

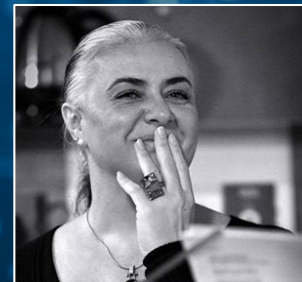
Data Revolution with Data Warehouse Cloud & SAP BI

22 Aprile 2021



1

Benvenuto ed Introduzione



Lorena Zivelonghi

Agenda

-
- | | | | |
|----------|---|--------|---|
| 1 | Benvenuto ed Introduzione
<i>Lorena Zivelonghi, Marketing Lead, Tech Consulting, PwC</i> | 5 Min |  |
| 2 | SAP Data Warehouse – The DW of the future
<i>Mohamed Abdel Hadi, VP DW Product Management, SAP</i>
<i>Hagen Jander, Senior Director, Product Strategy, DW, SAP</i> | 20 Min |   |
| 3 | DW Cloud: approccio e case study per risultati scalabili
<i>Marco Sartor, Partner, Finance Transformation, PwC Italia</i>
<i>Nicola Zandonà, Manager, Finance Transformation, PwC Italia</i> | 15 Min |   |
| 4 | DW Cloud e SAC Reporting & Planning: casi pratici e PwC
"APPS" per reporting e planning
<i>Nicola Zandonà, Manager, Finance Transformation, PwC Italia</i>
<i>Luca Tumelero, Manager, Finance Transformation, PwC Italia</i> | 20 Min |   |
| 5 | Q&As e Prossimi appuntamenti | | |
-

2

SAP Data Warehouse – The DW of the future



***Mohamed
Abdel Hadi***



***Hagen
Jander***

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Today's situation

Despite substantial investments in data management and data warehousing, several challenges remain largely unresolved to date

1.

Growing IT Complexity and Data Silos

Ever-growing data management portfolio with disparate systems that are increasingly difficult to integrate, maintain and govern for quality

2.

Evolving Business Requirements

Increasing need of agile and self-service data access for decision-making and processes

3.

Complex Data Transformation Value Capturing

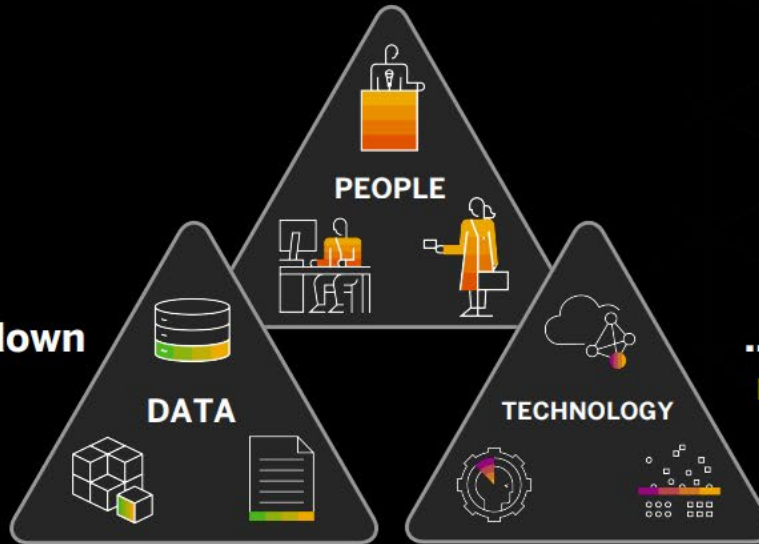
Data programs requiring significant time and upfront investment – and oftentimes new solutions putting past investments' and data programs' value at risk

The Challenge: **Data and Analytics**

...How to empower
all stakeholders?

...How to break down
data silos?

... How to get
results faster?



SAP Data Warehousing: Future Direction Along Three Main Pillars

DATA ACCESS ACROSS SILOS

Harmonize and facilitate access to governed data across systems rather than integrating



Central
access layer



Hybrid
integration



Virtual
access

BUSINESS EMPOWERMENT & GOVERNANCE

Enable business users for large-scale agility and flexibility in self-service use of information



Self-service
access



Modern
governance



Openness

SHORT-TERM VALUE

Gradually transform the data architecture to the target state – focusing on short-term value



Integration of
existing
assets



Pre-built
content



External
data
integration

SAP Data Warehouse Cloud

Unleash the data-driven business

The unified data and analytics service providing a complete end-to-end solution with one semantic view designed for business and IT



