

COGNITIVE BUSINESS

Digital Intelligence meets Digital Business

pietro della peruta

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IBM Distinguished Engineer*





Raised Lighter Tribute

Holding up lighters at a concert has been occurring since at least as early as the late 1960s



Smartphone Light Tribute

Same feeling, same passion different asset and more than lights ?

BIC® CONCERT LIGHTER APP HOW TO GET IT

Download the BIC Concert Lighter App from the iTunes® Store, Blackberry App World™ or search for it in the Android Market. You may also use one of the available barcode scanner apps on your phone to scan the appropriate QR code:

BLACKBERRY
APP WORLD™



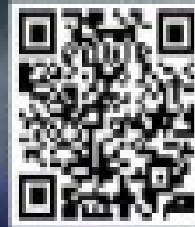
BlackBerry App
World™

ITUNES STORE



iTunes® Store

FOR ANDROID™



Android,
Search "BIC Lighter"



Digitization does impact the business



Information Technology is not anymore what it was

Upside down innovation requires that innovation in the consumer market become available for enterprise

A set of digital transformation drivers...

Mobile revolution

Connectivity, access and participation of people and things are growing rapidly; Mobile internet and smart devices are exploding

Social media explosion

Changing the way that individuals and organizations engage, interact and collaborate

Hyper-digitization

Digital content is being produced and accessed more quickly than ever before, causing growth in digitized industries, markets & segments

Power of analytics

New opportunities for real time analysis and predictive analytics creating business insight from more and more data

...is impacting all levels of society

Individuals

- The connected consumer
- The networked workforce
- The empowered citizens

Enterprises

- Evolved business models
- Optimized digital operations
- Connected enterprise

Industries

- Value migration
- Industry redefinition
- Fragmentation

Transformation drivers is impacting individuals, organizations and industries

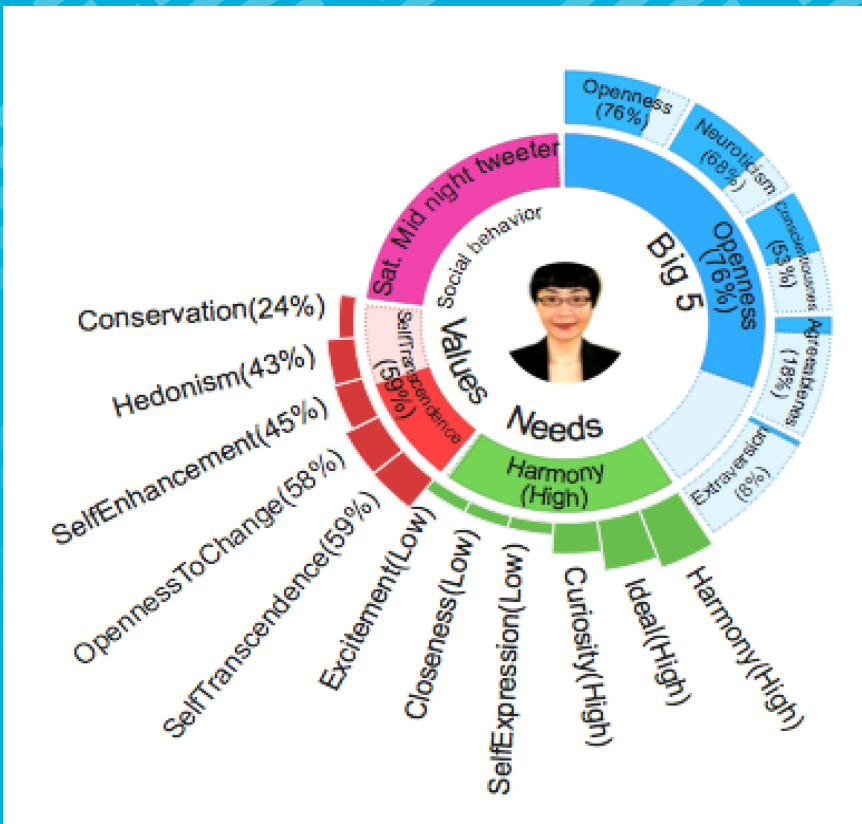


System of Records are not enough to get consumer needs

700,000.00	+
515,600.00	-
700,000.00	+
515,600.00	-

“If you wish to persuade me, you must think my thoughts, feel my feelings, and speak my words.”

— Marcus Tullius Cicero (c. 106-43 B.C.)



Social Media as new data source to better engage clients

THE INTERNET OF THINGS

Internet of Things generate new data for building up new insight in several industries




Tesla

A Tesla vehicle in need of repairs can autonomously call for a corrective software download, or, if necessary, send a notification to the customer with an invitation for a valet to pick up the car and deliver it to a Tesla facility.




Babolat

Babolat's Play Pure Drive product system puts sensors and connectivity in the tennis racket handle, allowing users to track and analyze ball speed, spin, and impact location to improve their game.




