Smart skills and data are the answer

What was the question?

Daniela Florea

ESPON 14 November 2018, London

World perspective

Artificial Intelligence (AI) ranking

1. China

2. USA

3. Europe

Within Europe:

➢ United Kingdom ~ 50%

➢ Rest of Europe   ~ 50%

EC policy makers believe that the digital 'battle' with China and the USA is as follows –

B-2-C	Already lost
B-2-B	Not lost but critical
Public-2-Citizen	In play and crucial for the EC

EC research initiatives

Push

e.g. Horizon 2020

Designed to maintain and extend the European Communities' R&D base

Pull

e.g. Digital Cities Challenge

Designed to stimulate relevant technologies in support of European citizens

Project grew out of a report by the WEF, 2014

"Europe lags behind . . key competitive countries and is in danger of falling even further behind"

DCC is aimed at addressing societal problems across Europe requiring innovative solutions

Success story – Espoo

https://www.youtube.com/watch?v=FSvsZc1XVj8

'The Most Intelligent Community in the World'

The Intelligent Community Forum, London, 2018

Espoo

All managers and directors are

MBA trained

And the norm….

LET'S SOLVE THIS PROBLEM BY USING THE BIG DATA NONE OF US HAVE THE SLIGHTEST IDEA WHAT TO DO WITH

TOM FISH BURNE

© marketoonist.com

Reality

- Major leadership challenges

- Diverse across the four corners of Europe (N/S & W/E)

  - Leadership styles

  - Openness of minds *

  - Political priorities

  - Legislative environment *

- Data availability

  - Inconsistent & messy *

  - Not published and often only available as pdf *

  - Out of date *

* These are all in need of innovative approaches

So where does this take us in terms of leadership and data availability?

Questions-1

What, and who is the city for?

Geo Strategies Ltd 2018

Questions-2

What, and who is
digital technology for?

Geo Strategies Ltd 2018

Questions-3

How can my city actively learn from & adapt to the needs of its people?

Trans. 11

What can I do for my city to make it unique?

Trans. 12

Questions-5

- How can we make our city more attractive?

- How can we create the right environment for millennials to want to live and work here?

- What does success actually mean in the context of our city?

- How can we make them take ownership of their city's future?

Real challenges

The Leaders Role

To -
- Inspire

- Drive change

- Collaborate

- Support

- Govern

However, political careers are rarely dependent on digital IQ….

City administration

- Some European cities have CDOs, CIOs or similar *but* –

- In the majority of urban environments that role is often associated with either IT or marketing which are focussed on day-to-day operations and delivery

- So, Mayors and City Managers can bring real benefit from -
  a) Understanding the need for, and promoting the use of data analytics
  b) Getting trained themselves
  c) Sponsoring (as opposed to mentoring) the data scientists in their quest to add value to the city
  d) Recognising that predictive analytics is not an exact science and depends very strongly on the skill of those involved

This can be an uphill task in certain parts of Europe!

London

Most digitally successful cities have a recognised (digital) leader

City administration

Need for decision makers -

- Getting the right data and key answers to make key decisions in a timely fashion

- Gaining deeper insight to really understand the changing environment

- Utilising reports and analytics that present data in a business context rather than from an IT perspective

- Having the ability to share their insights with other peers – both local and across Europe

Data-driven decision-making is novel for some and may not coincide with the political agenda!

Digital Data

Trans. 18

Data challenges

When it comes to getting the data needed for decisions -

- Incomplete data is the biggest problem for many administrations

- Often, data received from other departments needs cleansing, repairing and re-organisation before it's ready for analysis

- Data is required from multiple sources for decision making: the problems go up as n^2

In some states government data may even not be available to local authorities

- In general, getting government data takes far too long for it to be useful

Getting the data

There is a huge variety of data available from multiple sources including

- European Central Bank (ECB)

- EUROSTAT, etc

- But there is a vast amount of public data available from the web

  ➢ This is widely used in the commercial world so why not for public administration?