Connect

data with business context



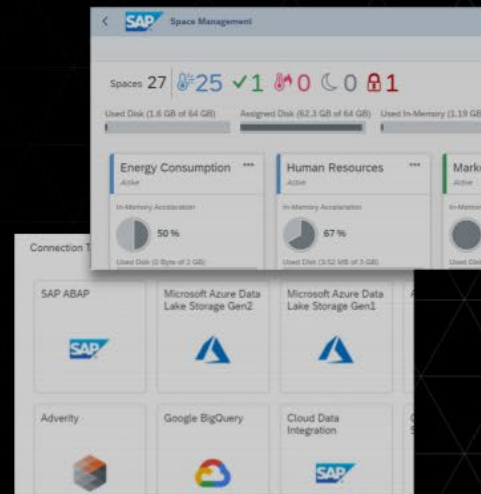
Unlock

data insights with integrity



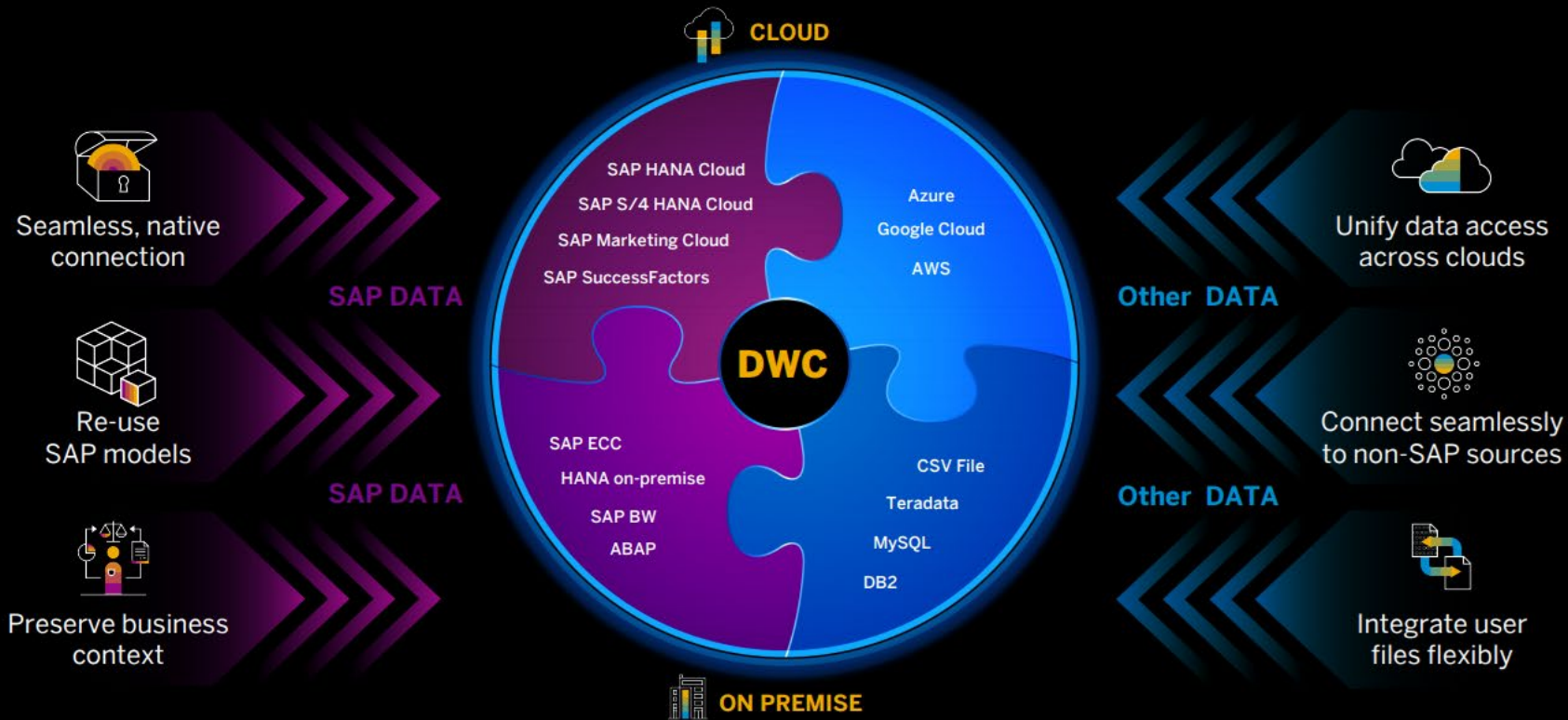
Accelerate

outcomes without complexity



SAP Data Warehouse Cloud

Unify data silos to understand your business



A central access layer to all your information across sources

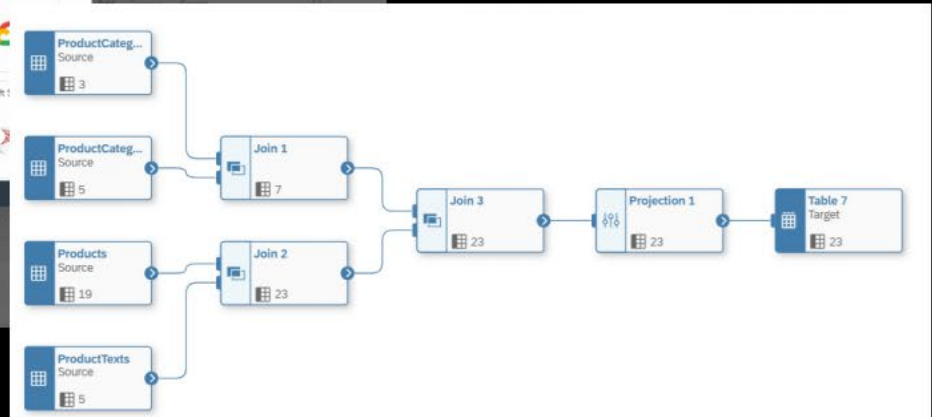
SAP Data Warehouse Cloud

Connect and collect data flexibly – catering to all styles of data integration

The screenshot displays the SAP Data Warehouse Cloud interface for 'Energy Data'. The left sidebar contains navigation options: Home, Files, Business Catalog, Story Builder, Business Builder, Data Builder, Data Access Control, and Data Integration Monitor. The main area shows 'General Settings' with tabs for Overview, Members, Connections, Database Access, Time Data, and Auditing. A 'Create Connection' dialog is open, showing a list of 25 connection types. The 'Features' section includes Remote Tables (19), Data Flows (21), and Model Import (1). The 'Categories' section includes On-Premise (10) and Cloud (17). The 'Sources' section includes SAP (11), Non-SAP (12), and Partner Tools (2). The 'Local Connections' table at the bottom lists:

Name	Type	Owner
SAP Plant Data	SAP HANA	SALIERNL
S3	Amazon Simple Storage Service	SALIERNL
SAP HANA	SAP HANA	SALIERNL

SAP Data Warehouse Cloud Connections



Data Flow Graphical Interface

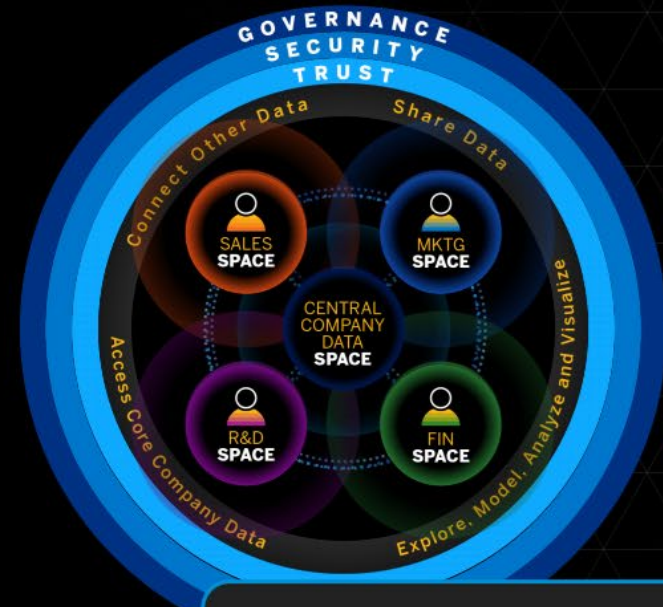
SAP Data Warehouse Cloud

Unlock data insights with integrity

Typical Environment



SAP Data Warehouse Cloud



- Self-service data modeling for all users
- Semantic business layer
- Data sharing and collaboration
- IT governance of resources and security

SAP DATA Warehouse Cloud

Collaborate in business terms

BUSINESS LAYER

Users work in business terms



"What were the key margin drivers for my product? What if I reduce the price by 10%?"

