

# Applied Data Science Project

L19 - Success stories

Giuseppe Rizzo

Turin, October 15, 2021



# Success stories

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Stories of 3 applied data science projects

For each, it is worth noting:

- how the objectives are framed
- the tasks addressed by the machine intelligences developed in the projects

The target audience of these stories are public/innovators

No technical choices nor experiment descriptions

# Take home message for your work

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References of applied data science projects that can be utilized as inspiration for conducting your projects





an EIT Digital  
initiative

# Plan a visit



# Explore a city



tourist and cultural data: events,  
places, and transportation



an EIT Digital  
initiative



madison square garden upcoming events



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## Madison Square Garden / Events

Tue, Nov 17      New York Knicks vs. Charlo...  
7:30 PM

Wed, Nov 18      The All Access Tour  
12:00 AM

Thu, Nov 19      Billy Joel  
8:00 PM

Fri, Nov 20      2K Classic benefiting Wou...  
5:00 PM

Sat, Nov 21      The All Access Tour  
12:00 AM

Sun, Nov 22      2K Classic Benefiting Wou...  
1:00 PM

Mon, Nov 23      New York Rangers vs. Nas...  
7:00 PM

Tue, Nov 24      Stevie Wonder: Songs in th...  
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initiative



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Wed, Nov 25      New York Rangers vs. Mont.  
7:00 PM

Thu, Nov 26      The All Access Tour  
12:00 AM

Fri, Nov 27      New York Knicks vs. Miami  
7:30 PM

Sat, Nov 28      Red Hot Hockey  
8:00 PM



## New York Knicks vs. Charlotte Hornets

Tuesday, November 17, 2015, 7:30 PM

**Madison Square Garden**  
4 Pennsylvania Plaza, New York, NY

Source: [thegarden.com](http://thegarden.com)

## MADISON SQUARE GARDEN®

THE WORLD'S MOST FAMOUS ARENA



## Madison Square Garden ★

Arena in New York City, New York

[Website](#)

[Directions](#)

Madison Square Garden is a multi-purpose indoor arena in the New York City borough of Manhattan, New York. Located in Midtown Manhattan between 7th and 8th Avenues from 31st to 33rd Streets, it is situated atop Pennsylvania Station. [Wikipedia](#)

**Address:** 4 Pennsylvania Plaza, New York, NY 10001

**Capacity:** 18,200

**Opened:** February 11, 1968

**Phone:** (212) 465-6741

**Owner:** The Madison Square Garden Company

**Height:** 150'

**Teams:** St. John's Red Storm men's basketball, New York Liberty, New York Knicks, New York Rangers



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4 Pennsylvania Plaza, New York, NY

Source: [thegarden.com](http://thegarden.com)

## Charlotte Hornets at New York Knicks - Vivid Seats

[www.vividseats.com/nba.../new-york-knicks.../knicks-11-17-1872819.htm... ▾](http://www.vividseats.com/nba.../new-york-knicks.../knicks-11-17-1872819.htm...)

Charlotte Hornets at New York Knicks Tue. Nov 17, 2015 7:30 PM - Madison Square Garden, New York, NY. NOTE: Prices set by sellers, may be over face-value ...

## Charlotte Hornets Tickets - Ticketmaster

[www.ticketmaster.com...>...>7>Charlotte Hornets...>Ticketmaster... ▾](http://www.ticketmaster.com...>...>7>Charlotte Hornets...>Ticketmaster...)

Results 1 - 10 of 68 - Nov. 17, Tue. Madison Square Garden New York , NY 07:30 PM.

**New York Knicks vs. Charlotte Hornets**, See Tickets. Nov. 18. Wed.

Tue, Nov 17 New York Knicks vs. Charlotte ... Madison Square Garden ...

Wed, Nov 18 Charlotte Hornets vs. ... Time Warner Cable Arena ...

Fri, Nov 20 Charlotte Hornets vs. ... Time Warner Cable Arena ...

