



Languages and OPEN DATA:

*How Language services
PROVIDERS can
CONTRIBUTE TO SMART
CITIES*

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AGenda

1. BACKGROUND - *THE rise OF smart CITIES, Data economy, inclusion*
2. WHAT ABOUT INDICATORS: *LANGUAGES and smart CITIES, GAPS*
3. "OPEN DATA": *ISSUES, CRITICALITY*
4. ENGAGING LANGUAGE PROFESSIONALS: *OPPORTUNITIES, EXAMPLES*



1. BACKGROUND -
*THE RISE OF
SMART CITIES,
DATA ECONOMY
AND INCLUSION*



THE RISE OF SMART CITIES: CHALLENGES; OPPORTUNITIES

- ◆ POPULATION
- ◆ ENVIRONMENTAL
- ◆ ECONOMIC
- ◆ TECHNOLOGICAL





smart cities HISTORY SIMPLIFIED:

- ◆ RIO EARTH SUMMIT
(**AGENDA 21**, 1992)
- ◆ CHARTER OF EUROPEAN
SUSTAINABLE CITIES
(**AALBOR CHARTER**, 1994)
- ◆ **MELBOURNE PRINCIPLES**
(2002)
- ◆ **UN SUSTAINABLE
AGENDA 2030** (2015)



smart CITY DEFINITIONS

- ◆ LIVABLE
- ◆ INTELLIGENT
- ◆ KNOWLEDGE
- ◆ LOW CARBON
- ◆ ECO
- ◆ RESILIENT
- ◆ smart -
SUSTAINABLE (SSC)



THE FUTURE
OF OUR
CITIES IS
LINKED TO
DATA
ECONOMY.



THE SIZE OF THE DATA market

European Data Market

 **Data workers**

6.16 million in 2016

→ 10.43 million by 2020

 **Data companies**

255,000 in 2016

→ 359,050 by 2020



Data economy value

Almost € 300 billion in 2016 → € 739 billion by 2020



Source: European Data Market study

ACCELERATING MOVES TO MOBILE BROADBAND NETWORKS AND SMARTPHONE ADOPTION

Mobile broadband connections to increase from 55% of total in 2016 to

73%
by 2020

By 2020, there will be

5.7bn
smartphones, growth of 1.9bn from the end of 2016

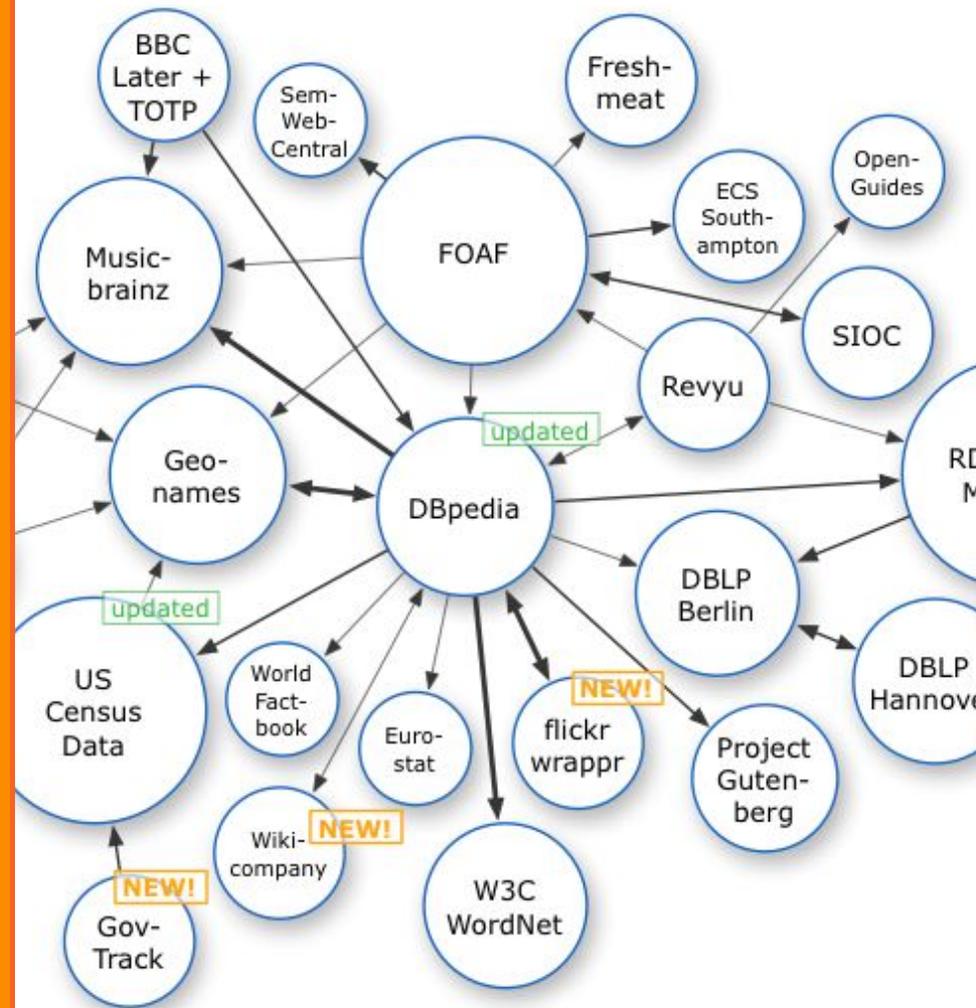
Mobile data traffic to grow by a CAGR of