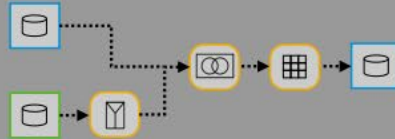
BUSINESS CATALOG

Users discover available assets & work on common KPIs



DATA LAYER

IT models underlying relationships



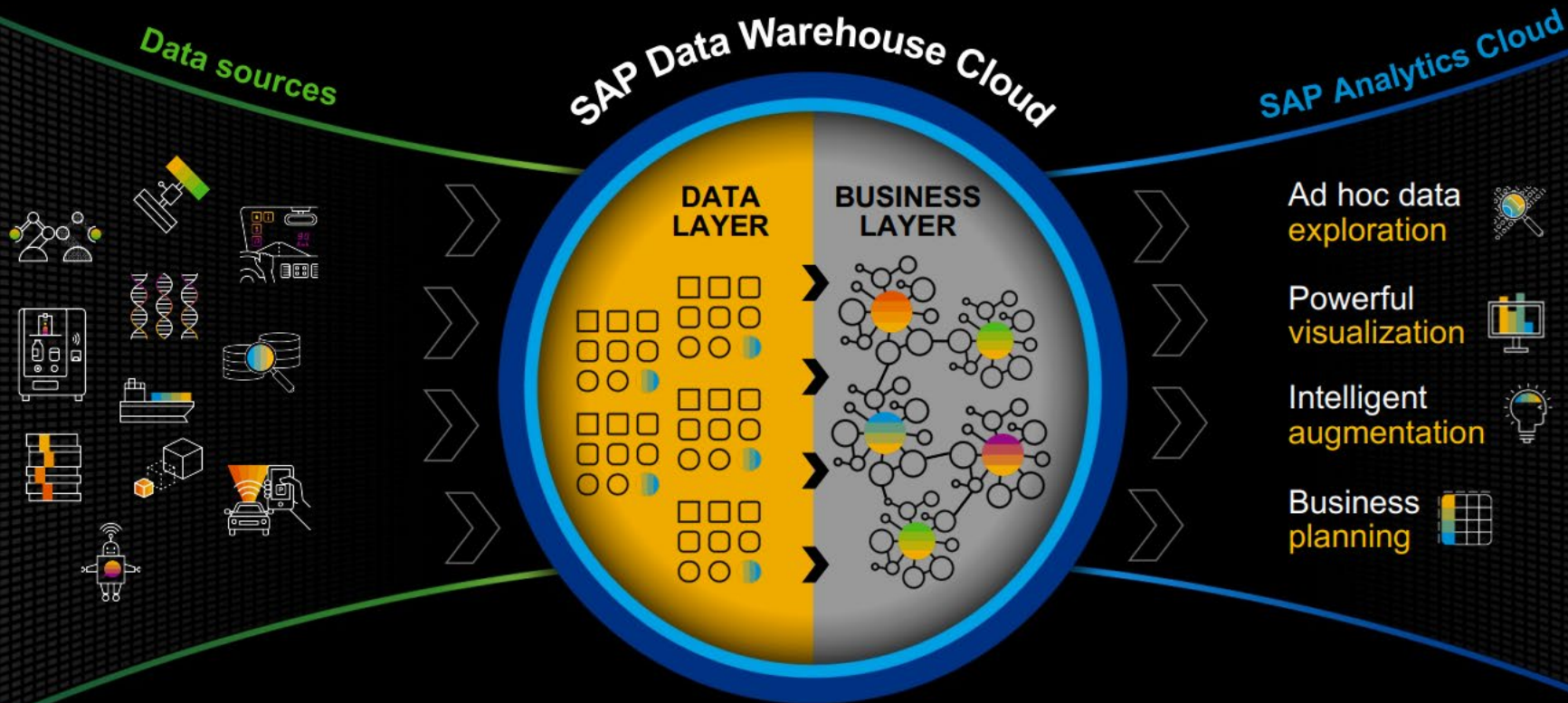
"How can I assure queries will perform with data coming from heterogenous systems?"

"How is the margin of the product calculated? Where do I find it?"

- Business entities and relationships with business language
- Model standardization and reuse for efficiency
- Independence for business users from IT

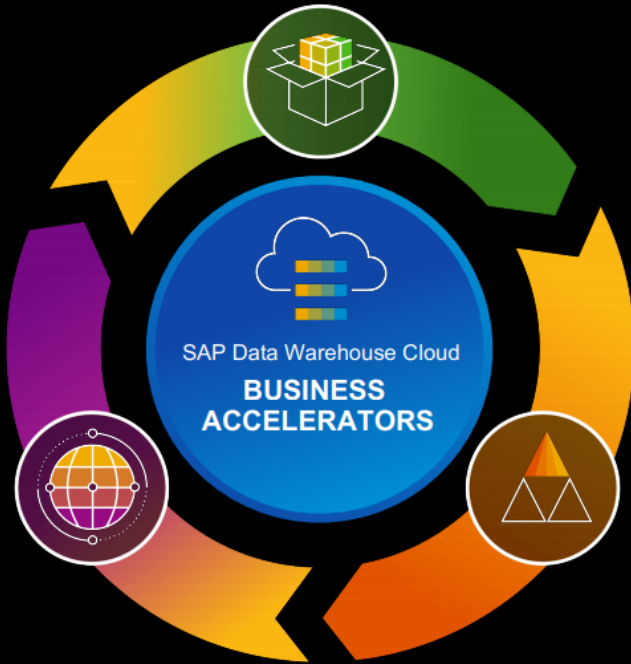
SAP DATA Warehouse Cloud

Integrate from data to insight with SAP Analytics Cloud



SAP Data Warehouse Cloud

Boost time-to-value with business accelerators



Deploy pre-defined content

Leverage pre-built content packages with data models, transformations, calculations and analyses for a variety of industry- and LoB-specific use cases



Re-use existing data models

Re-use SAP BW/4HANA queries in SAP Data Warehouse Cloud with hybrid model transfer and build on pre-defined views (CDS views)



Boost external data integration

Integrate with external data providers and third-party data sources with out-of-the-box connectors

Time-to-value

Cost efficiency

Investment protection

SAP Business Warehouse Customer Journey

Preference-Based Decision

Use-Case-Based Decision

Use Case

Solution

CLOUD
PREFERENCE

IT

Business

Other

SAP Data Warehouse
Cloud



SAP Data Warehouse Cloud is the strategic public cloud product offered as a software service managed by SAP.

