

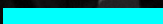
DIEGO PIACENTINI
COMMISSARIO STRAORDINARIO PER
L'ATTUAZIONE DELL'AGENDA DIGITALE

8 Marzo 2017
Settimana della Trasparenza

Dati e Innovazione nella PA

Il framework comune

D





Vision

The “**operating system**” of the country: a series of fundamental blocks upon which services for citizens, the Public Administration, and enterprises are built with modern digital products.





Mission

Make public services for citizens and businesses **accessible** in an easy manner, via a **mobile first** approach, with reliable, **scalable** and fault tolerant architectures, based on clearly defined **APIs**; support the different central and local government departments in making the best and most **data driven** decisions, thanks to the adoption of big data and machine learning techniques.



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Developer Relations



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*Innovation Adviser to the
Italian Prime Minister*



Daniela Battisti
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Federico Feroldi
Software Architect



Fabiana Lanotte
Data Engineer



Raffaele Lillo
Chief Data Officer



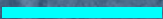
Valerio Paolini
Technical Project Manager



Marisandra Lizzi
Communication and PR



Diego Piacentini
*Government Commissioner
for the Digital Agenda*

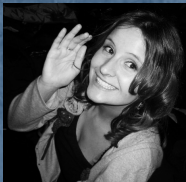




Simone Piunno
Chief Technology Officer



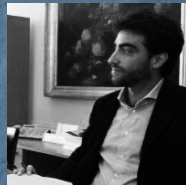
Guido Scorza
Italian and EU Regulatory Affairs



Elisabetta Piqué
Executive Assistant



Simone Surdi
*Technical Assistant and
Coordinator of Operations*



Ludovico Poggi
Communication



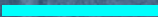
Gianluca Varisco
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Giuseppe Virgone
Digital Payment



Cinzia Zucal
Administration



Data-driven innovation

Big Data for Growth and Well-Being (OECD – Oct 6, 2015)

Infrastructure in digital economy is **not only broadband networks** but also **data**

Balance **benefits** of openness data with **privacy** and **intellectual property**

Address the creation of **skills in data science**

Take a whole-of-government approach that leverages **data as the new R&D in innovation systems**



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Current Situation

(Thousands of datasets not easy to use and find, even if you are a geek ...)

No standards for **generation, analysis and management of data**

No uniform **user experience and functionalities** when it comes to find and use data.

Too much attention on the number of data sets in a catalog, rather than their usage as **economic and competitive driver** (API economy)



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Big Data&Analytics

 Critical success factor for citizens, companies
and Public Administrations in the
competitive environment 



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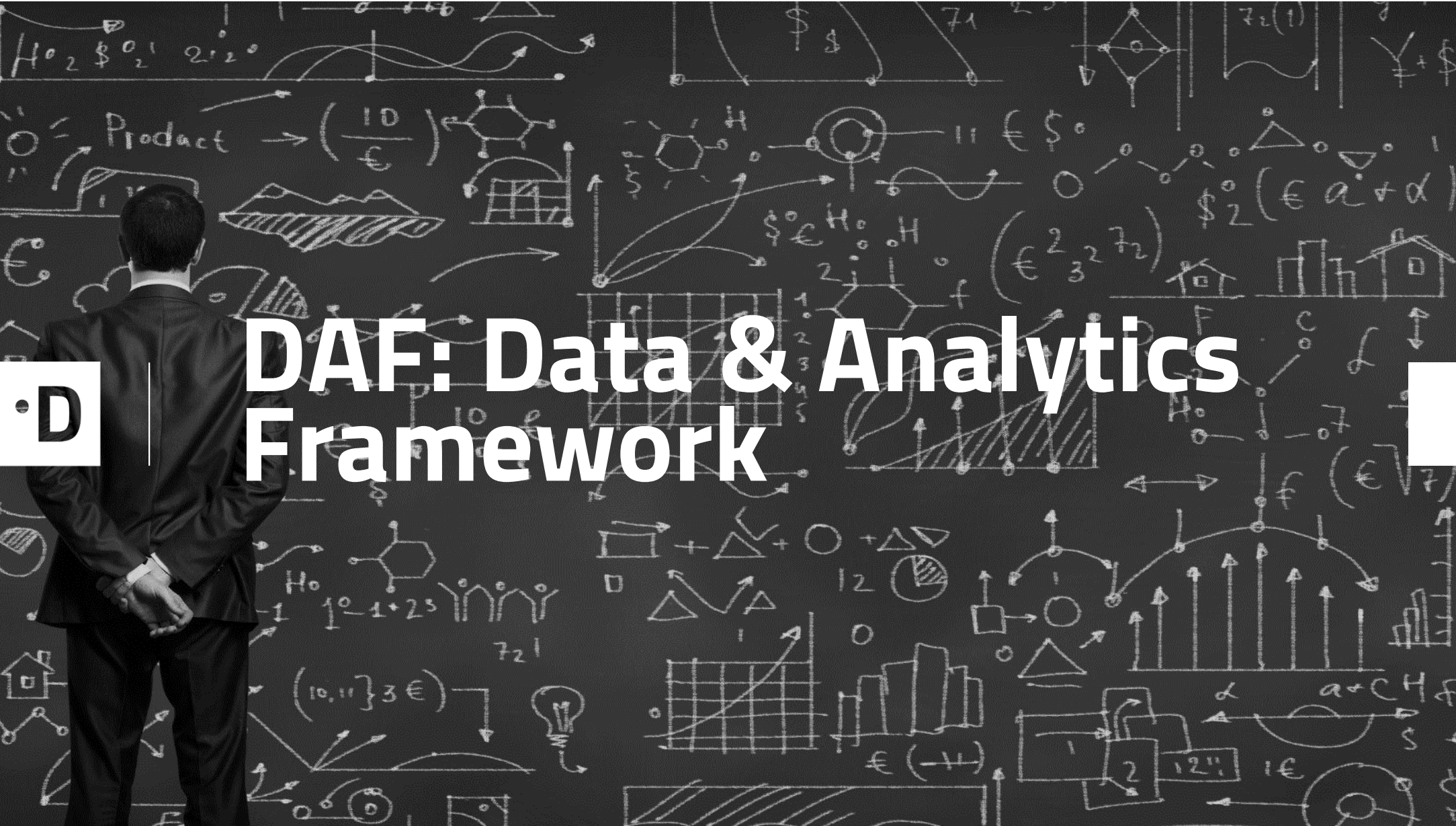
Twitter: @diegopia, @teamdigitaleIT



