MEET THE PRACTITIONERS FINANCE AND BANKING

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Tor Vergata University – Rome 22-11-2019

REPLY

DOCUMENT OBJECTIVES

- **Overview of** **Reply Group**

- **Focus on** **Avantage Reply**

- **Avantage Reply capabilities on** **Financial Institutions**

- **What is our job ? Two business cases**
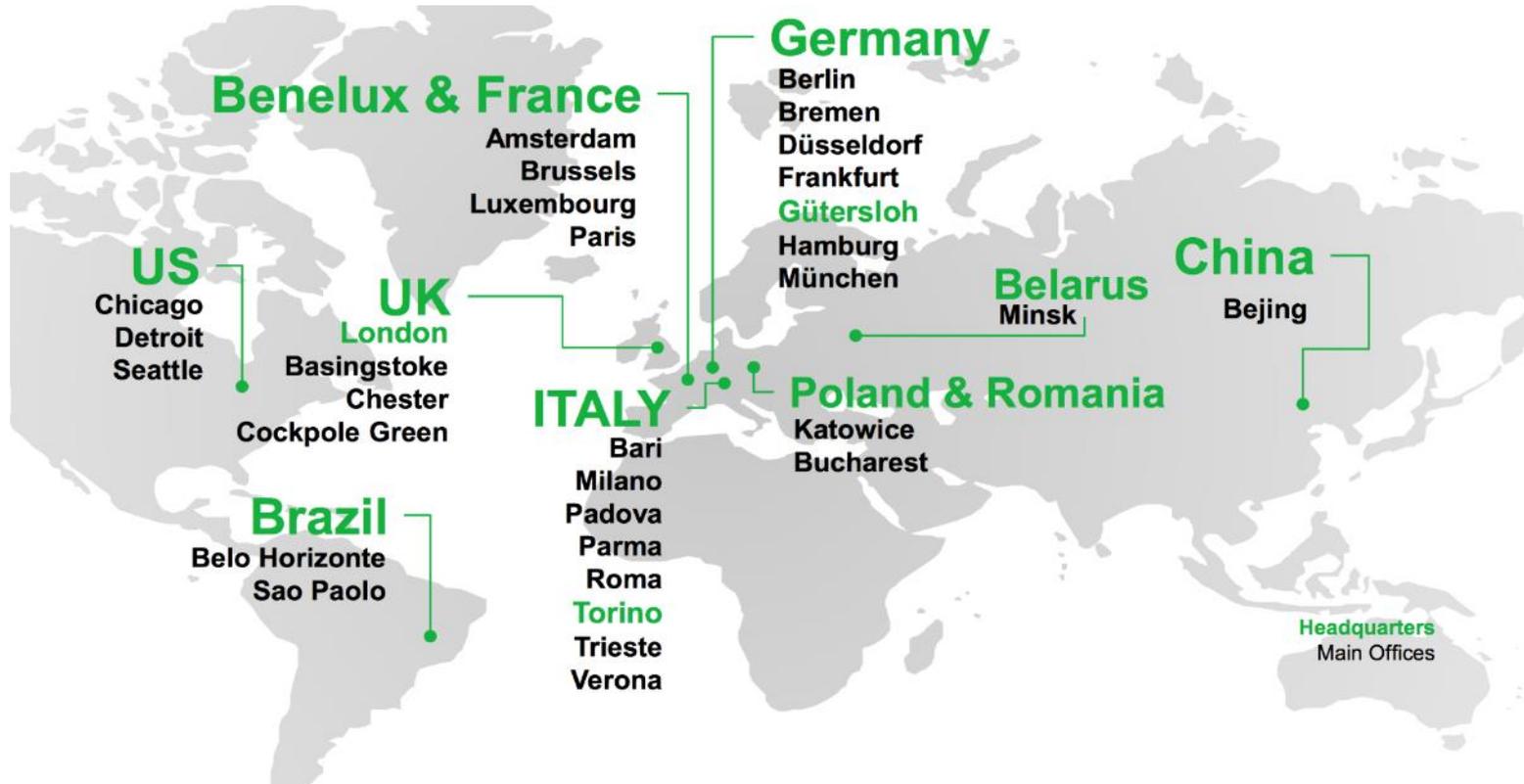
- **Key Competencies from new hired people**

