



Monday Afternoon Sessions  
& Group Working

Big Data

- Diane and Gasant



## Overview



Big data and changing technology, it is all about\*

- **Capture,**
- **Compute,**
- **Create**

And, I would add

- **Collaborate**

\*Real2015 Confere

## Introduction

The built environment/natural environment sector faces two main challenges (RICS Futures)

- **Rapid urbanisation** – Smart Cities
- **Disruptive technologies**- based around the vast computing power of the smartphone which were transforming business models

.... Terminology

## Terminology



- Big Data
- Disruptive technologies

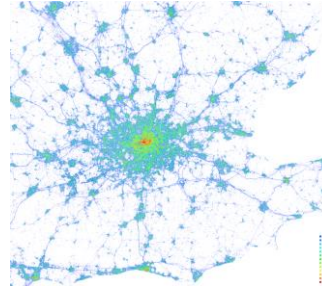


Both are positives and crucially they are dealing with change and new ways of working

## Terminology: Big Data



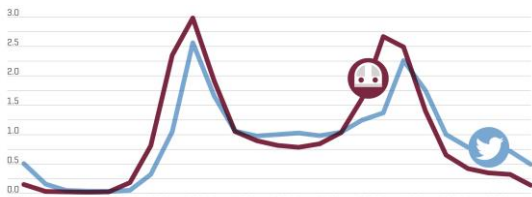
### RICS Futures 2015



## Terminology: Big Data



### RICS Futures 2015



London Twitter and transport use over the course of a day

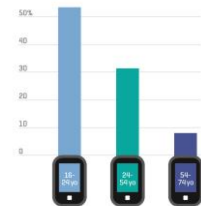
Source: Zachariadis 2014

## Terminology- Disruptive business models



### RICS Futures 2015 Disruptive

- ▶ **Mobile internet**  
Exponential growth in mobile internet use is boosting web-based businesses, especially in emerging markets
- ▶ **Increased cost pressure**  
Internet-driven disintermediation is driving efficiency – but also reducing profit margins
- ▶ **Mergers and acquisitions**  
Multidisciplinary companies are more commonplace, affecting the skills in demand



Internet use on mobile phones in the EU, 2012

Source: Eurostat

Examples: RICS Futures 2015



New models, new brands, disruption, leapfrogging



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## The growth of.....



- **Uber taxis:** where their business model was meeting demand for a journey by facilitating communication between a driver and those wishing to take a journey.
- **LivingPlanit:** explaining the concept in digital technology relating to smart cities, simply collecting data was not enough, as there was a need to have in place an integrated horizontal data platform to pull the required data together.
- **What3Words:** 3-by-3 meter parcels identified by three word combination to provide unique address.



*Leapfrogging traditional approaches*

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## Terminology- Disruptive technologies



Growth means processing **purposefully, powerfully** and with **connectivity**  
Importantly, Social partnership increases, e.g.

- R McLaren: **Crowd sourcing** is a way for people to gather evidence of their own land rights using (widely available) smart phones
- Too few land professionals too **solve** the problem
- **Tanzanian Mobile Applications to Secure Tenure (MAST)** resulted in lower cost, transparent and accessible, and
- Other countries: Kenya, DRC and South East Asia
- **FIG Comm 3/7 joint annual meeting:** Crowdsourcing of Land Information, Malta 16<sup>th</sup> -20<sup>th</sup> November.

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## Big Data & Technology



Aarti Shah  
Head of Government Relations  
(Sub Saharan Africa)  
Thomson Reuters

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## Technology



- Gasant Jacobs
- Director Business Development (Sub Saharan Africa)
- Thomson Reuters



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Tea Break - Please return by 16.00



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## Introduction to WG 4.1



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## Your action

### Objective:

- You have been working on new developments in technology and enterprise data within the property sector
- So, **how you could play a leading role** in
  - ensuring that our members ably face the challenges of disruptive technologies, and
  - can take advantage of opportunities offered.

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## Big Data- A reminder



- Technology capability increases exponentially
- Five billion become connected
- The cloud becomes ubiquitous
- Continuing productivity gains
- The works knowledge becomes digitised
  - Mega-companies and micro entrepreneurs emerge – fdi?
- Ever present avatars and virtual worlds
  - the rise of Cognitive assistants
  - Technology replaces jobs
- Social participation increases.....

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## Actions for the future



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### #3: Embracing technology and big data

We need to create a culture that doesn't fear technology, but embraces it.

#### Sector-wide actions:

- ▶ Broaden corporate skill sets to encompass **people comfortable handling and analysing data**
- ▶ **Understand** the implications, risks and opportunities associated with big data
- ▶ Support professionals to develop the requisite **skills to use new technology**

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### #3: Embracing technology and big data

#### Actions for RICS:

- ▶ Create a **home for big data professionals** in real estate and construction
- ▶ Encourage **innovation** through establishing new partnerships
- ▶ Make understanding technology and the analysis of data **core competencies** for new professionals
- ▶ Assist **existing professionals** to benefit from new technology



### #5: Helping the profession take new opportunities

We need to create a dynamic profession that can respond to changes in the market and wider society.

#### Sector-wide actions:

- ▶ Develop benchmarking tools linked to existing data sets for infrastructure and construction
- ▶ Deliver new education as job roles emerge and complexity increases
- ▶ Promote research in the field of asset productivity to inform future practice
- ▶ List the status of cost and project management, and rebrand the image of quantity surveying



### #5: Helping the profession take new opportunities

#### Actions for RICS:

- ▶ Get ready for new disciplines in infrastructure, asset management, and workplace productivity
- ▶ Review and update our entry requirements for new professionals
- ▶ Identify and help re-skill professionals whose disciplines are undergoing major change
- ▶ Shift the focus from entry point to whole-career development



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