,282	5,392,32
99	Connections			Monitors	Compact Screen	2,322,247	4,777,88
					Large Screen 21	1,978,204	3,931,36
(i)	System	>		Notebooks	Notebook Standa	3,022,778	3,111,17

Enterprise Reporting

Design reports and distribute to the workforce ondemand or scheduled

Report Formatting

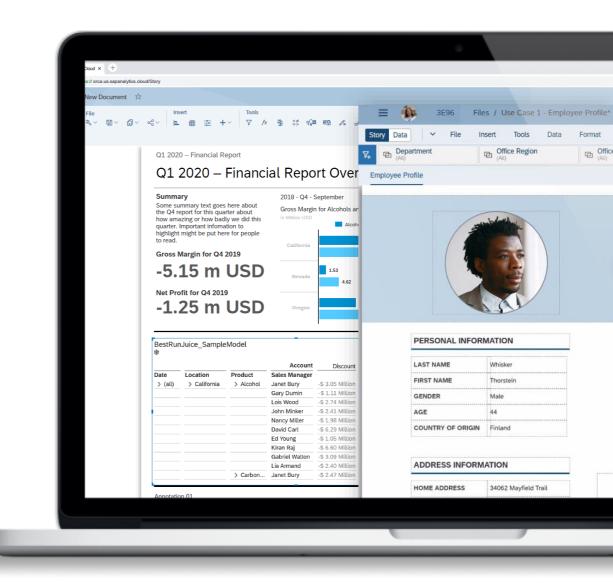
- Multi-page reports
- Dynamic label fields, relative positioning
- Report sections, headers and footers
- Paginated export to pdf and pptx

Report Delivery

- Schedule and distribute reports to SAP Analytics Cloud and non-SAP Analytics Cloud recipients
- Burst personalized content to SAP Analytics Cloud recipients based on recipient authorization

A modern architecture for reporting

- Easier maintenance by pushing some of the report semantics into the modelling layer (calculations, SAP Analytics Cloud public dimensions)
- Use new features such as KPI tiles, freeform input controls, CSS themes, data change insights, and commenting features



Enterprise Planning

What-If Analysis

Simulate "what-if" scenarios to test possible outcomes and make more confident decisions

- Perform what-if visually with widgets and value driver trees, or within a table
- Simulate from top to bottom or bottom to top
- Simulate questions like:
 - What if you increase discount by 20%?
 - What if you hire more staff?
 - What if costs of goods increased?



Extended Planning & Analysis

Remove barriers between Planning & Analysis

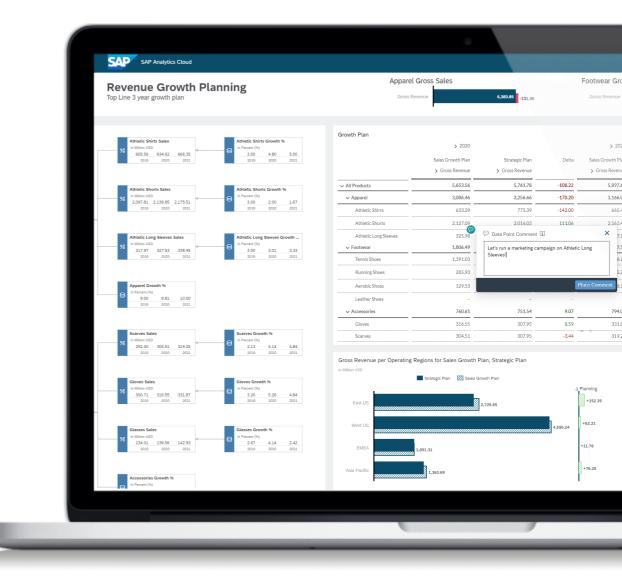
- Integrated BI, Planning, and Predictive
- Agile, streamlined planning and analysis with native collaboration & commenting

Access powerful planning capabilities

 Customized data spreading, workflow & process management, unique versioning & simulation tools, and robust scenario analysis

