

11th World Telecommunication/ICT Indicators Symposium (WTIS-13)

Mexico City, México, 4-6 December 2013



Contribution to WTIS-13

Document C/22-E
6 December 2013

English

SOURCE: Telefónica

TITLE: Big Data



Content

1. *Big Data description*
2. *New sources of information & Analytical Models using Big Data*
3. *Use cases in Telefónica*
4. *Conclusions*



The Digital Era for Consumers

1

Digital technologies are changing people's lifestyle, behaviour, attitudes...



1. The perception of time and space
Anywhere- Anytime
2. Life is lived more intensely
Non - stop
3. The speed of change
Fast fashion!
4. Hyper-communication
We are all journalists
5. Customisation
We want personal service

Requires a new era of digital strategies

1

Volume



Extreme amount
of data

Velocity



Needs to be
analyzed quickly

Variety



Information
from Everywhere
Structured /Unstructured

"Big data is high volume, high velocity, and/or high variety information assets that require new forms of processing to enable enhanced decision making, insight discovery and process optimization." *Gartner*

To deliver the customer promise...

A **digital Telco** brings the best of technology to people and businesses

Uses the networks, know-how, **customer knowledge** and commercial experience to help people and businesses to **BE MORE**



But we are aware of our customers privacy...

1

- Record anonymisation & aggregated information
- Respect customer privacy & confidentiality
- Legal & Regulatory framework...



If offers are meaningful to customers, they appreciate to receive personalized communications & promotions...

Understanding the tsunami... 2



New sources of information

- Enhanced Call Detail Records (CDRs)
- Customer voice (Speech to text)
- Internet navigation (Weblogs)
- Social networks
- Sensors everywhere (Internet of things)

Big Data – Releasing new data sources to... 2



- Ingest and store large data volumes
- Create knowledge from internet usage
- Develop knowledge from “real” social interactions
- Integrate knowledge from mobility patterns
- Deliver knowledge rapidly
- Optimize our network to better serve our customers

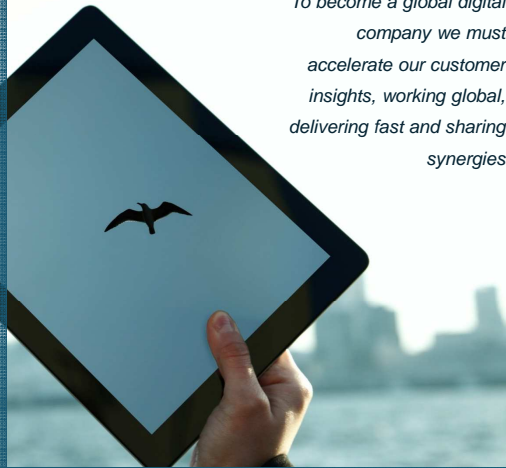
...to generate incremental & new revenues

Telefonica has set a global agenda for delivering the advanced analytics needed to transform the company... 2

Our Data Scientist's team is committed to develop **analytical global assets based on Big Data...**

- Mobility
- Web-Profiling
- Text mining / sentiment analysis
- Network analytics
- Social Network Analytics

To become a global digital company we must accelerate our customer insights, working global, delivering fast and sharing synergies



Some use cases in Telefónica... 3

- Customer Mobility in Prague
- 2G to 3G handset migration in Santiago
- Churn prediction in Latam
- Network Optimisation & LTE deployment
- Dynamic Insights by Telefónica Digital



Smart Steps / Dynamic Insights 3

Telefonica Digital mission is to seize the opportunities within the digital world and deliver new growth for Telefonica.



Conclusions 4

- Understand **new sources** of information
- Business **use cases** should define the initial scope of Big Data
- Understand and observe **Legal & Regulatory** framework in each country
- Develop **customer insights**
- Internal R&D data scientist team is critical for **retaining knowledge** within the business
- **Integration** to existing assets
- **Open architecture** to allow for sharing across operations