Medium: @diegopia, @team-per-la-trasformazione-digitale



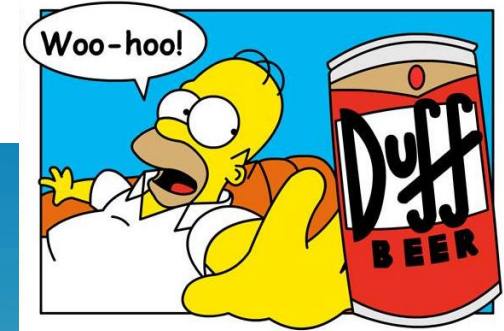
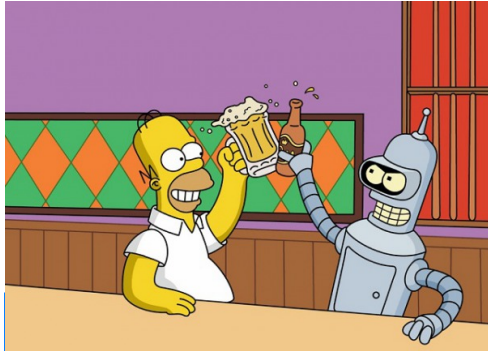
LinkedIn: @company/teamdigitale



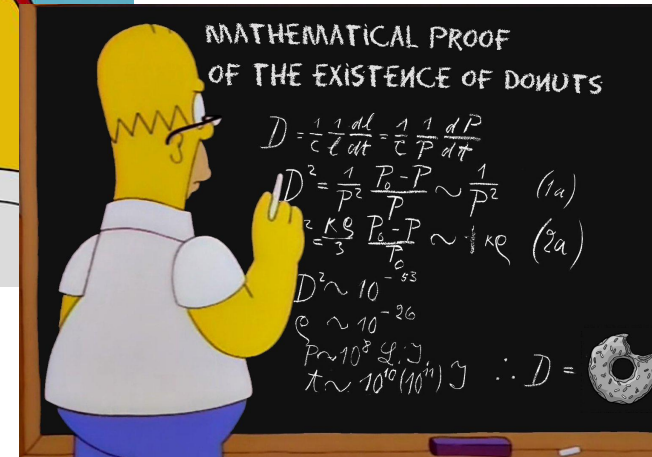
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DAF: Data & Analytics Framework

Etimology of DAF



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Daf

Data & Analytics Framework (DAF)

Goals

Ok, but what is DAF?

Projects

Some Architectural Highlights

Use Cases

DAF & Open Data

Business & Open Data – Some Ideas

How Open Data can Help You

What do you need

Examples

Q&A

Give us data and a platform...

