

Data & Analytics



Maximizing Banking Value with Big Data Open Analytics

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Milan, November 2016

Welcome to
UniCredit
Business Integrated Solutions

Presentation Purpose

Introduce **UniCredit Business Integrated Solutions'** reality



Present **up and running Open Source based** Big Data solutions within the bank and their added value

Show **Data & Analytics point of view** on Open Source



UniCredit at a glance



Over
143.000
employees



7.588
branches

- Banking operations in **17** countries
- International network spanning: **~50** countries
- Global player in asset management: **220.7** bn in managed assets
- Market leader in Central and Eastern Europe leveraging on the region's structural strengths

* Source: UniCredit Company Profile, data as at March 31, 2016



Identity Card

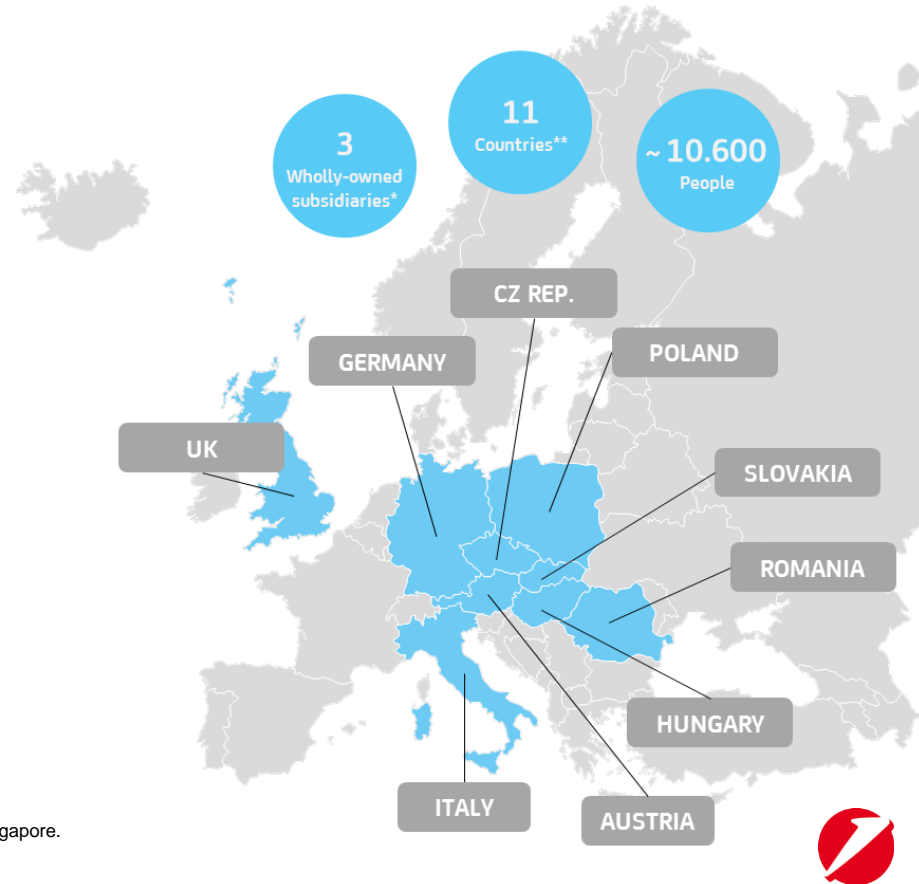
UniCredit Business Integrated Solutions is the Group's global services company **dedicated to providing services in the sectors of Information and Communication Technology (ICT), Operations, Real Estate, Security and Procurement.**

It is one of the first service companies, created at European level, aiming to consolidate and reorganize those operational activities necessary for the correct functioning of the Groups' business by leveraging on a more flexible delivery and an improved response time.

The company includes **about 10.600 people** and oversees activities in **11 countries**: Austria, Germany, Italy, Poland, Great Britain, Czech Republic, Romania, Slovakia, Hungary, New York and Singapore.

* Data as of December 31, 2015.

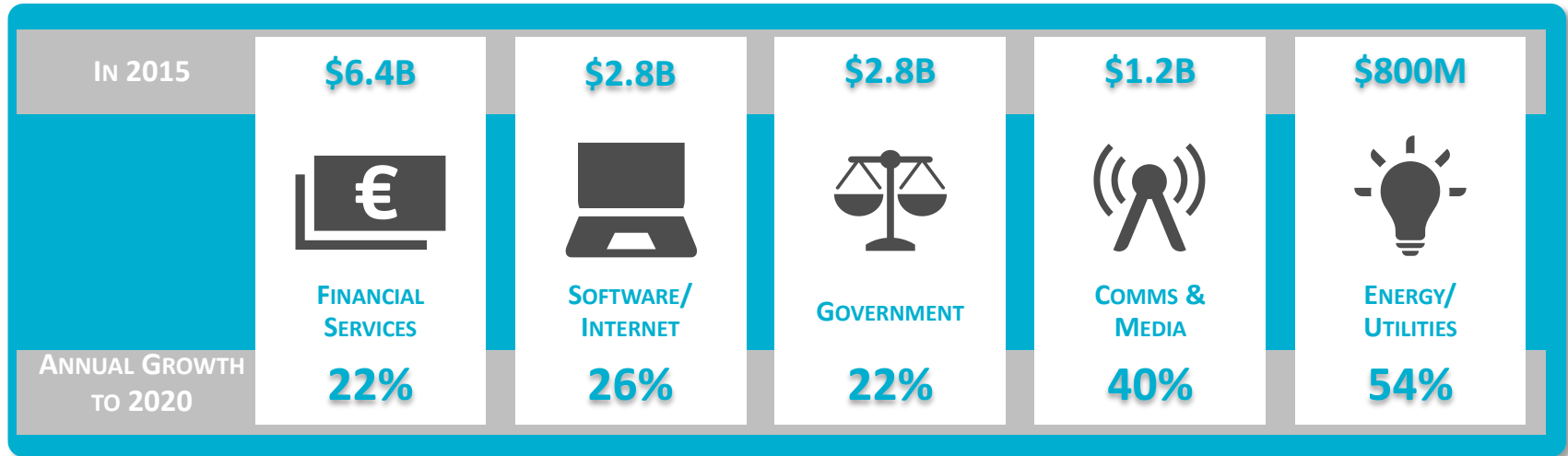
** UniCredit Business Integrated Solutions operates also in 2 branches, one located in New York and one in Singapore.



