Environmental Futures / Big Data Impact Lab

Ben Neild

Economic Context

In 2010, in the aftermath of the credit crunch, economic policy focused on 'jobs and growth'.

- Youth unemployment was 21%
- GDP was still 4% below its 2008 peak.

Between 2010 and 2015

- Youth and adult unemployment has fallen by around a third
- The Claimant Count has halved
- The number of people in employment has grown by 2.1 million

"We have been exceptionally successful in recent times in growing employment. We are proud of that."

'Fixing the Foundations', the Government's National Productivity Plan
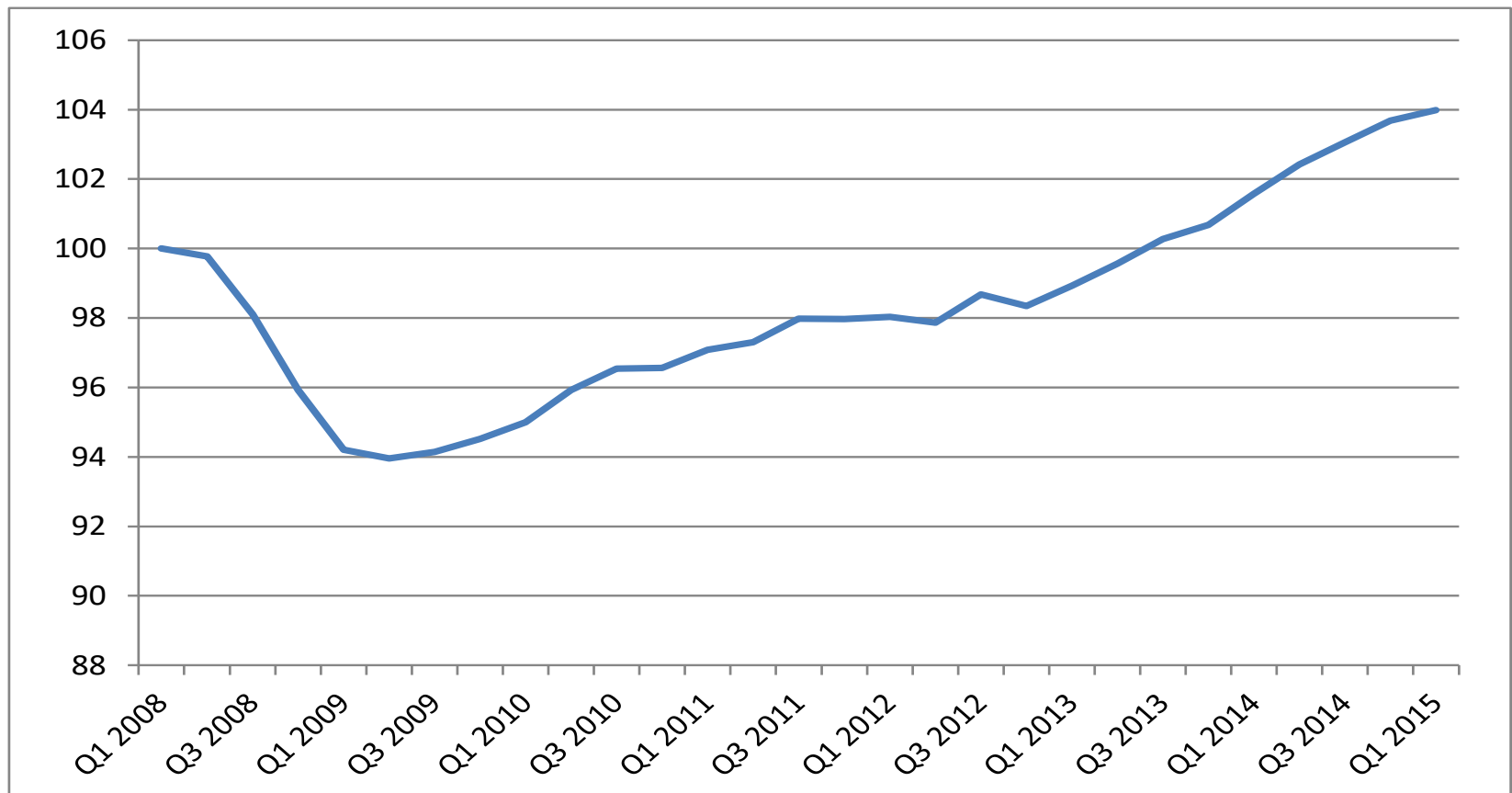
The UK economy is growing