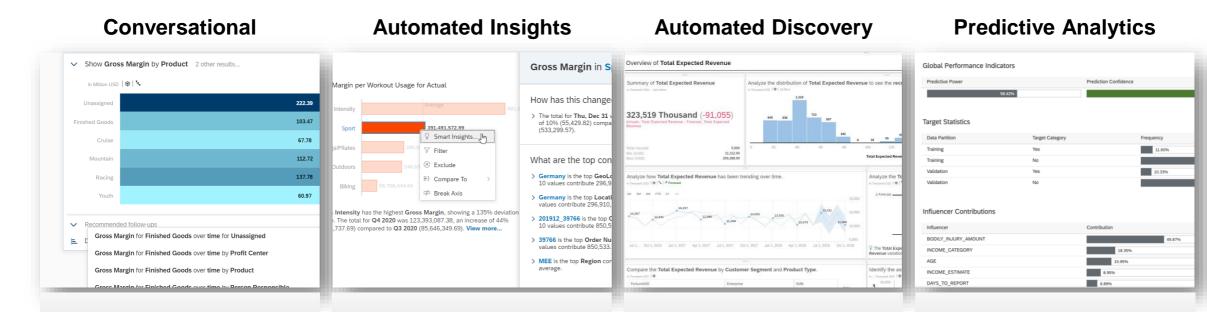
Deliver planning for an Intelligent Enterprise

 Consolidate planning onto a single platform by leveraging best-in-class connectivity to SAP solutions, and pre-delivered Best Practice content to realize accelerated time-to-value



Augmented Analytics for Everyone

Make smarter and faster decisions with automated insights powered by machine learning



Ask questions conversationally and get answers visualized

Automatically find top influencers in your data, explained in natural language Automatically generate stories that reveals trends, relationships, patterns, and outliers in your data Run regression and classification scenarios, and generate forecasts without data scientists

Information Worker

Smart Predict

Build trusted and actionable predictions without the help of a data scientist

- Classification: "Create a sorted list of prospects to focus on for this product"
- Regression: "Give me revenue estimates for each customer for the next 6 months"
- Time Series: "Forecast revenue for each product and each point of sales daily for the next 30 days

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						Jour
	Overview 🗸					
	Global Performance Indicators				0	
	Predictive Power		Prediction Confidence			
		84.83%			98.95%	
	Variable Contributions				0	
					÷	
	Variable		Contribution			
	JobLevelChangeType		16.59%			h
	Current_Functional_Area		15.59%			
	Tenure		12.54%			
	Change_in_Performance_R		11.74%			
	Previous_Region		6.58%			
	Target Statistics				٢	
	Data Partition	Target Category		Frequency		
	Training	No		Trequency	90.95%	
	Training	Yes		9.05%		
	Validation	Yes		8.92%		

Predictive Planning

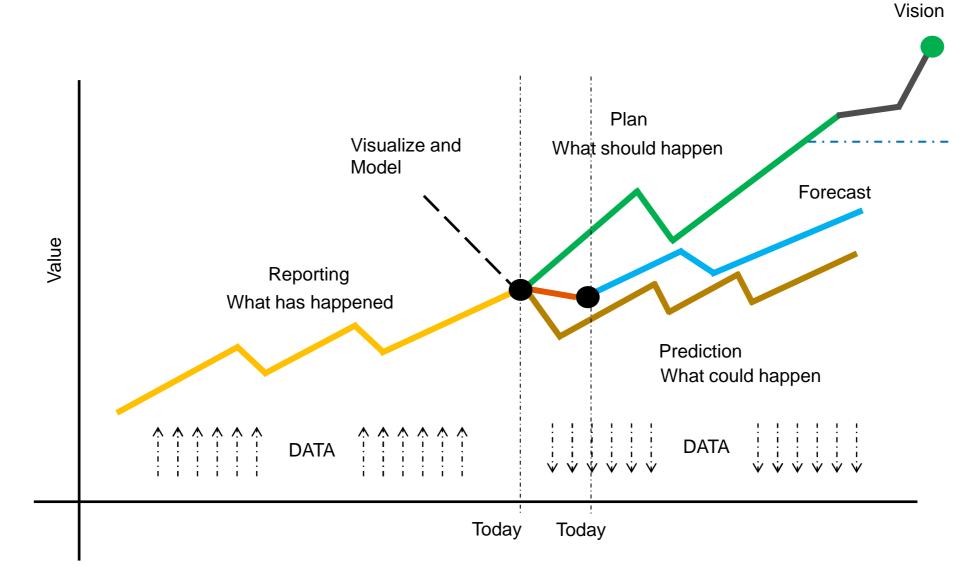
Combine the power of planning and predictive forecasting to accelerate planning cycles