AGENDA

REPLY GROUP IN A NUTSHELL

AVANTAGE REPLY – WHO WE ARE

AVANTAGE REPLY – OUR CAPABILITIES

AVANTAGE REPLY – OUR FINANCIAL INSTITUTIONS EXPERIENCES

WHAT IS OUR JOBS? TWO BUSINESS CASE
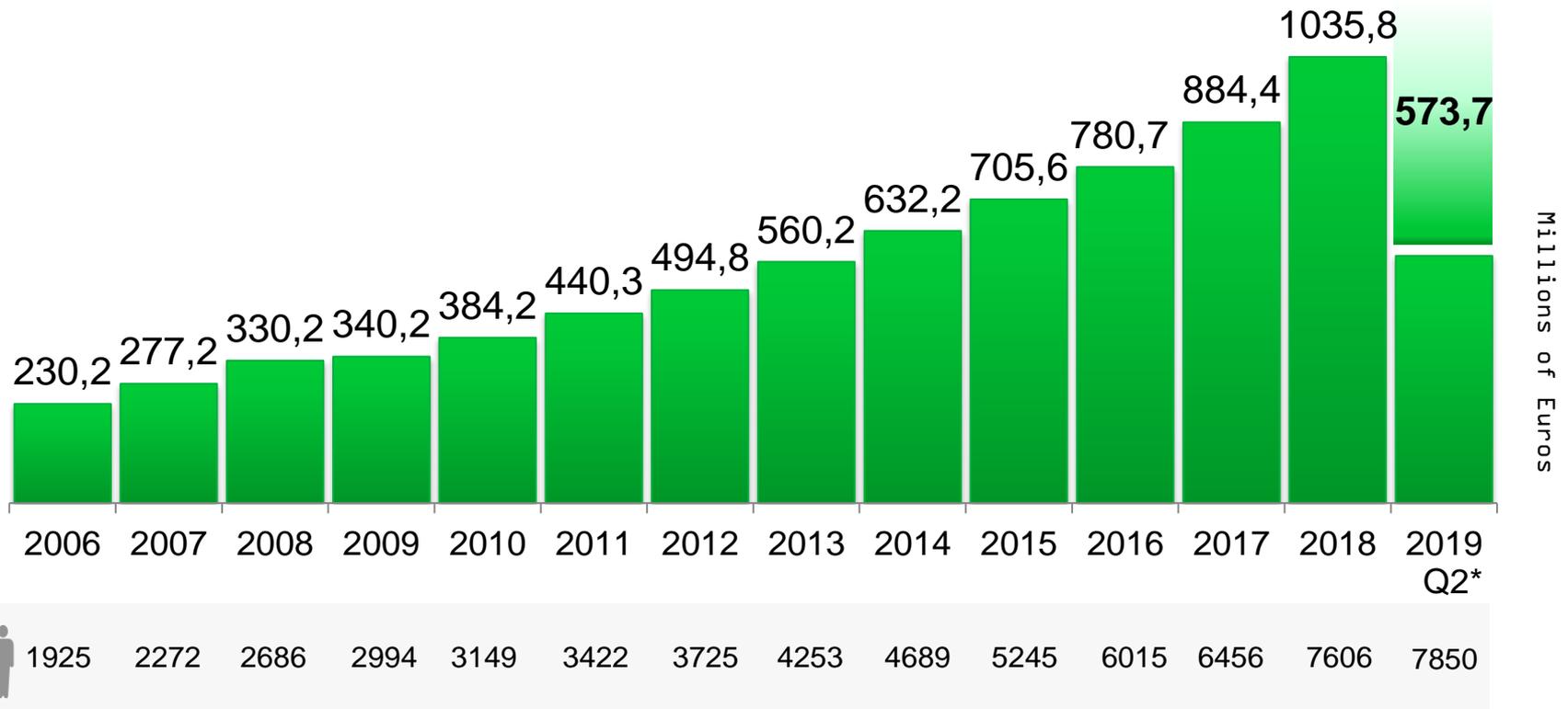
KEY COMPETENCIES AND PROFESSIONAL GROWING

REPLY GROUP
ITALIAN OWNERSHIP, INTERNATIONAL FOOTPRINT

Benelux & France
- Amsterdam
- Brussels
- Luxembourg
- Paris

Germany
- Berlin
- Bremen
- Düsseldorf
- Frankfurt
- Gütersloh
- Hamburg
- München

