

Unleashing potential: upskilling the workforce on data & digital

Camellia Williamson

Head of Analysis (Deputy
Director), Analytical
Services
NHS England

Matthew Hutton

Digital Programme Manager
Integrated Care
Northamptonshire

Kirstie Watson

Digital Director
Integrated Care
Northamptonshire

Rhys Westall

Enterprise Account Executive
Multiverse

Chair: Simon Noel

CNIO
Oxford University
Hospitals NHS FT

Data + AI

Upskilling the workforce on data & analytics

Camellia Williamson

State of Nation Survey 2022, AnalystX Observatory



Figure 4: Distribution of WTE by pay bands and organisational tiers

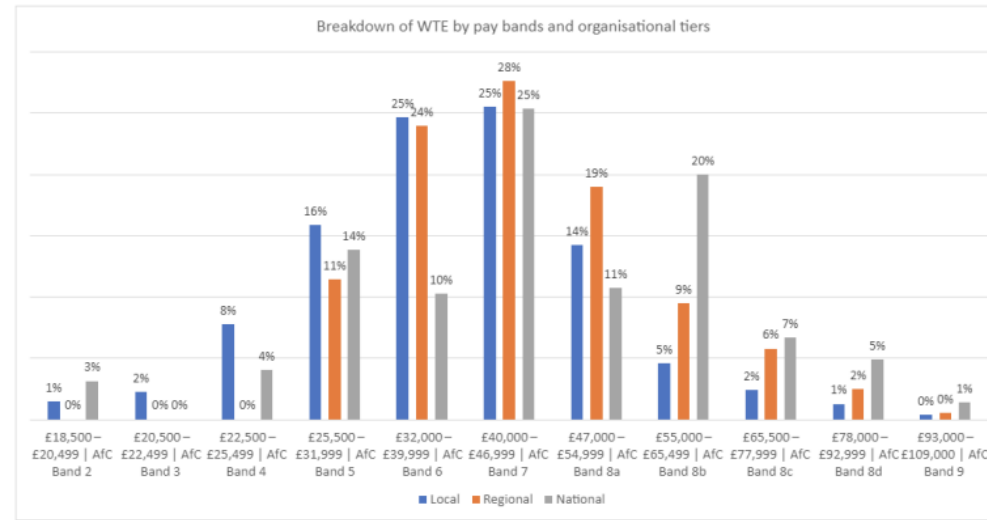
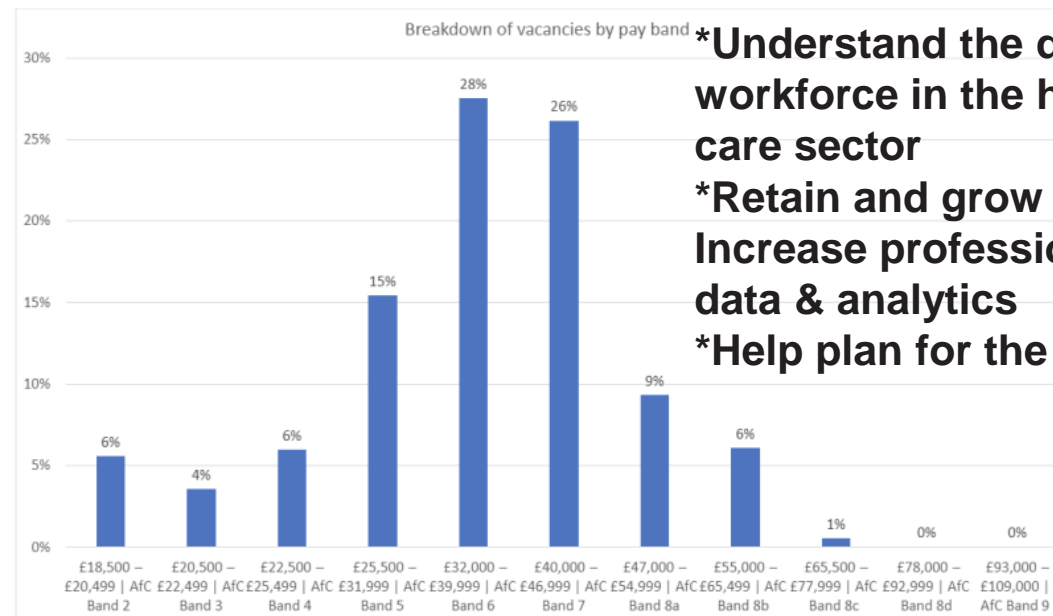