In Q1 2015, UK GDP was 5% higher than it was in Q1 2013

It was 11% higher than it was in Q1 2009

UK GDP constant prices, Q1 2008 = 100

New Industrial Strategy

However this growth is entirely fuelled by the fact that there are: more people in employment; more people doing more than one job; and more people doing longer hours. Output per head remains lower than before the recession.

GDP & Output per head , constant prices, UK, Q1 2008 = 100
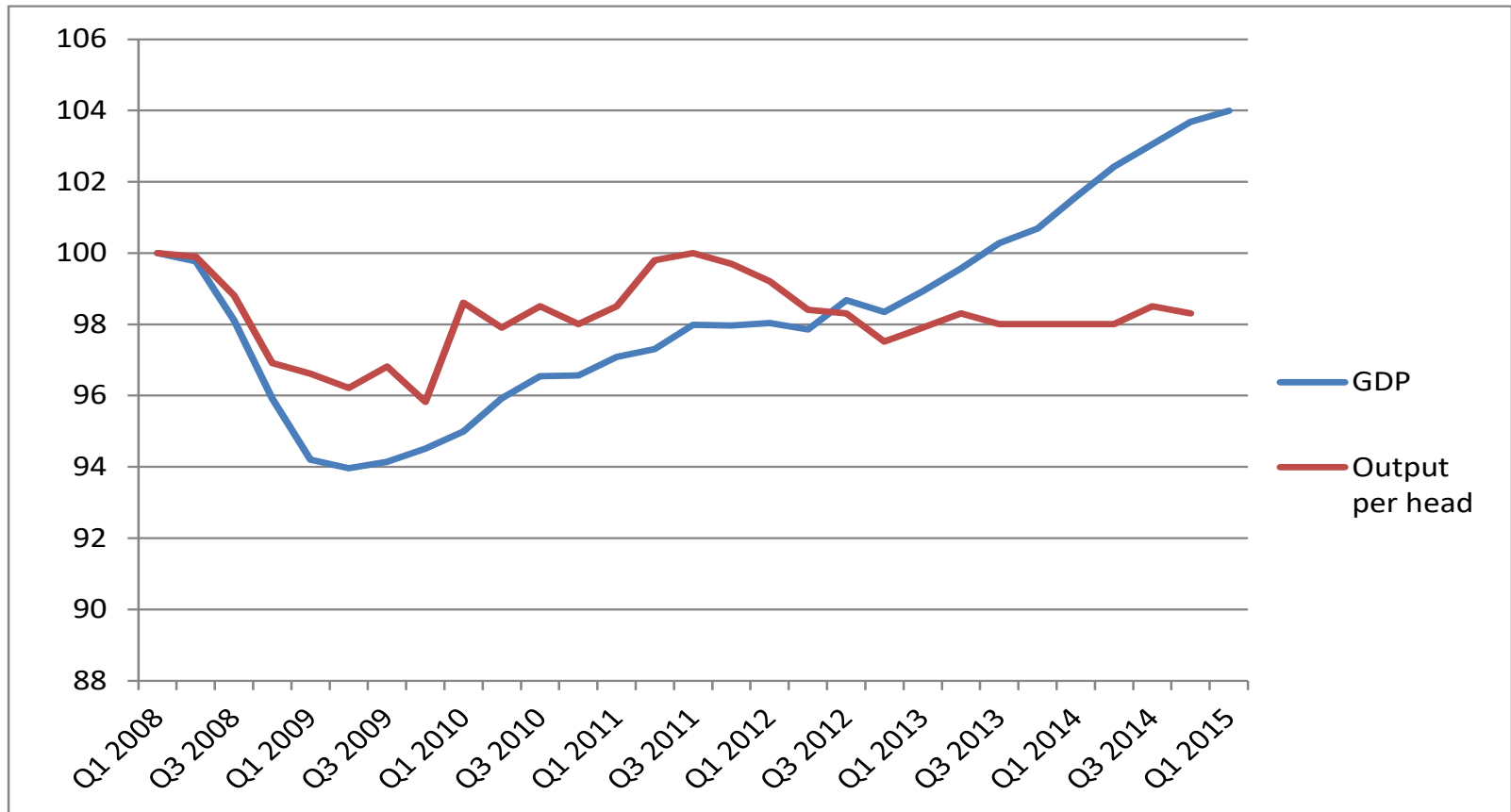
What do we mean by data analytics?