Enterprise data
warehouse with a highly
integrated and
customized SAP BW

SAP Data Warehouse
Cloud



SAP Data Warehouse Cloud is a new offering for data warehousing in the public cloud - it can be a stand-alone solution or complement the data warehouse portfolio of SAP by extending current use cases.

SAP BW/4HANA

ON-PREMISE
PREFERENCE

Fully integrated data
warehouse solution

SAP BW/4HANA

and/or

Agile, flexible, and
database-driven data
warehouse approach

SAP HANA for SQL data
warehousing



SAP BW/4HANA and **SAP HANA for SQL data warehousing** are the strategic solutions for on-premises and private cloud data warehousing.

SAP Business
Warehouse (BW)
on any database

Priorities 2021

1

Focusing on **Enterprise Readiness for Ingestion** (Connectivity, Data Integration, Caching) & **Operation** (Elasticity & Scalability, Spaces & Dev/Test/Prod Landscapes) & **Modeling**

2

Continue to lay the foundation for successful **Content** building and delivery

3

Ensuring **Consumption & Openness** by focusing on a seamless SAC integration and enhanced consumption possibilities via ODBC/ 3rd party connectors & Data Access APIs

4

One LoB & Business User experience through a truly business focused environment driven by a Business Catalog, the Data Marketplace & the Business Layer

5

Make SAP Data Warehouse Cloud the foundation for SAP's **planning** solutions

SAP Data Warehouse Cloud x

55 Innovations x Q

Products 1 Industries Focus Topics

Current - Latest Save

Q1 2021 CURRENT 23 Innovations

SAP Data Warehouse Cloud 1.0 +1

- Business Content Provisioning**
 - Business content packages for manufacturing, finance, telco, and...
SAP Data Warehouse Cloud
- Business Modeling**
 - Currency Conversion
SAP Data Warehouse Cloud
 - Input parameters and variables
SAP Data Warehouse Cloud
 - Model metadata access for analytics cloud solutions
SAP Data Warehouse Cloud

Q2 2021 18 Innovations

Future Release

- Cloud Availability Assurance**
 - Data center availability in South Korea through AWS
SAP Data Warehouse Cloud
 - Data-center availability in Canada through AWS
SAP Data Warehouse Cloud
 - Data-center availability in the U.S. western region on Azure
SAP Data Warehouse Cloud
- Data Integration Management**
 - Connection to PostgreSQL, Teradata, and MySQL
SAP Data Warehouse Cloud

Q3 2021 4 Innovations

Future Release

- Cloud Availability Assurance**
 - Data-center availability in Europe through Azure
SAP Data Warehouse Cloud
- Data Modeling**
 - Versioning
SAP Data Warehouse Cloud
- Data Warehouse Management**
 - Built-in support
SAP Data Warehouse Cloud
- Data Warehouse Spaces Management**
 - Advanced cross-space sharing capabilities

Q4 2021 4 Innovations

Future Release

- Business Modeling**
 - Multilingual content support
SAP Data Warehouse Cloud
 - Workflow Management
SAP Data Warehouse Cloud
- Data Modeling**
 - Intelligent data maintenance: searching and highlighting
SAP Data Warehouse Cloud
 - Multilingual content support
SAP Data Warehouse Cloud

Q1 2022 0 Innovations

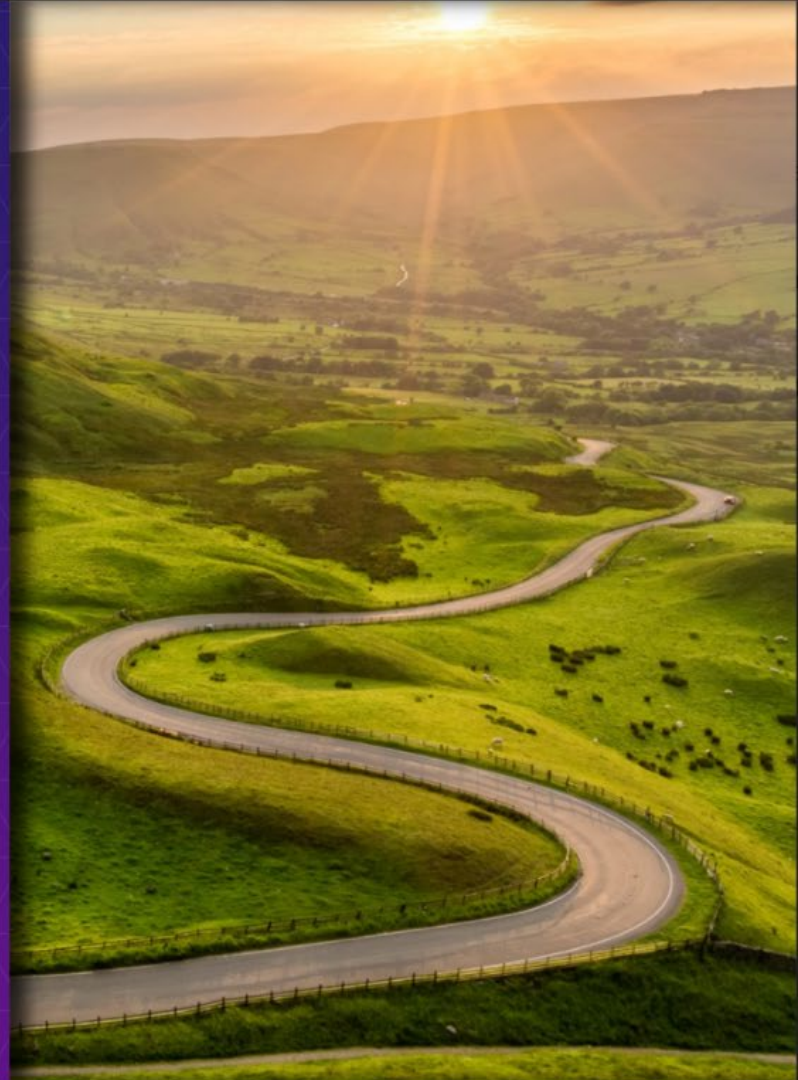
Start your data and analytics journey with **SAP Data Warehouse Cloud**

[Try now for free](#)

[Request a demo](#)

[Learn more](#)

[Join the conversation](#)



3

DW Cloud: approccio
e case study per
risultati scalabili



**Marco
Sartor**



**Nicola
Zandonà**

Cosa si aspettano i CFO italiani?