Data & Analytics Framework (DAF) is a combination of:

- A **Big Data Platform** to centralize and store (data lake), manipulate and standardize (data engine), re-distribute (API & Data Applications) data and insights.
- A **Data Team** (data scientists + data engineers) which uses and evolve the Big Data Platform to analyze data, create ML models and build data applications and data viz.



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... and we shall move the PA

Interoperability (aka Get out of the Silos!)

Public data is... public and all PP.AA. should have access to it

Democratizing Data (aka Open Data, API & Data Viz)

Data should be open (when legally possible), accessible by anyone (and anything) and insightful

Data Products (aka deliver value & insights)

Machine Learning in interconnected software applications

Crowdsourcing (aka data is everywhere, give it to me)

Citizens (esp. civic hackers) contribute to the surfacing of knowledge

A blue square containing a white dot and the letter 'D' in white, positioned on the left side of the slide.

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Data Driven Policy needs... Data (and Data Scientists)

Organizational and Managerial Challenge

Central Data Office and federated analytics teams

Human Resources

Data Scientists & Data Engineers to get knowledge from data

Technology

This is the least complicated one, but still fundamental.

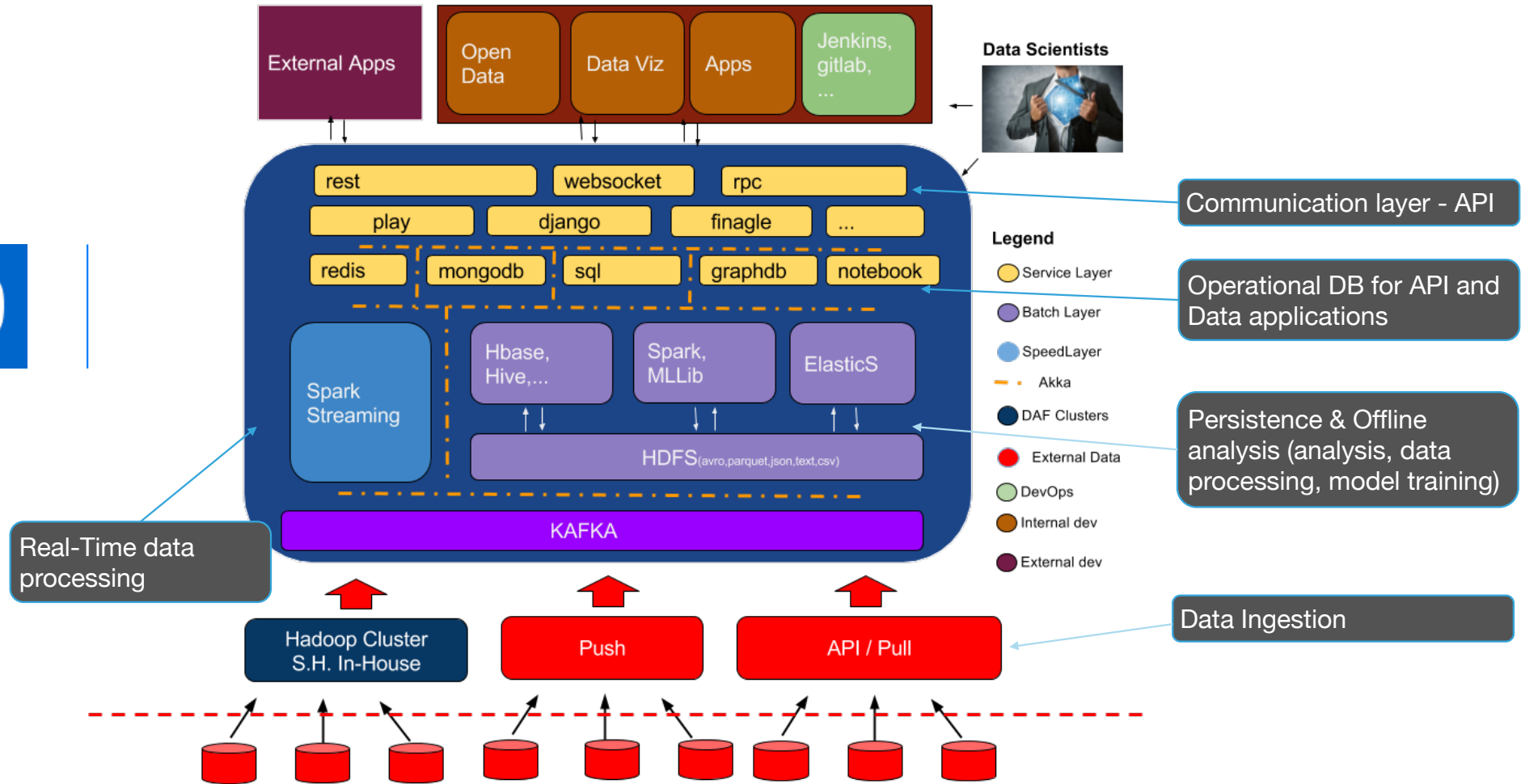
Legislative Challenge

Balancing Privacy and Public Interest



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(Current) Architectural Design



