



UKCS Data & Digital Maturity Survey



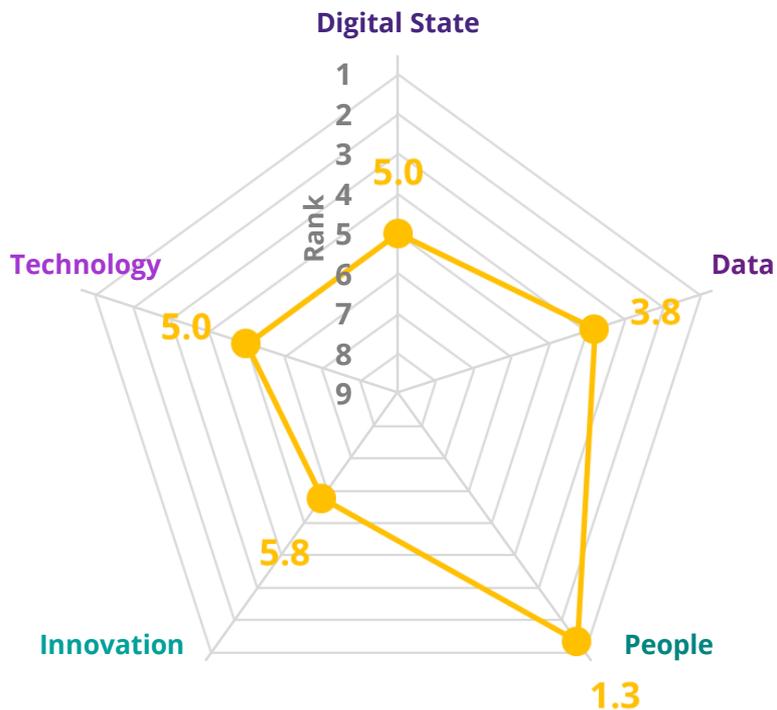
OPERATOR RESULTS

Individual report produced for Apex Petroleum



EXECUTIVE SUMMARY – OVERVIEW

OPERATOR RANKING FOR EACH REPORT AREA



HOW TO INTERPRET THIS CHART

This chart shows a high level representation of the organisation's position across digital state, data, people, innovation & technology.

The average ranking shown for each of the report areas is displayed in relation to eight other comparable operators (as shown on page 5).

Rankings were formed by assessing the responses to individual survey questions. (For example, organisations that confirmed they have a digital strategy are ranked higher than those who do not).

The primary survey objective was not to perform a Comprehensive Maturity Assessment of an Individual Organization, rather to understand the Sector attitudes, progress and challenges regarding digital transformation. The report should be read with this in mind.

SURVEY INTRODUCTION

- The cross-industry survey was designed with the aim of understanding organisations' attitudes, strategies and progress in digital, encompassing data, people, innovation and technology.
- The survey report was published in September 2020, providing results from the 73 participating organisations.
- This subsequent phase of reporting involves providing individual reports to the operator organisations who took part.

THE SURVEY FOCUSED ON FOUR AREAS OF DIGITAL



Data is the foundation of digital. Governed, accessible and connected datasets provide the basis for digital to add value.



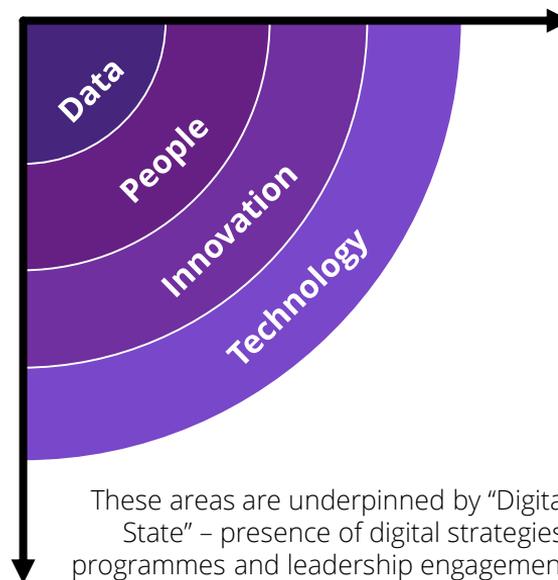
Without digital capability and culture through the organisation, the impact that digital can make is limited.