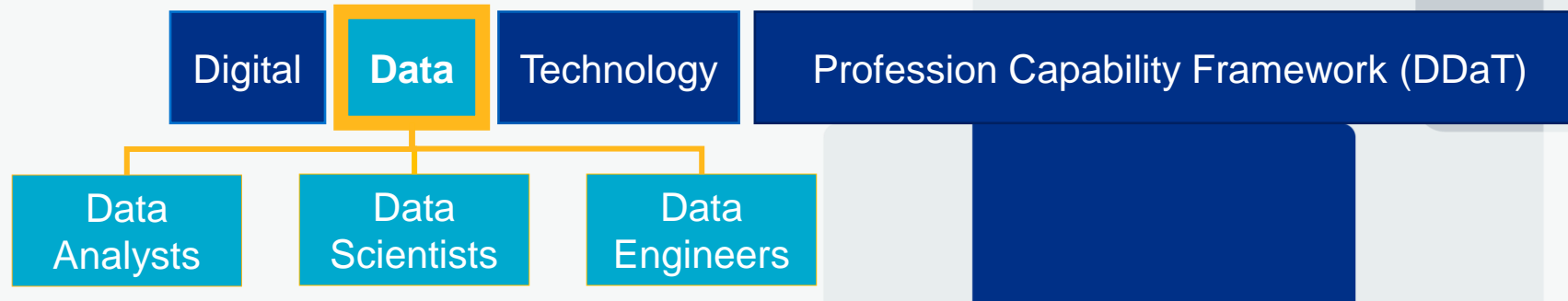
Figure 7: Vacancies in survey by pay band distribution



- *Understand the data professional workforce in the health & social care sector
- *Retain and grow expertise
- Increase professionalism within data & analytics
- *Help plan for the future

Vision for Data & Analytics Workforce

Vision	Health and Care recognised as being one of the best places to work as a data and analytics professional
Mission	To professionalise the data and analytics workforce within health and care and create a vibrant data culture within the wider workforce
Strategic Goal	Working collaboratively to standardise what data professionals are, what they do and how they develop



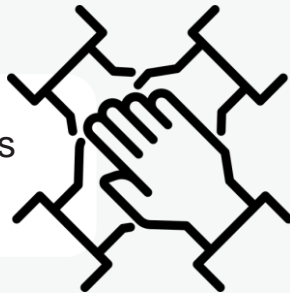
Data family is a key part of the digital workforce and a core component of successful digital transformation

Why start with a competency framework?

Creation of new Training & CPD to reflect the needs of the workforce and support them towards professional registration



Partnership working across organisations

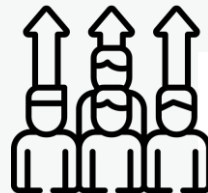


Consistent standards and language across the system, to streamline career pathways and recruitment

What good looks like is more easily recognisable and transferable across the system



Workforce succession and development planning across teams and organisations becomes easier



Developing our Analytics and Data Workforce

Early talent pipeline – entry

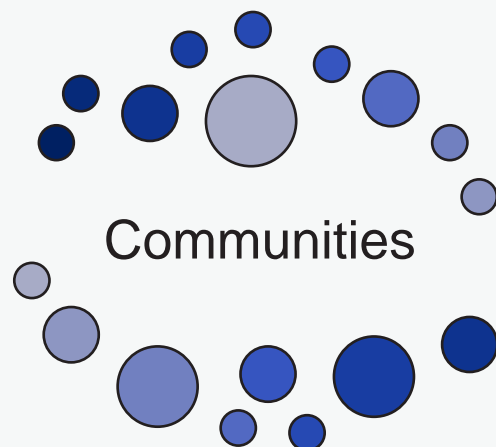
NHS Graduate Scheme
Student Placement (with DHSC)
Apprentices
MSc Students
Black Internships (including HDRUK)
PHDs

Upskilling – existing

Apprenticeship Levy – L3/4/7 etc
On the job training
Formal training – paid or free
Mentoring
Coaching
Analyst X and COP / COE
Data Literacy
Also supporting non data & analytical professionals



Communities



- Applied Evaluation
- Data viz
- Data science
- GeoHealth
- Process Mining
- NHS.pycom
- NHS.sql
- Emerging tech (working group)
- RAP



AnalystX hub



- Documents
- Governance
- Policy
- Guidance
- Standards
- Development leads (professional groups)
- Skill matrix

Non Data and Analytics Professionals

Understanding the context

with a strong delivery focus and training this should provide an understand of where the data has come from, its strengths and weaknesses, and how to understand outputs of products to operation in data and analytics

Contribute to a data culture

Data needs to become a native language; people need to 'talk' data and become more data-literate. Data literacy – **the ability to understand, engage, analyse and reason with data** – is a key factor for successfully implementing a data-driven culture within an organization.

