# REPLY WORKSHOP IOT

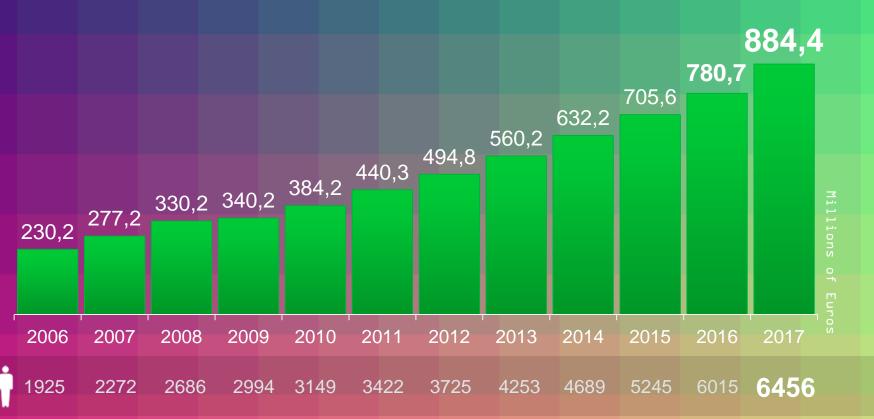
Politecnico di Torino, 23 marzo 2018





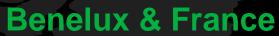
To excel in helping our customers exploit relevant innovation brought about by economic changes and driven by internet technologies.

# REVENUE & PEOPLE





# WHERE WE ARE



Amsterdam Brussels Luxembourg Paris

US Chicago Detroit Seattle

London Basingstoke Chester

Brazil

**Cockpole Green** 

Belo Horizonte Sao Paolo

#### ITALY

Bari Milano Padova Parma Roma Torino

Torino
Treviso
Trieste
Verona

#### **Germany**

Berlin Bremen Düsseldorf Frankfurt Gütersloh

Hamburg München

Belarus Minsk

China Bejing

#### **Poland & Romania**

Katowice Bucharest





# REPLY SERVICES

#### **INDUSTRY CONSULTING**

	Automotive & Manufacturing	CPG & Retail	Banking	Energy	Telco & Media	Insurance	Healthcare
THE BUSINESS CONSULTING FABRIC							

#### **DATA FABRIC**

Security	loT				
The Technology Stacks Solution Design, Software Development, Enterprise Collaboration, Enterprise Operations					
Cloud Computing	Data & ML				

Video & Gaming	Social & Crowdsourcing				
The Agencies					
Digital Brand, User Experience,					
Digital Communication					
Mobile	eCommerce				

TECHNOLOGY PLATFORM DIGITAL EXPERIENCE



## 2016-17 AWARDS & ACHIEVEMENTS

2016

Microsoft

WORLDWIDE **EMERGING CLOUD** PARTNER OF THE YEAR Cluster Reply

> Solidsoft Reply 2017



GOLD PARTNER Europe - Middle East - Africa Arlanis Reply

2016



PREMIER CONSULTING **PARTNER WW** Storm Reply

2017



MANAGED PUBLIC CLOUD PROVIDER #1 **GERMANY** Reply

2016



DIGITAL **TRANSFORMATION** ITALIAN PARTNER OF THE YEAR Cluster Reply

2017



INTERNATIONAL **SHOPWARE ENTERPRISE PARTNER** Portaltech Reply

2017



INTERNET AGENCY **RANKING 4th PLACE** Reply Digital Experience

2017



**AWS INNOVATION** AWARD WINNER Storm Reply

2017



CLOUD PARTNER OF THE YEAR Business Reply Riverland Reply Red Reply

2017



ADOBE BUSINESS **PARTNER** Aktive Reply Profondo Reply

2016



DIGITAL PARTNER OF THE YEAR Reply

2017



**FRAUNHOFER** VALIDATION OF WM 4.9 SYSTEM Click Reply

2016



GLOBAL SERVICE **DELIVERY PARTNER** & Hybris TRAVEL **ACCELERATOR** Portaltech Reply

