

Università di Roma



PHILMARK
GROUP

THE HARD PATH FOR THE TECHNOLOGICAL TRANSFORMATION

«BUSINESS INTELLIGENCE & ANALYTICS»

14 April 2022: 14.00 – 17.00

Speaker

Andrea
Schiavi

YOUR TODAY SPEAKER



Andrea Schiavi

Business Intelligence Consultant, Tableau Developer & Project Manager of Kalyte (a Philmark Group company)

I've been working for:

- World Food Programme (WFP)
- Octo Telematics;
- Cassa Depositi e Prestiti;
- Municipality of Bologna;
- European Space Agency (ESA)

SEMYNAR STRUCTURE

Speaker	Day	Topic	Room
Andrea Schiavi	14/04/2023 - 14.00/17.00	Business intelligence & Analytics	P4
Adriana Fidanza	21/04/2023 – 14.00/17.00	Artificial Intelligence and Machine Learning for Business	P4
Adriana Fidanza	28/04/2023 – 14.00/17.00	Artificial Intelligence and Machine Learning for Business	P4
Cecilia Buzzi	05/05/2023 – 14.00/17.00	Project Management	P4
Cecilia Buzzi	12/05/2023 – 14.00/17.00	Project Management	P4
Giulia Zinanni	19/05/2023 – 14.00/17.00	Web applications in business environment	P4

At the end of learning path there will be a final test in order to evaluate your knowledge or your achievements. This semynar will not give you a vote but only an suitability.



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WHO WE ARE

We are a smart, young and dynamic company. For more than 12 years, we're working in the ICT market as an ideal partner who leads the companies technological renewal. We have a very thin and flexible organizational model based on the different companies with a centralized governance. We are expert in Big Data, Machine Learning, Data Analytics, app development, web e Mobile, Gamification, process analysis, ERP, management of technologies asset.



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Philmark Group has a organizational model based on vertical specializations: many different companies, independent from each other, with a centralized governance that it has the purpose providing tailored solutions as the market require

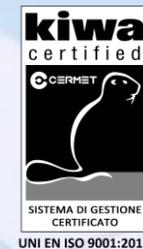
KEY FACTS

300
EMPLOYEES

PARTNERSHIP



MORE THAN
160
CUSTOMERS



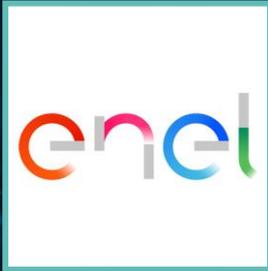
CRIBIS
Prime Company

4

BRANCHES
(ROME, MILAN,
PRIVERNO,
CIVITAVECCHIA)



SOME CUSTOMERS



CONTENT

- What is Digital Transformation?
- What is Business Intelligence?
- Why Business Intelligence is part of Digital Transformation?
- Business Intelligence Market Overview
- Architectural Framework
- Data Design
- Data Integration Design
- Business Intelligence Design
- Advanced Final Output
- KPI Metrics and Dashboard

WHAT IS DIGITAL TRANSFORMATION?

- Digital transformation is the integration of digital technology into all areas of a business, fundamentally changing how you operate and deliver value to customers.
- It's a cultural change that requires organizations to continually challenge the status quo, experiment, and get comfortable with failure.



WHY BI IS PART OF DG?

Set up a Business Intelligence environment into a company means put in place successful change processes to a data-driven organization.

This means should be able to organize processes around customers and technologies around data in a digital way. Technologies such as Business Intelligence improves the quality of data and, therefore, the quality of decisions that fuel your business.



WHAT IS BUSINESS INTELLIGENCE?

- Is a set of business processes to collect and analyze data;
- is a set of technologies for realizing business process (point above);
- the information elaborated as a result of all this processes.



BI MARKET OVERVIEW

- Business Intelligence Statistics
- Business Intelligence Trend
- Key Drivers
- Market Size
- Market Evolution
- How BI Helps Business



BI STATISTICS (1/2)