In sintesi:

L'**80%** dei CFO vedono la trasformazione dell'area Finance una priorità, dove la **tecnologia** riveste il ruolo fondamentale di **abilitatore** a supporto del cambiamento...

...In particolare i CFO hanno maturato che nei **processi Finance tradizionali** e nella **gestione del rischio finanziario** è possibile ottenere **ulteriori benefici** grazie alle evoluzioni oggi possibili sui sistemi **ERP, EPM** e **Big Data/BI**...

...La funzione Finance del Futuro assume un ruolo sempre più strategico dedicando maggior spazio alla generazione di **Business Insight**. Ciò è fondamentale per la **gestione dei rischi** e l'anticipazione delle problematiche del business

I principali benefici che i CFO si attendono dall'evoluzione delle tecnologie



Standardizzazione ed efficientamento dei processi back office



Automazione processi reporting e compliance



Miglioramento efficienza ed efficacia processi previsionali



Real-time Reporting – Data Warehouse Cloud Cooperation SAP & PwC

We enable agile execution
PwC as a strong Partner



Long term partnership to SAP with strong experience in D&A. We have tested the DW Cloud Beta version in 2019



DWC headliner program partner as the only consulting company worldwide



Profound experience in the use of DWC through the analysis of pains and gains

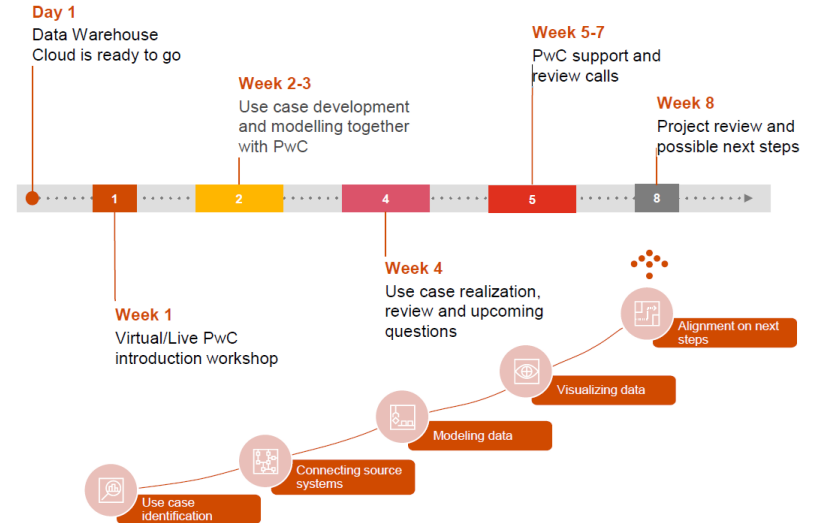


Strong collaboration with SAP developers and team

SAP EMEA South 2021 Award for
Global Strategic Service Partner
Excellence
Cloud Growth

SAP® Recognized Expertise
Enterprise Planning and Analysis

Project Planning



Real-time Reporting – Data Warehouse Cloud Project Purpose

WHY



Reporting Sales, Supply Chain and Maintenance module is divided into 4 main streams:

- Transport & Logistic Costs
- Global Inventory
- Purchasing
- Sales & Distribution



Reporting Sales, Supply Chain and Maintenance needs to aggregate the data from each country / subsidiary, and navigate on the prevailing analysis dimensions useful in the Company context