47%
over the period 2016-2020



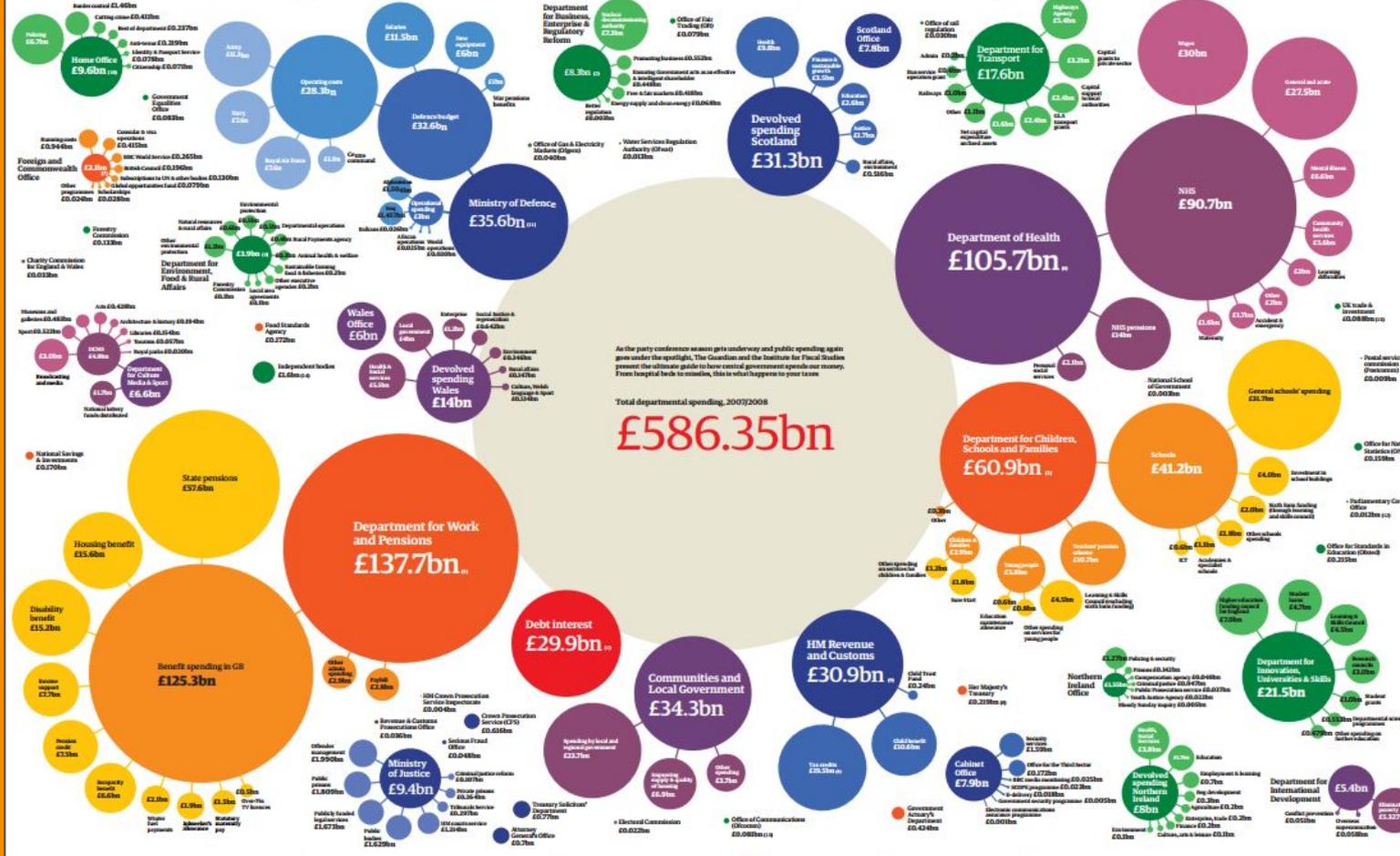
Source: Ericsson

“smart city”
Governance in
“Data economy”
MUST PROVIDE
ACCESS TO DATA
FOR **INCLUSIVE**
PLANNING AND
DECISION
MAKING TO TAKE
PLACE