China
- Bejing

US
- Chicago
- Detroit
- Seattle

UK
- London
- Basingstoke
- Chester
- Cockpole Green

Belarus
- Minsk

ITALY
- Bari
- Milano
- Padova
- Parma
- Roma
- Torino
- Trieste
- Verona

Poland & Romania
- Katowice
- Bucharest

Brazil
- Belo Horizonte
- Sao Paolo

Headquarters
Main Offices

REPLY GROUP
KEY POINTS

Millions of Euros

Year	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019 Q2*
Revenues	230,2	277,2	330,2	340,2	384,2	440,3	494,8	560,2	632,2	705,6	780,7	884,4	1035,8	573,7
Employees	1925	2272	2686	2994	3149	3422	3725	4253	4689	5245	6015	6456	7606	7850

- **FIG (Financial Istitutions Group) is one of principal market of Reply Group**
- **More than 25% total revenues is due to the FIG market with around 1.800 specialist (1.300) in Italy**

QUARTERLY REPORT "2019.06.30": Consolidated turnover of €573.7 million (+15.2% with respect of I quarter 2018)

REPLY NETWORK MODEL

REPLY GROUP
FINANCIAL SERVICES - OUR CLIENTS

Within Financial Services, we work with clients at Group, subsidiary and branch levels. We provide management consultancy services, system integration and digital services with a focus on the conception, innovation, design and implementation of solutions to implement strategic, business and regulatory changes in a client-centric and cost effective way.

ASSET MANAGEMENT

Deutsche Asset Management · ManGroup plc · BLACKROCK · ALLIANCEBERNSTEIN · STATE STREET GLOBAL ADVISORS · EurizonCapital · AVIVA INVESTORS · apg morgen is vandaag

BANKING

ING · RBS · BNP PARIBAS · Deutsche Bank · HSBC · Belfius · Bayern LB · BIL BANQUE INTERNATIONALE À LUXEMBOURG · ABN·AMRO · KBC · INTESA SANPAOLO · cdp cassa depositi e prestiti · Gruppo bancario Iccrea · MEDIOBANCA · BANCA GENERALI

INSURANCE

AXA · Allianz · GENERALI · AG INSURANCE · ethias · P&V · Bâloise Assurances · ERGO · AVIVA · NN · EULER HERMES Our knowledge serving your success

MARKET INFRASTRUCTURE & GLOBAL CUSTODIANS

J.P.Morgan · clearstream DEUTSCHE BÖRSE GROUP · caceis INVESTOR SERVICES · RBC Royal Bank · Deutsche Börse Group · London Stock Exchange · ice · STATE STREET · euroclear · BNY MELLON

REGULATORS

EUROPEAN CENTRAL BANK BANKING SUPERVISION · Single Resolution Board

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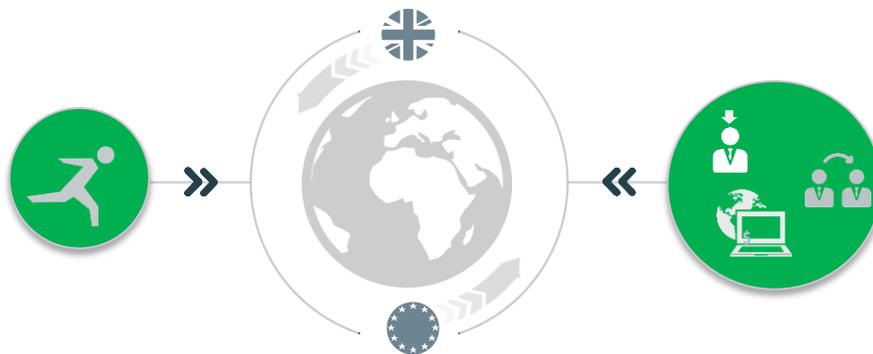
WHAT IS OUR JOBS? TWO BUSINESS CASE

KEY COMPETENCIES AND PROFESSIONAL GROWING

AVANTAGE REPLY
FROM DESIGN TO OPERATIONAL IMPLEMENTATION

We are a specialized management consultancy fully integrated across our 13 European offices, with over 300 consultants working with leading financial institutions and for the regulators themselves. In addition, we leverage the technology capability of Reply not only to advise on change but also to implement it.