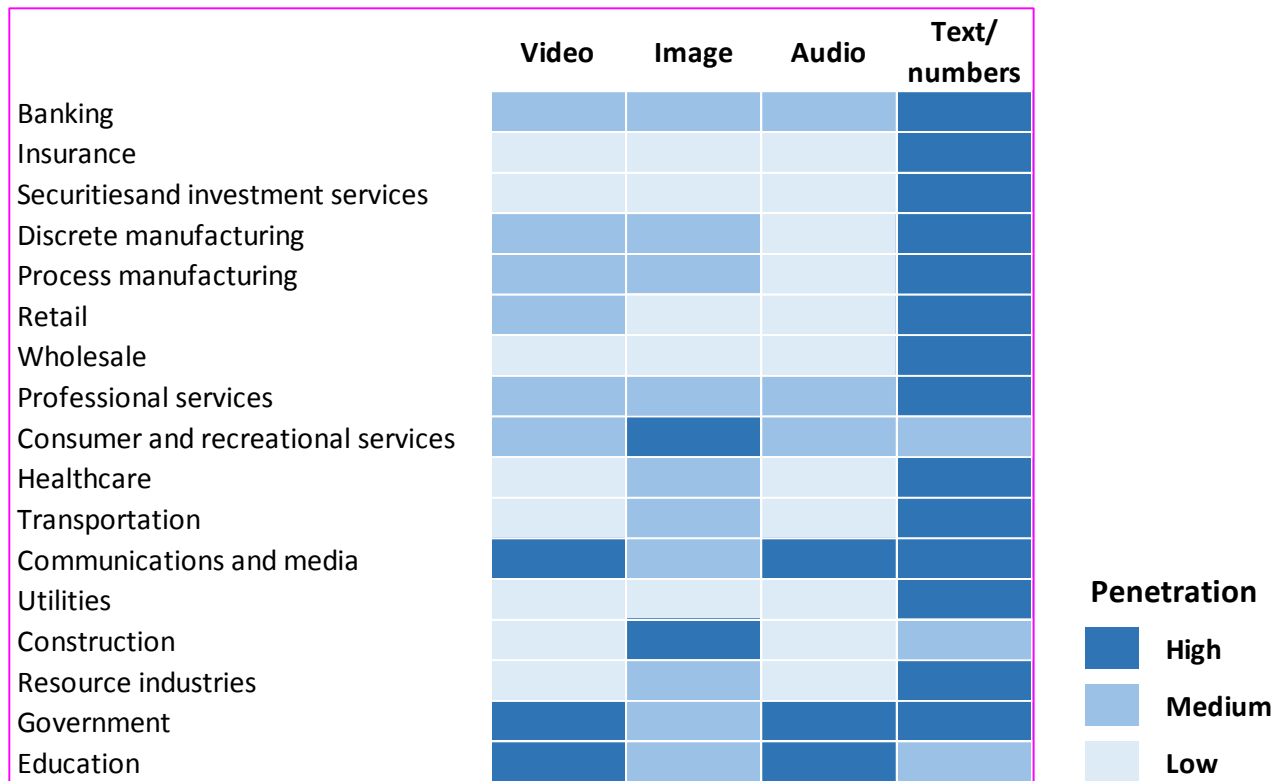- Also it is quite common to use surrogate data

Crowds around Waterloo station

Geo-tagged images downloaded from Flickr

In general, public administration isn't entrepreneurial but, in the area of digital it is sometimes required

Data availability

The type of data generated and stored varies by sector

	Video	Image	Audio	Text/ numbers
Banking				
Insurance				
Securitiesand investment services				
Discrete manufacturing				
Process manufacturing				
Retail				
Wholesale				
Professional services				
Consumer and recreational services				
Healthcare				
Transportation				
Communications and media				
Utilities				
Construction				
Resource industries				
Government				
Education				

Penetration

- High
- Medium
- Low

Trans. 21

Use cases – Open Minds

- **Red Cross** in Spain

  Segment blood donor database and find others like them.

  Use geo-demographic segmentation and postcode mapping to replenish blood bank after Madrid bombing.

- **Cancer** in Romania

  Segmented hospital episodes statistics used to determine geo-demographic characteristics of the top locations.

  Create the case for investment. Targeting 16 types (out of 45) = a gain of +42%.

  Much can be done with a modicum of ingenuity

What needs doing

- Stimulate data literacy for the leadership team

- Create agents of change

- Help identify analytical talent

- Nurture and sponsor new talent

- Ensure that specialists are trained in both business and soft skills (acquire domain knowledge)

- Help adapt, re-purpose and prioritise initiatives

- Create new business value – not just keep the lights on

- Monitor progress (relevant KPIs)

- Benchmark against others

Bring in the millennials as reverse role-models

Mr Mayor – some advice

- Don't be afraid. Be humble and acknowledge lack of knowledge.

- You don't have to start with a 'big bang'. There are often early wins

- Educate your team and stakeholders across sectors about what digital can do to support your city vision and ambition. They will become your city's pillars for success

- Provide a space for ideas, questions and experiments

- Just do it: be bold!

Those of us in the knowledge economy have a duty to help

Trans. 24

Mr Mayor – and more . . .

- In today's economy, you need to champion data in your city.

- The quality of the data is all-important and if it isn't already up to scratch, get going with a data quality improvement programme as soon as possible.

- Make your data truly open: the value for your city will grow exponentially!