51%

use analytics to develop products and services

50%

use analytics to drive process and cost efficiency

46%

use analytics to manage risk

41%

use analytics to find new customers

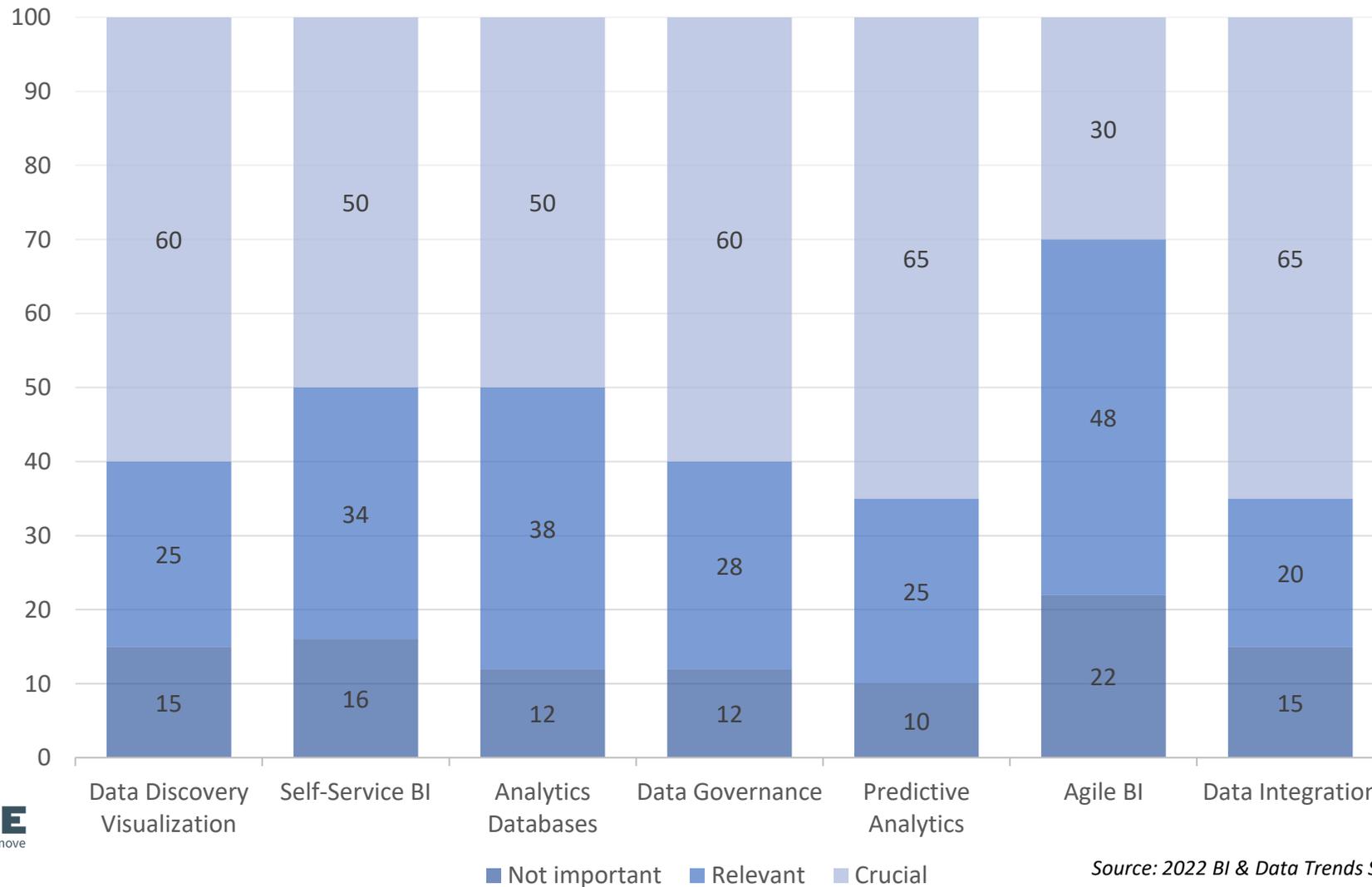
44%

use analytics to analyze existing customers in terms of needs and value

48%

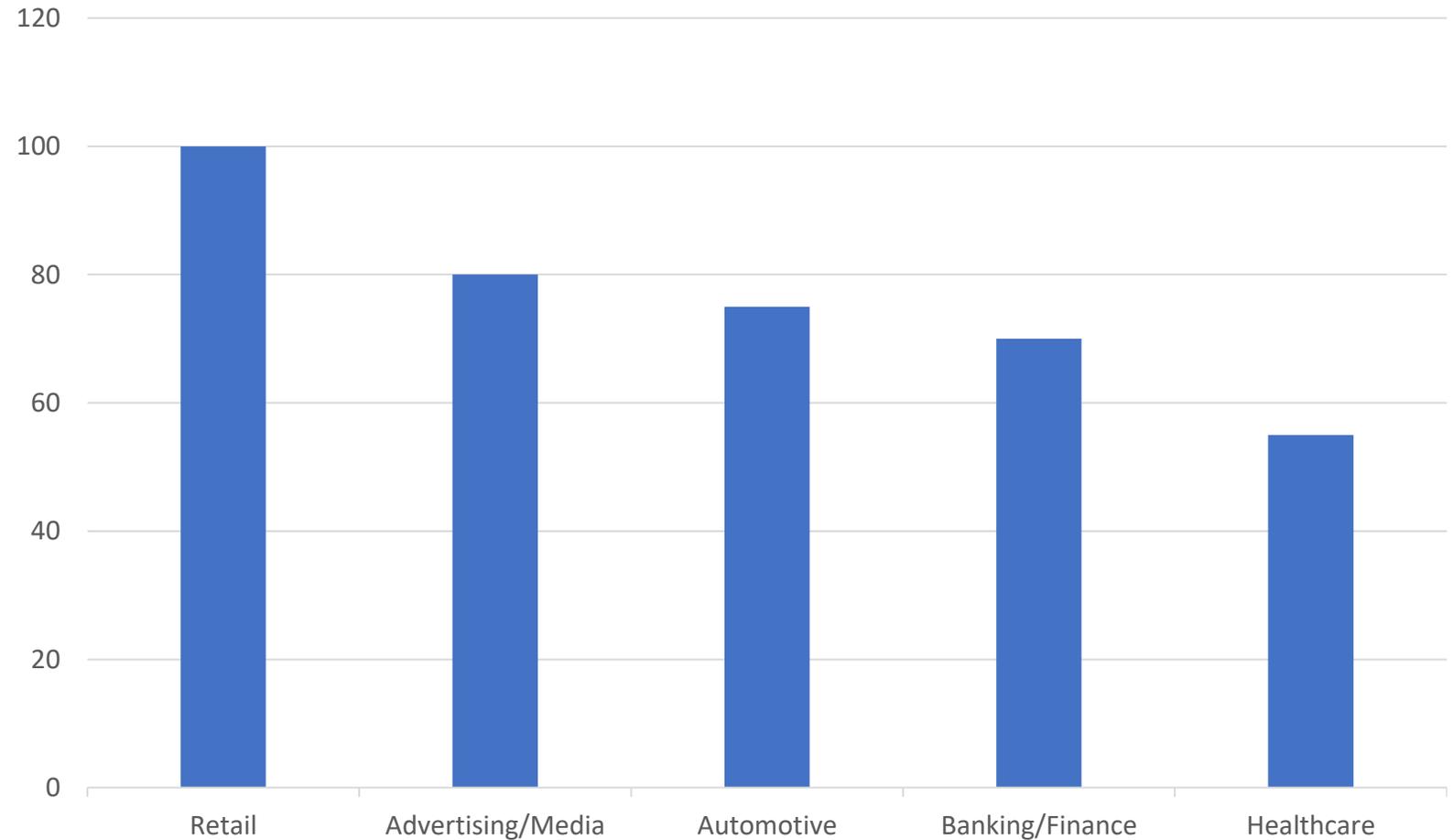
use analytics to drive Strategy and change

BI STATISTICS (2/2)