An innovation process ensures that a pipeline of "ideas" is driving transformation, with the support mechanism to invest, pilot and scale.



Technology transforms data into tangible value, but must be focussed on solving the right problems, and properly deployed.



HOW THIS REPORT SHOULD BE INTERPRETED

- The survey was designed to understand attitudes, progress and challenges regarding digital transformation, and not to provide an assessment or ranking of digital maturity. The report should be read with this in mind.
- In preparation for future instances of the survey, respondents are invited to send feedback or suggestions to elambourn@deloitte.co.uk, to be sent onto the survey team.

PURPOSE OF THIS REPORT



This report aims to provide operators with a view of how their survey responses compare with the other operators, both peers and larger / smaller operators.



The report displays un-altered responses to a representative set of survey questions to display each organisation's position relative to others. Significant additional analysis or interpretation has not been done.



The results of 10 large supply chain organisations have been included for comparison. The survey report investigated the maturity of operators vs. the supply chain, therefore this may support useful analysis.



The report is structured around the areas explored in the full survey report – digital state, data, people & capability, digital innovation and technology.

POINTS TO CONSIDER



The survey completion was a self-assessment approach. Some organisations/individuals will naturally have some bias in their responses, especially considering that the majority of respondents have a vested interest.



Only the organisation's single nominated response has been used in the results, even though some organisations submitted multiple responses.



Different organisations used different methods to complete the survey - some have completed the survey "by committee" and some through individual input only.



Follow up interview findings have not been included in this report. Following the survey completion, the project team attended a series of follow up interviews with around fifteen organisations to explore their input further.

HOW THIS REPORT HAS BEEN FORUMLATED

- The 27 responding operators have been split into three groups. These three groups are shown in different colours in the report, to enable like-for-like comparisons.
- All three groups of operators are shown in this report, in case it is useful to compare against all groups.
- Ten of the largest supply chain organisations have also been include for comparison.

Operator Group 1

IOCs or >80 mbd production

International Oil Companies, or Operators with North Sea average production of >80 mbd*

9 organisations

Operator Group 2

30–80 mbd production

Operators with North Sea average production of >30 mbd*

9 organisations

Operator Group 3

<30 mbd production

Operators with North Sea average production of <30 mbd*, or non-operating partners

9 organisations

Suppliers

Large Supply Chain Organisations

Oilfield services companies, EPCs and other large supply chain organisations.

10 organisations

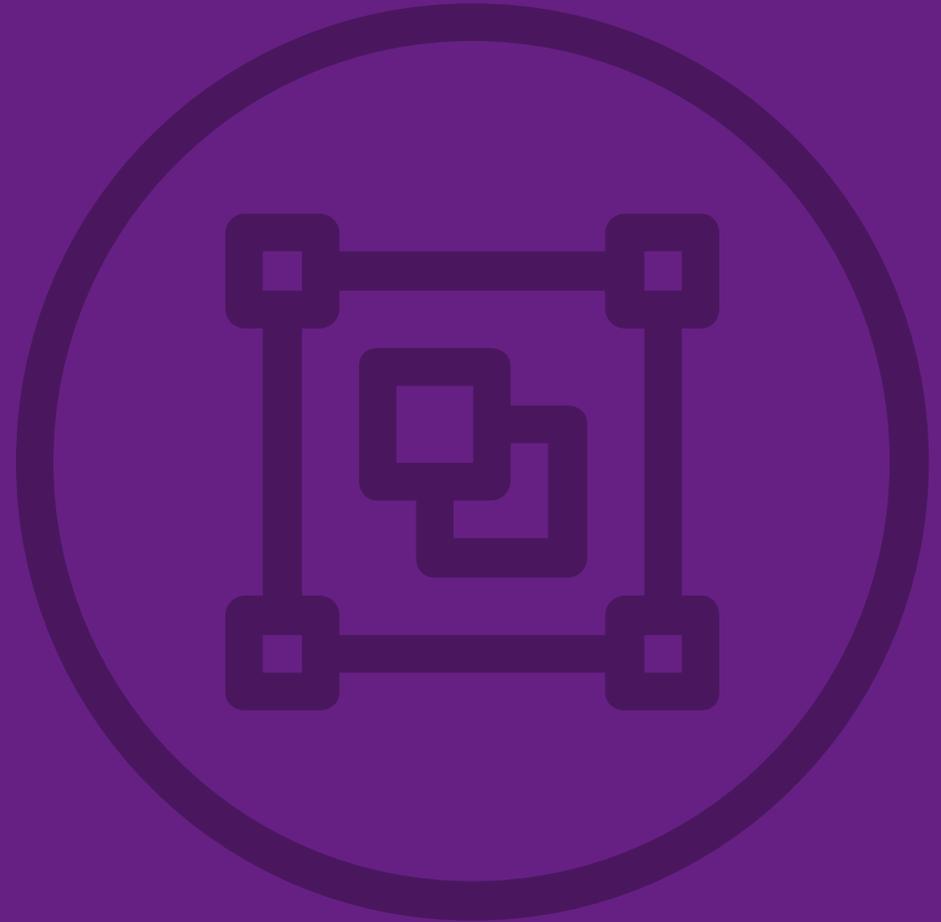
Your organisation will be displayed as an orange dot throughout ● as part of Group 1