Practising good data governance

Data Governance has many definitions but our view is that it is the systems, policies, and procedures where organisations manage access and availability of its data assets. While Data Literacy is the ability to access, understand, and communicate with data to make better decisions



Communicate insight

If data is used correctly, it can assist an individual and organisation in optimising decision making, streamlining processes and amplifying potential. It should provide the capacity and capability to assist the development of this skill and development of knowledge.

Undertaking analysis and draw insights

With knowledge and detail provided in the framework, will help decision makers to gain insights and understand analysis provided.

Approach data analysis and interpretation collaboratively

It should be able to provide a safe space for teams to collaboratively work together and learn together without boundaries.

Understanding the context of data

Without context, data is useless and any visualisation create with it will also be meaningless. has a potential to provide knowledge to senior managers and leaderships and non data users to build a foundation to data knowledge and how to use it.

Thank You



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[company/nhsengland](https://www.linkedin.com/company/nhsengland)



[england.nhs.uk](https://www.england.nhs.uk)



Integrated Care Northamptonshire Digital Skills Academy

1. Strategic importance of Digital + Data at ICN
2. Launching the ICN Digital Academy
3. Introduction to Multiverse + skills assessments
4. Vision for the ICN Digital Academy



Kirstie Watson

Integrated Care Northamptonshire,
Digital Director



Matthew Hutton

Integrated Care Northamptonshire, Digital
Lead

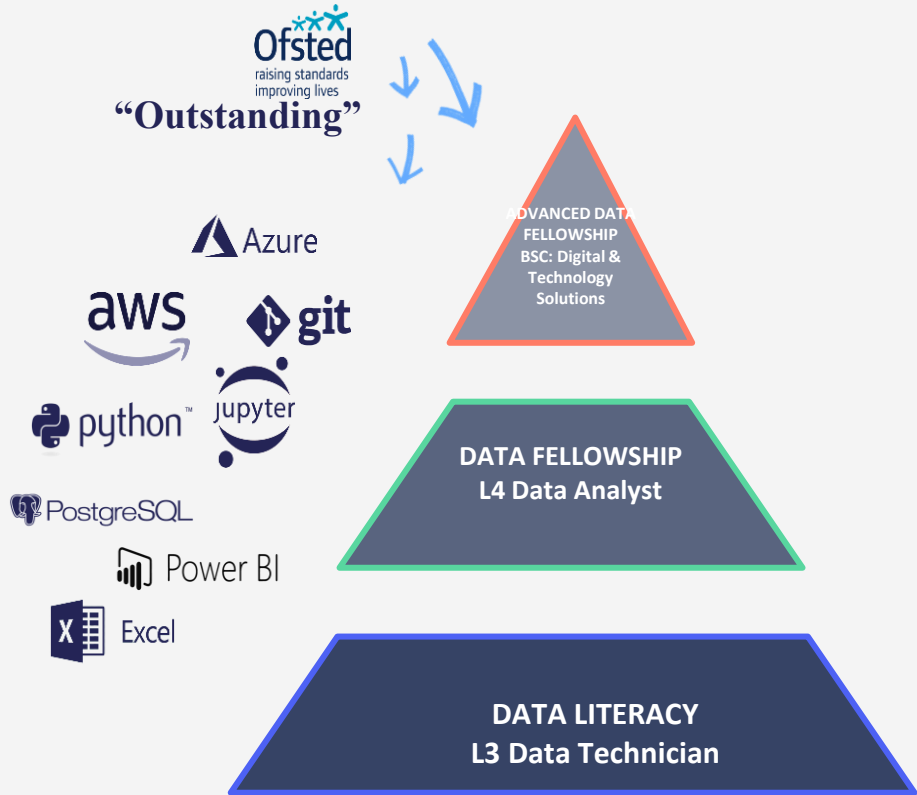


Rhys Westall

Multiverse, NHS Digital Skills Lead



Northamptonshire Digital Academy



UK's **#1** Data Training provider

Embedding data as a distributed capability rather than a centralised function

DATA PROFESSIONALS: 32 MONTHS

Skills taught	Outcomes
<ul style="list-style-type: none"> Becoming data leaders. - Cyber security. - Data warehousing. - Automation. - Data project management. Machine learning, AI. - ETL process. - Digitisation Strategy 	<p>Highly skilled inhouse developed data scientist capable of managing complex data and digital projects . Able to bring multiple data sets together to drive impact.</p> <p>1 day a week saved from new data skills</p>