TOP 5 INDUSTRIES USING BI

BI Market revenue by 2028:
43 billions \$



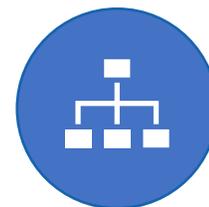
KEY DRIVERS



use analytics to develop products and services



Business understand the importance of trusted data



Data analysts are pushing new BI products with discovery capabilities



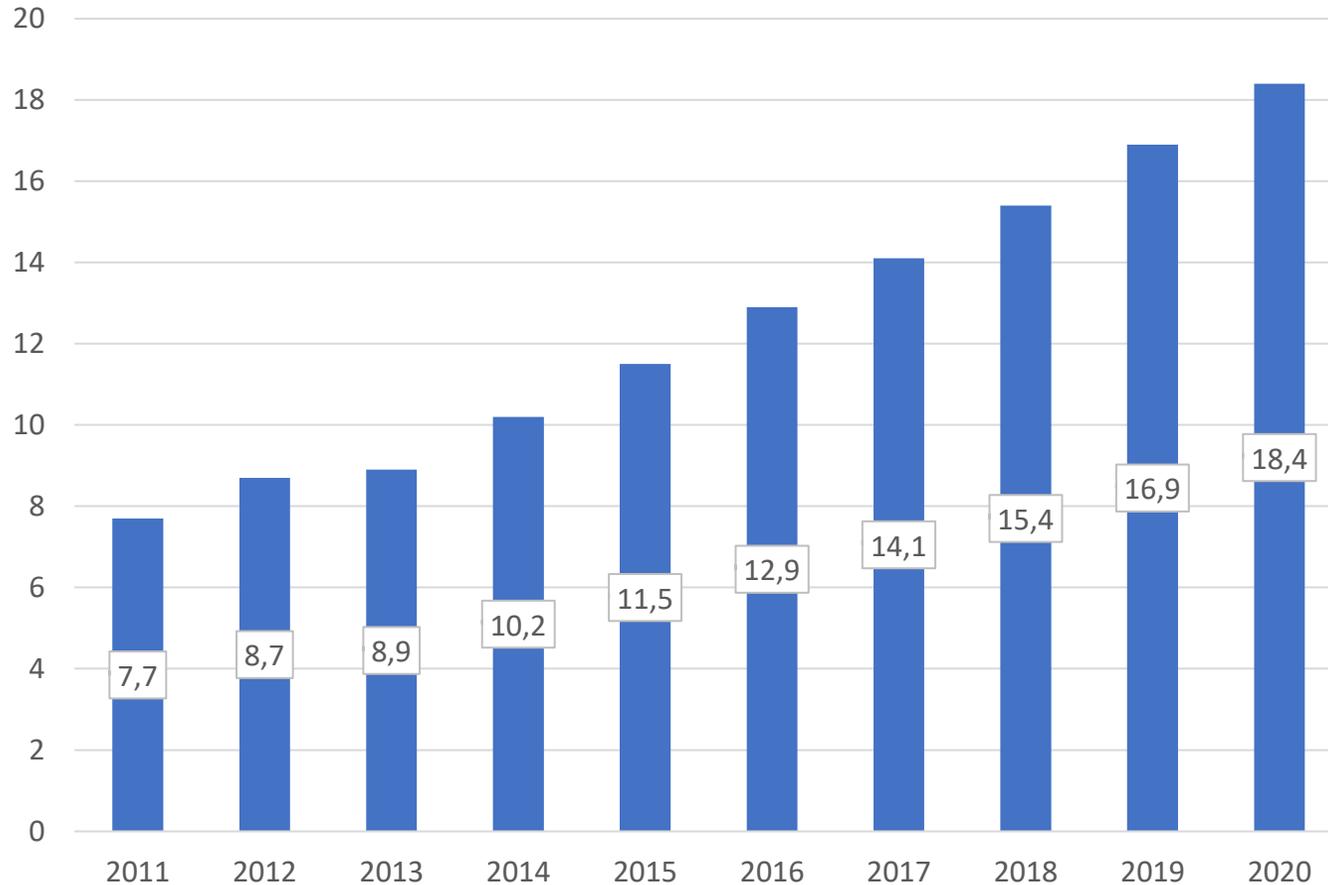
Organizations want a single platform where combines data from different applications (single point of truth)



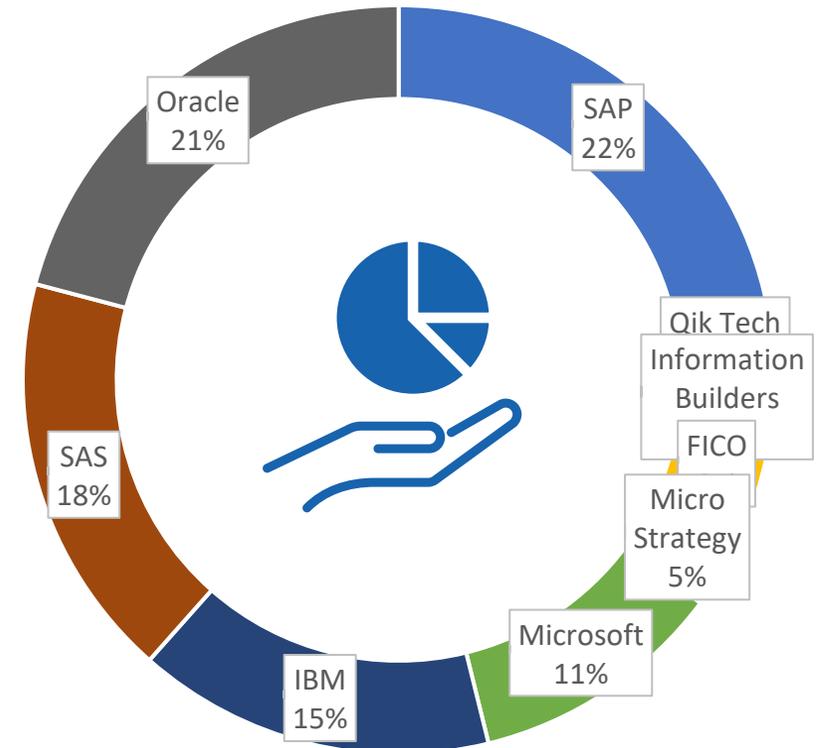
Embed and extend analytics contents to drive business decisions