Medtronic

Medtronic's implanted digital blood glucose meter connects wirelessly to a monitoring and display device and can alert patients to trends in glucose levels requiring attention.




Ralph Lauren

Ralph Lauren's Polo Tech Shirt, available in 2015, streams distance covered, calories burned, movement intensity, heart rate, and other data to the wearer's mobile device.

HBR, November 2014, How Smart Connected Products Are transforming Competition, M.E. Porter

Physical goes Digital

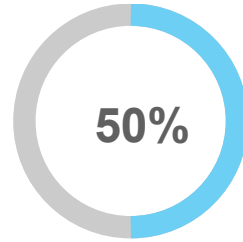
Physical objects centered business are transforming into digital business by extending object with digital attribute leveraging software application

5,000,000
lines of code in smart appliances

100,000,000
lines of code in a new car

1,200,000
lines of code in a smartphone

80,000
lines of code in a pacemaker



of B2B collaboration will take place through web APIs next year.

Smart TVs represented 27% of all TV sales in 2012; by 2018, they will represent 82%.



Sensors for industrial asset monitoring and management will grow from just over 15M units in 2014 to over 40M units in 2018



Smart LED lighting will grow from 6M units in 2015 to 570M units in 2020, used for safety communication, health, pollution and personalized services.



By 2020, there will be 925M smart meters installed worldwide, more than double the 400M in 2014.



By 2017, there will be 1B connected things in smart homes, including appliances, smoke detectors and cameras.



Smart traffic sensors and other devices installed in smart cities will grow from 237M units in 2015 to 371M in 2017.



Revenues for smart grid sensors will grow ten-fold from 2014 to 2021.



The world is being rewritten in software code, and cloud is the platform on which the new digital builders—from developers to business professionals—are reimagining everything from banking to retail to healthcare.

Innova Challenge is a clear compromise of BBVA with Big Data and Open Innovation. Following this contest, the bank has opened his real trade data for the first time in history.

BBVA Innova Challenge

How to take part

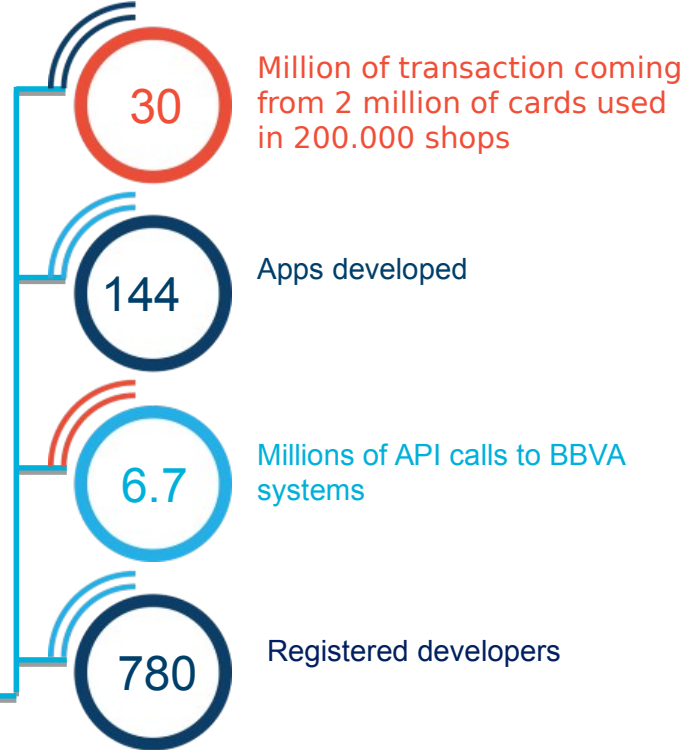


1: **Register** on the BBVA Innovation Center website.

2: Register on our **Developer Portal** and download our API.

Step 3: Develop your project(s).

Step 4: When you have finished, upload your project in the **form** field for it called "Project".



<https://www.centrodeinnovacionbbva.com/en/innovachallenge/home>

Innovation with the ecosystem

API Economy creates new value

Economic Value created by enterprises offering **API** to programmable access to internal system e data