- Planners generate accurate forecasts on top of actuals to accelerate their day-to-day planning activities
- Add predictive forecasts back to planning models to support data-driven business decisions
- All without the need for machine learning expertise

Revolues Forecast Smart Prediction S musp Smart Prediction S 2020 S 202	Nevenue i orecast	Prediction Via Smart P	redict		C
Social Regions Products 5 098,19 5 053,56 > Gross Revenue < Global < All Products 5 098,19 5 053,56 > Cruise 1 855,47 1 479,76 -3 > Mountain 1 412,33 1 283,85 > Racing 7 39,27 871,85 > Youth 365,53 784,02 > Youth 365,53 784,02 > Vouth 365,53 784,02 > Youth 365,53 784,02 > Vouth 365,53 303,74 > Vouth 368,93 311,72 > Youth 148,80 311,72 > Youth 348,80 311,72 > Youth 148,80 311,72 > Youth 348,80 439,86 448,09 +					
Gil Account Regions Products 5 098,19 5 053,56 > Gross Revenue ~ Global ~ All Products 5 098,19 5 053,56 > Cruise 1 855,47 1 479,76 3 > Mountain 1 412,33 1 283,35 > Nouthin 1 412,33 1 283,35 > Youth 365,53 744,02 > Youth 365,53 744,02 > Cross Bike 725,59 634,57 > United States ~ All Products 2 075,43 2 030,74 > Vouth 365,53 744,02 300,74 300,74 > United States ~ All Products 2 075,43 2 030,74 > Youth 360,95 347,47 347,47 > Youth 148,80 311,72 347,47 > Youth 148,80 311,72 33,36 253,36 Predictive Forecast vs Budget * Youth 148,80 311,72 346 Imm USD 1 Wariance * 390,93 408,70 387,38 1 187,00 415,389				Previous Forecast	Smart Prediction
> Gross Revenue > Global > All Products 5 098,19 5 053,56 > Cruise 1 855,47 1 479,76 -3 > Mountain 1 412,33 1 283,35 > Racing 739,27 871,85 > Youth 365,53 784,02 > Cross Bike 725,59 634,57 > United States > All Products 2 075,43 2 030,74 > Cruise 755,34 599,66 544,57 > Mountain 574,95 518,83 518,83 > Cruise 755,34 599,66 53,86 > Mountain 574,95 518,83 518,83 > South 148,80 311,72 503,36 > Youth 148,80 311,72 53,36 Predictive Forecast vs Budget 205,1 100,0 100,0 In USD 1 Variance 50 40,0 41,0 390,93 408,70 387,38 1 187,00 415,389 1 283,94 410 45 50 50 40,0 40,0 10 1 Variance 50 50				> 2020	> 2020
> Cruise 1 855,47 1 479,76 -3 > Mountain 1 412,33 1 283,35 -<	G/L Account	Regions	Products		
> Mountain 1 412,33 1 283,35 > Racing 739,27 871,85 > Youth 365,53 784,02 > Cross Bike 725,59 634,57 > United States > All Products 2 075,43 2 030,74 > Cruise 755,34 599,66 518,53 > Mountain 574,95 518,53 > Vouth 148,80 311,72 > Youth 148,80 311,72 > Cross Bike 295,38 253,36	> Gross Revenue	✓ Global	✓ All Products	5 098,19	5 053,56
> Racing 739,27 871,85 > Youth 365,53 784,02 > Cross Bike 725,59 634,57 > United States > All Products 2 075,43 2 030,74 > Cruise 755,34 599,66 518,53 > Mountain 574,95 518,53 > Nouth 148,80 311,72 > Youth 148,80 311,72 > Cross Bike 295,38 253,36			> Cruise	1 855,47	1 479,76
Youth 365,53 784,02 > Cross Bike 725,59 634,57 > United States ~ All Products 2 075,43 2 030,74 > Cruise 755,34 599,66 > Mountain 574,95 518,53 > Racing 300,95 347,47 > Youth 148,80 311,72 > Cross Bike 295,33 253,36			> Mountain	1 412,33	1 283,35
> Cross Bike 725,59 634,57 > United States ~ All Products 2 075,43 2 030,74 > Cruise 755,34 599,66 > Mountain 574,95 518,53 > Mountain 574,95 518,53 > Racing 300,95 347,47 > Youth 148,80 311,72 > Cross Bike 295,38 253,36			> Racing	739,27	871,85
> United States All Products 2 075,43 2 030,74			> Youth	365,53	784,02
> Cruise 755,34 599,66 > Mountain 574,95 518,53 > Racing 300,95 347,47 > Youth 148,80 311,72 > Cross Bike 295,38 253,36			> Cross Bike	725,59	634,57
> Mountain 574,95 518,53 > Racing 300,95 347,47 > Youth 148,80 311,72 > Cross Bike 295,38 253,36		> United States	\checkmark All Products	2 075,43	2 030,74
> Racing 300,95 347,47 > Youth 148,80 311,72 > Cross Bike 295,38 253,36 Predictive Forecast vs Budget In m USD 1 Variance			> Cruise	755,34	599,66
Youth 148,80 311,72 > Cross Bike 295,38 253,36 Predictive Forecast vs Budget Inm USD 1 Variance 390,93 408,70 387,38 1 187,00 415,389 1 283,94 439,61 439,86 448,09 416 +0 -5 9 -38 439,61 439,86 448,09 Jan Feb Mar Apr Oct Nov Dec Q1 Q1 Q2 Q3 Q4 Q4 Q4 Q4			> Mountain	574,95	518,53
> Cross Bike 295,38 253,36 Predictive Forecast vs Budget in m USD 1 Variance			> Racing	300,95	347,47
Predictive Forecast vs Budget in m USD 1 Variance 390,93 408,70 387,38 1187,00 415,389 388 439,61 439,86 448,09 +10 55 73 388 439,61 439,86 448,09 +11 415,389 388 439,61 439,86 448,09 +10 55 75 75 75 75 75 75 75 75 75 75 75 75			> Youth	148,80	311,72
in m USD 1 Variance 390,93 408,70 387,38 1187,00 415,389 38 439,61 439,86 448,09 +16 +0 55 7 38 408,70 387,38 +11 45,389 38 439,61 439,86 448,09 -55 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7			> Cross Bike	295,38	253,36
390,93 408,70 387,38 +11 415,389 -38 439,61 439,66 448,09 +16 +0 -5 -6 +0 +1 +9 Jan Feb Mar Apr Oct Nov Dec Q1 Q1 Q2 Q3 Q4		t			
Q1 Q1 Q2 Q3 Q4		387,38	415,389	-38 439,61	
	Q1				Nov Dec