BI MARKET SIZE

Market size by Year



Market size by Top Vendor



ARCHITECTURAL FRAMEWORK

- Information Architecture
- Data Architecture

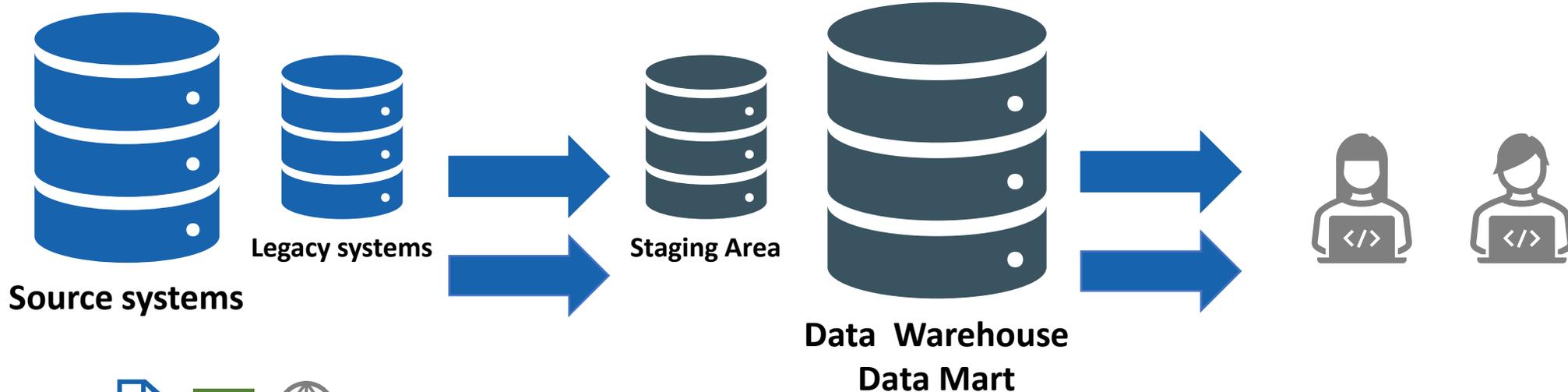


INFORMATION ARCHITECTURE

OLTP Process - Transactional

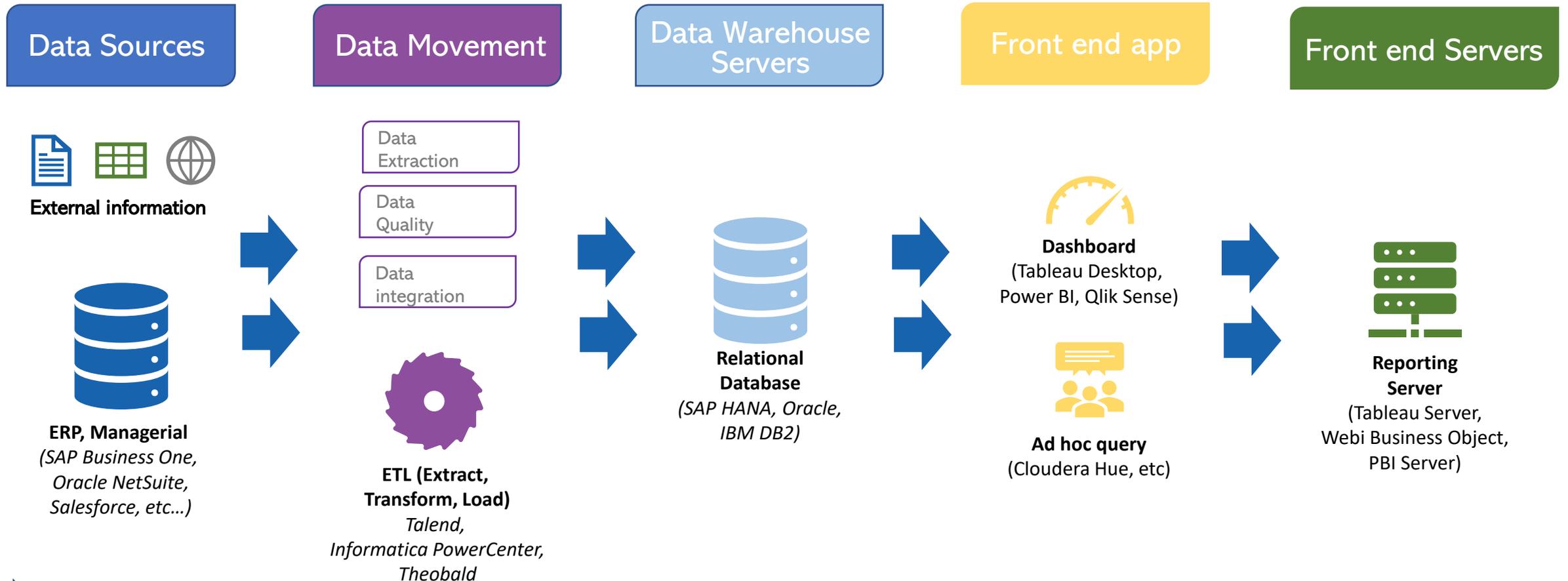
Data Warehousing

OLAP Process