*OGA production data May 2019 - May 2020.
Other sources used where OGA production data is not available.

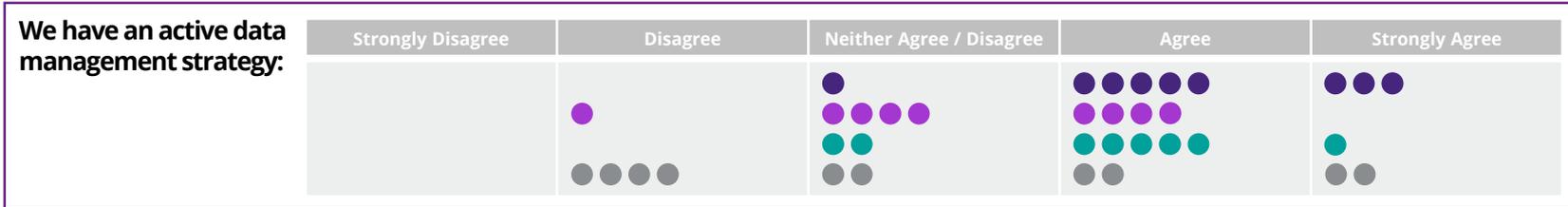
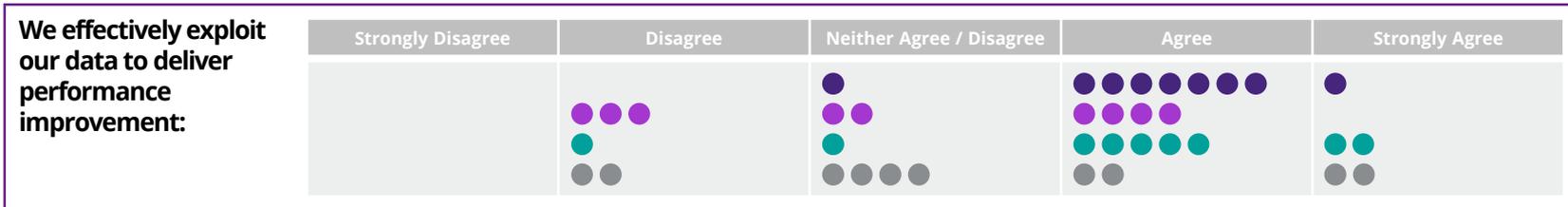
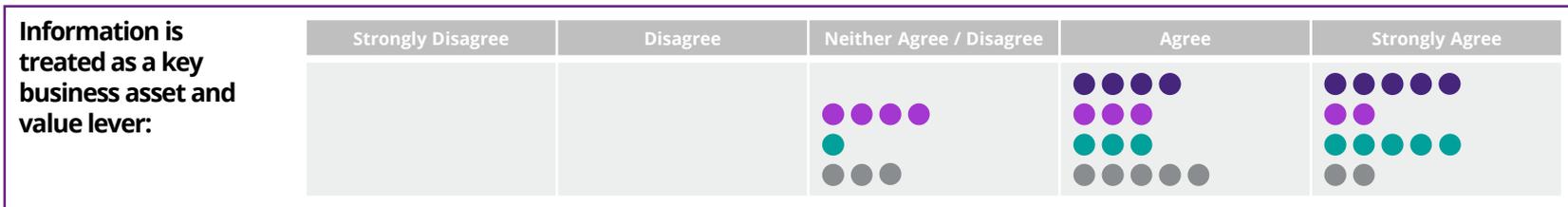
ONE

Data

What are the approaches to exchanging, processing and making use of data?