2017



WMS WORLD WIDE PLATFORM Click Reply & Sideup Reply

2016



SECURITY PARTNER OF THE YEAR Communication Valley Reply

2016



**FASTEST GROWING** IT CONSULTING AND SYSTEM INTEGRATOR Reply

2017



SAP QUALITY **AWARDS GOLD** WINNER Syskoplan Reply

2017



**CRM SERVICE PROVIDERS** Reply

2017



NC AWARDS NATIVE ADV 1st PLACE Bitmama

2017



**INNOVATION** AWARD Spike Reply

2017



GOOGLE CLOUD 2017 EMEA **PARTNER** Go Reply

2016



**GLOBAL PARTNERSHIP** Avantage Reply Xuccess Reply



2017

MEDIASTARS ADVIONINE 1st PLACE Triplesense Reply

2017



**CORPORATE COMMS DIGIAWARD** Avvio Reply

2017



MSP EXCELLENCE AWARD 1st PLACE LIFT AND SHIFT APPS Red Reply

2017



**CLOUD HERO AWARD** Red Reply

2017



**CLOUD HERO AWARD Business Reply** 

2017

ORACLE PARTNERNETWORK

**PARTNER EXCELLENCE AWARD** Red Reply



# REPLY SOCIAL NETWORK

Enrico Giovannini



# KEEP A VERY HIGH LEVEL OF KNOW-HOW SHARE CORPORATE IDENTITY AND VALUES IMPROVE COLLABORATION AMONG REPLYERS FOSTER ATTITUDE TO INNOVATION

Reply Social Network

















**TOGAF** 

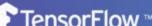




amazon alexa







**MACHINE LEARNING** 



DeepMind





android things

**DATAROBOTICS** 



BLOCKCHAIN

CUSTOMER ROBOTICS

DIGITAL Tranformation

DETECTION

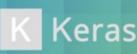
SAP Hybris (V)





**MONITORING** 

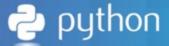
NEURAL **NETWORKS** 



































ON MARCH 15TH

7776 CODERS registered in the challenge

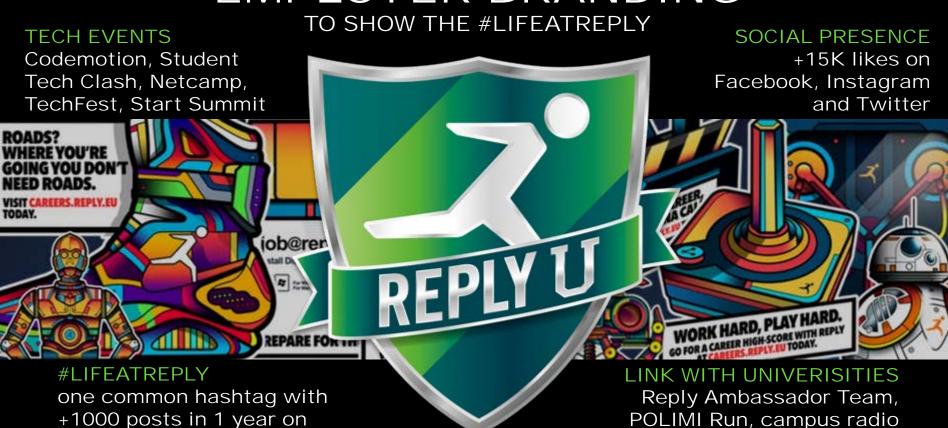
67 COUNTRIES

1207 TEAMS

2328 SOLUTIONS submitted



# **EMPLOYER BRANDING**

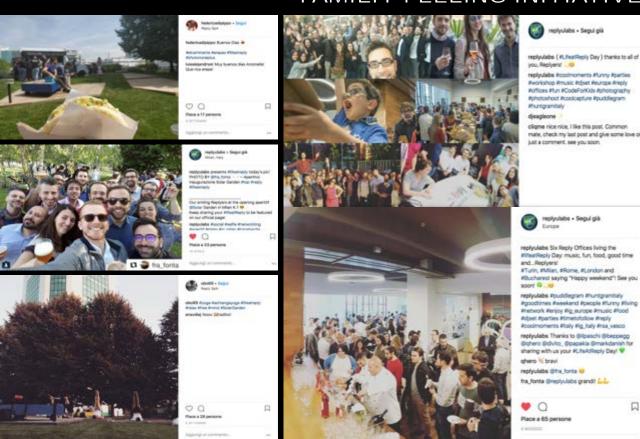


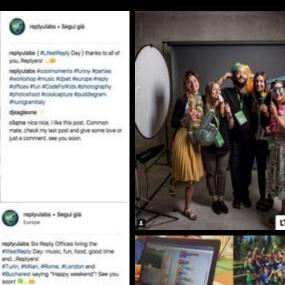
collaboration 🖈

Instagram, Facebook and Twitter

# NEW #LIFEATREPLY

#### FAMILIY FEELING INITIATIVES











replyulable filtramenty Fearning Acadings to **Academicis Poels Polemonts Bots** Avideogeme Protots Apolipleyers Achellenge

