

Corporate Analytics at ONS

What is Corporate Analytics?

Corporate Analytics refers to the skills, technologies and practices for the exploration and investigation of business performance to gain insight and drive decision making.

It focuses on developing new insights and understanding of business performance based on data and analysis.

It enables decisions to be made to ensure the organization is performing to plan.

Challenges

ONS has faced a number of challenges to build an effective corporate analytics approach, including:

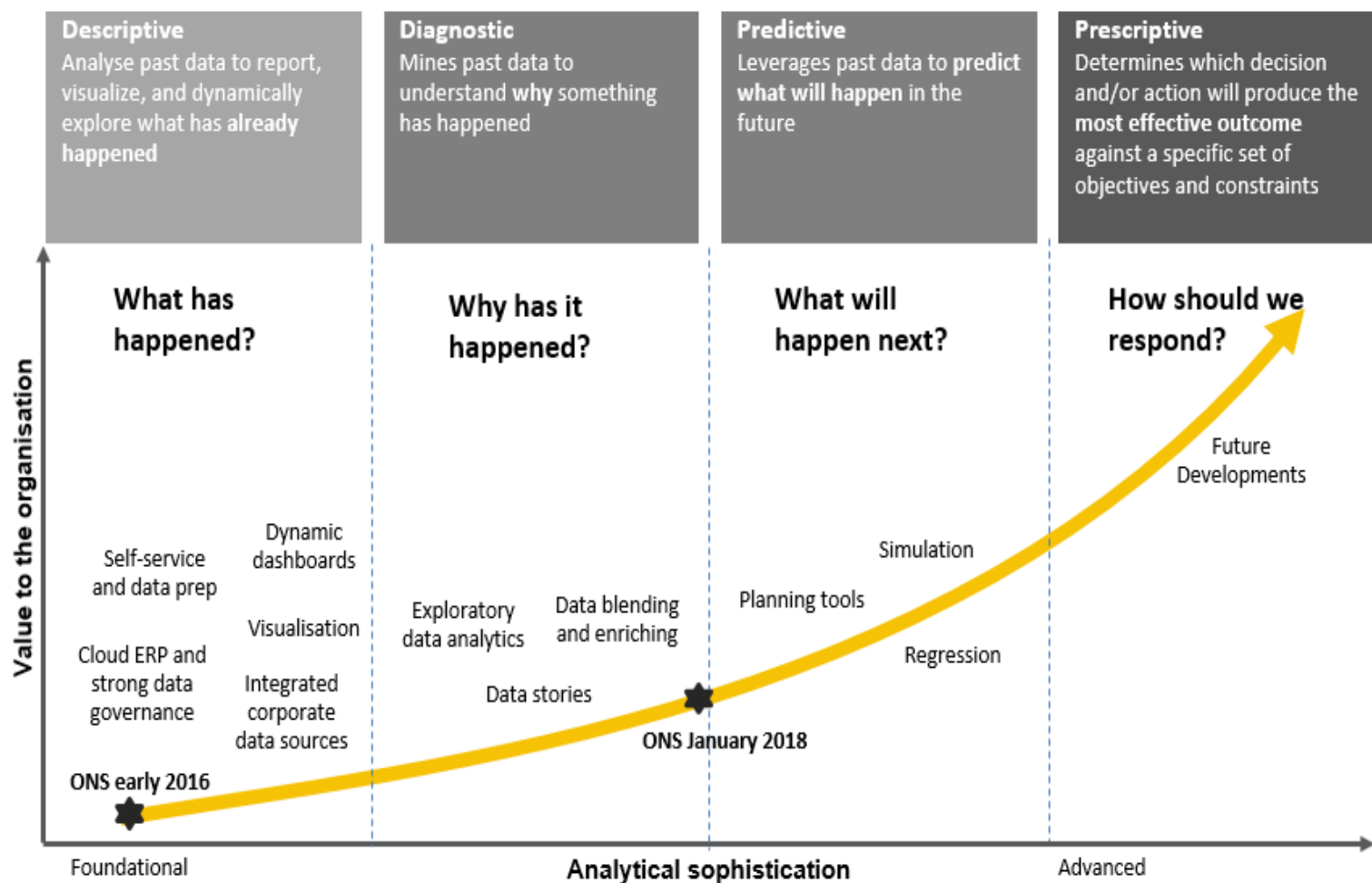
- Limitations of past tools
- Skills and capability of staff
- Lack of integration in corporate data
- Limited scope of previous key performance indicators
- Different professions (i.e. Finance and HR) pulling in different directions
- Lack of a single vision for change

Establishing a Corporate Analytics Vision

The development of a **single joint vision** was essential to driving change across different areas as it aligned this **broad team** around who they wanted to become together, and prompted others to raise their hands to help make it happen.

The ONS vision for corporate analytics was to move from a position where corporate data was used to look back at past trends (a descriptive approach) to one which determines which action will produce the most effective outcome in the future (a prescriptive approach).

Corporate Analytics Maturity



Measuring the Right Thing

Results Based Accountability

	QUANTITY	QUALITY
EFFORT	How much did we do? How much service did we deliver?	How well did we do it? How well did we deliver the service?
EFFECT	Is anyone better off (#)? How much change for the better did we produce?	Is anyone better off (%)? What quality of change for the better did we produce?