Regulatory

- Change management (implementation of a new regulation)
- Remediation (addressing recommendations from the supervisor)
- Interim support regulatory reporting, stress tests
- Optimisation (regulatory capital, liquidity, etc.)

Strategic, Business and IT Change, M&A

- Strategic & business change (e.g., credit 're-invention')
- IT change (e.g., risk and finance systems)
- Data management & reporting

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AVANTAGE REPLY
FIVE KEY DIFFERENTIATORS

Integrated pan-European footprint

- Leading business and regulatory capabilities, leveraging our experience with best-in-class solutions in other countries

Embedded in the industry and regulatory ecosystem

- Advanced regulatory and supervisory capabilities, leveraging knowledge gained when working for the European Central Bank, the Single Resolution Board, etc.

Technology enabled

- Demonstrated capability to implement change in IT systems, leveraging 5,300 technologists and partnerships with key vendors

Experienced delivery teams

- Staffing model drawing on business, technology and regulatory professionals organised in 'SWAT' teams.

Price policy

- Operational efficiency resulting in competitive price policy
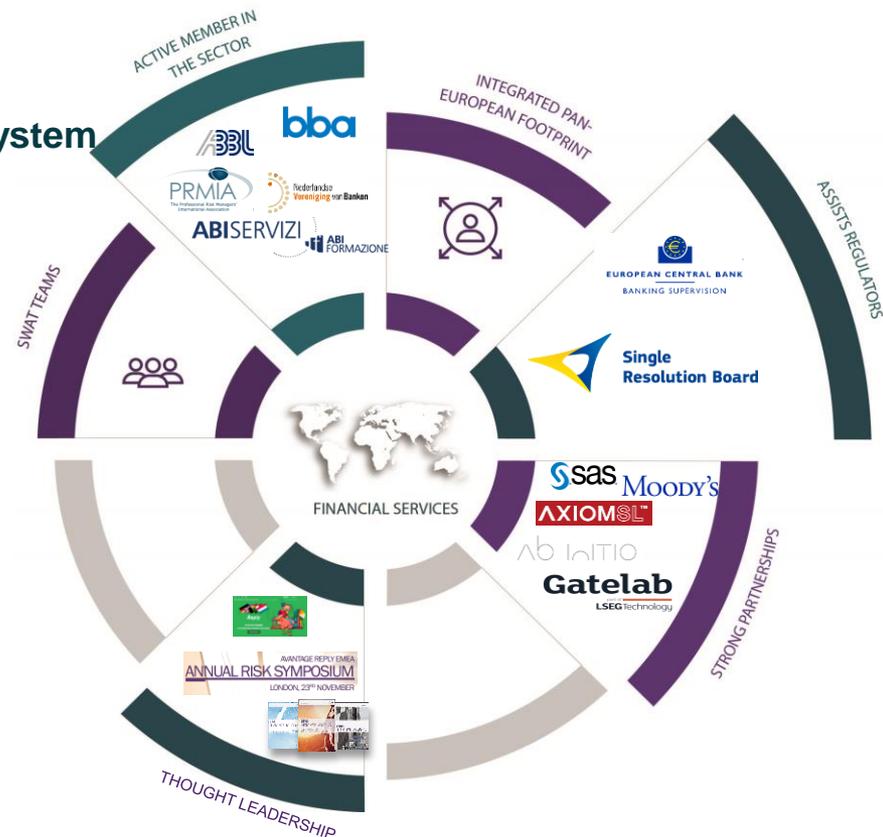
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AVANTAGE REPLY

MOST RELEVANT FINANCIAL INSTITUTIONS EXPERIENCES

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AVANTAGE REPLY

BUSINESS CASE: ASSESSMENT OF TRANSACTION REPORTING PLATFORM

CONSULTANT
- What kind of skills do I need?
- What are the information we have to ask to the customers?
- What are the data we have to collect ?