WHY?
TO MONITOR GOVERNMENT SPENDING

Where your money goes: the definitive atlas of UK government spending



source: <http://www.freshminds.net/2011/02/case-study-data-gov-uk/>

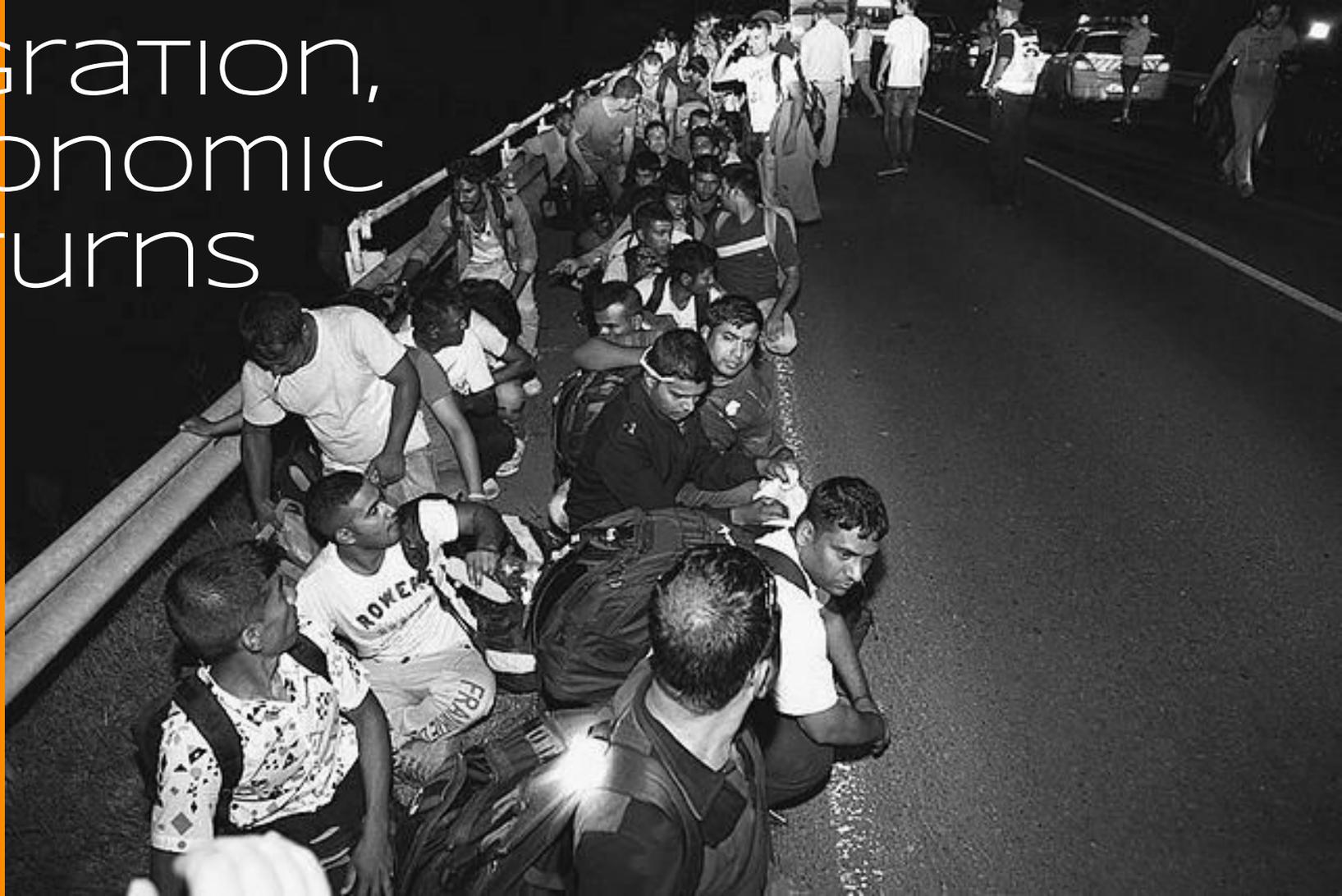
WHY?

TO manage risks/
COMPLEXITIES and
anticipate trends

environment



MIGRATION, economic turns



PEOPLE in
data
economy
and
sustainable
- smart
cities

"**HOLISTIC VISION** OF SUSTAINABLE - smart city entails a creative, local, balance - seeking process THAT EXTENDS INTO ALL AREAS OF LOCAL DECISION MAKING ... **THE GOVERNANCE DIMENSION IS THEREFORE ESPECIALLY KEY** AS IT requires **COOPERATIVE EFFORT** AND **COLLABORATION** FROM **DIVERSE STAKEHOLDERS** TO TAKE **COMPREHENSIVE APPROACH** TO SOLVING CITIES' COMPLEX CHALLENGES."