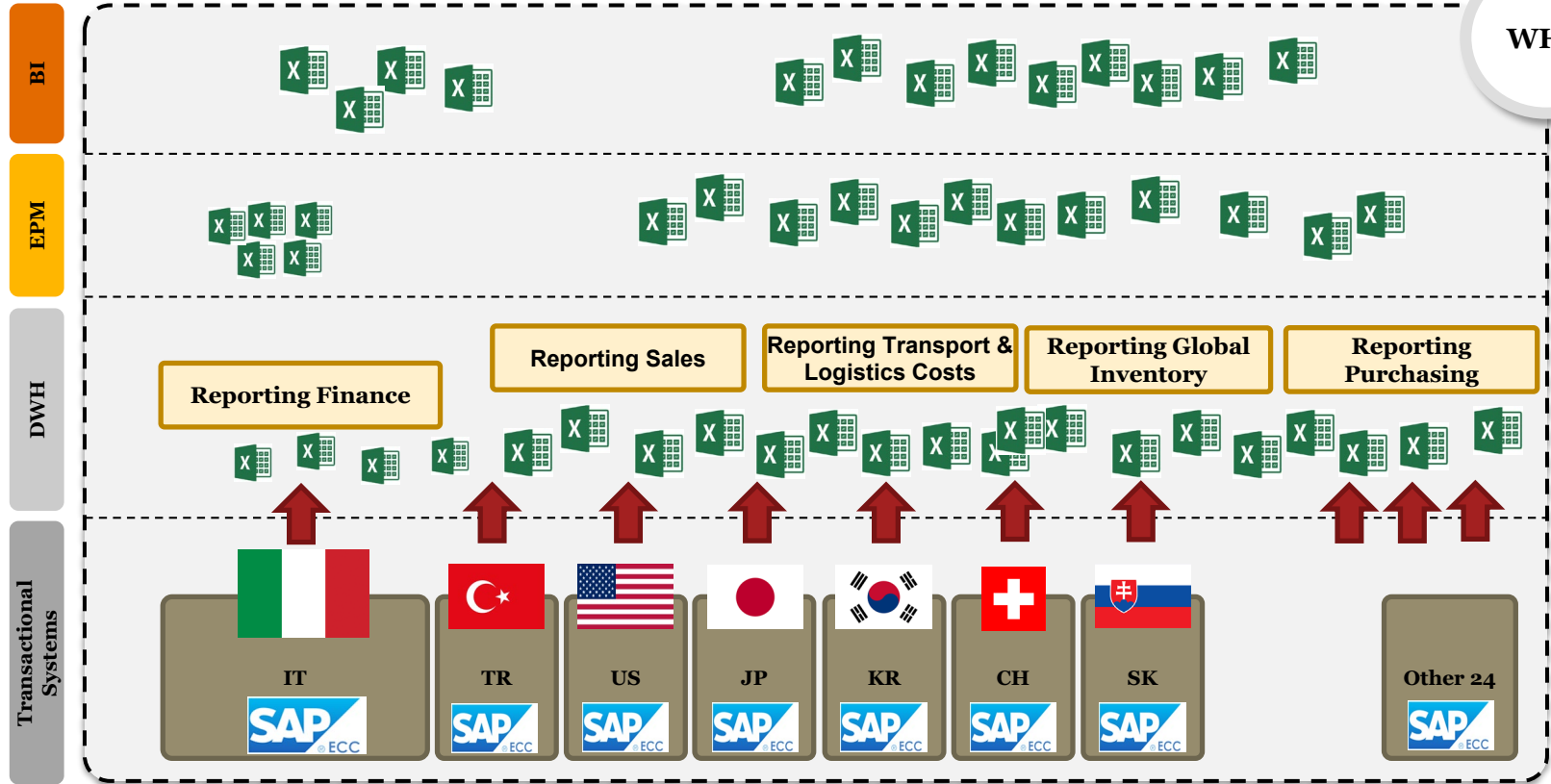


Reporting and Dashboarding needs to allow data discovery and data visualization and allow Business to analyze the information in a “smart way”
(es. Top/bottom 10 customer, monthly comparisons KPIs, etc...)

SAP Data Warehouse Cloud + SAP Analytics Cloud

Real-time Reporting - Architecture before the project

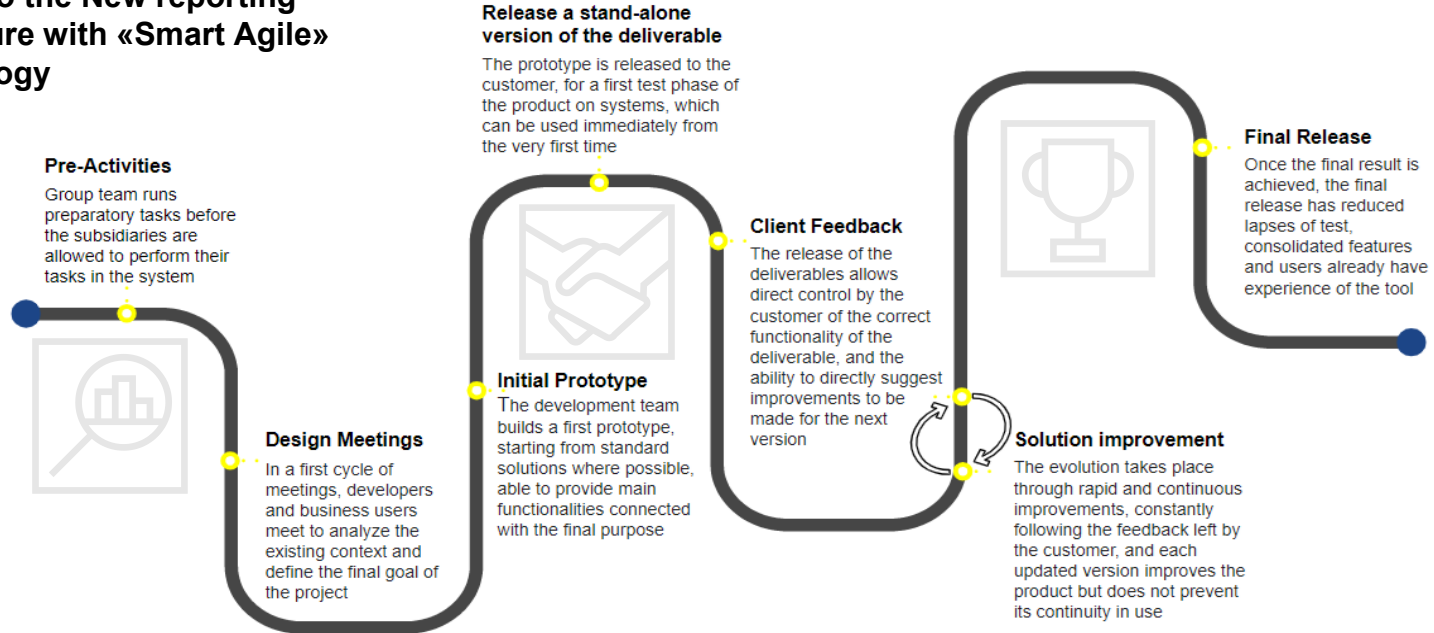
WHY



Real-time Reporting – Data Warehouse Cloud Road Map to Delivery



Journey to the New reporting architecture with «Smart Agile» Methodology



8 weeks of working

Real-time Reporting – Data Warehouse Cloud Road Map to Delivery



Examples of KPI by stream project

Transport & Logistics Costs	Logistics Costs by period & product group	Global Inventory	Warehouse net value by period / country	Purchasing	Open orders
	Logistics Costs incidence on total costs		Gross value & obsolescence by period		Changing code
	Top suppliers – Transportation costs		Warehouse net value in transit & on-hand		Lead time from booking to
	Top suppliers – Logistics costs		Value by last movement aging		Progressive Order
	No time delivery performance %		Backlog quantity, net value etc.		RRMP Index
	Actual costs vs budget costs YTD		% Net value on material category		Total availability
	...		Warehouse net value & obsolescence by family		...

21 KPI!

24 KPI!

17 KPI!

Design Meetings	People Involved	Countries /Societies	Stream in scope	Analytical Views	Database Tables	Identified KPIs
22	19	25	4	27	48	62