- Industrial Strategy

- 'Smart Specialisation' *"…a set of integrated actions that build on the comparative advantages of our physical and human assets"*

  Science, innovation and regional growth funding is becoming increasingly linked to the ability of an area show capacity and will too become world class at specific things.

- Local Productivity Plans

The Exeter Context

Big data….

"the 'new oil' that will fuel our economy in the coming decades, and data analytics the tools needed to refine that oil and release the powerful insight held within".

Innovation Exeter…

"To establish the Exeter City Region as one of the UK`s leading knowledge economies, attracting significant investment, creating sustainable high quality employment, raising both skills and income levels for the benefit of its residents and businesses"
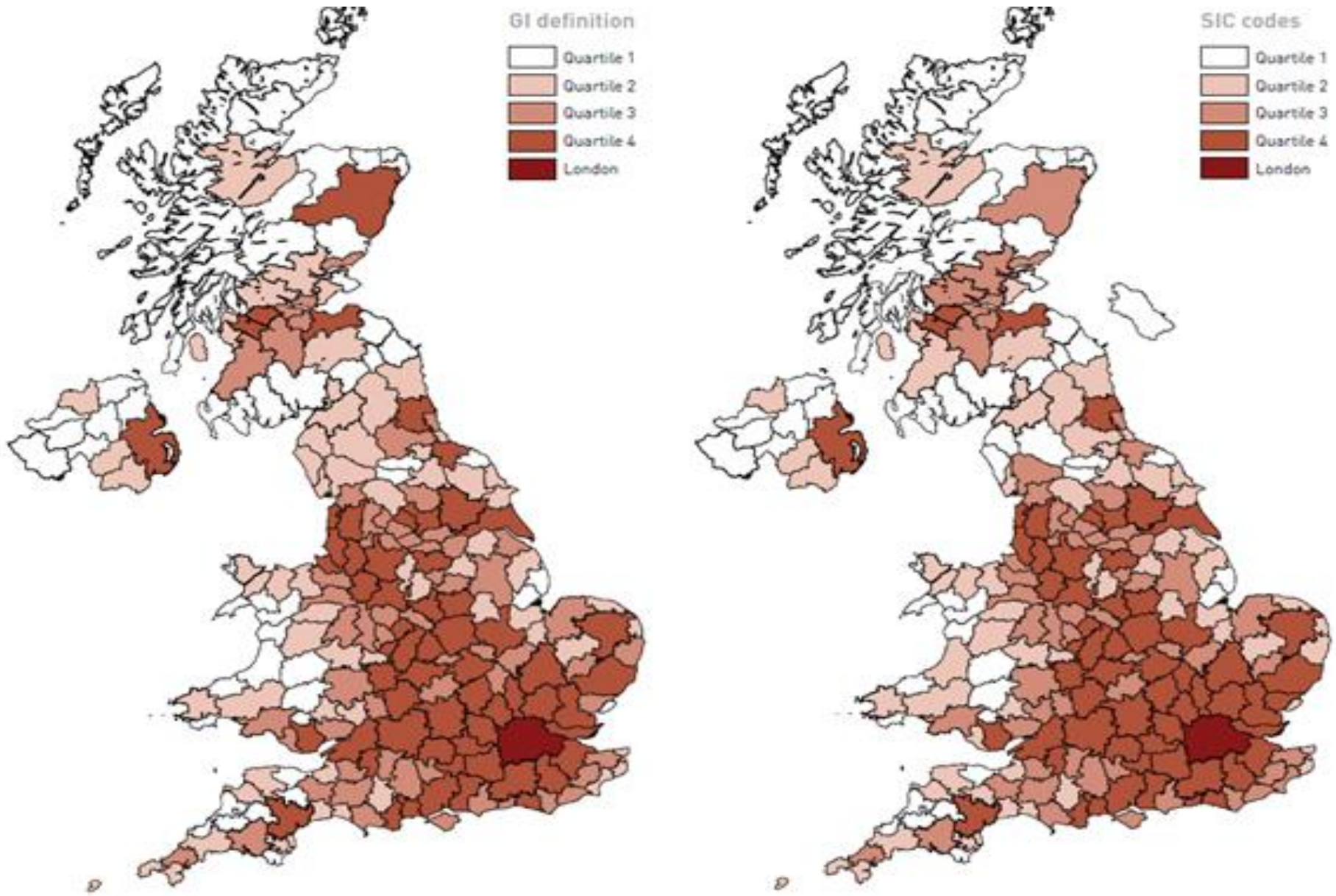
"Data science and analytics underpins many of the comparative advantages of Exeter, like environmental sciences, Agri-Tech research, biological systems and healthcare studies and analysis"