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### Reviews

4.5

[Write a review](#)

# nearby places?



an EIT Digital  
initiative

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### Reviews

4.5 740 reviews

[Write a review](#)

related events?



an EIT Digital  
initiative

will be looking for an Indian restaurant  
reachable in 10 minutes on foot from  
the Madison Square Garden



an EIT Digital  
initiative

All

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Videos

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About 547,000 results (0.95 seconds)

### 10 Places To Eat And Drink Near Madison Square Garden ...

[www.foodrepublic.com/.../10-places-to-eat-and-drink-near-madison-squ...](http://www.foodrepublic.com/.../10-places-to-eat-and-drink-near-madison-squ...) ▾

Nov 7, 2013 - Now we take on the **food** near **Madison Square Garden**, which has long ... find some really interesting things less than a **10-minute's walk** away.

### 10 Restaurants Near Holiday Inn Express NYC Madison ...

[www.tripadvisor.com/.../New York City/New York City Restaurants](http://www.tripadvisor.com/.../New%20York%20City/New%20York%20City%20Restaurants) ▾

**Restaurants** near Holiday Inn Express NYC **Madison Square Garden** on TripAdvisor:

See 646808 reviews and ... 03/04/2016; "A great variety of **Indian** dish.

Missing: **reachable** **foot**

### Restaurants within Walking Distance of Monona Terrace

[conferencing.uwex.edu/.../RestaurantswithinWalkingDistanceofMonona...](http://conferencing.uwex.edu/.../RestaurantswithinWalkingDistanceofMonona...) ▾

**Madison**, Wisconsin conference 2009. ... Sunprint Café on the **Square** (breakfast and lunch) ... **Maharani Indian Restaurant** (lunch buffet and dinner). 280 W. Washington Avenue (**10 minute walk**) ... the north side of W. Washington Ave. at the corner of Henry St. **Fabulous Indian food**, outdoor seating in an enclosed **garden**.

### Hotel Row NYC at Times Square, New York City, NY ...

[www.booking.com/.../New York City Hotels](http://www.booking.com/.../New%20York%20City%20Hotels) ▾

★★★★★ Rating: 7.5/10 - 7,910 reviews

In the Theater District and within a short **walk** of Times Square, this hotel ... The City Kitchen **restaurant**, also on site, offers New York city specialties. ... Radio City Music Hall. **Madison Square Garden**, the Empire State Building, and Javits ..... Group is just



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initiative



[https://youtu.be/K6\\_ylq1ufH8](https://youtu.be/K6_ylq1ufH8)

@giusepperizzo

# PAS<sup>T</sup>IME

**PasTime: a new personalized “in-destination” experience**

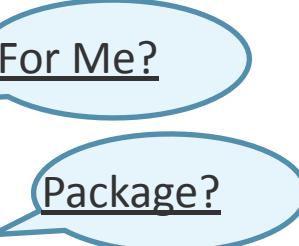
# PasTime in a nutshell

## Traveler needs at destination:

*Right service and content at the right time, customized for ME*



tripadvisor®



Google Trips



# PasTime – Project description

**PasTime is THE innovative solution** offering city visitors personalized, smart and attractive touristic recommendations based on a comprehensive knowledge base of local content promoting a territory combined with a deep understanding of travellers' behaviour and interests.