- Bring in external help

While these messages are directed at the local mayors they are, in effect, <u>our</u> customers and it is incumbent on us to help them
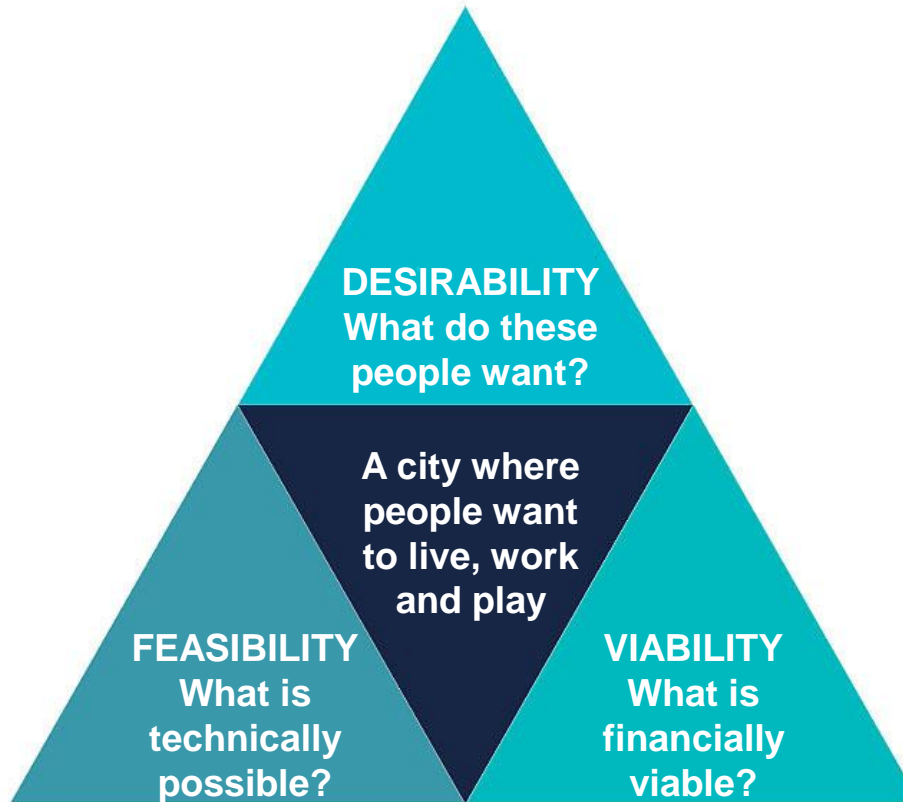
The question

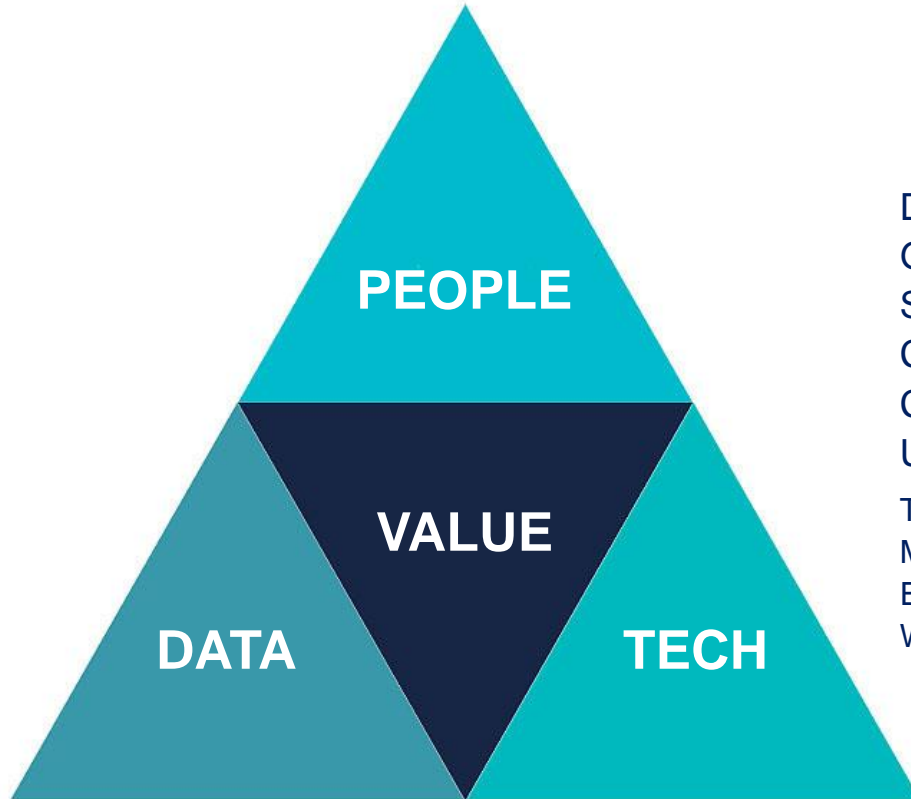From my experience, the real question relates to realities on the ground

Precisely what should we be doing to raise the game for those cities that are light-years behind e.g. Espoo?

Starting with the needs, this will pull forward the EC research agenda

Innovation model

Thank you

PEOPLE

VALUE

DATA

TECH

Daniela Florea
Geo Strategies Ltd
St John's Innovation Centre
Cowley Road
Cambridge CB4 0WS
United Kingdom

T: +44 (0)1223 205080
M: +44 (0)778 0660 763
E: *daniela.florea@geo-strategies.com*
W: *www.geo-strategies.com*

Trans. 28