Freeman, G. (2017) THE ORIGIN AND IMPLEMENTATION OF THE SMART-SUSTAINABLE CITY CONCEPT THE CASE OF MALMÖ, SWEDEN



**Governance Dimension as a Key =
COOPERATIVE EFFORTS +
COLLABORATION +
DIVERSE STAKEHOLDERS +
COMPREHENSIVE APPROACH.**

(Freeman, G., 2017)



AGENDA FOR SMART - SUSTAINABLE CITY INCLUDES

1. SOCIAL	2. ECONOMIC	3. ENVIRONMENTAL	4. GOVERNANCE
EDUCATION & HEALTH; FOOD & NUTRITION; GREEN HOUSING/ BUILDINGS; WATER & SANITATION; GREEN PUBLIC TRANSPORTATION; GREEN ENERGY ACCESS; RECREATION/ COMMUNITY SUPPORT	GREEN GROWTH; DECENT EMPLOYMENT; PRODUCTION & ACCESS TO RENEWABLE ENERGY; TECHNOLOGY & INNOVATION (R&D)	FOREST & SOIL MANAGEMENT; WASTE & RECYCLING; AIR QUALITY; ADAPTATION TO CLIMATE CHANGE	DECENTRALIZED PLANNING; PROMOTION OF EQUITY; STRENGTHENING CIVIL & POLITICAL RIGHTS; SUPPORT OF LOCAL, NATIONAL, REGIONAL & GLOBAL LINKS



[HTTP://WWW.SYMBIOCITY.SE/](http://www.symbiocity.se/)

NOW, WHAT
DOES THIS
HAVE TO DO
WITH
LANGUAGES?





IN FACT, EVERYTHING

"WORDS ARE IMPORTANT—THE FIGHT
SILENCE, ALIENATION, AND VIOLENCE.

WORDS ARE FLAGS PLANTED ON THE
PLANETS OF OUR BEINGS; THEY SAY
THIS IS MINE, JUST AS IMPORTANT,
WORDS HELP US FIND EACH OTHER
AND OVERCOME THE ISOLATION THAT
THREATENS TO OVERWHELM AND TO
BREAK US. WORDS SAY WE ARE HERE."

MONA ELTAHAWY, HEADSCARVES AND
HYMENS: WHY THE MIDDLE EAST NEEDS A
SEXUAL REVOLUTION



WITHOUT
LANGUAGE
THERE IS
no
INCLUSION



2. WHAT ABOUT INDICATORS? Languages and smart cities

IEEE

-HEALTH; Energy efficiency; Learning Technologies; Home; **Governance**; Cyber security

source:

<https://www.iso.org/obp/ui/#iso:std:iso:37120:ed-1:vi:en>

ISO 37120: Sustainable Development of Communities

Themes (17) City Services & Quality of Life

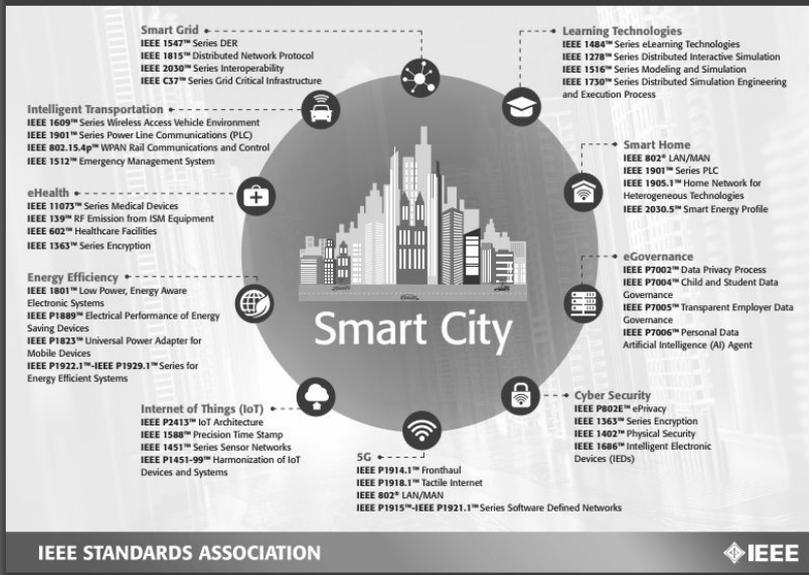
- Economy
- Education
- Energy
- Environment
- Finance
- Fire/Emergency
- Governance
- Health
- Recreation
- Safety
- Shelter
- Solid Waste
- Telecomm
- Transportation
- Urban Planning
- Wastewater
- Water/Sanitation

Indicators (100)

**Core
(46)**
required

**Supporting
(54)**
recommended

IEEE Standards Help Enable Smart City Technologies for Humanity



ISO 37120

Governance

source:

https://beyondstandards.ieee.org/wp-content/uploads/2017/04/IEEE_Smart_City.pdf

smart CITIES: 31 FACTORS (74 INDICATORS)

SMART ECONOMY (Competitiveness)

- Innovative spirit
- Entrepreneurship
- Economic image & trademarks
- Productivity
- Flexibility of labour market
- International embeddedness
- *Ability to transform*

SMART PEOPLE (Social and Human Capital)