## Products and Services Proposal

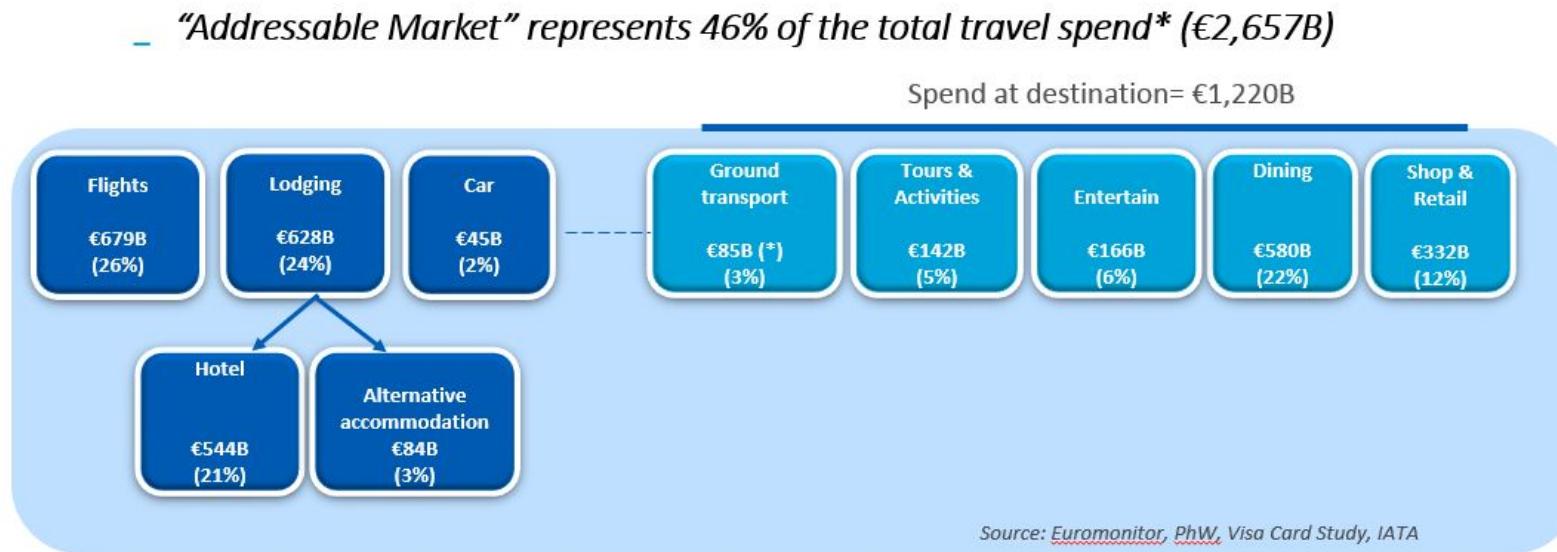
- Semantic technologies for building comprehensive knowledge bases in the domain of culture and tourism.  
**Product type:** data Platforms

- Technologies for creating bundles of business and cultural tourist offerings that correspond to user needs.
- Technologies for recommending attractive offers to user groups based on a strong understanding of users interests, purchase behaviors and past activities (personalization).
- **Product type:** in-destination recommender system

# Challenges are huge

## Business Opportunity:

A huge addressable market:



- Increasing + 4% per year – and even more online...

## For cities and tourism organisms:

- Give visibility on activities and tourist trumps (attractivity – image - promotion)
- A better knowledge of traveler behavior to adapt offers
- A way for visitors loyalty... Don't forget that a happy visitor is a better visitor