Public

BI, Predictive and Planning – Better Together





F. Hoffmann–La Roche AG

Powering Predictive Financial Forecasts with SAP Analytics Cloud

2

Hours to generate a CHF 4 billion financial forecast vs **several weeks** involving 30 Finance resources

7%

Improvement in forecast accuracy using **predictive planning** vs manual process

14k

forecast entry data points now automated with SAP Analytics Cloud (out of 20k)

Askdata integration into SAP Analytics Cloud H2 2023

Targeting casual end user

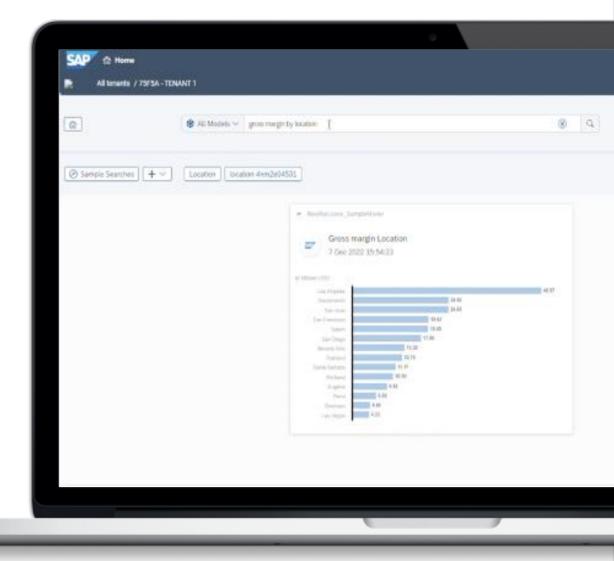
- Transformer based natural language query and generation improves language understanding
- Lightweight personalized feeds and watchlists
- Multi-language

