



World Forum of CSDs

How Monte Titoli is leveraging Innovation

Marrakech, April 11 2019



How Monte Titoli is leveraging Innovation

Data is the **asset**,
Cognitive is the **goal**

Monte Titoli, thanks to data analytics, intends to
“transform numbers in precious information” to improve
Clients Experience

The best way to evolve is **by adapting
quickly** to transformations

Big data is not about
the data. It's about **how you
analyze** the data

Process Excellence is more
than process efficiency: it starts from
Clients needs, to redesign processes
and to enhance products and services
offering

Robots - the goal is to **augment**
human capability

Process Excellence is a mix of **rationalization,
automation, satisfaction**



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: Key Themes

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.

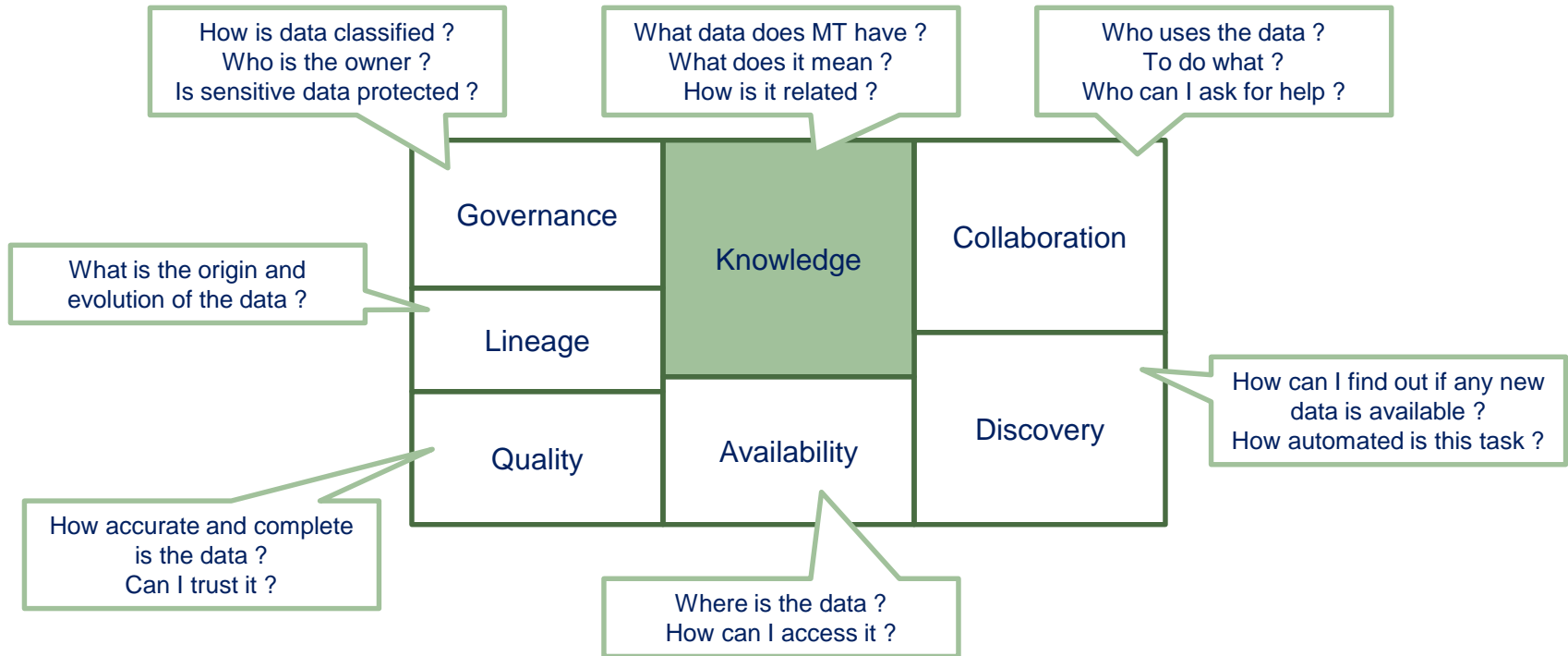


ONE-STOP-SHOP



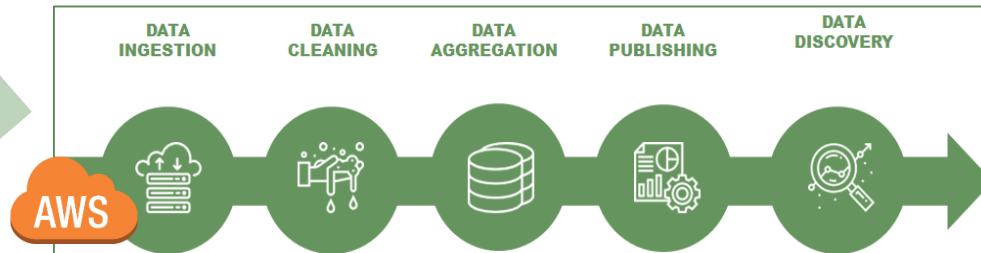