- Level of qualification
- Affinity to life long learning
- Social and ethnic plurality
- Flexibility
- Creativity
- Cosmopolitanism/Open-mindedness
- Participation in public life

SMART GOVERNANCE (Participation)

- Participation in decision-making
- Public and social services
- Transparent governance
- *Political strategies & perspectives*

SMART MOBILITY (Transport and ICT)

- Local accessibility
- (Inter-)national accessibility
- Availability of ICT-infrastructure
- Sustainable, innovative and safe transport systems

SMART ENVIRONMENT (Natural resources)

- Attractivity of natural conditions
- Pollution
- Environmental protection
- Sustainable resource management

SMART LIVING (Quality of life)

- Cultural facilities
- Health conditions
- Individual safety
- Housing quality
- Education facilities
- Touristic attractivity
- Social cohesion

SMART CITIES: *SMART PEOPLE*

- *Foreign Language SKILL*

Factors and indicators Smart People

	indicators	weighting
Level of qualification	4	14%
Affinity to life long learning	3	14%
Social and ethnic plurality	2	14%
Flexibility	1	14%
Creativity	1	14%
Cosmopolitanism/Open-mindedness	3	14%
Participation in public life	2	14%
	20	100%

Smart People	Level of qualification	Importance as knowledge centre (top research centres, top universities etc.)	2007	regional
		Population qualified at levels 5-6 ISCED	2001	local
		Foreign language skills	2005	national
	Affinity to life long learning	Book loans per resident	2001	local
		Participation in life-long-learning in %	2005	regional
		Participation in language courses	2005	national
	Social and ethnic plurality	Share of foreigners	2001	local
		Share of nationals born abroad	2001	local
	Flexibility	Perception of getting a new job	2006	national
	Creativity	Share of people working in creative industries	2002	national
		Voters turnout at European elections	2001	local
	Cosmopolitanism/ Open-mindedness	Immigration-friendly environment (attitude towards immigration)	2006	national
		Knowledge about the EU	2006	national
		Voters turnout at city elections	2001	local
	Participation in public life	Participation in voluntary work	2004	national

<https://www.slideshare.net/BUDmeLCHOR/He-europeanwide-and-worldwide-smart-cities-initiatives>

smart cities: smart LIVING

IMPLIEd:

- *EDUCATIONAL ACTIVITIES*
- *TOURISTIC ATTRACTIVITY*
- *SOCIAL COHESION*

Cultural facilities	Cinema attendance per inhabitant	2001	local
	Museums visits per inhabitant	2001	local
	Theatre attendance per inhabitant	2001	local
Health conditions	Life expectancy	2001	local
	Hospital beds per inhabitant	2001	local
	Doctors per inhabitant	2001	local
	Satisfaction with quality of health system	2004	national
Individual safety	Crime rate	2001	local
	Death rate by assault	2001-03	regional
	Satisfaction with personal safety	2004	national
Housing quality	Share of housing fulfilling minimal standards	2001	local
	Average living area per inhabitant	2001	local
	Satisfaction with personal housing situation	2004	national
Education facilities	Students per inhabitant	2001	local
	Satisfaction with access to educational system	2004	national
	Satisfaction with quality of educational system	2004	national
Touristic attractiveness	Importance as tourist location (overnights, sights)	2007	regional
	Overnights per year per resident	2001	local
Social cohesion	Perception on personal risk of poverty	2006	national
	Poverty rate	2005	national



smart cities: *smart* Governance

IMPLIEd:

- *PARTICIPATION AND
DECISION MAKING:
POLITICAL PARTICIPATION*
- *Transparent Governance*

Factors and indicators Smart Governance

	indicators	weighting
Participation in decision-making	4	33%
Public and social services	3	33%
Transparent governance	2	33%
Political strategies & perspectives	0	0%
	9	100%

Smart Governance	Participation in decision-making	City representatives per resident	2001	local
		Political activity of inhabitants	2004	national
		Importance of politics for inhabitants	2006	national
	Public and social services	Share of female city representatives	2001	local
		Expenditure of the municipal per resident in FPS	2001	local
		Share of children in day care	2001	local
	Transparent governance	Satisfaction with quality of schools	2005	national
		Satisfaction with transparency of bureaucracy	2005	national
		Satisfaction with fight against corruption	2005	national

TO RECAP:



1. SMART CITIES are INFLUENCED BY DATA ECONOMY
2. DATA economy SHOULD BALANCE PEOPLE WITH TECHNOLOGY (INCLUSION)
3. SMART CITY INDICATORS SHOULD INCLUDE LANGUAGE TO FACILITATE INCLUSION FOR BETTER PLANNING AND ACCESS ("SOCIAL INNOVATION")
4. NO LANGUAGE (INCLUSION) = NO SOCIAL INNOVATION

A street sign for Cecil St. The sign is white with a black border and a decorative top. It features the name 'CECIL ST.' in large, bold, black capital letters. Below it, the Chinese characters '施素街' are written in a similar bold, black font. The sign is mounted on a black metal post. The background is a plain, light-colored wall.