BANK
- I would like to know what are the main pain points of the platform;
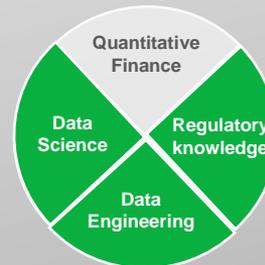- What are the main difference between the platform and the RegTech solution ?

Regulatory Data RTS and ITS data Data Quality Process

Cloud Computing

Machine Learning RPA and NLP

DATA

TECHNOLOGY

METHODOLOGY
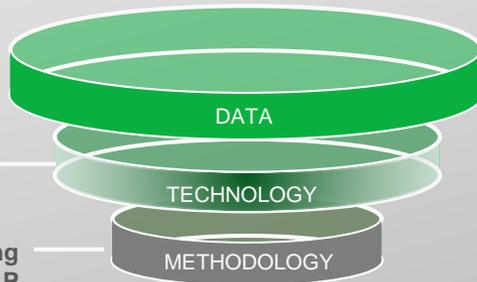
Strategic Capabilities

Quantitative Finance

Data Science

Regulatory knowledge

Data Engineering

1. Through a Machine Learning algorithm is possible to set-up a regulatory rule engine is able to manage regulatory exceptions, perform the quality control of the transaction before it is sent to Trade Repository
2. Data reporting manipulation provides a strategic and business view of the transaction reporting

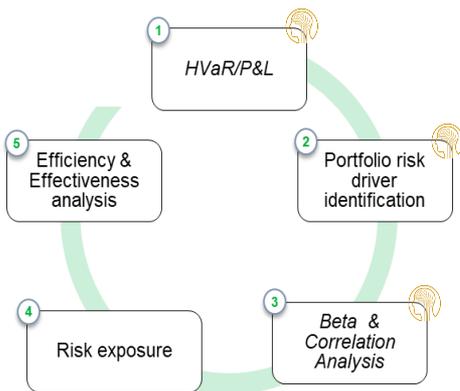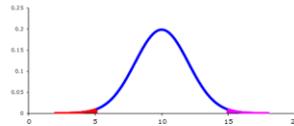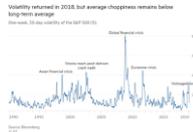**KEY SUCCESS FACTORS**

RESULTS AND BENEFITS

AVANTAGE REPLY

BUSINESS CASE: TAIL RISK MANAGEMENT FRAMEWORK (1/2)

In a market context more tempestuous, how can I build a framework in order to hedge the portfolio from "tail events"?

Solution: Tail risk management framework

BANK

CONSULTANT

HVaR/P&L

5 — Efficiency & Effectiveness analysis

2 — Portfolio risk driver identification

4 — Risk exposure

3 — Beta & Correlation Analysis

1
- Portfolio **HVaR** and/or **P&L computation**
- For illiquid asset the AI algorithm identify a **market benchmark** to be used in the original portfolio

2
- Identification of the main risk factors to which the portfolio is exposed through **Multivariate linear regression/PCA Analysis** and Drawdown analysis

3
- Replicating Portfolio construction: weighted portfolio whose weights are the betas (step 2)
- Bivariate Regression Analysis: **Filtered Regression Analysis and Rolling Regression Analysis** aimed to compute beta spot (how a shock to the replicating portfolio impact the spot price) and beta vol (how a shock to the spot impact the related volatility)

4
- **Hedging strategy**
- **Full-repricing**
- **Risk metrics**

5
- *Tail Risk Analysis:* backward looking based on historical scenario and market data
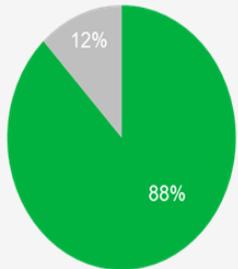- *Beta Analysis*: forward-looking analysis based on market expectation (Expected Beta Return)