Companies are spending big on Big Data



SPENDING IN BIG DATA BY INDUSTRY



- **The Big Data market** continues to exhibit strong momentum as businesses accelerate their transformation into data-driven companies
- A new forecast from International Data Corporation sees the **Big Data technology and services market growing at a compound annual growth rate of 23.1% over the 2014-2019 forecast period** with annual spending reaching \$48.6 billion in 2019



Data & Analytics Journey

31

DATA & ANALYTICS JOURNEY

2014

Collaboration framework set up among UniCredit Business Integrated Solutions, R&D and Group CIO starting exploration and implementation on Big Data technologies

NOVEMBER 2015

Creation of a **new independent Data & Analytics Competence Area**, in charge of the whole Data strategy and management

EARLY 2015

Launch of **Big Data management area** in GES, fully focused on Data strategy and management

NOVEMBER 2016

Organization structure review to **fully comply with new delivery and service model**

WHAT'S NEXT?



DEFINE AN **HOLISTIC APPROACH TO DATA MANAGEMENT, ANALYTICS AND RELATED INNOVATIVE IT SOLUTIONS** IN ACCORDANCE WITH **UNICREDIT CHIEF DATA OFFICER (CDO)** TO PROVIDE **INDUSTRIAL AND CUTTING-EDGE SERVICES TO THE GROUP** AND **PROMPTLY ANSWER TO MARKET NEEDS** END **FUTURE EVOLUTION**



Data & Analytics Organization

In order to fulfill Data Strategy as defined in collaboration with UniCredit Chief Data Officer, D&A's complex structure is able to cover any organizational and technological need at best



Developers

- Architectural Design
- Innovation inception
- Big data solutions development
- New technologies exploration



Infrastructure

- Systems deployment and migration
- Application management and monitoring
- Data center operations monitoring



Data Scientists

- Mathematical and Statistics algorithms inception
- Machine Learning techniques application
- Value from data extraction



Data Ingestion

- Data governance
- Data-flow management
- Multiple data sources integration



Project Managers

- Scope definition
- Cost, time and quality control
- Customer relationship
- Global Governance



Leveraged Open Source Technologies



Red Hat Enterprise Software



Stability for mission critical products



Continuous support

Production Environment



RED HAT® JBOSS® DATA GRID

RED HAT® JBOSS® BPM SUITE

RED HAT® JBOSS® ENTERPRISE APPLICATION PLATFORM

Red Hat Ecosystem



Certifications



Partners



Community

Red Hat Consulting



Open Collaboration



Architecture Advisory






Team Working






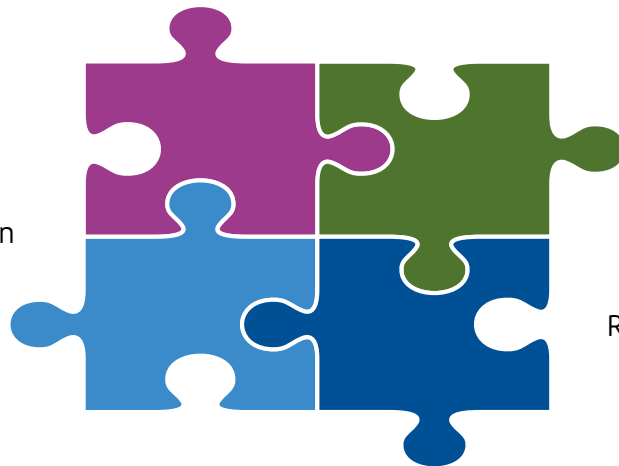
Big Data Solutions

Compliance


-  Registry Services
-  Market Abuse detection
-  Inter/Intra-bank risk detection

Data Products

-  My Business View
-  My Business Manager
-  Cards Data Dashboard





CRM Corporate

- Analytical CRM 
- Operational CRM




CRM Retail

- Real Time Campaign Manager 
- Loyalty Program 
- Big Data CRM Italy
- Big Data CRM CEE



UniCredit Business Integrated Solutions is open, too!



UniCreditDnA

Repositories People 0

Filters

blockchain-paper

★ 6 📄 4

Updated on 7 Mar

composable-reactive-rule-engine-example

★ 1 📄 1

Akka actor system with multiple RulesProcessors which allows composition of different rules

Updated on 15 Feb

reactive-rule-engine-example

Scala ★ 2 📄 1

Real time application of Drools rules on streaming events with Akka-based reactive-rule-engine.

Updated on 9 Feb

reactive-rule-engine

Java ★ 3 📄 2

Drools streaming engine embedded in Akka actor for reactive and scalable rules-based

Github Open Repository

<https://github.com/UniCreditDnA>



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