Accomments Acostolophure

00 Place a 27 persone 3 strrought

## NEW #LIFEATREPLY

FAMILIY FEELING INITIATIVES

#### STREET FOOD

+3300 lunches served from March to October in Milan K 1

#### **APERITIME**

15 events in Reply offices all over Europe with +2000 participants

# **#LIFEATREPLY DAY**

On May 5<sup>th</sup> 2017, 6 cities in livestreaming, Labcamp, Bootcamp, inductions, TamTamy lunches, Cereal Minds, Code for Kids and the SOLAR opening in Turin. 1000 participants in 1 day!

#### **WELLNESS**

50 workout sessions of yoga and functional training with +300 participants. Plus, 112 1to1 meetings with the nutritionist and 4 live-streaming wellness talks with +300 participants.

#### SOLAR

The network of living spaces in Reply offices, where to meets Replyers, students and customers.

#### **REPLY PHOTOSHOOT**

10 sold-out sessions in Reply offices, plus Hackathon and Xchange (2800 shots).
Pics directly uploaded on TamTamy.

# **CODE FOR KIDS**

6 events for Replyers' kids, plus the Reply U16 golf tournament lab!

# WORKSHOP IOT

Luigi De Martino, Concept Reply Michele Di Florio, Concept Reply



# **BUSINESS CASE**

MODULI IOT DISLOCATI IN AREE SENSIBILI, COMUNI, CASOLARI ISOLATI



Sul territorio del Piemonte, sono dislocati dei moduli IOT in grado di rilevare mediante sensoristica di grandezze fisiche:

- Sorgenti di calore (incendi) Categoria 1
- Livello acqua fiumi Categoria 2
- Fratture critiche su pareti Categoria 3
- Temperature/Umidità Categoria 4



## REQUISITI FASE 1: SVILUPPO SIMULATORE

- 1. Sviluppare routine in grado di identificare in maniera univoca l'oggetto. L'identificativo è descritto da un file json contenente i campi ID, Nome, Categoria, Coordinate GPS, tipologia di sensore
- 2. Sviluppare il simulatore in base al gruppo di appartenenza che genera dati ogni 2 minuti. Il dato generato dovrà essere incapsulato in un json e pronto per essere spedito al server di back-end. Tale json dovrà contenere il timestamp e l'ID del sensore/simulatore
- 3. In assenza di connessione, il dato dovrà essere salvato localmente, e quando la connessione sarà disponibile, sarà inviata verso il server
- 4. Se dopo 2 minuti, il dato non è cambiato, non deve essere mandato di nuovo il dato verso il server.
- Indipendentemente dal cambiamento del sensore, dopo 15 letture identiche, il dato dovrà essere comunque mandato verso il server di back-end
- In base alle risorse hardware, stimare il numero di letture massime che potrà contenere il DB locale e implementare un meccanismo tale per cui la dimensione del DB non superi tale dimensione.



## REQUISITI FASE 2 INTEGRAZIONE PIATTAFORMA CLOUD

- 1 I dati raccolti dal campo dovranno essere passati ad una piattaforma Cloud AWS
- 2 La comunicazione «device to cloud» dovrà avvenire con il protocollo MQTT e utilizzando la piattaforma AWS IOT
- 3 I dati raccolti dovranno essere memorizzati in un data lake basato su AWS S3
- 4 I dati raccolti potranno essere visualizzati tramite Amazon QuickSight.
- In alternativa ad Amazon QuickSight potranno essere utilizzati altri strumenti di reportistica incluso dashboard costruite ad hoc



#### FASE 3: CHISURA LAVORI



Verranno analizzati tutti i progetti e sarà stilata una classifica.

Ogni membro del team primo classificato riceverà un FitBit Charge 2 in premio!



# PIANO DI PROGETTO





# JOIN US!

Follow Reply U / jobs@reply.com