AVANTAGE REPLY

BUSINESS CASE: TAIL RISK MANAGEMENT FRAMEWORK (2/2)

OUTCOME

Portfolio

- Govies
- Financials

HTC	813 mln/€
HTCS	472.5 mln/€
Duration	< 2y
Time to Maturity	< 5y

* The portfolio structure is based on the Italian bank sector benchmarking. Source:Reply Observatory

Equity Line

Drowdown

1

2

3

Hedging Strategy

Underlying	Moneyness	Opt Tenor	Delta	Call/Put	TailRet/Yearly Carry v	TailRet
SX7E	98%	6M	-50%	Put	0.70	4.31%
FTSEMIB	98%	6M	-50%	Put	0.69	3.65%
SX5E	98%	6M	-50%	Put	0.46	2.16%
DAX	101%	6M	-50%	Put	0.40	1.86%
SPX	101%	6M	-50%	Put	0.13	0.59%
NDX	102%	6M	-50%	Put	0.11	0.56%

The output is a ranking of put option which are able to hedge the portfolio from tail risk events.
The options are sorted by efficiency, **tail performance** (column "TailRet") and effectiveness, **cost of carry** (ratio between tail return and cost, the column "TailRetYearlyCarry").
The best solution is to buy a put option on SX7E with a tenor of 6 month and a delta -50%

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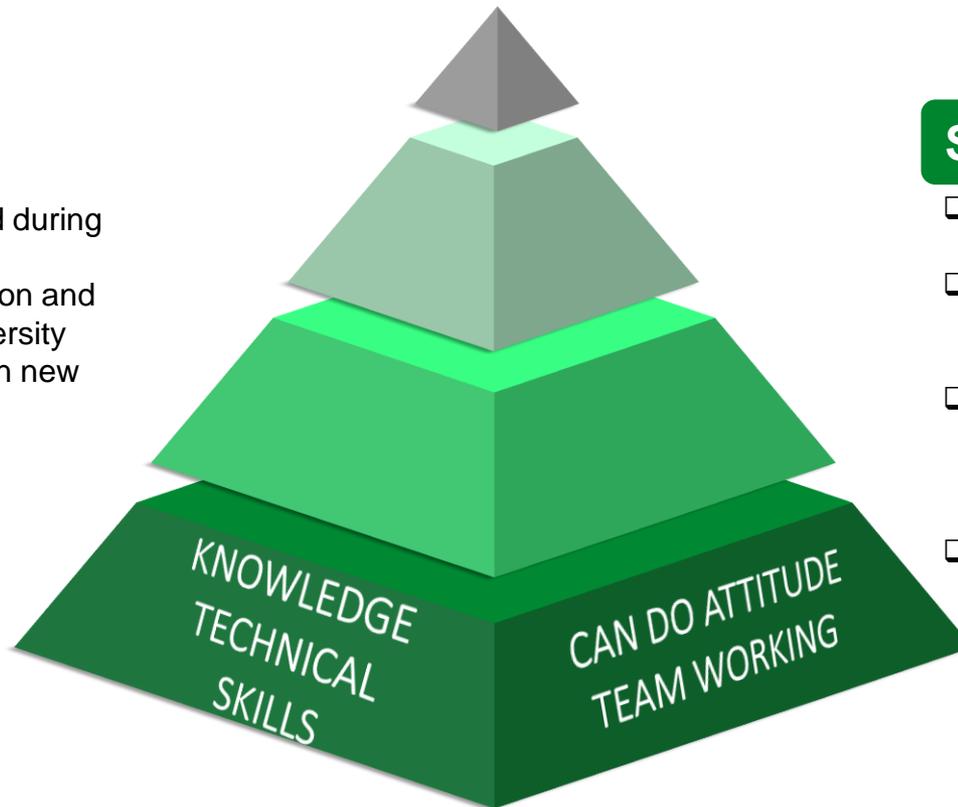
KEY COMPETENCIES AND PROFESSIONAL GROWING

KEYS COMPETENCIES

OUR EXPECTATION FROM NEW HIRED COLLEAGUES AND THEIR PROFESSIONAL GROWING

HARD SKILLS

- ❑ What you have learned during your study path
- ❑ Your experience, passion and knowledge out of University
- ❑ Your availability to learn new concepts