# PasTime – Functional Diagram



# Knowledge Base for Cities

French Riviera

316 K places  
22K Events



Canary Islands

207 K places  
3 K Events



Time for KB creation divided by 3 between Jan and Sep 2017

Amsterdam

610 K places  
28 K Events



Saint Barthelemy

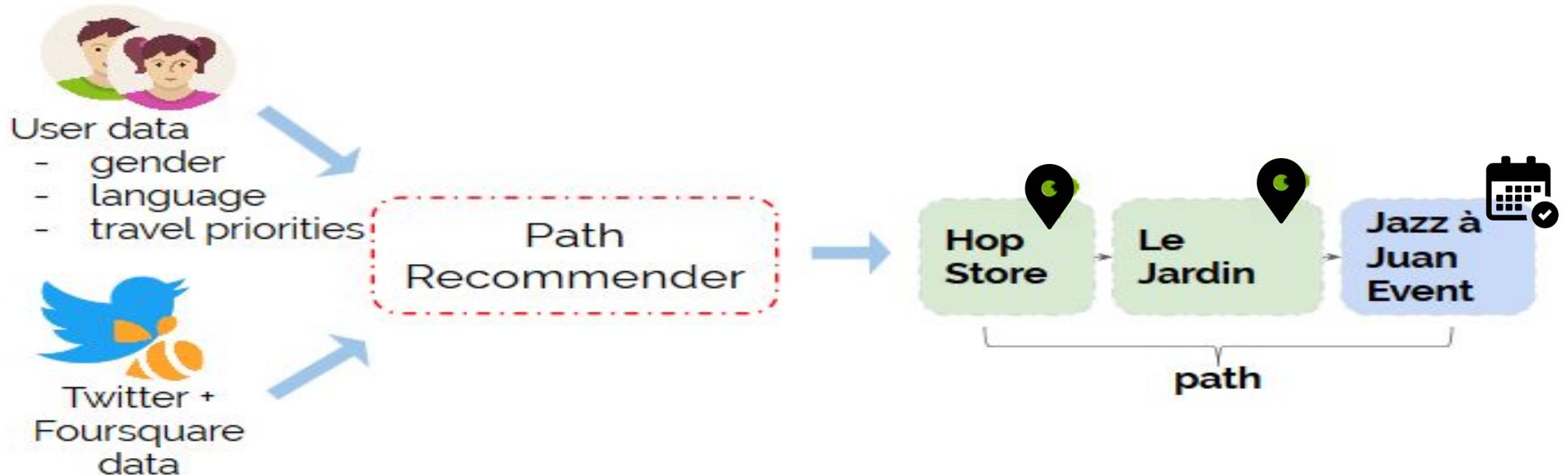
1 K places  
1 K Events



Hyper-local  
sources (OT)



# Innovation: Creation of Logical Bundles of Offers



**AMADEUS®**

A unique deep learning based recommender system that generates bundles composed of accommodation, restaurants, shopping, activities, sights and events

# Product B2B2G: data platform for tourism

Extract, Transform, Load



**Open Data: our speciality**

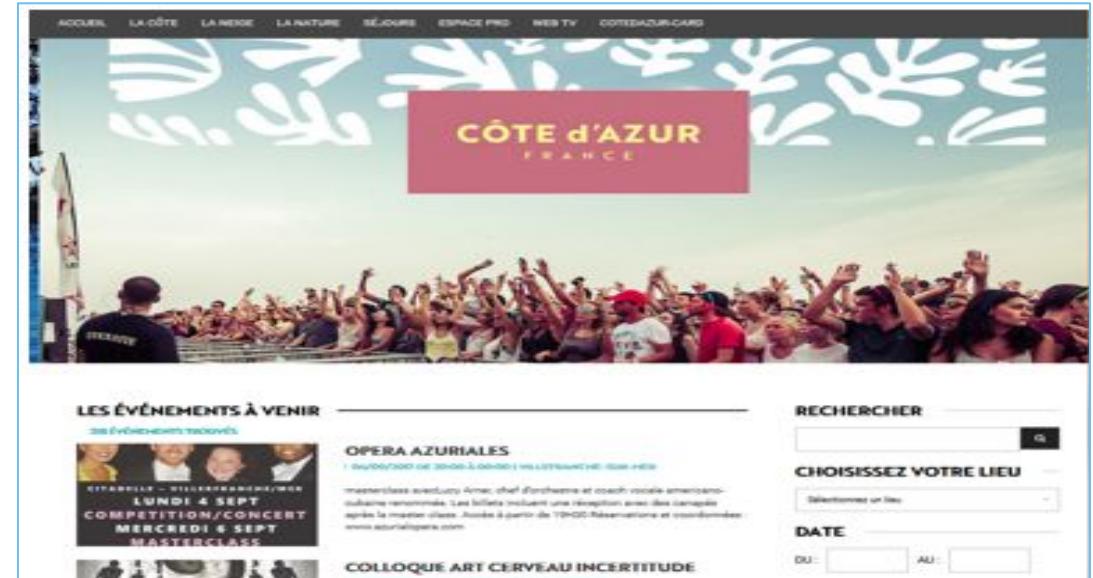
We can provide you support during the whole lifecycle of your open data projects (designing your strategy, selecting, transforming and publishing data sources, engaging reusers), no matter whether you are a private or public organisation.