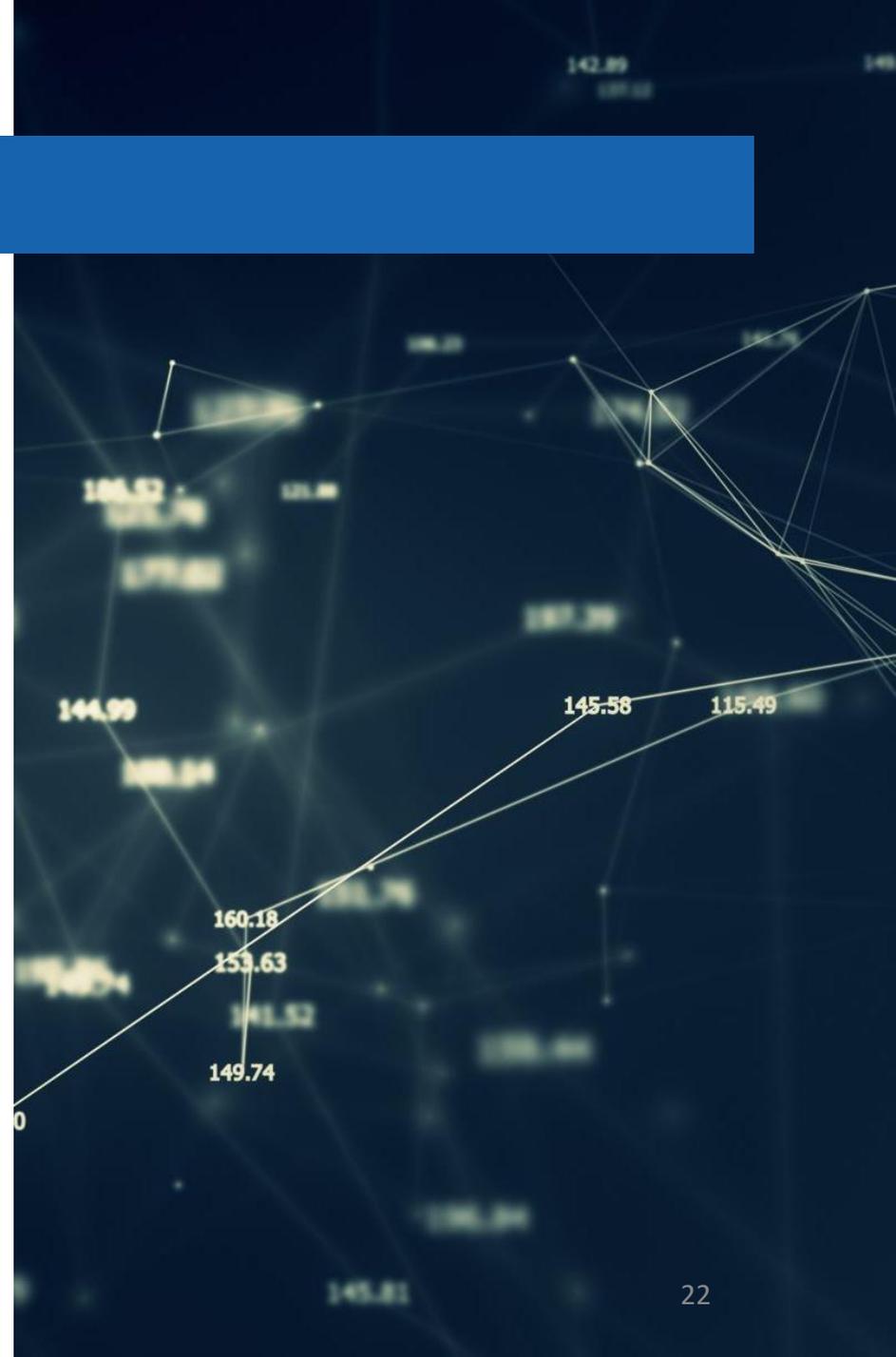
External information

DATA ARCHITECTURE AND TECHNOLOGY

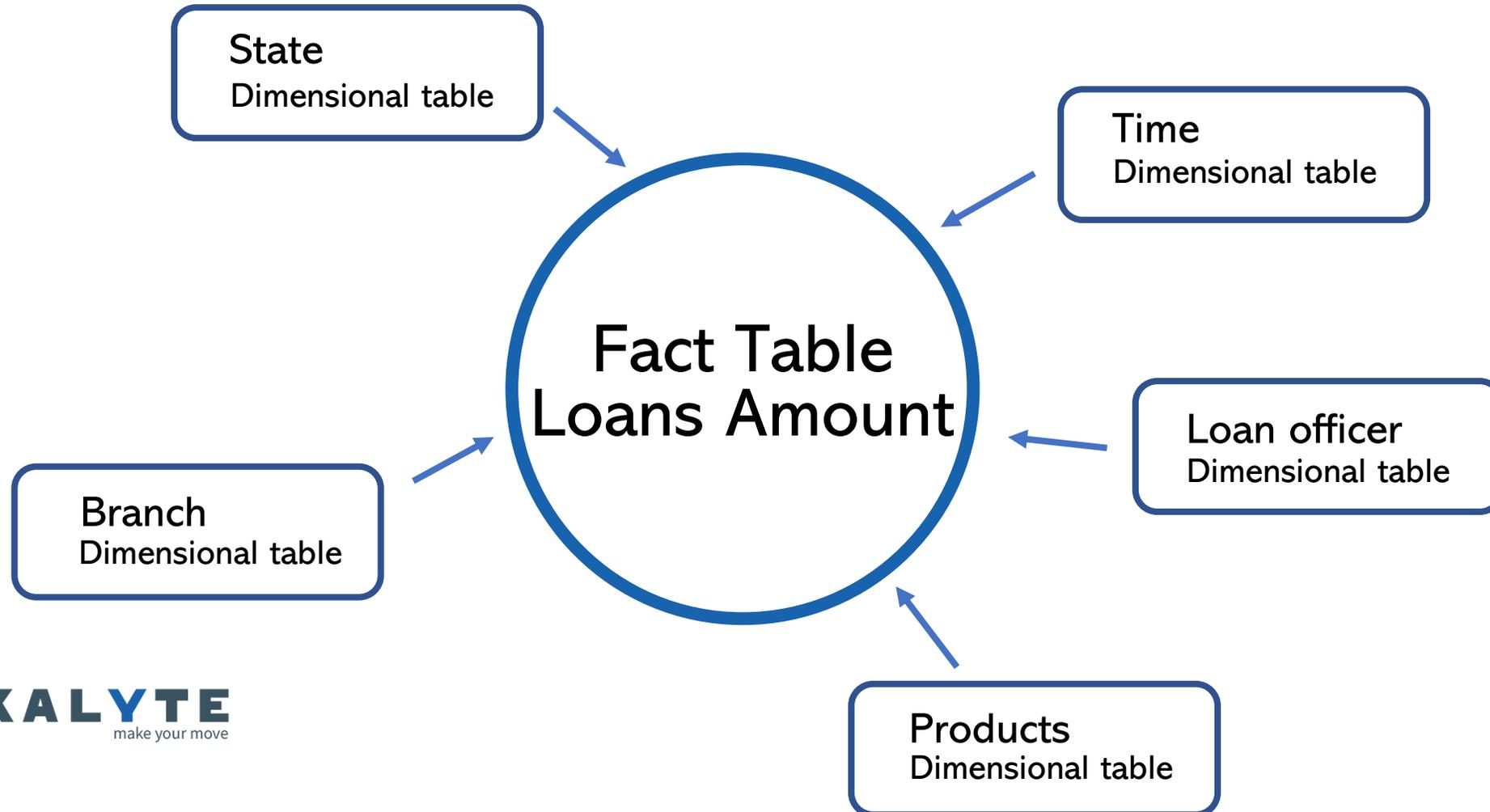


DATA DESIGN

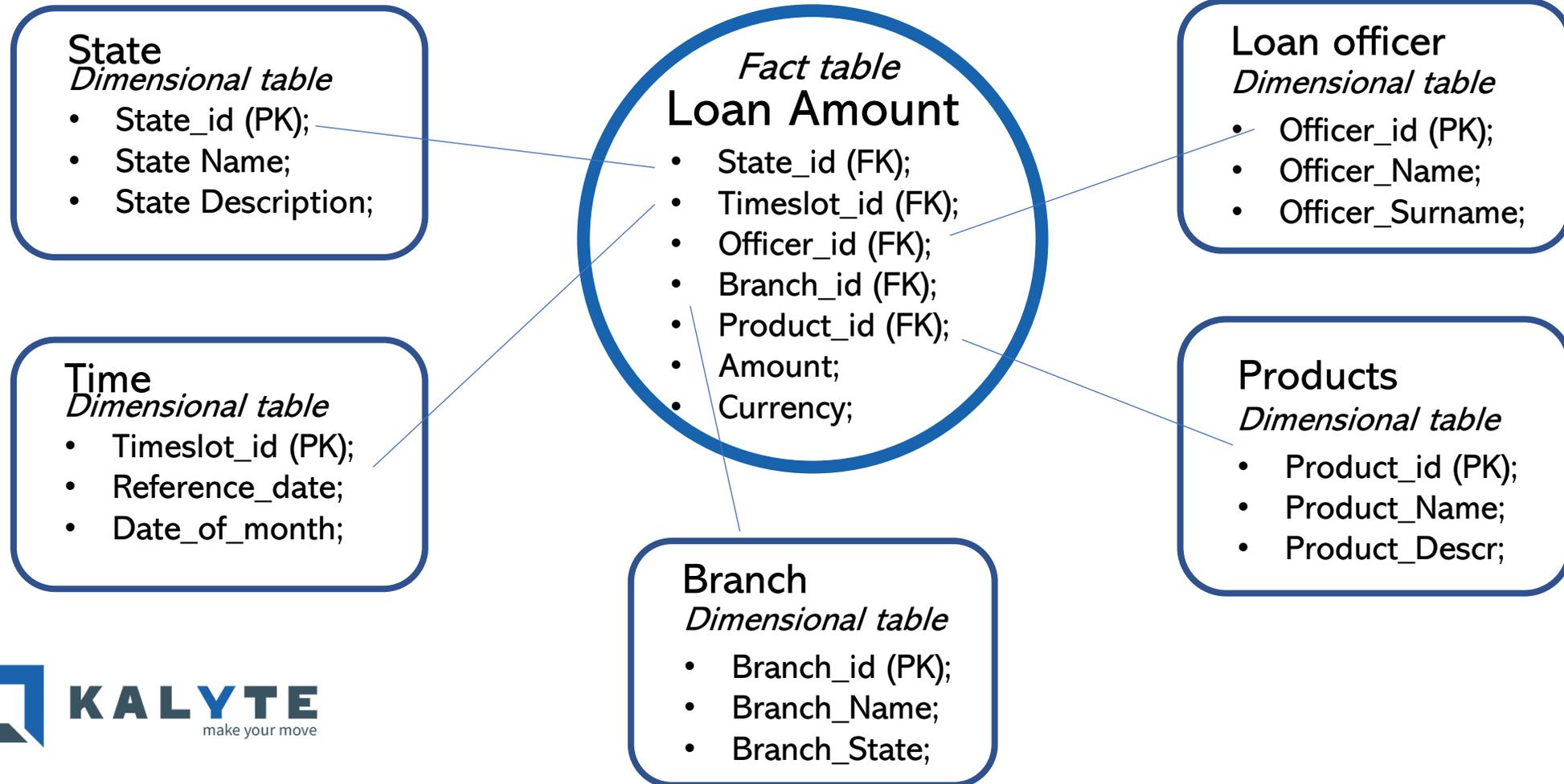
- Dimensional Modelling



DIMENSIONAL MODEL (1/2)



DIMENSIONAL MODEL (2/2)



BUSINESS INTELLIGENCE DESIGN

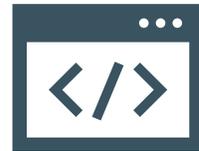