Integrated

- All data models both live and acquired
- Embedded in digital workspaces and enterprise applications
- Prebuilt content and synonyms

Smart

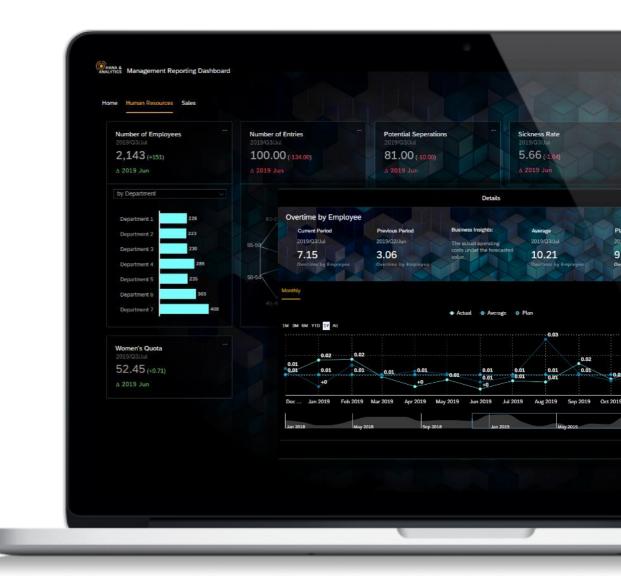
- Continuous learning
- Integrated with Smart Insights and Smart Discovery



Analytic Applications

Fulfill unique and advanced use cases and workflows with analytic applications built with Analytics Designer

- Develop analytic applications that bring together Business Intelligence, Planning, and Predictive capabilities
- Start from existing content, reuse user stories widgets, customize, integrate and extend
- Guide the users and adjust the widgets behavior based on their expectations



Public

Optimized Story: story unification

Design

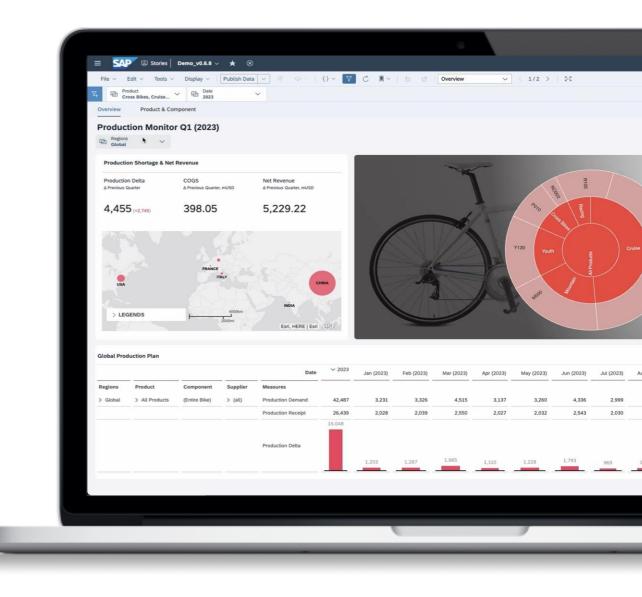
- Self-service story building
- Extends existing optimized story capabilities
- No-code features of analytic applications, such as custom widgets, theming

Extend

- Smooth extension through scripting
- Low-code and advanced coding capabilities of analytic applications

Present

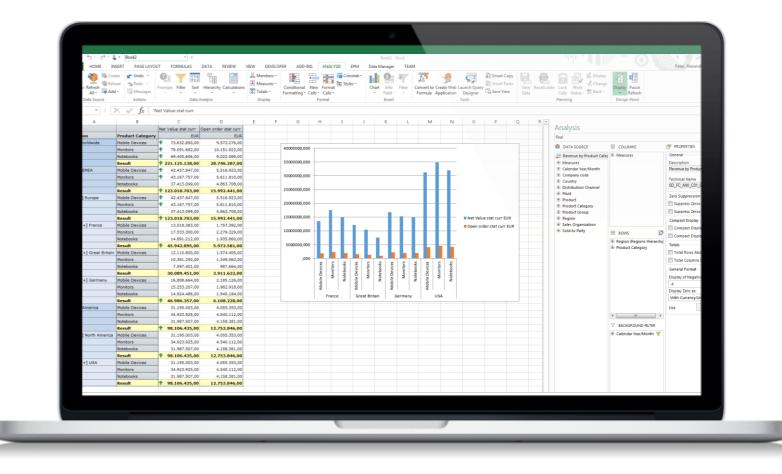
- Ability to compose your presentation
- SAP Digital Boardroom concepts, such as navigation paths through story contents