8 weeks of working

Real-time Reporting – Data Warehouse Cloud High Level Architecture - Step 1



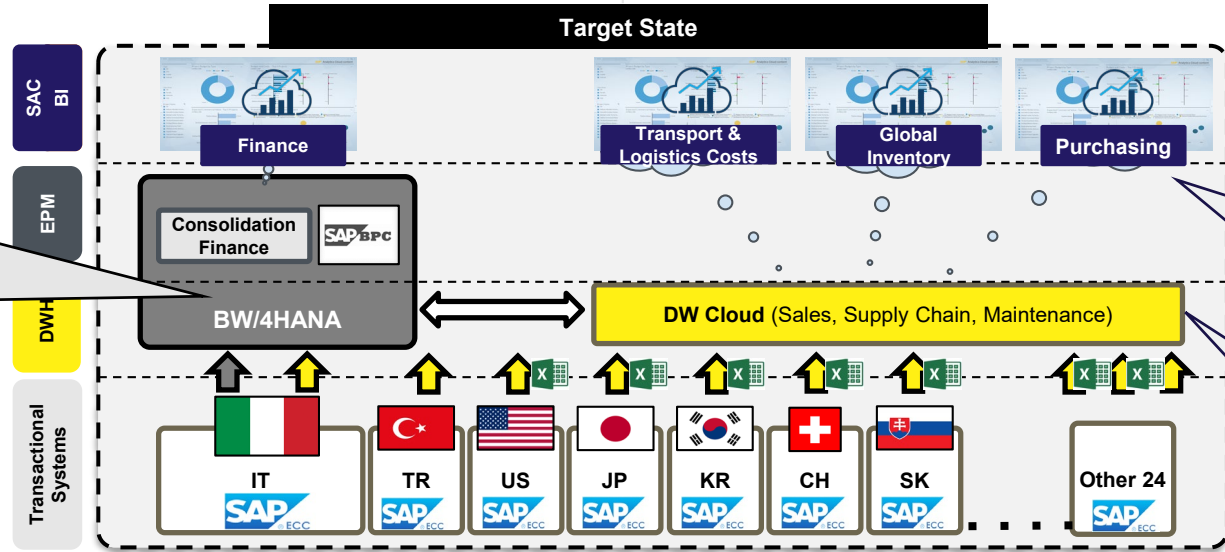
“Smart Agile” methodology allows to minimize the risks and timings related to implementation, thanks to the adaptation of the standard solution to the client’s needs and subsequent iterations/integrations of the data model and data flows.

Technology on this Project:



Integration Finance and SCM Stream

The SCM Reporting process is integrated into a broader reporting system that also includes the Finance module, which is why an additional common data collection layer (BW/4 HANA) was deemed necessary to allow communication between the two modules, even if the main data flow from ECC still remain separated between BW/4HANA and DWH.

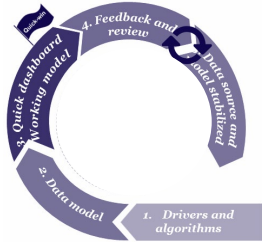


Benefits

An intuitive, navigable and natively available reporting on mobile within the SAP Analytics Cloud platform. Business users thus become effective users of the data with significant savings in working hours for business users, relieved of the burden of building the reporting of interest

Data availability is very fast and in total security through the use of Cloud technology and a structured and optimized data flow, which brings also extreme flexibility and guarantees data access from every device

Real-time Reporting – Data Warehouse Cloud High Level Architecture - Step 2



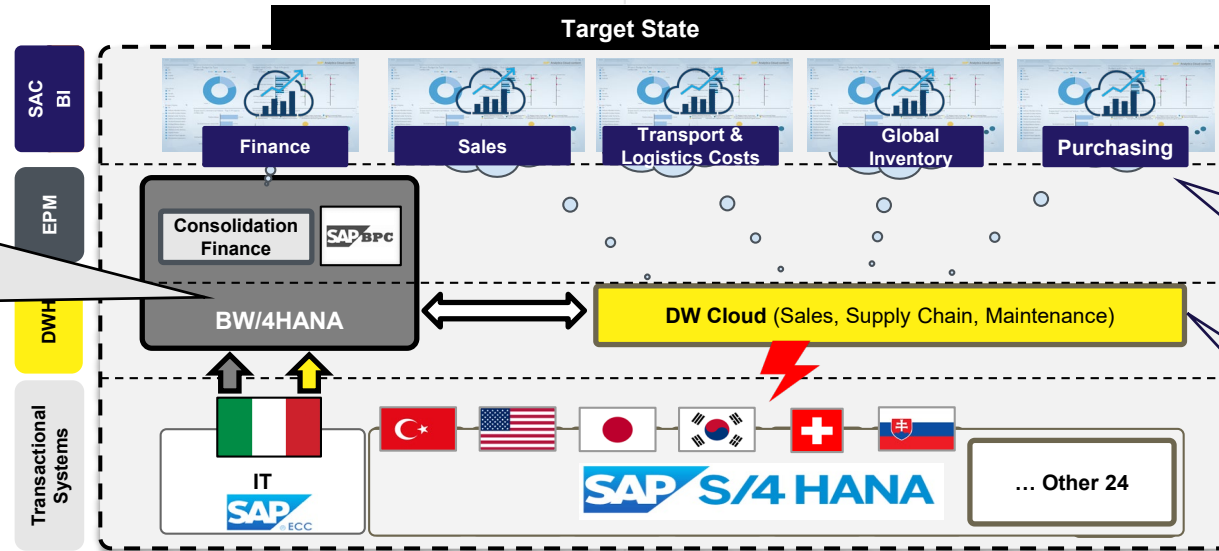
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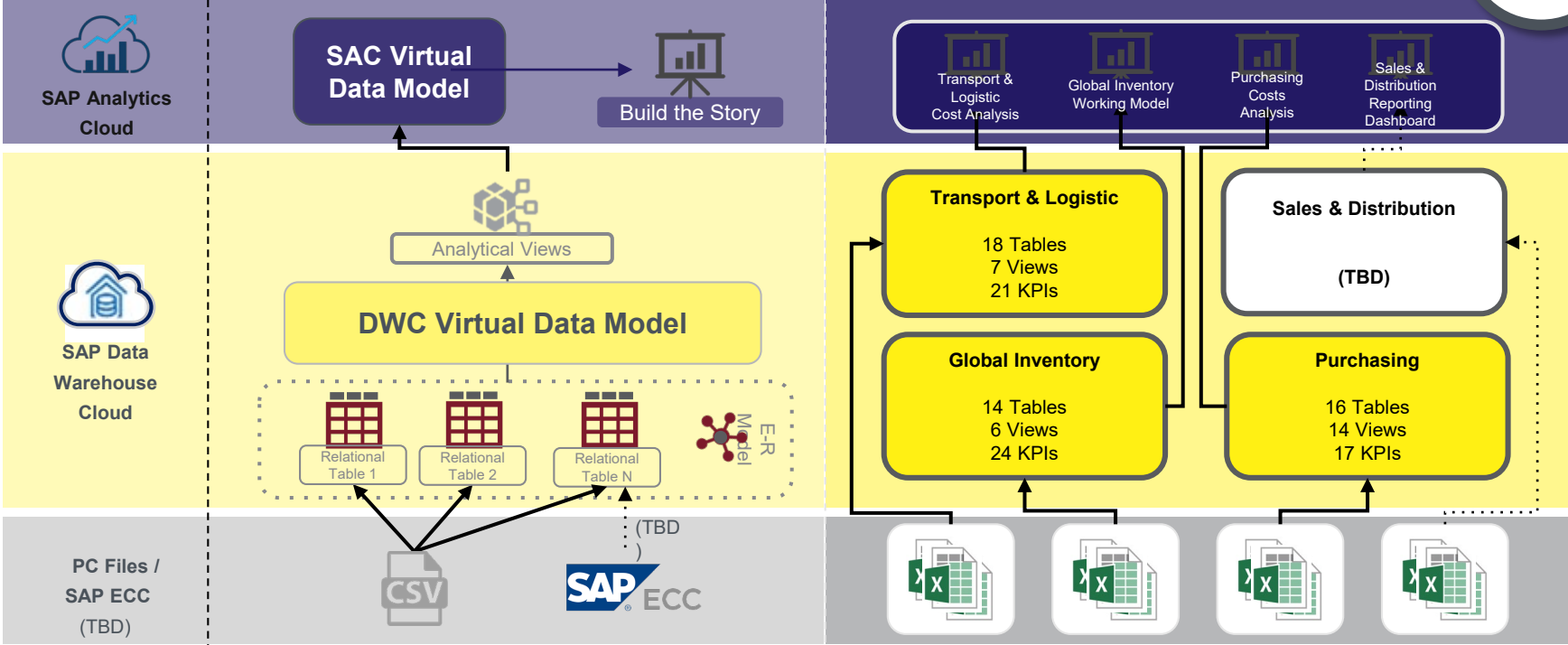
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Real-time Reporting – Data Warehouse Cloud System Design