API **is** the product



API **projects** the product



API **promotes** the product



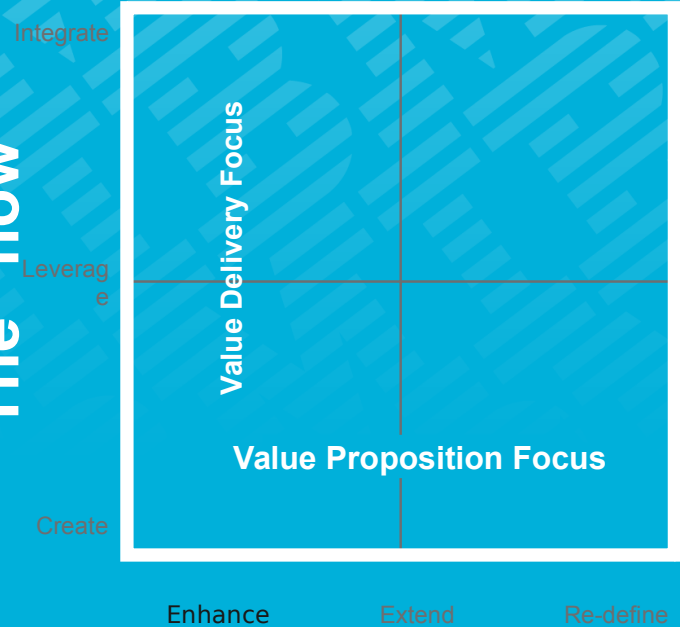
14 API **powers and feeds** the



We can now confer on every digitized object, product, process and service a kind of thinking ability.

Reshaping the operating model

The “how”



Reshaping the customer value proposition

The “what”

Ricerca La nuova funzione della macchina che batteva l'uomo ai test

Watson, computer in corsia

Dai quiz alla cura dei tumori

Studia tutte le riviste mediche e suggerisce le cure



La scheda

Nel 2011 il computer Ibm Watson è diventato famoso nel 2011 per aver sbancato «Jeopardy», il più popolare dei quiz show televisivi statunitensi, sconfiggendo due supercampioni umani, dopo aver «letto» migliaia di libri e di enciclopedie (sotto, il computer nel 2011: oggi è più potente e più piccolo)

La potenza La potenza di elaborazione complessiva di Watson è pari a quella di seimila personal computer. In questi mesi il suo cervello elettronico è stato testato in campo medico al Memorial Sloan-Kettering Cancer Center di New York per trovare il miglior trattamento per i pazienti affetti da cancro al polmone, al seno o alla prostata attraverso lo sviluppo di una app pilota. Nel corso del 2012 ha «imparato» milioni di pagine di letteratura medica e casi clinici

più grossa mutua privata degli Stati Uniti che ha 35 milioni di assicurati, un americano su nove. Ma davvero l'era della sanità digitale, tante volte annunciata e mai materializzata, sta arrivando? I medici, fin qui non troppo aperti al cambiamento, non temono di diventare schiavi del computer e magari, in futuro, dei semplici intermediari?

«A oggi non ho visto niente di simile» risponde il direttore esecutivo della Cleveland Clinic, Chris Coburn. «Per i nostri medici Watson è un assistente che aiuta a non sbagliare. Inquadri il caso, ma nessuno può essere sempre aggiornato su tutto». Ci sono mutazioni genetiche rare rispetto alle quali qualcuno nel mondo ha scoperto che quel certo farmaco non è efficace. Il medico può non saperlo, ma nel database di Watson l'informazione c'è. «E poi» aggiunge Coburn, «Watson raccoglie e aggiorna la storia clinica, prepara le richieste di autorizzazione dei trattamenti da inviare alle assicurazioni. Tempo risparmiato che il medico può destinare al paziente. È essenziale in una struttura d'eccezione come la nostra che riceve malati da tutti i Paesi».

Ma chi garantirà l'infallibilità di Watson? Chi tutelerà la «privacy» del paziente? E quale medico, che ha pur sempre l'ultima



Cognitive Computing Era

A cognitive system is able to ingest information, reasoning about fact, formulate hypothesis and all of this interacting with natural language

Cognitive systems can understand the world through sensing and interaction, reason using hypotheses and arguments and learn from experts and through data. Watson is the most advanced such system.

Today, businesses in

36
countries across.

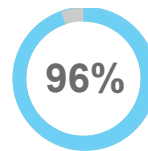
17
industries are
applying cognitive technologies.

There are
350+
Watson ecosystem partner
companies, with
100
of those have taken their
product to market.

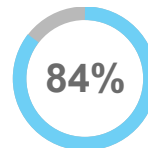
78%
of **business and IT**
executives believe
that successful business
will **manage employees**
alongside **intelligent**
machines.

On average there are
1.3B
Watson API calls a
month and growing.

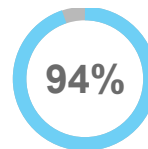
**Among C-Suite executives
familiar with cognitive computing:**



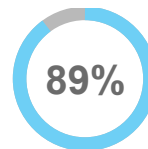
in **insurance** intend to invest in cognitive capabilities.



in healthcare believe it will play a disruptive role in the industry, and 60% believe they lack the skilled professionals and technical experience to achieve it.



in retail intend to invest in cognitive capabilities.



in telecommunications believe it will have a critical impact on the future of their business.

When your business thinks, you can **out**think. And build cognitive industries: cognitive healthcare, supply chains and much more.

Advantages of Cognitive Business:
Deep analytics
Expertise
Engagement

Cognitive
processes
and operations.

Intelligent
exploration
and discovery.

products and
services.

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