CECIL ST.
施素街

60

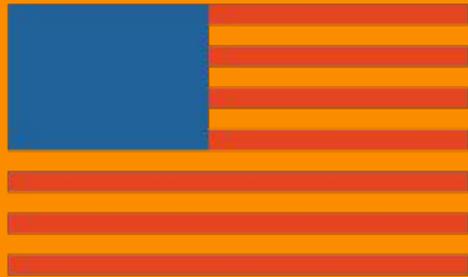
3. "open data":
issues, criticality

CO-DEVELOPING OUR

OPEN

DATA

Master Plan



DATA.GOV



CRITICAL DATA

- ISSUES WITH GOVERNMENTS' GAME WITH "OPEN DATA"



1. **Open Data For open Government**: PLATFORM economy; SHARING economy, EFFECTIVE POLICING VS. SURVEILLANCE; OPEN DATA AS A PROMOTIONAL VALUE VS. GENUINE DEBATE ABOUT WHO IS INCLUDED
2. **Machine Learning**: engagement in machine environment; MACHINE VS. PEOPLE AND WHO GOVERNS
3. **Data Poverty**: MINDFUL CHOICES WHEN COLLECTING DATA; THE STORIES WE TELL (HOMELESSNESS, LANGUAGE ACCESS, CLIMATE CHANGE); THE GAPS (DOMESTIC VIOLENCE AND FEMICIDE, MURDERED ABORIGINAL WOMEN)
4. **Data sovereignty** e.g. IN CANADA FIRST NATIONS DEFINING THEIR DATA SOVEREIGNTY; ALIGNMENT WITH NATIONAL CONVERSATION ABOUT RECONCILIATION

[HTTP://GO-OPENDATA.CA/](http://go-opendata.ca/)



“There is an identifiable **set of basic information needs that individuals need met to navigate everyday life, and that communities need to have met in order to thrive.** [...] A large body of research suggests [...] that access to information and, equally, the tools and skills necessary to navigate it are **essential to even a minimal definition of equal opportunity and civic and democratic participation.** Further, both traditional and contemporary analyses have demonstrated access to information [...] to be essential to **community economic well being and democracy.**”

(Friedland et al., 2012)

ACCESS TO CRITICAL INFORMATION - includes 8 areas:

1. **emergencies and risks**;
2. **HEALTH AND WELFARE**, INCLUDING SPECIFICALLY LOCAL HEALTH INFORMATION AS WELL AS GROUP SPECIFIC HEALTH INFORMATION WHERE IT EXISTS;
3. **EDUCATION**, INCLUDING THE QUALITY OF LOCAL SCHOOLS AND CHOICES AVAILABLE TO PARENTS;
4. **TRANSPORTATION**, INCLUDING AVAILABLE ALTERNATIVES, COSTS, AND SCHEDULES;
5. **ECONOMIC OPPORTUNITIES**, INCLUDING JOB INFORMATION, JOB TRAINING, AND SMALL BUSINESS ASSISTANCE;
6. **THE ENVIRONMENT**, INCLUDING AIR AND WATER QUALITY AND ACCESS TO RECREATION;
7. **CIVIC AND LEGAL INFORMATION**, INCLUDING THE AVAILABILITY OF CIVIC INSTITUTIONS AND OPPORTUNITIES TO ASSOCIATE WITH OTHERS;
8. **POLITICAL INFORMATION**, INCLUDING INFORMATION ABOUT CANDIDATES AT ALL RELEVANT LEVELS OF LOCAL GOVERNANCE, AND ABOUT RELEVANT PUBLIC POLICY INITIATIVES AFFECTING COMMUNITIES AND NEIGHBORHOODS.

(FRIEDLAND, NAPOLI, OGNYANOVA AND WILSON)

PRESENTED BY MCIS LANGUAGE SOLUTIONS

HOW THE POWER OF LANGUAGES SUSTAINS PROSPEROUS COMMUNITIES

MCIS advocates to remove language barriers. This improves access to critical information about local schools and job opportunities, civic and political rights, and health and legal services. Information about these vital services makes it possible for people to fully participate in civic life and for communities to remain prosperous (Canadian Index of Well-Being).

THREE major ways to remove language barriers:

1. provide access to information and services in a more familiar language,
2. increase language proficiency through the use of language acquisition tools,
3. take advantage of third party language solutions including translation and interpretation services.