SAP Analysis for Microsoft Office

Leverage the familiar Excel interface with SAP Analytics Cloud for reporting and centralized planning

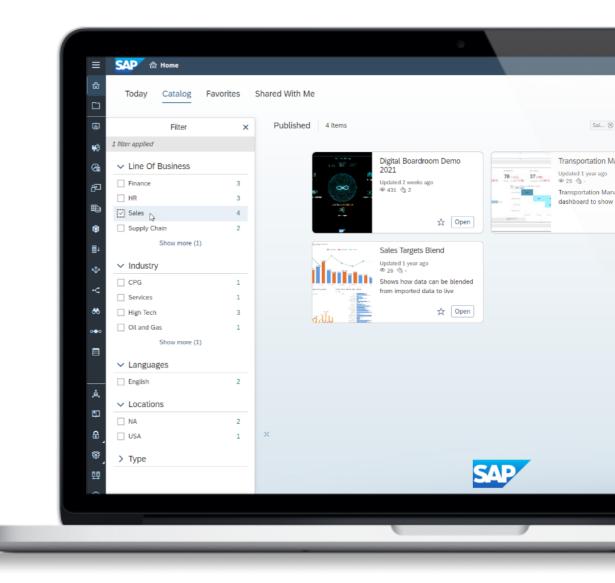
- Design formatted reports in Excel
- Analyze acquired data and live data from SAP BW, SAP BW/4HANA, SAP HANA, and SAP S/4HANA via SAP Analytics Cloud connections
- Available with SAP Analytics Cloud subscription



SAP Analytics Catalog

Increase productivity and raise user adoption of key analytics by simplifying access to analytics

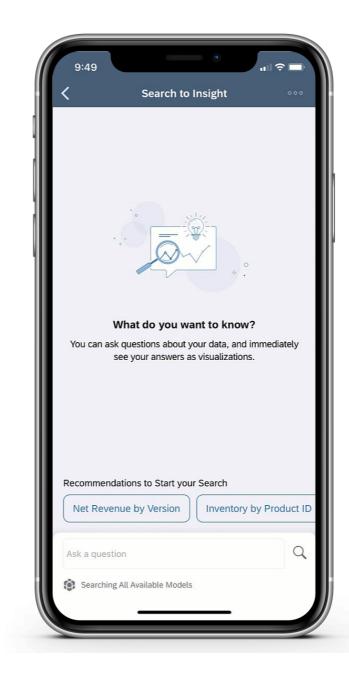
- Centralize access to all analytics across your organization
- All analytics including SAP, non-SAP, cloud or onpremise can be added to SAP Analytics Catalog
- Display analytics with consistent business & technical metadata
- Included in all SAP Analytics Cloud licenses



SAP Analytics Cloud Mobile

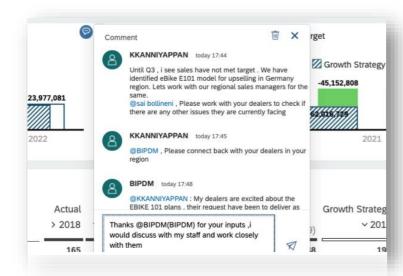
Stay informed and connected to your analytics, any time, any place with SAP Analytics Cloud Mobile App

- View your analytics from your iOS and Android devices
- Build stories with responsive layout and view from desktop or device
- Native mobile experience allows you to interact with your content intuitively and with ease
- Supports single-sign-on for easy access to analytics on mobile



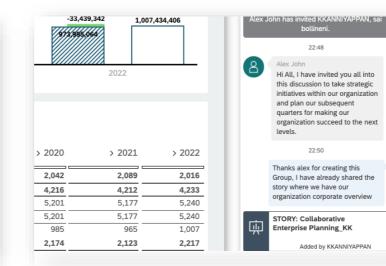
Collaboration

Increase engagement, and accountability with built in collaboration capabilities



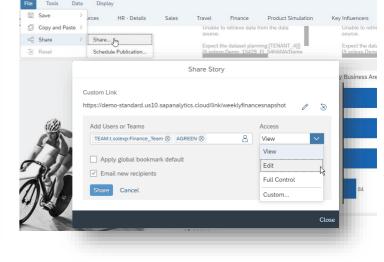
Commenting

Comment on stories, applications and event specific data point table cells. Like, reply, address other users as @UserName



Discussions

Start discussions on your analytics to collaborate with other SAP Analytics Cloud users and teams, on the desktop or on your mobile device.