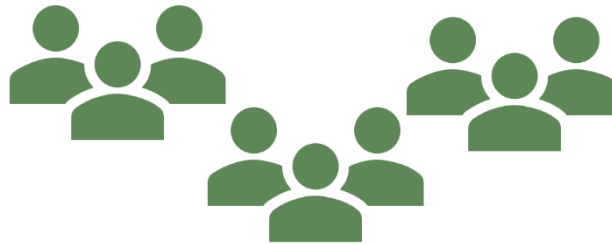
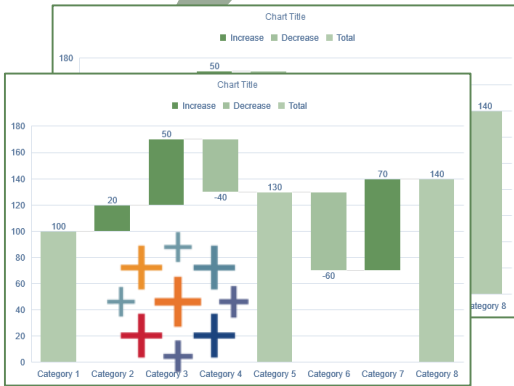
Data Analytics: Enterprise Data Governance

Enterprise Data Governance is the orchestration of people, processes, policies and technology to formally manage and protect structured and unstructured data assets, with the aim to guarantee a **standards-based, trusted and secure guide to data.**





Data Analytics: Educational & Cultural Path

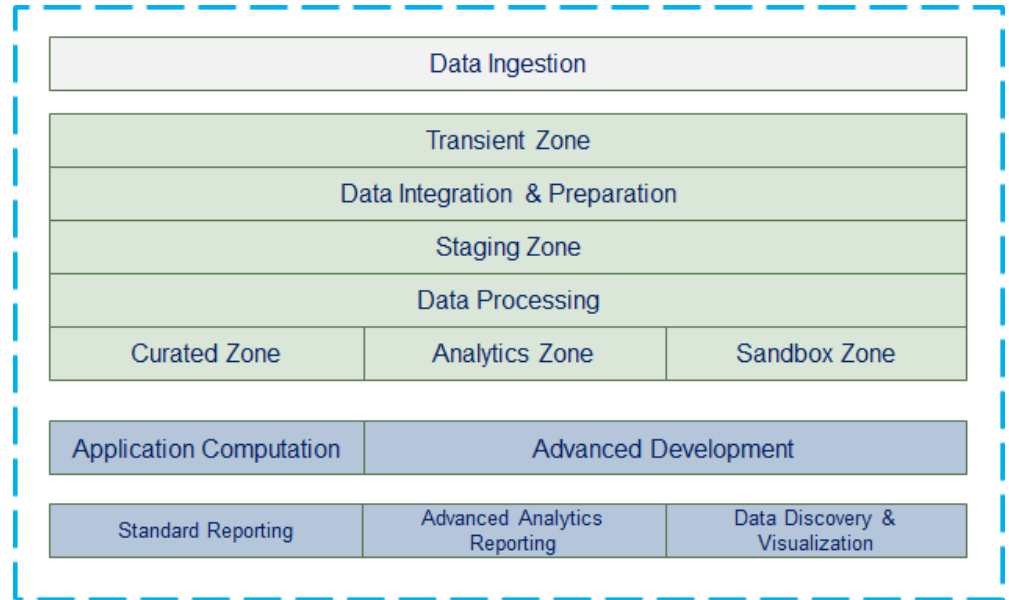




Data Analytics: Data Lake Architecture

A **Data Lake** allows to:

- ✓ collect and store **any type of data** (structured, unstructured, streams), at **any scale**, at **low cost**
- ✓ **secure** data and prevent unauthorized access
- ✓ **catalogue, search, and find** the relevant data in the central repository
- ✓ **quickly** augment capacity or increase environments
- ✓ **easily** perform new types of data analysis thanks to a **broad set of analytic engines** for ad hoc analytics.

