



ECSDA Conference

Innovation & Technology for Financial Market Infrastructure

Monte Titoli Data & Analytics Journey

Brussels, 20 November 2019

Agility & Growth Programme

Create an **AGILE** operating model that fosters Growth

Agility

AGILITY is the ability to change rapidly to remain competitive and create long term value

Growth

Accelerate business development and international client expansion

Reinvest savings into **GROWTH** initiatives that improve competitiveness

Core Pillars

Exceptional Client Experience 2.0

Process Excellence (Agile & Simple)

Enabling Pillars

Digital Transformation

Enabling Technology Simplification

Data & Analytics: a long journey ...

DATA & ANALYTICS JOURNEY

1. ADVANCED REPORTING

Manage data analytics aimed to **facilitate data comprehension** to the internal Data Owner and educate internal people to figure out **business trends**.

OPERATIONAL
EXPERIENCE

2. PREDICTIVE ANALYSIS

Analyse data in order to **monitor customers behaviours** and to leverage data to **generate new services/products** to foresee and satisfy customers needs.

CUSTOMER
EXPERIENCE

3. PRESCRIPTIVE ANALYSIS

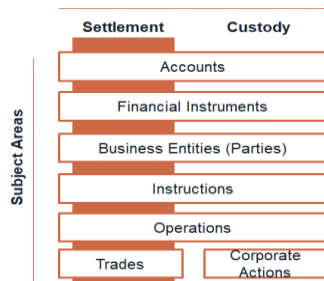
Leverage data and massive process elaboration to **forecast future trends** with the objective to **identify strategic solutions** to drive decisions.

DECISION MAKING
PROCESS

Data & Analytics: ... started in 2017 ...

2017

SEMANTIC DATA MODEL



BUSINESS GLOSSARY

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

A

Account ~ 280 terms

Account Identifier

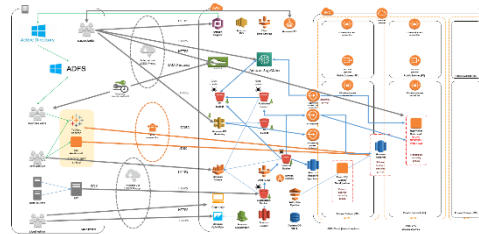
Acquisition Takeover Purchase Offer Buyback

Additional matching field

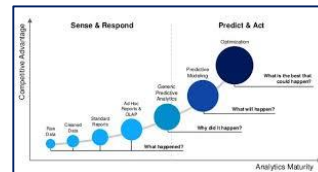
Taxonomy/Domain: **Accounts**
General category that includes the subcategories of cash account and safekeeping account.

2018

DATA LAKE



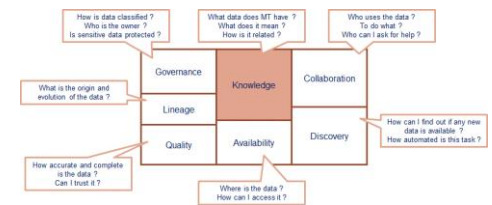
DATA VISUALIZATION TOOL



STRUCTURED DATA

2019

DATA CATALOGUE



MACHINE LEARNING TOOL



PREDICTIVE ANALYSIS



Data & Analytics: ... the next steps...

2020

MONTE TITOLI DATA & ANALYTICS JOURNEY

UNSTRUCTURED DATA

Augment **quantity of data** and information to be used in making predictive analysis, aimed to explore potential new business opportunities and strategies.

SEMANTIC DATA ANALYSIS

Improve **quality of data** and information to be used in making predictive analysis, saving time and effort of people to be dedicated to analyse potential new cases and/or solutions to increase our capability.

PRESCRIPTIVE ANALYSIS

Leverage the machine learning tool to perform **prescriptive analysis** with the aim to augment data knowledge and create to address the decision making process through data.

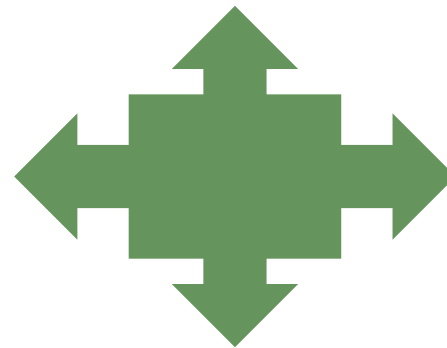


Data & Analytics: ... to augment capability

HUMAN BEINGS

DATA SCIENCE

refers to the techniques where a human supported by a machine is trying to extract **information and insights from data**. This includes predictive models on the higher level.



MACHINE LEARNING

is the science of creating **algorithms and programs which learn on their own** on the basis of heterogeneous data sources such as systems, things and humans.

ARTIFICIAL INTELLIGENCE

is the study of how to create **intelligent agents**. In practice, it is how to program a computer to behave and perform a task as an intelligent agent (say, a person) would.



Data & Analytics: Key Successful Factors

1. ORGANIZATION

Drive through a business approach in discovering data value and operational processes, working as a single and unique team: **many brains in a single head.**

SINGLE
TEAM

2. PEOPLE

Foster the exploration of all the potential correlations of data, to encourage **data analysis** and facilitate the adoption of predictive modelling tools.

COMPETENCE
CENTRE

3. TECHNOLOGY

Leverage **Cloud** opportunity as enabler to implement a data lake architecture and to take advantage of products and services, available in the marketplace.

ONE-STOP-SHOP