Sharing

Easily share private or public stories and bookmarks to any SAP Analytics Cloud user or team via a customized link.

Schedule Publications

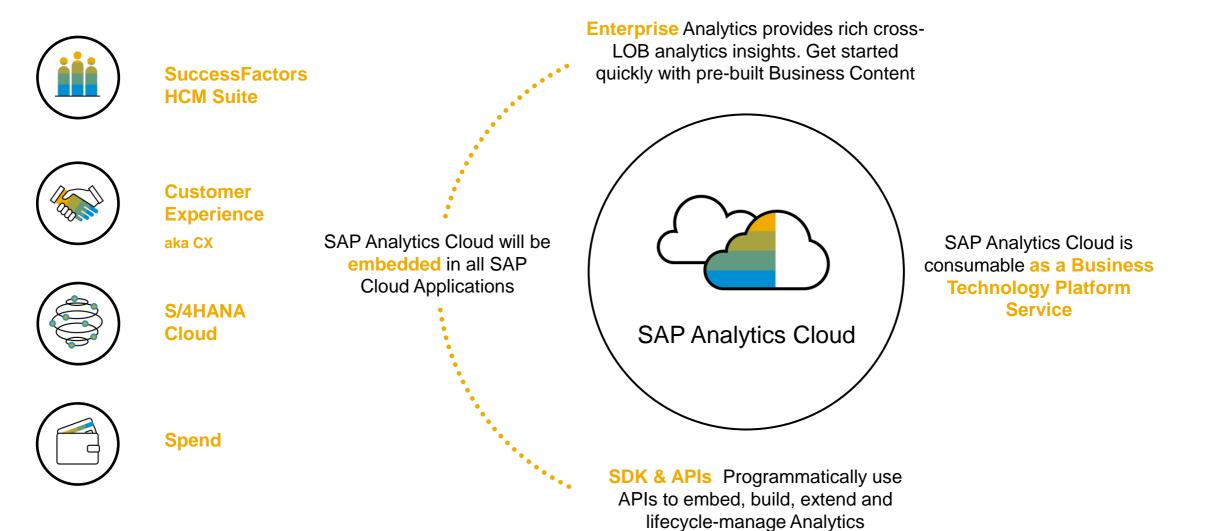
Streamline and optimize information delivery by scheduling delivery of analytics to users

- Schedule stories and analytic applications to SAP Analytics Cloud users, teams and SAP Analytics Cloud recipients
- Burst personalized content to SAP Analytics Cloud recipients based on recipient authorization (<u>Q1 2022</u>)
- Specify format (.pdf or .pptx), prompts, variables, bookmarks, and page range for schedules
- Manage schedules via calendar and configure custom SMTP server for delivery

File \checkmark Edit \checkmark Tools \checkmark I	Display 🗸 📗	Schedule Publication
BestRun		Share Story by E-mail With access to SAP Analytics Cloud, you can share a story with users or teams as well a external users. *Name: Monthly Business Dashboard
\$145.2 m (0%) YTD Profit Forecast (USD)	\$414.1 r YTP Sales Re (USD)	Start Date: Oct 28, 2021 - 10:48
\$81.4 m (0%) YTD HR Expenses (USD)	\$17 m YTD Travel EX	Recurrence Image: Constraint of the second
Product Revenue Lost		Check Availability File Type PDF *Subject Monthly State of Business - Sales, Forecast and Pipeline Message B I Image: The two problems
In USD Racing Mountain Youth Cruiser 16,625.4	64,667.84 44,071.58	Hi All, See attached and linked monthly business summary. Sources: S/4HANA PROD
Unassigned 0.00		Create C Corp Dev 19