WHERE



Real-time Reporting – Data Warehouse Cloud

DWC Data Modeling Examples



Create Relational Tables

Logistica_DB
Logistica_DB

General Attributes & Measures (21) Business Purpose Table Services

Business Name:
Logistica_DB

Technical Name:
Logistica_DB

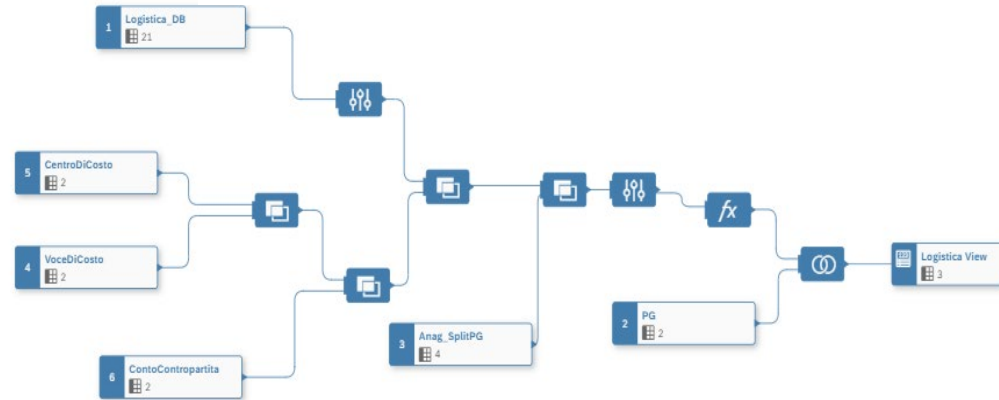
Type:
Analytical Dataset

Deployment Status:
 Deployed

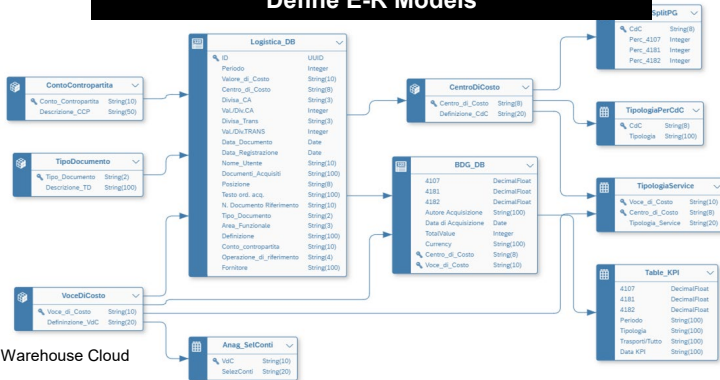
Attributes & Measures (21)

Attributes	Business Name	Technical Name	Data Type	Semantic Type
<input checked="" type="checkbox"/>	ID	ID	UUID	None
<input type="checkbox"/>	Periodo	Periodo	Integer	Fiscal - Period
<input type="checkbox"/>	Valore_di_Costo	Valore_di_Costo	String(10)	None

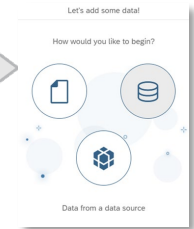
Detailing Tabs (Charts & Tables)



Define E-R Models



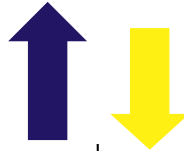
DWC Views are natively integrated on SAC



Real-time Reporting – Data Warehouse Cloud User Experience

Strengths of the Product

- The platform is simple to use and intuitive even for non-technical users
- DWC Native connectivity with Analytics cloud define a perfect analytics stack
- Quick to setup and develop, easy to update or roll-back
- Ability to organize data by Space, effectively managing safety thanks to the possibility of diversifying roles per user



Possible Enhancement

- Not easy to manage the updating of tables: imports needs to be optimized with a delta loading option and the possibility to schedule updates
- Some SAP Analytics Cloud feature are still not supported for DWC virtual Models
(es. YTD Aggregation)
- Integration with EPM product could lead to a complete DWH product in cloud: Q3 2021 release will give a go step ahead

4

DW Cloud e SAC
Reporting: casi pratici e
PwC "APPs" per reporting
e planning



*Nicola
Zandonà*



*Luca
Tumelero*

A large, bold, white number '5' is positioned on the left side of the image. The background is a deep blue with a complex, glowing circuit board pattern in lighter blue and white. The number '5' is the central focus of the left half of the image.

5

Q&A e Prossimi
appuntamenti

Next Appointments



SAC

Planning dal Top-down, Scenario Planning al Workflow bottom-up

Maggio 2021



PwC's Apps and Accelerators



Segui i nostri eventi su www.meetpwc.it



S/4 HANA Cloud Move: Series to Evolution

Maggio - Giugno 2021

SAVE THE DATE!

Thank you



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