- Business Intelligence Applications
- BI Design & Development
- Advanced Analytics



BUSINESS INTELLIGENCE APPLICATIONS



Reporting
(Excel, csv, etc...)



Querying software
(like Hue for Impala environment)

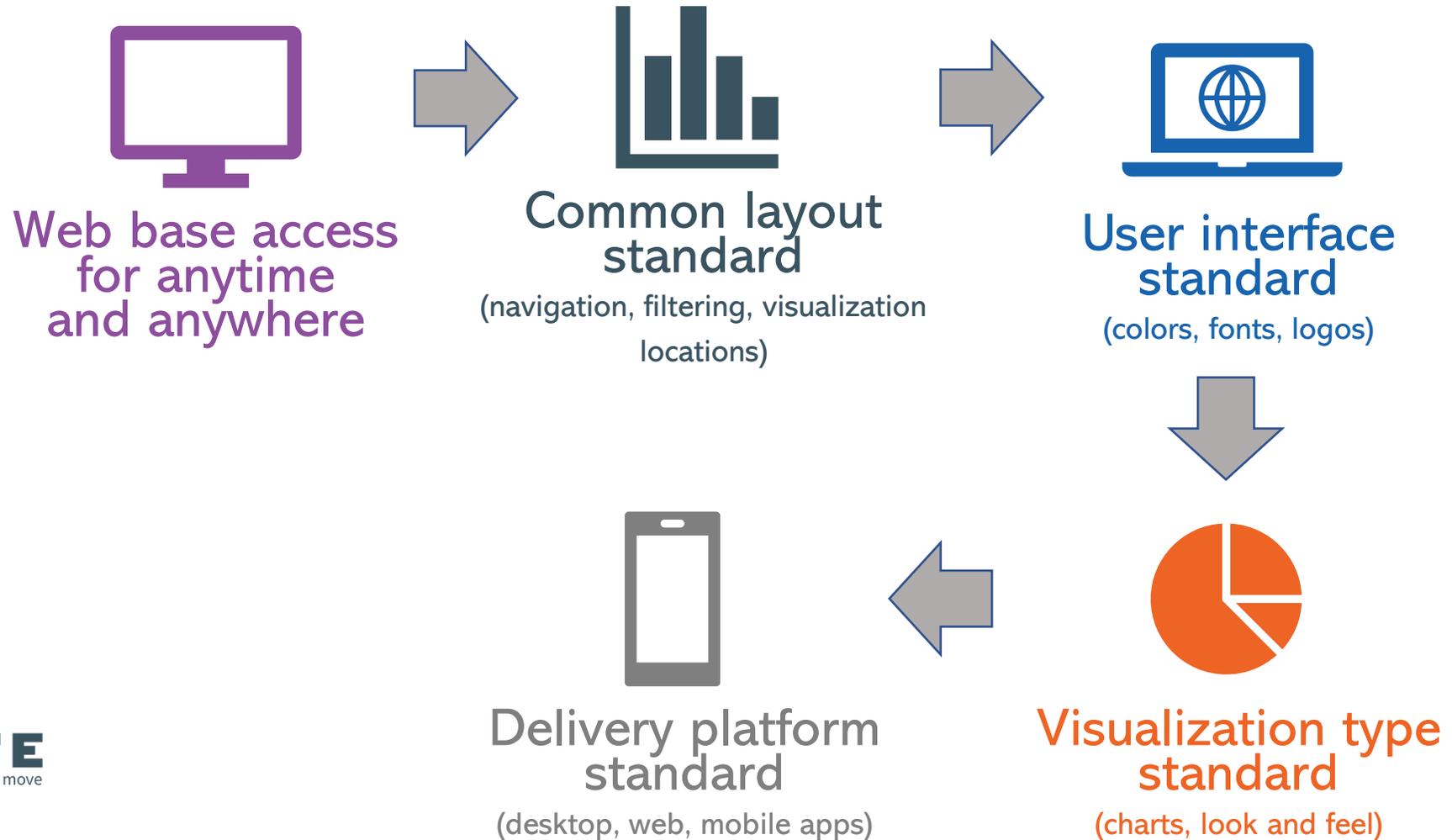


Digital Dashboard
(Tableau, Power Bi, Qlik Sense, etc...)