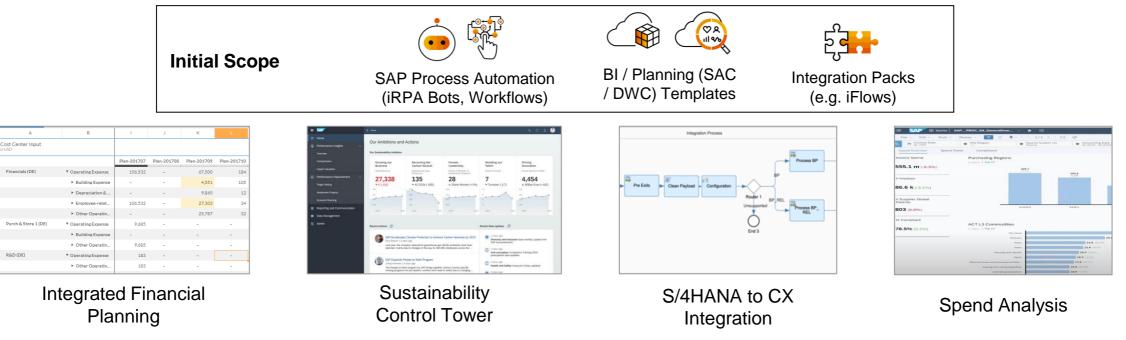
Analytics in the Intelligent Enterprise

Unified view across all lines of business



What is Business Content on BTP?

SAP BTP Business Content are pre-packaged objects/templates encompassing best practices that can be deployed as part of a specific SAP BTP service, to jump start customer implementations



E.g., Financial Planning & Analysis takes 6 Months to deliver when started from scratch as compared to 2-4 Weeks when using business content – 6X accelerated time to value

More Info: <u>SAP Business Content Blog</u> | <u>SAP API Business Hub</u> | <u>SAP Analytics Content</u> | <u>SAP iRPA Store</u>

Content Packages for Industry and Line of Business

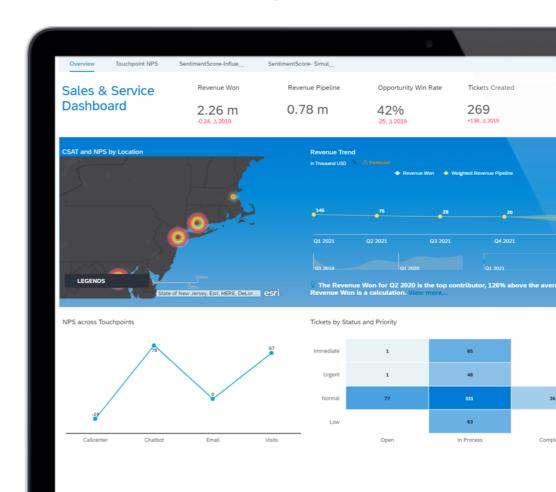
Over 100 Line of Business and Industry content packages available free-of-charge

Line of Business

- Advanced Compliance Reporting
- Carbon Footprint Analytics
- Environment, Health and Safety
- Finance
- FI Operational Expense Planning
- Human Resources
- Liquidity Planning
- Marketing
- Procurement
- Product Cost Planning
- Project and Portfolio Management
- Project Budgeting & Planning
- Project Staff Planning
- Sales and Distribution
- Sports One
- Trade Management
- Travel & Expense
- Treasury Management for SAP
- Vendor Management System
- Workforce Planning
- + many more

Industry

- Trading & Risk Management Analysis
- Banking
- Chemicals
- Consumer Products
- Customer Profitability Analysis
- Engineering, Construction & Operations
- Health Care
- High Tech
- Insurance
- Mill Products
- Mining
- Oil & Gas
- Professional Services
- Public Sector
- Higher Education and Research
- Real Estate
- Retail
- Rural Sourcing Management
- Utilities
- + many more



Why SAP Analytics Cloud?

- Analyze, predict and plan all in one unified user experience
- **Connect live** to cloud and on-premise data sources and break down data silos
- Make confident decisions with automated insights powered by machine learning
- Collaborate with ease; add discussions, comments or share content on desktop or mobile
- Innovate rapidly with new innovations and features automatically added every quarter
- Scale flexibly to support users & enhance capabilities without increasing IT costs
- Cloud software-as-a-service solution fully hosted and maintained by SAP

Thank you

SAP Analytics Cloud Visit the Community Explore our Roadmap Experience for Free Get Started





Orla Cullen orla.cullen@sap.com