DATA CHAMPIONS: 15 MONTHS

Skills taught	Outcomes
<ul style="list-style-type: none"> - Cleaning & Manipulating Data. - Visualizations & Dashboard Analysis. - Advanced Excel. - Relational Database Management. - Automation, Machine Learning. - Data Science best practice. - Storytelling. SQL. Python 	<p>Data Champions in each organisation, able to turn analytics into action from large data sets & solve data challenges. Power BI experts.</p> <p>1 day a week saved from new data skills</p>

WIDER BUSINESS, LEADERSHIP: 13 MONTHS

Skills taught	Outcomes
<ul style="list-style-type: none"> - Sourcing and manipulating data. - Automating manual processes. - Working confidently with data. - Finding and presenting data. - Making data driven decision. - Advanced Excel. Power BI 	<p>Improved data literacy ICB wide, capable of asking good questions of the data champions and making data driven decisions.</p> <p>3+ hours a week saved from new skills. The foundation of ICB data culture.</p>

HOLISTIC OUTCOMES

Empowered employees with the digital skills & tools
Common data language across roles and organisations
Improved operational efficiency from reduction in manual tasks
Agile workforce capable of achieving ICB digital objectives
Joined up data strategy across organisations
Move away from spreadsheet culture
Clear development pathways to keep our people



How did Multiverse support?



Step 1: Engage

Identify current state & define future state through visioning workshops & stakeholder interviews

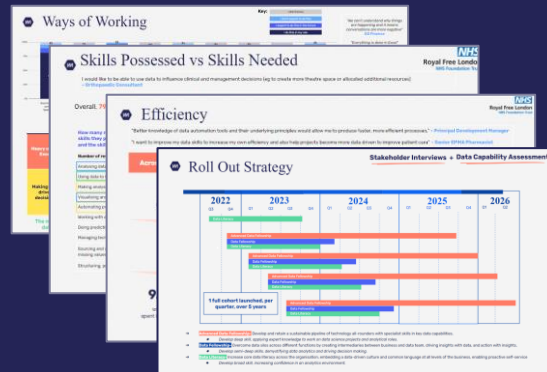


Multiverse



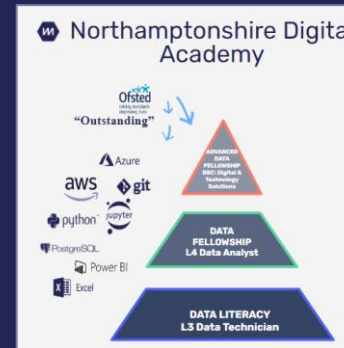
Step 2: Assess

Quantify gaps, estimate impact & develop roadmap through strategic engagement plan & comms



Step 3: Activate

Design academy, educate and excite the workforce through information sessions, events & marketing



Step 4: Measure

Drive & report on value delivered

The screenshot shows the 'Multiverse Impact Story Generator' interface. It includes a header with the Multiverse logo and the text 'A tool to help you communicate your impact'. Below this is a large white box with the heading 'Achieve Strategic Objectives' and three bullet points: 'Improve operational efficiency', 'Data driven, self-service culture', and 'Improve patient outcomes'.

Expected Outcomes of our Digital Academy

- **This pilot cohort is the first step in closing the skills gap** across health and social care
- **Upskilling** our BI workforce
- **Retaining our talent and attracting new talent**
- **Creating the best data ‘customers’** for our services internally
- **Sharing data skills** projects across organisational boundaries
- **A system-wide scheme** that we can **track benefits for**
- Looking to **add more course and digital skills** to the Academy
- **Wider participation and linked to digital competencies** – Leicestershire working to their first cohort in December.

Integrated Care Northamptonshire 

 Northamptonshire Care Record

Connecting your care

The way Northamptonshire's NHS and care providers use the information they hold about you is changing.



The Northamptonshire Care Record is a way of joining up the existing records held by GPs, hospitals and other local health and care services. This means any professional directly involved in your care can instantly access the information they need to help you – connecting your care for a safer, better and more joined-up experience.

Find out more at connectingyourcare.net or scan here 



Get in touch to learn more!

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