### Opening your Data

Our main objective is to make sure that your data **are used**, both inside and outside your organisation. To achieve that, we need to take into account: **strategy** so that the initiative will remain sustainable over time, **publication** to facilitate access to data, and ensure transparency, and **normalisation**, so as to ensure interoperability with other external data sources, hence increasing their potential usage

- Open Data Strategy**  
We will help you to define the strategy for managing and publishing data, considering organizational legal and technical criteria.
- Data Publication**  
We will create and maintain your open data portal following best practices and up-to-date data publishing technologies.
- Normalisation and Analysis**  
We will automate the data normalisation and publication process, reducing the time required for manual edition and facilitating its analysis.

CityMoove



ACCUEIL LA CÔTE LA MER LA NATURE SÉJOURS ESPACE PRO WEB TV CÔTEDAZUR-CARD

**CÔTE d'AZUR FRANCE**

LES ÉVÉNEMENTS À VENIR

OPERA AZURIALES

COLLOQUE ART CERVEAU INCERTITUDE

RECHERCHER

CHOISISSEZ VOTRE LIEU

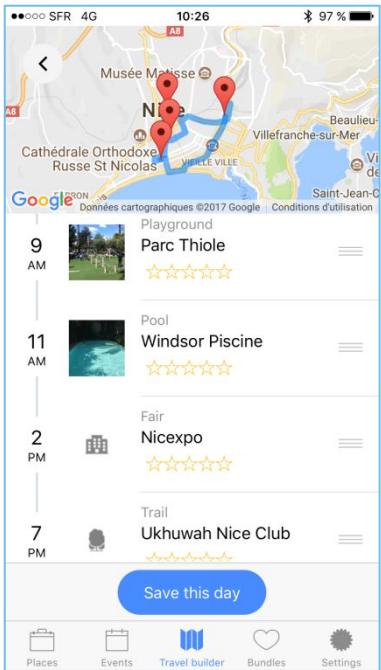
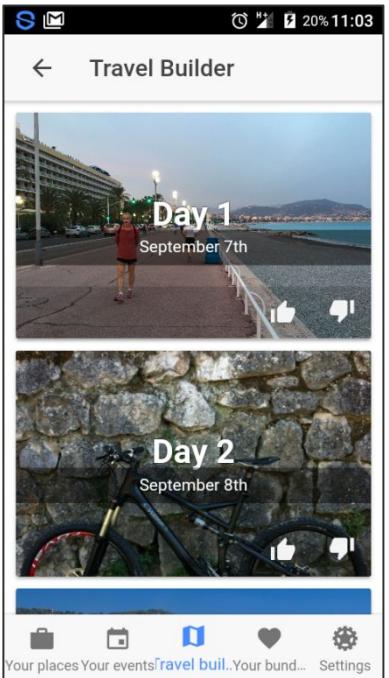
DATE

DU:  AU:

<http://www.cotedazur-en-fetes.com/>



# Product B2B / B2C: in-destination recommender





KICK OFF MEETING  
Bruxelles - January 7-9, 2020



easyRights has received funding from the EU Horizon 2020 research and innovation programme under grant agreement No 870980.



# Migration...

You've made it, you've managed to **leave your country**.

**You are in Europe**, but your travel hasn't finished yet.

You still have a **long journey ahead** of you to get to know the new hosting country's societal institutions, culture, socio-economic settings.

You'll have to orient yourself and try to grasp how to *live* where you are, **accessing the different kinds of resources** required for your daily life.

You'll have to **learn a new language**.

You'll have to **understand what your rights and duties are**.

And you'll need to **be oriented in this journey**".

(by a NGO member, Milan, Oct.2017)

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**You are in Europe**, but your travel hasn't finished yet.

You still have a **long journey ahead** of you to get to know the new hosting country's societal institutions, culture, society,

**it is a landing, a plugging-in in a new society,  
it is a learning process, it is a new birth...  
it a new language.**

You'll have to **understand what your rights and duties are**.

And you'll need to **be oriented in this journey**".