SOFT SKILLS

- ❑ What is your approach to new projects, subjects and issues
- ❑ You are not alone, you work with a group of colleagues and workers
- ❑ Need patience, communication skills (complex concepts explained very simple way)
- ❑ Accept new challenges outside your "comfort zone"

KNOWLEDGE TECHNICAL SKILLS

CAN DO ATTITUDE TEAM WORKING

KEYS COMPETENCIES

OUR EXPECTATION FROM NEW HIRED COLLEAGUES AND THEIR PROFESSIONAL GROWING

FLEXIBILITY

Consultant works for different customers and this means:
- ❑ Location
- ❑ Culture
- ❑ Language and technical language
- ❑ Subjects of the project
- ❑ Tight deadline
- ❑ Time management
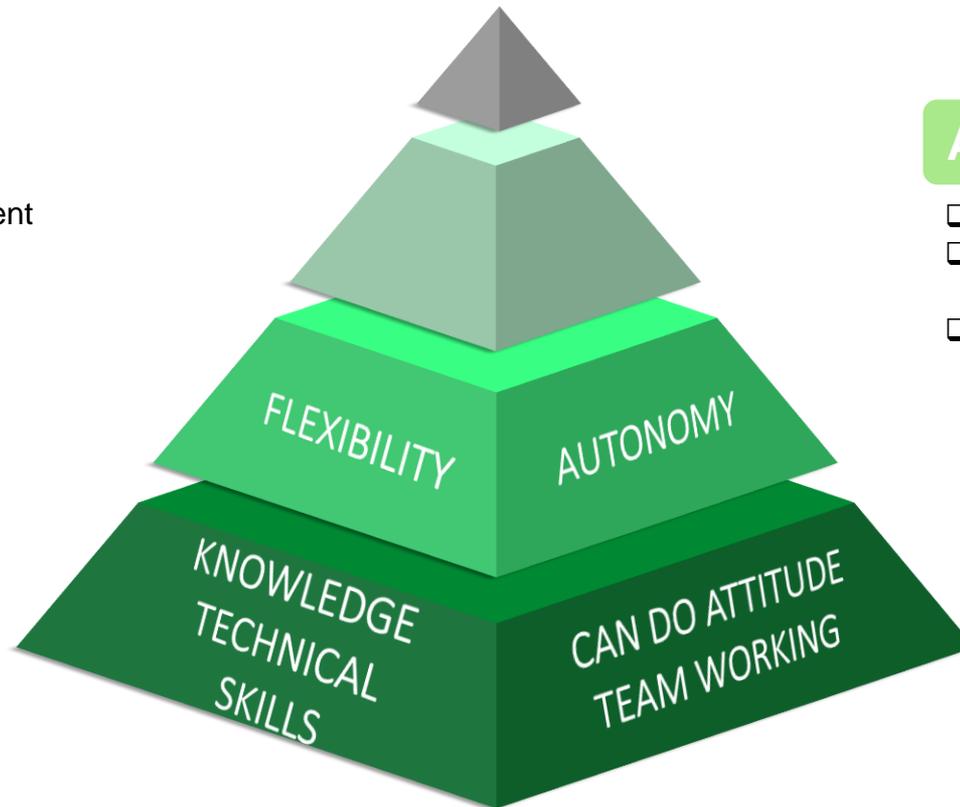
AUTONOMY

- ❑ You are able to plan your work
- ❑ You are able to manage issues and propose solution
- ❑ Understand when involve your senior colleagues