Data Mining
(R, Rapid Miner, Python, Knime, etc...)

BI DESIGN & DEVELOPMENT



ADVANCED ANALYTICS TECHNIQUES



Descriptive Analytics

It looks backward to understand what happened. It is focus on the past.



Predictive Analytics

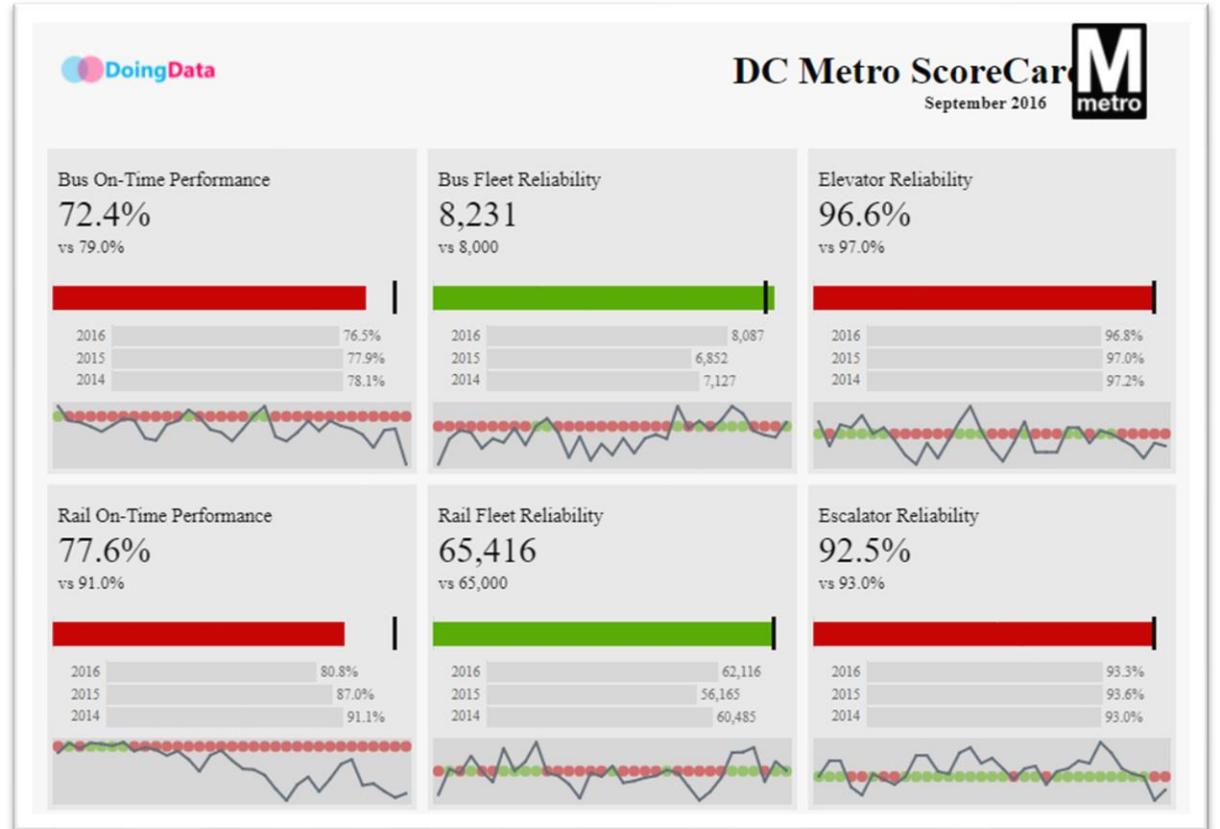
It uses statistical models and other methods to predict what might happened based on previous events. These Analytics use data mining and machine learning methods. Based on past events it would predicte future situations.