CONNECTING THE GLOBE CELEBRATING OUR DIVERSITY



TOP 20 INTERPRETED LANGUAGES

- 1. ARABIC
- 2. HINDI
- 3. URDU
- 4. PUNJABI
- 5. FARSI
- 6. PORTUGUESE
- 7. SPANISH
- 8. ITALIAN
- 9. VIETNAMESE
- 10. POLISH
- 11. ROMANIAN
- 12. RUSSIAN
- 13. HUNGARIAN
- 14. JAPANESE
- 15. KOREAN
- 16. GREEK
- 17. CATALAN
- 18. DUTCH
- 19. GERMAN
- 20. FRENCH

TOP 20 TRANSLATED LANGUAGES

- 1. FRENCH
- 2. ENGLISH
- 3. CHINESE (MANDARIN)
- 4. PORTUGUESE
- 5. SPANISH
- 6. ITALIAN
- 7. GERMAN
- 8. POLISH
- 9. VIETNAMESE
- 10. HUNGARIAN
- 11. ROMANIAN
- 12. RUSSIAN
- 13. JAPANESE
- 14. KOREAN
- 15. GREEK
- 16. CATALAN
- 17. DUTCH
- 18. ARABIC
- 19. URDU
- 20. PUNJABI

DID YOU KNOW?

According to the 2011 Census, 211,500 Canadians have an Aboriginal language as their mother tongue. 60 different Aboriginal languages, grouped in 12 language families, are spoken in Canada.

GATEWAY TO VITAL INFORMATION AND SERVICES ALWAYS READY

THE SPOKEN WORD

INTERPRETATION

ENSURING ACCESS TO CRITICAL SERVICES INCLUDING:



*COMMUNITY-BASED SERVICES INCLUDE CHILDREN'S SERVICES, EDUCATION, FAMILY, IMMIGRATION AND SENIORS SERVICES, LAW ENFORCEMENT, AND SHELTERS

59,169 THE NUMBER OF CRITICAL SERVICE INTERPRETATIONS**

THE WRITTEN WORD

TRANSLATION

ENSURING ACCESS TO CRITICAL INFORMATION INCLUDING:



SERVING VULNERABLE POPULATIONS EQUITY OF ACCESS

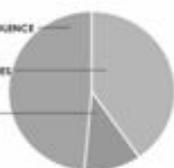
NEARLY 1/3 OF ALL LANGUAGE INTERPRETATIONS ARE ACCESSED BY VULNERABLE PERSONS

THAT'S ALMOST 18,300 LANGUAGE INTERPRETATIONS FOR VULNERABLE PERSONS IN 2015 ALONE



LANGUAGE INTERPRETATION ASSIGNMENTS THAT CHANGE LIVES

8,873 FOR VICTIMS OF VIOLENCE
7,365 FOR STRAN REFUGEES
2,029 FOR THE HOMELESS



CREATING A LEGACY OF WORLDWIDE COMMUNICATION MEETING THE GROWING GLOBAL NEED

389,092

NUMBER OF LANGUAGE INTERPRETATION PROJECTS OVER THE LAST 20 YEARS

INCREASE IN INTERPRETATION ASSIGNMENTS FROM 1996 - 2015

11,491

NUMBER OF TRANSLATION PROJECTS SINCE 2001

INCREASE IN TRANSLATION ASSIGNMENTS FROM 1996 - 2015



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Emergencies
& Risks

Health &
Welfare

Education

Transportation

Economic
Opportunities

Environment

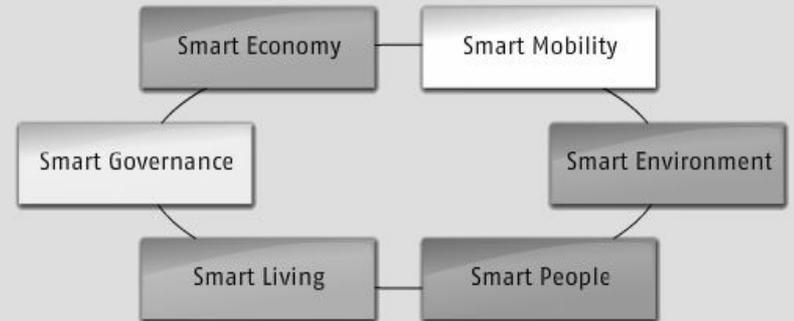
Civic & Legal

Political

CRITICAL INFO
meets
SMART CITIES

The smart city model

A Smart City is a city well performing in 6 characteristics, built on the 'smart' combination of endowments and activities of self-deciseive, independent and aware citizens.





INSTITUTIONS

INFORMATION
IS POWER, BUT ONLY
IF PEOPLE ARE ABLE TO:

- ACCESS
- UNDERSTAND
- APPLY IT





4. ENGAGING LANGUAGE PROFESSIONALS WITH SMART CITY AGENDA: *examples*

SO, WHERE DO LPs FIT?