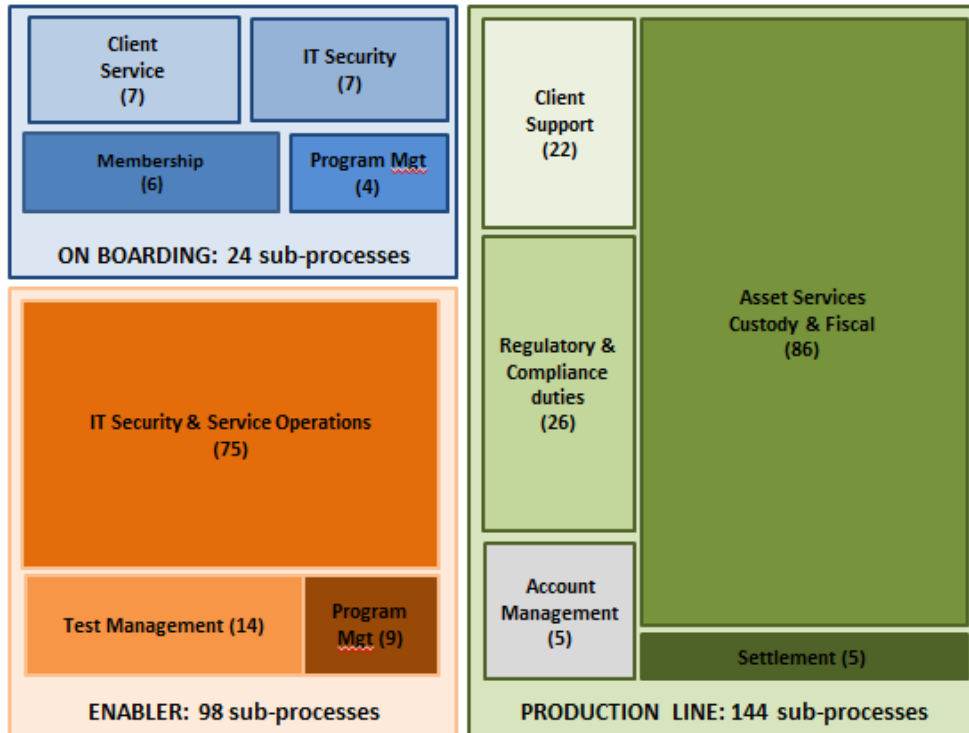




Process Excellence

To deliver **Process Excellence** through agility, we need to improve and re-think our **core processes**, thanks to the Lean Six Sigma (LSS) methodology.

Monte Titoli Business Process Mapping



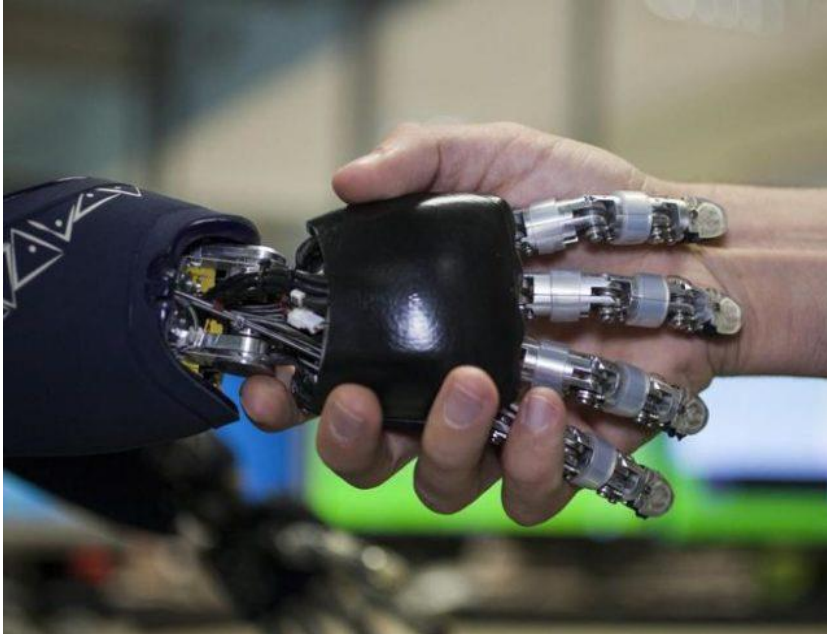
On boarding: processes related to the activities that have to be done when on-boarding a client

Operations: processes related to the activities that are necessary to provide our services to clients

Enabler: all the processes related to the activities that enable the production line to work properly



Process Excellence: Robotic Process Automation



Robotic process automation (RPA) is the practice of automating routine business practices, with "software robots" that perform tasks automatically.

