Challenges for Statistics but big opportunities

- An increasingly digital world
- A unique opportunity for NSIs
- Downward pressure on public spending
- External initiatives
- Competition from other providers of statistics
Transforming Technology
A unified approach...

Desktop as a Service

PaaS Development Services Cloud Foundry

Data Storage & Services Cloudera

Software Defined Data Centre

On Premise and Cloud DC

SOFTWARE DEFINED INFRASTRUCTURE

Orchestration & Automation

App Resource Management

Storage/Availability, Servers, Networking, Security, Management/Monitoring
ONS Platforms
Transforming the workforce
The way we work...

- Responsible for managing a service, using digital service management, delivery and operational capabilities and resources to ensure digital services meet business colleagues' needs.
- Responsible for the financial and technical resources as well as the delivery.
- May have multiple product teams.

- Knows the business.
- Manages the scope, boundaries and features.
- Prioritises development of functionality and features.
- Ensures right people from user area(s) available to product team.

Digital Service Manager

Multi-disciplinary Product team (methodologists, architects, developers etc.)
Develops the product

Every release of the product is usable ('thin' initially)

Product Owner

Delivery Manager

Users
Exploiting data sources
How does ONS access data?

- Survey Data
- Administrative Data
- Big Data

- Regular Outputs
- Research & Analysis
- Innovation
Public Data – driving Digital Transformation, Productivity & Growth

National Data Infrastructure

Data Sources
• Local Government
• Central Government
• Census
• Citizens
• Business

Deliverables
• Data Catalogue
• Metadata
• Access rights
• Analysis
• Open Data

Innovation

Academic Research

Policy Design / Efficiency

Statistics/Economic Analysis

Business-facing Services - SBS

Citizen-facing Services - Gaap

Registers/Core Reference Data
The Government Data Programme

**Data Skills:**
- Open Data
- Data Science
- Data Literacy & Capability

**Data Infrastructure:**
- APIs
- Registers
- Data Access Tools

**Data Policy:**
- Legislation
- Common Approaches
- International Leadership
Data Programme Objectives

Better use of data for statistics/decision-making:

- Rationalise and modernise ONS data estate and analytical methods
- Use new data sources (administrative data, big data, private sector data)
- Electronic Data Collection
- Integrate with/support wider Government Data Programme:
  - Digital Transformation Plan
  - National Data Infrastructure & Registers
  - Government Survey Platform
Access to data

• Research and statistics
• Fraud and debt
• Public services
  Troubled Families
  Warm Homes
  Births, deaths, marriages
Who we work with

- Government
- International
- Privacy Groups
- Academia
- Commercial Sector

Logos include:
- United Nations Economic Commission for Europe
- Statistics Netherlands
- Eurostat
Regional Migration Flows 2014-2015
What’s Next?
Preparing for the future…

Launching in Sep 2017 The Campus will develop the next generation of data analysts, equipped with the skills to meet the future needs of ONS and UK society as a whole.

… through training today

Tailored apprenticeship and post-graduate programmes for ONS staff developed by The Campus in conjunction with external academic and industry partners and ONS Learning Academy.
Data Campus - Research and Collaboration

Cutting Edge Research…

The Campus will be a world-class centre for Data Science and Data Engineering, bringing together Analysts, Data Scientists and Technologists.

… at the heart of Data Science

From funding opportunities for external PhD candidates through to joint research programmes with national and international partners, The Campus acts as a hub and incubator at the forefront of Data Science in the UK and beyond.
Any Questions?

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