Measuring the Right Things

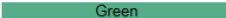


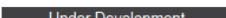
As NSIs the **impact** we have is not easy to measure but if we can focus our KPIs on **outcomes and results** we can try to get to the heart of our value. We recognised it was difficult for us to measure ‘population accountability’, that is accountability for the well-being of a whole population (as this is bigger than one organisation and removed from the direct line of sight of ONS), however it should be possible to measure ‘**performance accountability**’ that is the impact of ONS (or other statistical organisations) on the well-being of the client population (those who receive the service and benefit from ONS outputs).

Using Modern Tools and Techniques

We identified **new tools needed to drive improvement** and acquired Alteryx for data processing and Tableau for visualisation.

Both tools have enabled us to fundamentally transform the way our corporate analytics work, creating efficiencies through the automation of processes and allowing staff time to be dedicated to value added work, providing analysis and insight.

Corporate Performance Report

	Helpful	ONS Online end user satisfaction Current Position 96% Previous Year Not Comparable Annual Target 60%	Public Confidence in Official Statistics Current Position Due Autumn 2018 Previous Year 90% Biannual Target 90%	Proportion of Customers who feel ONS outputs are trustworthy Current Position Due Autumn 2018 Previous Year 87% Annual Target 90%	Help the UK research and innovation community to thrive through increased use of the secure research service Current Position 191 projects 2018/19 Target 400 projects	Media sentiment across print and online Current Position 4.7% Target <10% of media stories 'negative'	Data Science Campus outputs adopted See Data Science Campus Dashboard	Customer Perception of whether ONS is Helpful in improving decision making Currently measured through feedback from key customers against product area	Key:  Green  Amber  Red  Under Development ○ Previous RAG Status*
		Business Plan Deliverables Current Position 55 G, 3 A/G, 17 A, 1 A/R, 3 R	Number of statistical releases with major errors (ONS) Current Month 0 Previous Month 0 Annual Target 0	Releases Within the 09:30 Deadline Current Month 100% Previous Month 100% Annual Target 100%	Minor Corrections to Statistical Releases Current Month 9 Previous Month 7	Social Survey Response Rate Improvement See Social Survey Response Rates Dashboard	Significant data breaches or losses Current Month 0 Previous Month 0 Annual Target 0	Retain National Statistics Status for key outputs and regain National Statistics status for Trade and Construction Trade and Construction Target 2018/19	
	Professional	Key Business Plan Deliverables							Proportion of ONS systems and processes that are assessed as resilient Current Position 82% Annual Target 85%
		Deliver significant progress towards modernising ONS, including Census 2021 CDCTP: Amber ESTP: Amber	80% of ONS "Legacy" IT Systems to be replaced with new technology by April 2020 Current Position To be introduced in October	Data Science Campus methods, processes and techniques used in production See Data Science Campus Dashboard	Reduction in reliance on surveys due to the use of alternative data sources Current Position To be introduced in September	Specific focus on Census 2021 Amber based on Programme status. See Census Dashboard			
	Innovative								
		Budget to Full Year Forecast Variance Current Month -3.2%	Achieve Set Income Target Current Month -2.3%	The number of staff days lost per person across the Authority Current Month 7.6 Previous Month 7.5 Annual Target < 7.5	Number of business surveys available online Current Month 82000 Previous Month 61000 Annual Target 410,000	Estimated respondent time and cost for completing ONS surveys 2016/17 Position £17M Previous Year Not Comparable Target Reducing over time	Deliver our business while achieving annual efficiency savings Current Position To be introduced in September	Demonstrate the benefits from Economic Statistics and Public Policy Transformations Current Position To be introduced in October	
	Efficient								
		ONS Learning Academy courses and attendees aligned to priority skills development Course Attendances: 433 Completed Events 30	Employee Engagement Score 2017/18 Current Position 61% Previous Year 59% Annual Target 65%	Through the Data Science Campus, produce 500 qualified data analysts for Government by 2021 Current Position 126	Share of the ONS workforce who are members of the four Government analytical professions (Statistics, Economics, Operational Research and Social Research) Current % of Posts 28%	Proportion of new ONS recruits who are analytical professionals Current Month 50% Previous Month 28%	Overall Workforce Position	Recruitment of Apprentices in England Current Number 10 Q1 Target 13	
	Capable								

Corporate Analytics Tools



Changing customer expectations - decision makers expect Corporate Services professionals to dig deeper into what's happening across the organisation; to use data to optimise the business and drive innovation. This change in demand is reflective of changing expectations across the wider government and private sector landscape.

•**£Savings!** Operational cost savings within the Finance function; and a changing shape for the Finance workforce. Fewer administrative roles; greater numbers of mid-level professional and analytical roles.

•**Value for money** – relatively low costs to implement with immediate and considerable benefits.

•**People engagement** – research tells us that millennials do not want to be Excel junkies! ...our future workforce expects to have access to best-in-class visual and analytical tools; while our existing workforce want better tools to perform their roles.

Conclusions

We have come a long way in two years, but are only just starting to realise the value of improvement.

While what we have achieved so far is good progress, we understand that people and cultural changes will need to follow to further our improvement in this area.

As we continue to build a collaborative community of analysts who understand organisational performance and can provide insight across different areas and data sets, we will further accelerate our maturity and enable the organisation to take effective and timely business decisions.

Questions...?