BUSINESS INTELLIGENCE KPI & DASHBOARD

- KPI Metrics
- KPI Dashboard



KPI METRICS



KPI DASHBOARD

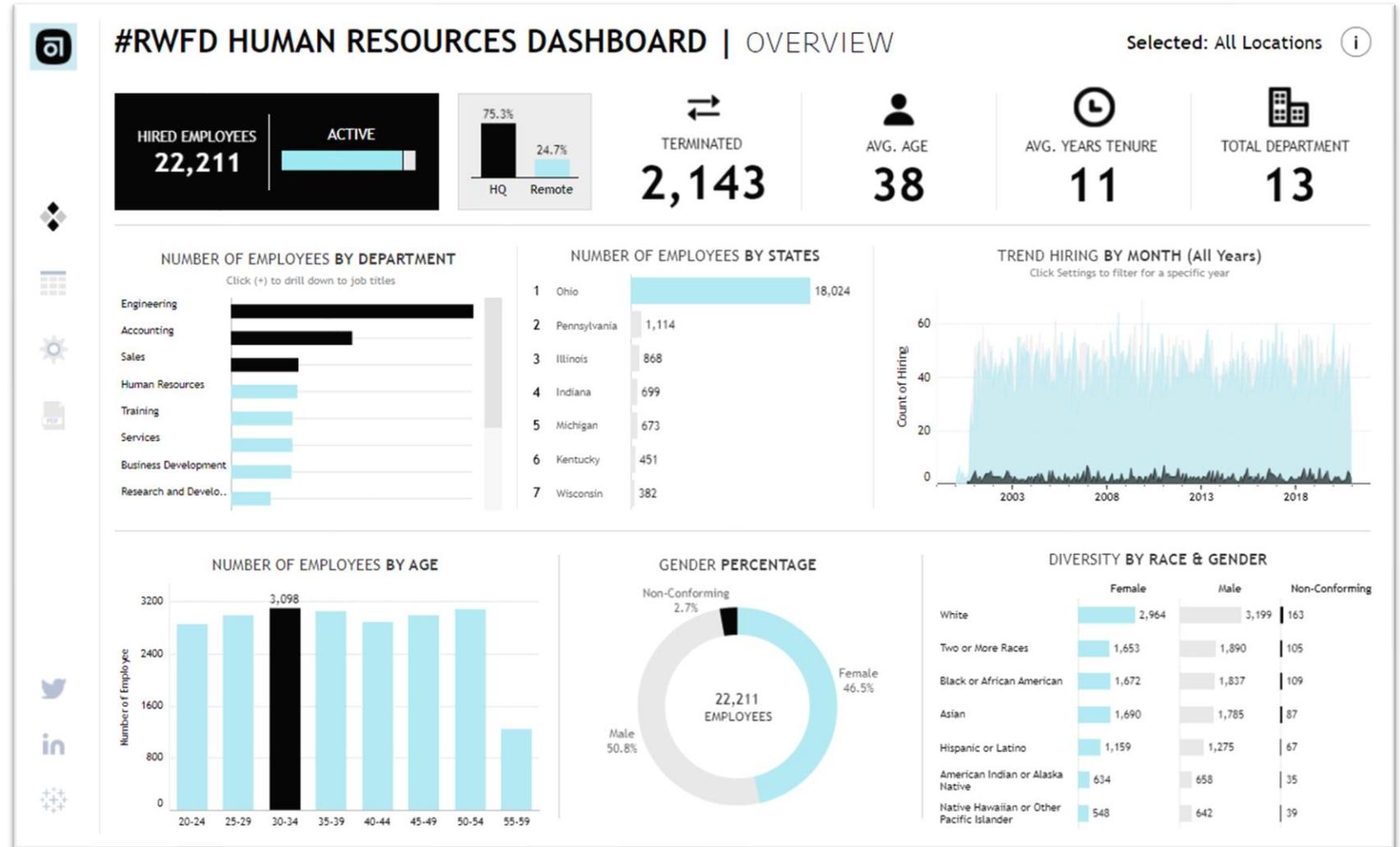


TABLEAU FOR THE DATA VISUALIZATION

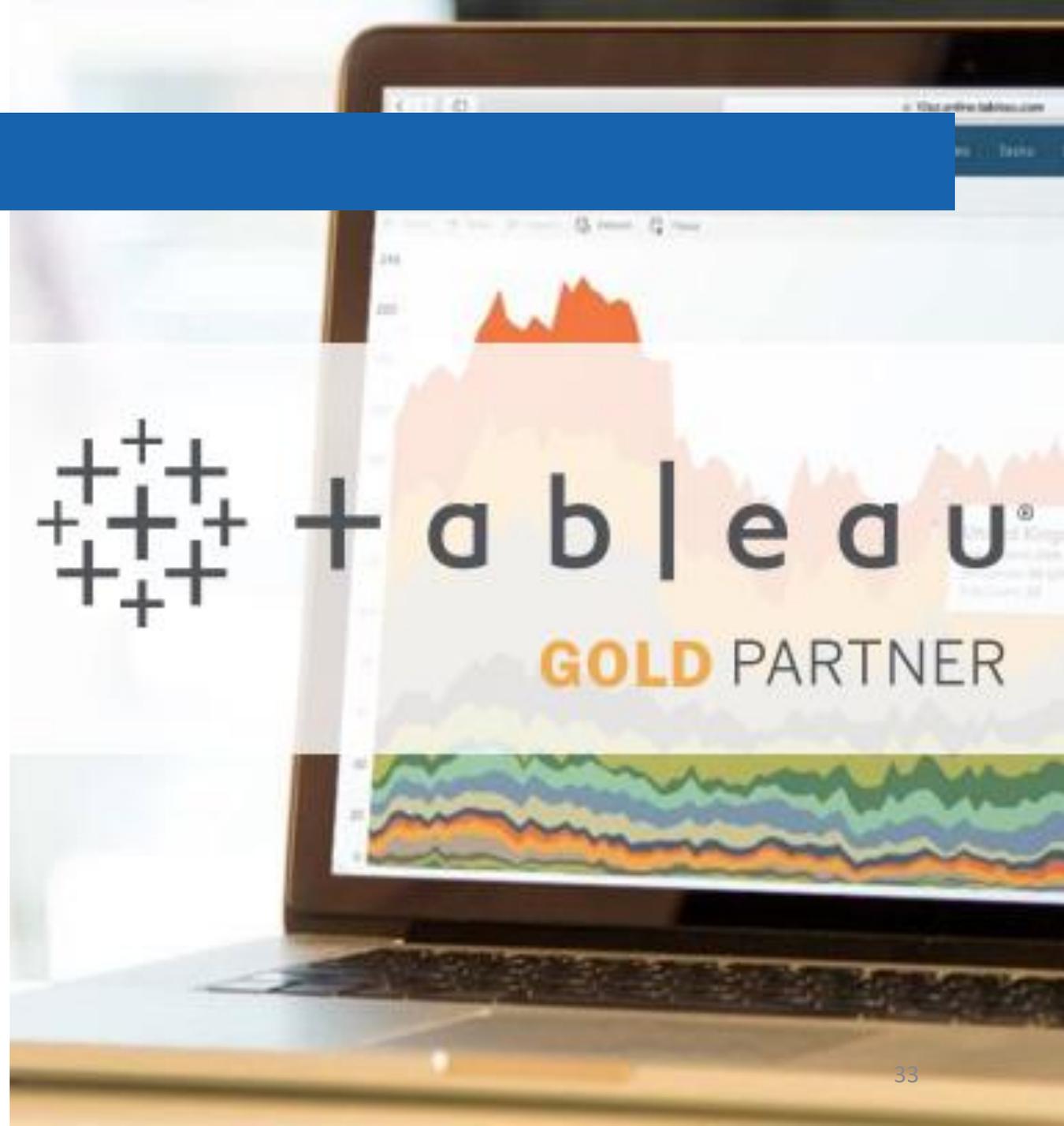
- Know Tableau environment (fundamentals);
- Understand Tableau Dashboard;
- Create Tableau Dashboard.



ABOUT TABLEAU

What is Tableau?

Tableau is a Business Intelligence tool used for Data Visualization. Its target is show the statistics developopt on the database. The target of its creators is make Tableau the definitive choice for the SELF SERVICE REPORTING.



ABOUT TABLEAU

The programming language that use Tableau is SQL (structured query language)

Definition

Sql is a programming language to query a database. Furthermore is possible read, modify and delete data.

```
Sub-Category Segment
IF [Sub-Category] = "Copiers"
OR [Sub-Category] = "Machines"
OR [Sub-Category] = "Supplies"
THEN "My Sub-Categories"
ELSE "Other"
END
```

The calculation is valid.

Apply OK

Tableau IF statement

ABOUT TABLEAU

Find inspiration!

If you want to find some inspiration about Tableau, you can navigate on Tableau Public (<https://public.tableau.com/en-us/s/>) the world community of Tableau users.

tableau public

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KALYTE make your move

35

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and open it!



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make your move

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