Data Sources

Healthcare

Cultural events

Corporate events

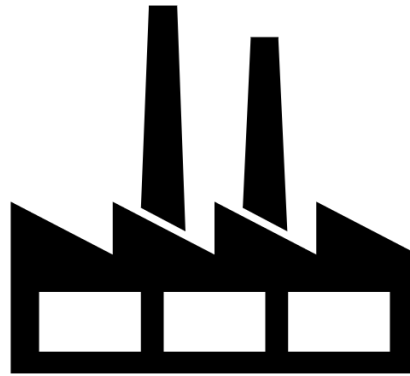
Corporate info

Public Transportation



People

Crime



Firms



Smart Cities

Education

Fiscality

Pension

Real estate registry

Balance Sheet

Energy

Traffic

Use Cases (examples)

Machine Learning Based Applications (aka Data Products)

Lex Datafication & Citizen Assistant, Fraud Detection, Citizen Recommendation Engine, Spending Check, Leading Indicators, etc.

Data Visualization

Thematic dashboards and infographics for citizens and firms

API for Interoperability and Open Data

Easy and standard access to data within PP.AA. and citizens

And much more... The limit is imagination

Smart city, analysis for data driven policy making, etc.



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What the DAF can do for Open Data

It exposes data via API

Machine-2-machine communication by default

Standardization by design

You know what you get and how to get it

Ease the process of "opening" PA data

Easy and standard access to data within PP.AA. and citizens

Open Information & Insight (not only data)

It is an analytical platform, not just a datalake!

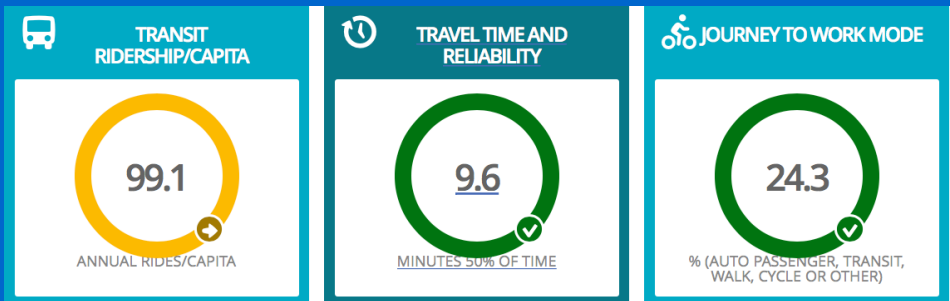


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Data & Analytics Framework (DAF)