→ **ADVOCATES FOR**

- ◆ Government POLICIES - TO INCLUDE PROVISION OF LANGUAGE WITH PROVISION OF CRITICAL SERVICES
- ◆ Smart CITY DASHBOARDS - TO CREATE AND HAVE PUBLIC access TO a transparent DASHBOARD and INCLUDE language as an INDICATOR in ALL 6 DIMENSIONS

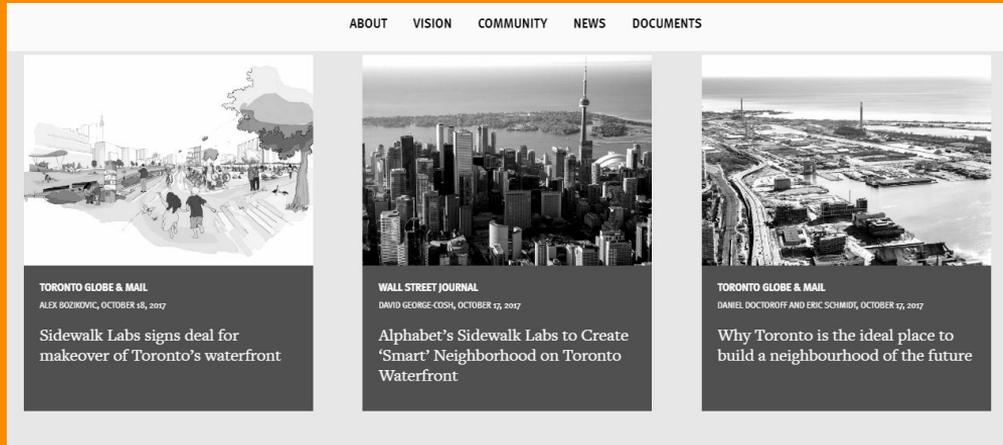
→ **COLLABORATORS WITH**

- ◆ ALL INTERESTED PARTIES across ALL SECTORS: FOR PROFIT, non PROFIT, TECHNOLOGY, economy, academia
- ◆ Government - BEING PRESENT at ALL PUBLIC CONSULTATIONS and JOINT INITIATIVES where DATA, services and PEOPLE are INVOLVED
- ◆ Local CIVIC TECH organization

OPPORTUNITIES FOR COLLABORATION & engagement

1. SIDEWALK TORONTO

ABOUT VISION COMMUNITY NEWS DOCUMENTS



TORONTO GLOBE & MAIL
ALEX BOZKOWICZ, OCTOBER 16, 2017

Sidewalk Labs signs deal for makeover of Toronto's waterfront

WALL STREET JOURNAL
DAVID GEORGE-COSH, OCTOBER 17, 2017

Alphabet's Sidewalk Labs to Create 'Smart' Neighborhood on Toronto Waterfront

TORONTO GLOBE & MAIL
DANIEL DOCTOROFF AND ERIC SCHMIDT, OCTOBER 17, 2017

Why Toronto is the ideal place to build a neighbourhood of the future

2. welcomeHome TO

our example 1: SEMI-STRUCTURED PUBLIC DIALOGUES- (UN)CONFERENCE 2017 and INTL. TRANSLATION DAY (LIBERATING STRUCTURES)



YOU ARE INVITED

MCIS
MEMBER SINCE 1981

TO CELEBRATE INTERNATIONAL 2017 TRANSLATION DAY!

WHAT: *Networking, conversations, documentary screening*

WHERE: *Triovest Conference Centre, 789 Don Mills Road, @Eglinton*

WHEN: *September 30, 2017*

WHY: *Why not? REGISTER HERE*



MCIS LANGUAGE SOLUTIONS
(UN) CONFERENCE 2017

MCIS
MEMBER SINCE 1981

*HACKING THE FUTURE
OF CANADA'S LANGUAGE INDUSTRY*

[HTTP://PUB.LUCIDPRESS.COM/MCIS-UNCONFERENCE2017/](http://pub.lucidpress.com/mcis-unconference2017/)

OUR example 2 - *community HACKATHON*

November 3-5, 2017 | Toronto

#MigrahackTO



COMMUNITY HACKATHON
ON MIGRATION DATA



www.migrahackto.com

Join us for live streaming **NOV 5TH, 11am EST**

ALL acts of communication are acts of **Translation and Interpretation.**

Translators *Remove Communication Barriers*

BETWEEN PEOPLES & CULTURES. We blend disciplines to bridge the complexities of the Globalized World, monitoring its impact on

Sciences, Humanities, Arts and Technologies.

TR NAS LA OTRS ARE DEOCEDRS. Our minds are young and we love fun. We are here to **UNTANGLE**

verbal, visual, musical and digital acts of communication and

INSPIRE Users, Innovators & Thinkers to collaborate Better & Faster.

Translators **WORDS** to fight Social Injustice and advocate use their **WORDS** for the Freedom of Expression.

We contribute to improved quality of life by facilitating equal access to **healthcare, education and justice for all.**

Translators *Devoted to their clients*

A R E Excellence-Driven Relationship Builders *Driven BY PURPOSE*

Our **Culture** is the **Culture** of **SOCIAL IMPACT**

measured by our non-compromising obligation to *Seek Out* the change we need to *Create* in the world.

EXAMPLE 3 - GENERAL ADVOCACY



https://www.youtube.com/watch?v=_BAs1P4-s5w

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館
店

Banh Mi
Nguyễn Hoàng

THANK YOU!

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