(KPMG – Innovation Exeter).

Counts of digital economy companies by TTW Area, 2012

Source: Measuring the UK's Digital Economy With Big Data, NIESR, 2013

Data Analytics Skills Escalator

- Raise young peoples' awareness, interest and attainment in data analytics study and careers

- Establish an Academy / Institute for Data Analytics

- Build an Apprenticeship pathway

- Establish a Data Science Institute at the University

- Making better use of graduates' skills / link to business

- Support innovation and new product development

Source: APS / ONS

Impact Lab

- A £6.4m project over three years, with £3.8m from European Regional Development Fund

- Establish an 'innovation ecosystem'

- Provide SMEs / Innovators from Devon access to knowledge, expertise & data held by partners:

University of Exeter   *Met Office*

University of Plymouth   *Plymouth Marine Lab*

Plymouth College of Art   *Rothamsted Research*

Exeter City Futures

Outputs

- 125 enterprises supported

- 40 grants

- 15 new enterprises supported

- 13 new to market products

- 20 new to firm products

Impact Lab Space

- Space in Exeter, probably on the Science Park

- c. 20 work stations

- 3 x FTE Industrial Research Fellows

- Project Manager

- Business Support Manager

- Digital Marketing Apprentice

Impact Lab - operation

Thematic 'Challenges Approach'

Outreach / marketing

Crowd-sourcing of ideas

Identification of 'challenge owners'

Development of ideas and proposals

'Innovation Bootcamps'

Plus 'ad-hoc' referrals

Impact Lab - operation

Wrap around innovation / business support

- Experts in residence

- SetSquared

- Growth Hub

£1.5m Challenge Fund

- Grants

- Additional input from partner organisations

- £300k match funding from SMEs

Impact Lab - operation

- Enhanced access to partner data

- City Data Hub

- Partnership with Exeter City Futures

Source: APS / ONS

Timetable

Full Application Deadline – 7th January

Start of project – April 2017

Source: APS / ONS