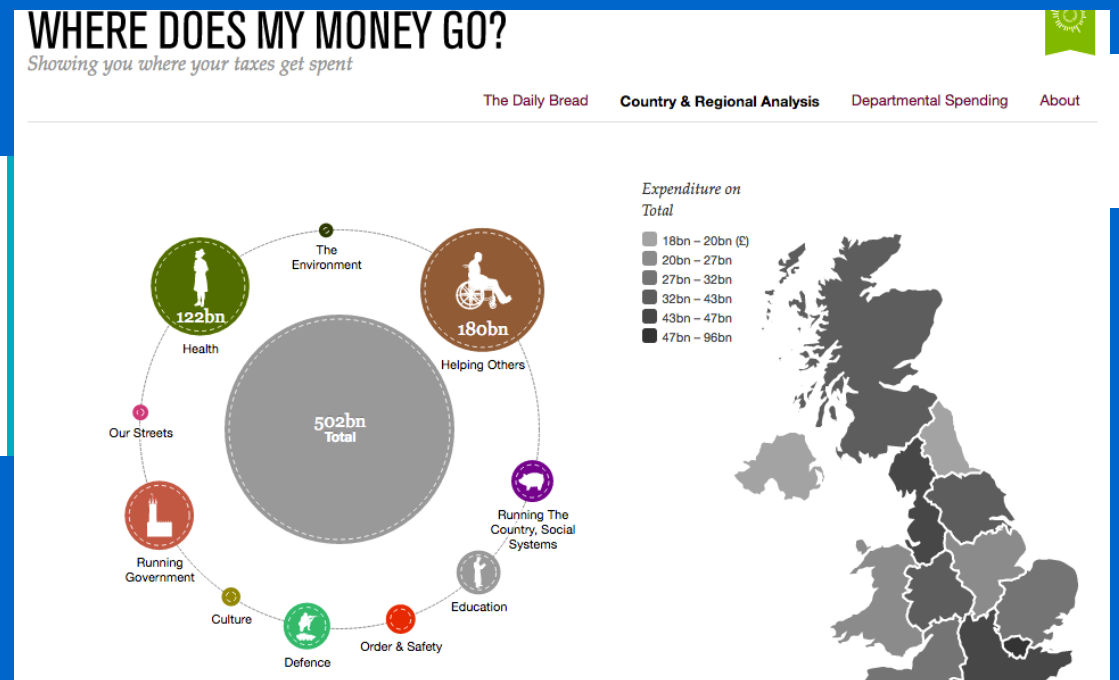
Casi d'uso

Dashboards di Cittadino e Impresa



da Dashboard esposta dal comune di Edmonton City

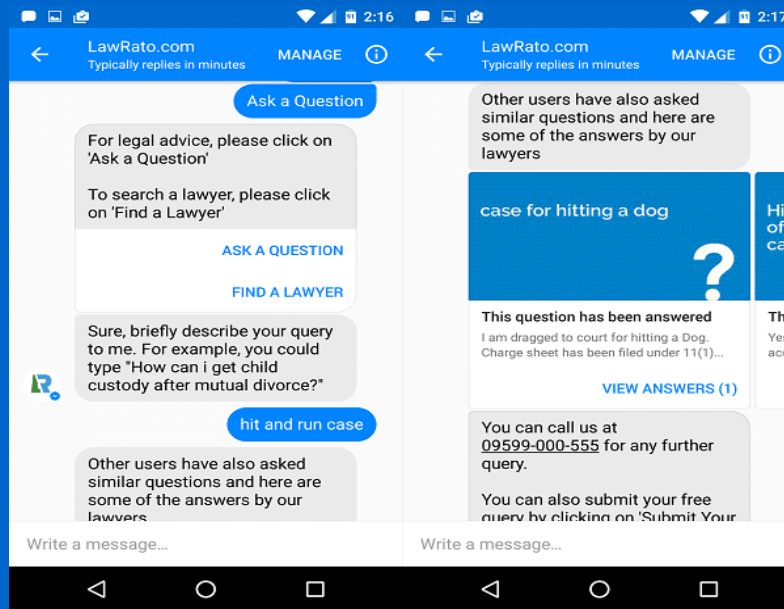
<https://dashboard.edmonton.ca/>



Data & Analytics Framework (DAF)

Casi d'uso innovativi futuri

Lex Datafication e Citizen Assistant





Business & Open Data Some Ideas

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How Can Open Data Help You?

Precious information for your business

Market trend, georeferenced quality of life, economic activities, more importantly, IDEAS. BTW, you have a data scientist, don't you?

Open Data to create new business opportunities

Ability to combine data from different sources to create new services can be a great source of competitive advantage.

What do you (we) need?

Keep Calm and find a Data Scientist

Domain Expertise (or passion to learn) + Math + Coding

Effective Open Data Ecosystem

Standards & Metadata, API, No "Yet Another Catalog", IoT

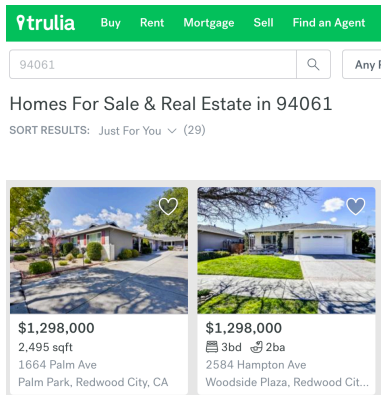
Government Needs to Care (and Invest)

Cohesive Federation of PA (central and local), Laws, Investments



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Examples



Reports

<https://opendataincubator.eu/companies/>

<https://theodi.org/diverse-uk-companies-open-data>

<http://www.opendata500.com/us/>



Si...Può...Fareeeee



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Grazie!

Cooperate with us

Google Group - Open Data & Analytics

<https://groups.google.com/a/teamdigitale.governo.it/forum/?hl=it#!forum/data>

Twitter

#DatiPubblici #DAF

Website

<http://teamdigitale.governo.it>