Robot:

- A. as «special colleagues», not competitors
- B. work with and for us, not in place of us

- ✓ We consider the use of RPA to reduce operational activities, mitigate risks, and enrich the customer experience
- ✓ We employ RPAs to automate repetitive and low value activities, also in an unattended mode
- ✓ With this automation we are going to reduce the human cost and save HCs
- ✓ The saved HCs will be dedicated to support customers and the growth of volumes



Robotic Process Automation: Key Themes

1. METRICS & BENEFITS

- a. **Speed** - Increase productivity
- b. **Quality** - Improve accuracy
- c. **Risk** – Mitigate mistakes
- d. **People** - Transform people effort
- e. **Efficiency** – Reduce costs



VALIDATION
APPROACH

2. CHALLENGES

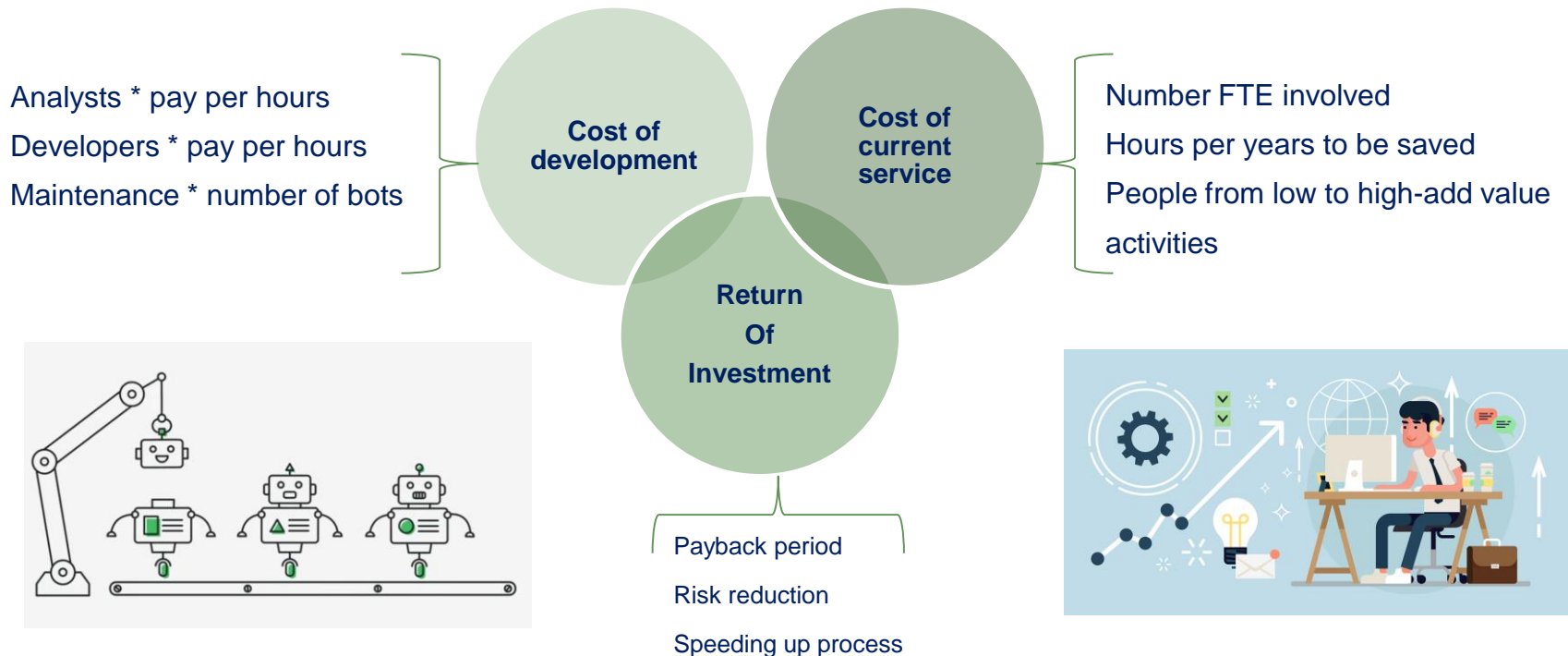
- i. Take a **business perspective** to reduce or simplify demand
- ii. Drive end-to-end **process standardisation** to avoid unnecessary automation
- iii. Ensure **technology is ready** to deploy robots at scale
- iv. Manage **bots and human talent together**
- v. Initiate a **cultural change** to automation, training managers to the new role

3. KEYS FOR SUCCESS

- ✓ Finding right **opportunities**
- ✓ Evaluating and estimating the **full impact**
- ✓ **Reengineering** first and reviewing operational processes
- ✓ Redesigning **roles** and **re-skilling** people
- ✓ Creating **reusable designs** to be leveraged across different solutions and business areas

Robotic Process Automation: Validation Approach

The business process is evaluated in order to understand if the organization can reap benefits from its automation and to **validate the approach**, assign the correct priority to the RPA implementation.