FLEXIBILITY

AUTONOMY

KNOWLEDGE TECHNICAL SKILLS

CAN DO ATTITUDE TEAM WORKING

KEYS COMPETENCIES

OUR EXPECTATION FROM NEW HIRED COLLEAGUES AND THEIR PROFESSIONAL GROWING

RESOURCE MNGT

When you will lead a project you need to understand:
- ❑ How many resources (effort)
- ❑ What are the (hard and soft) skills you need for the project
- ❑ When the resource will start the activities
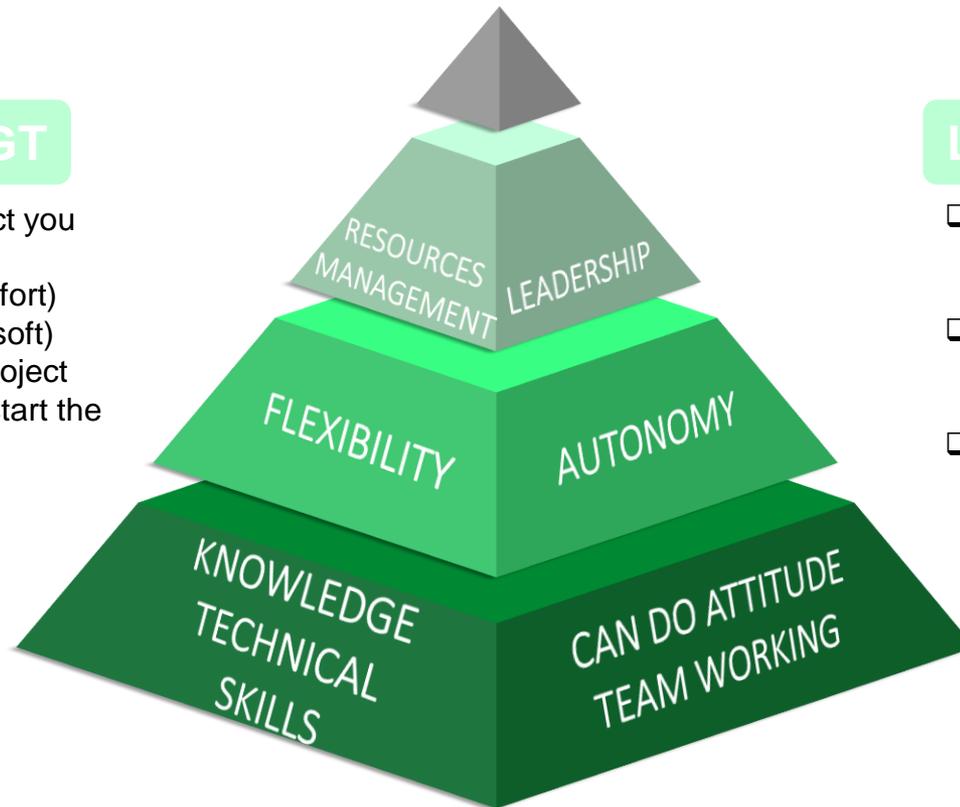
LEADERSHIP

- ❑ You have to lead your team to achieve the milestones and complete the project
- ❑ You have to motivate your team to achieve both personal and common goal
- ❑ You have to stay update about the environment around your job, as instead how the job is changing

Pyramid labels:
RESOURCES MANAGEMENT / LEADERSHIP
FLEXIBILITY / AUTONOMY
KNOWLEDGE TECHNICAL SKILLS / CAN DO ATTITUDE TEAM WORKING

REPLY CAREER PATH

Career Path

- Partner
- Associate Partner
- Senior Manager
- Manager
- Senior Consultant 2
- Senior Consultant 1
- Consultant 3
- Consultant 2
- Consultant 1

Evaluation drivers

1 Value for company

2 Team Building and best place to work

3 Business management as usual

SERGIO'S CAREER PATH

Statistics and Economics Science
Master Degree

Lieutenant
Guardia di Finanza

Consultant
Capital Market

Accenture

Statistics and
Quantitative
Finance
PhD

Manager
Capital Market

REPLY

2001

2002 - 2003

2007 - 2009

2011-2014

2016 - Today

Guirreri Sergio Salvino (PhD)

MARIO'S CAREER PATH

Statistics (First level degree)
Finance (Second level degree)

Quantitative Finance &
Risk Management

Dottore
Commercialista e
Revisore Contabile

Consultant
Financial Risk
Management

CFA
1st level

- Consultant
- Senior Consultant
- Manager

Financial Risk
Management & Capital
Markets

2009

2010

2010 - 2012

2013

2012 - Today

Mario Pace

THANK YOU

REPLY