(by a NGO member, Milan, Oct.2017)

# Migration...

## Migration is bigger and more contentious than ever

While work is still the main reason people move to another country, growing conflicts and instability are increasing the number of people forced from their homes.

While in the U.S. and Europe, concerns that migrants are stretching local services and disturbing order have been harnessed by nativist politicians embracing tighter controls, advocates for migrants lament the many who die attempting to reach a new land or face exploitation once there.

(E. Vickers, C. Alexander, Bloomberg Businessweek, Oct.2019)

# Migration...

**Migration is bigger and more contentious than ever**

While work is still the main reason people move to another country, growing conflicts and instability are increasing the number of people leaving from their homes.

**we are in the middle of an EMERGENCY  
and in the middle of a CONFLICT**

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(E. Vickers, C. Alexander, Bloomberg Businessweek, Oct.2019)

# easyRights...

EASYRIGHTS aims at improving the **easiness for  
(im)migrants to exercise** their rights by:

1. including two distinct instances of the concept of rights: the rights of **non-citizens** (OHCHR, 2006 - refugees, asylum seekers, illegal or irregular immigrants) and the rights of the '**new citizens**', (UNHCR, 2006 - legal immigrants under the general framework of integration)
2. interpreting simplification as a problem of communication, trying to define a new international standard – the **easyRights  
Mediation Grammar**

# easyRights...

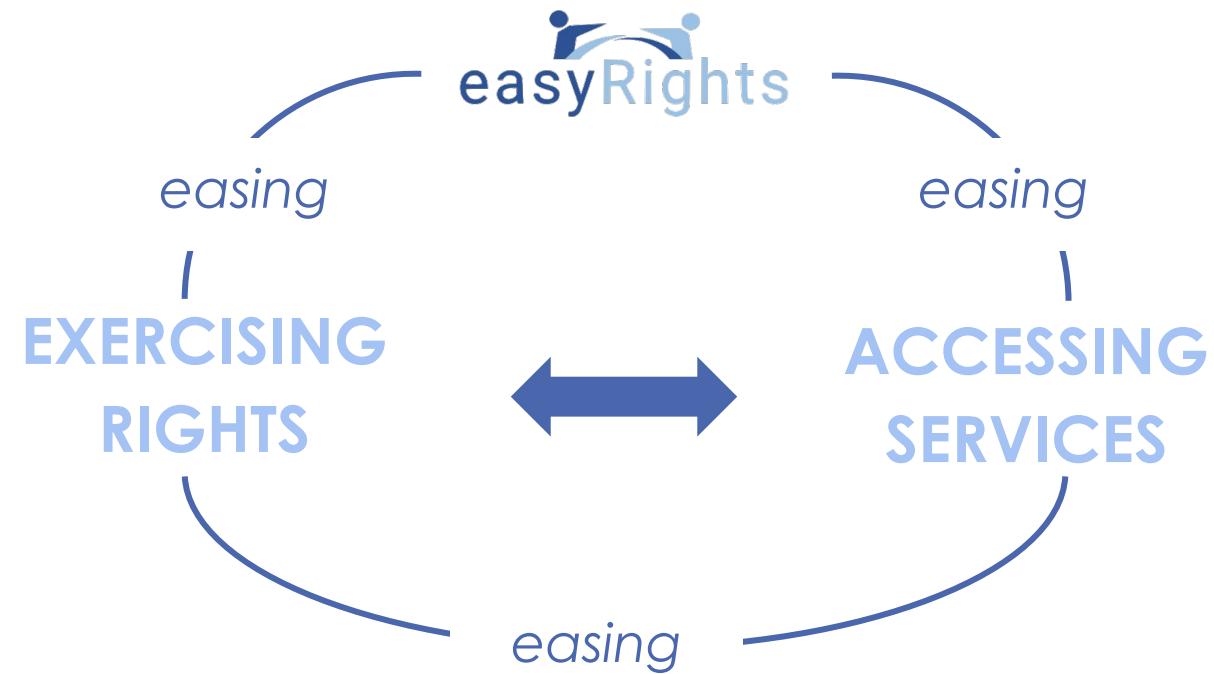


EXERCISING  
RIGHTS

The easyRights logo, identical to the one in the top right corner, featuring the stylized figure and the brand name.