Robotic Process Automation: Key Initiatives

1. KYC PROCESS

Digitize KYC/on-boarding process, aimed to speed up the workflow, to automate the documentation gathering process with the aim to digitize it.

ENHANCE
CLIENTS EXPERIENCE

2. DIGITALIZATION

Digitize information and data coming from internal/external sources, with the aim to enhance volume of data to be used, mitigating risks as well, replacing repetitive manual tasks through robots.

ENHANCE
DIGITALIZATION

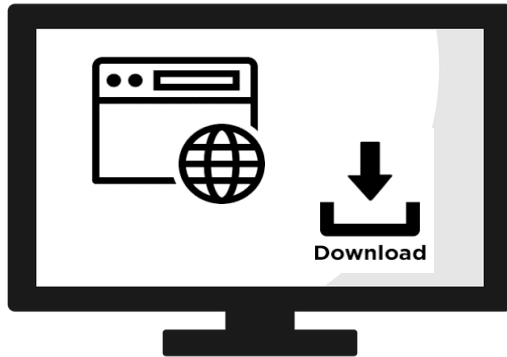
3. ARTIFICIAL INTELLIGENCE

Leverage artificial intelligence solutions to maximize value of the automation, thanks to the RPA's combination with other technologies (NLP, machine learning, etc...).

ENHANCE
EFFICIENCY



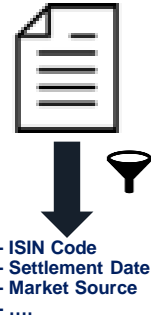
Robotic Process Automation: Use Case – As Is



Daily Market Notices are manually downloaded by Operations team



Users verify notice contents, select the relevant types of the notice and for each of them they collect the meaningful data

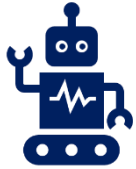


Users input meaningful data for the selected notices on legacy MT System





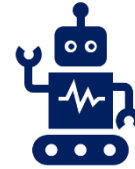
Robotic Process Automation: Use Case – To Be



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DATA  **CAPTURE**

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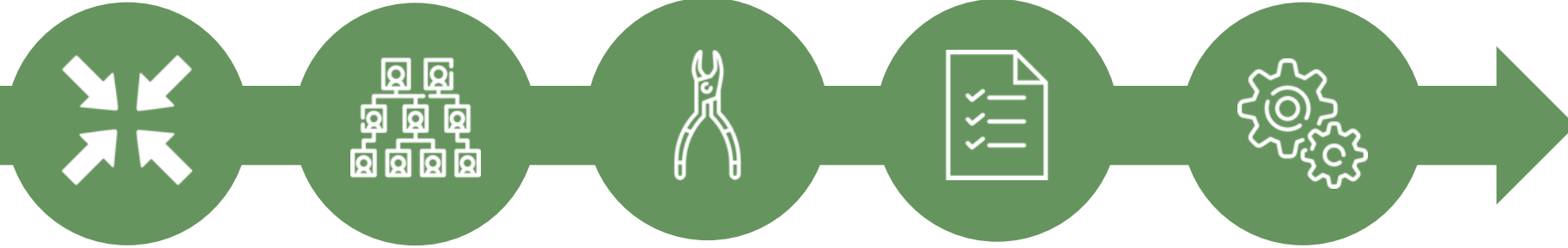
MULTI-CHANNEL DOCUMENT SCRAPING

DOCUMENT CLASSIFICATION

ABSTRACT INFORMATION

FORMAL DATA CHECK AND TRANSFORMATION

LEGACY MT SYSTEM OPERATION



WEBSITE



KNOCK-OUT DELISTING



ISIN CODE



DATA PRESENT



LOGIN



DATA PROVIDER



PERIOD INTEREST RATE



SETTLEMENT DATE



DATE FORMAT TRANSCODING



ROBOT DATA INPUT



EMAIL



BTP ADMISSION DATE



MARKET SOURCE



DATA VERIFICATION



DATA CERTIFICATION