ACCESSING  
SERVICES

# easyRights...



# easyRights...

EASINESS TO  
EXERCISE  
RIGHTS



awareness of  
basic  
rights/services



communication  
also involves the  
service providers

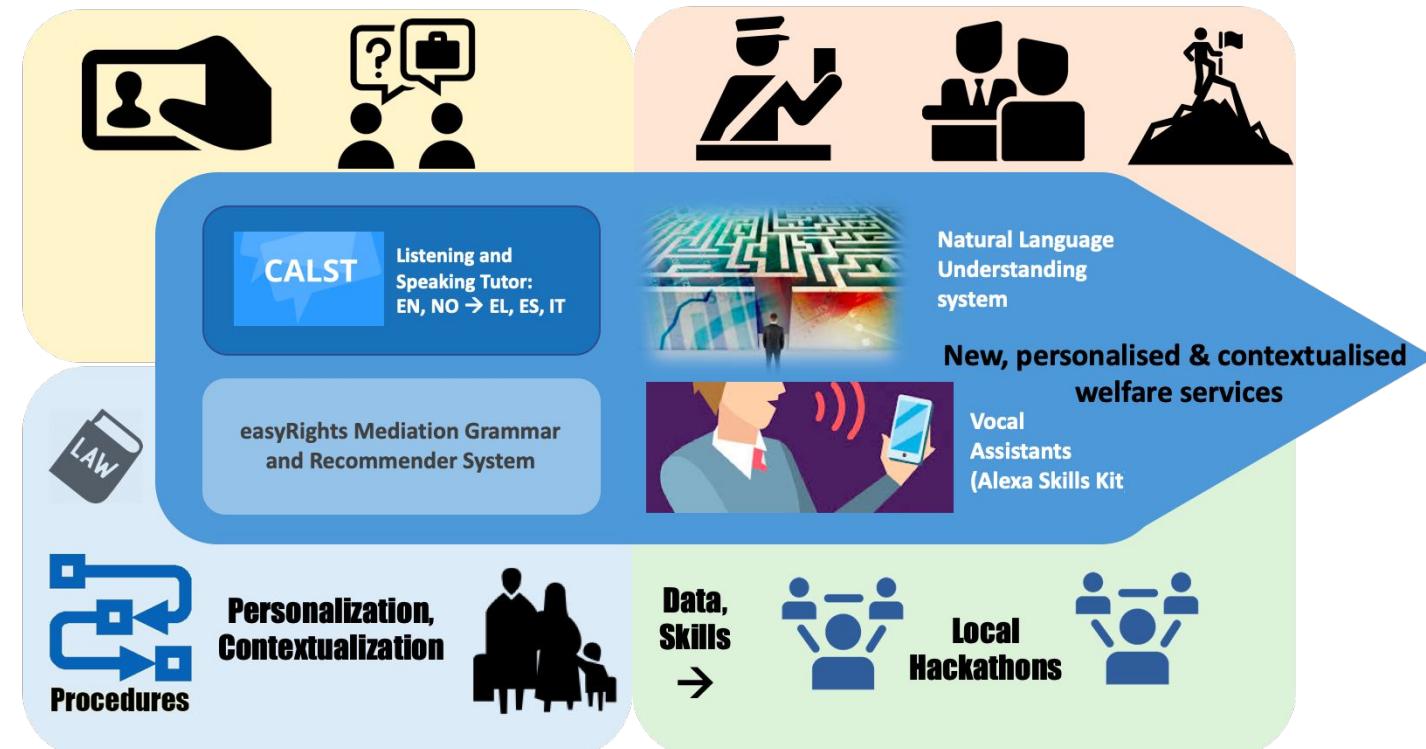


user-centricity for  
bureaucratic  
complexity



# easyRights...

EASINESS TO  
EXERCISE  
RIGHTS





**Thank you for your attention.**

Questions?



# CONTACTS

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