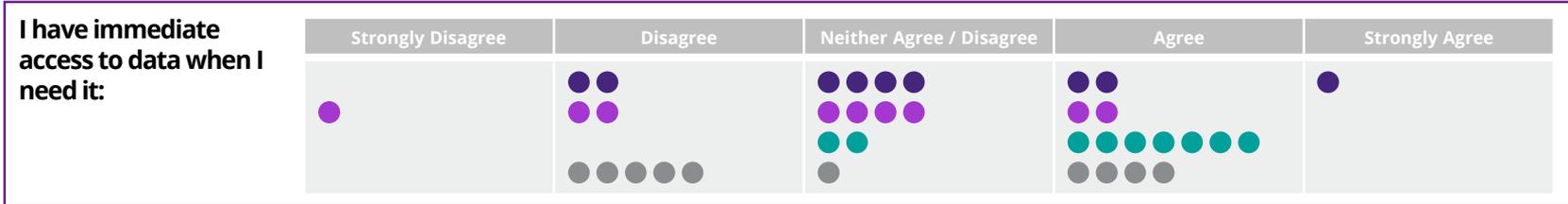
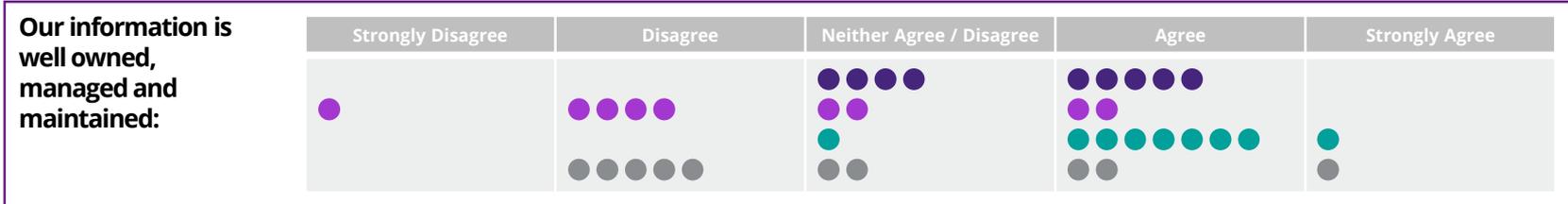


DATA (1/2)

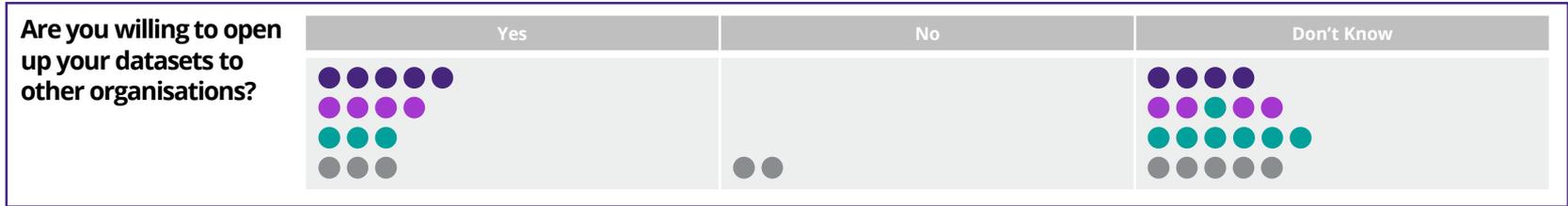


Importance of data is clear across all organisations, with larger organisations placing an even higher emphasis on it. Perhaps surprisingly, the smaller operators demonstrate a higher likelihood of having an active data management strategy, with suppliers less likely to. Whilst suppliers are likely to agree that information is treated as a key asset, they are less likely to exploit data to deliver performance.

DATA (2/2)



There is agreement among operators that working with the supply chain to receive data is a priority. Operators in Group 2 and suppliers have some problems with their data maintenance and ownership, as well as being able to access data when required. These operators are perhaps are large enough for data volumes to be a problem, but have not yet invested significantly in it, or have inherited legacy systems through acquisition of assets.



The question relating to willingness to open datasets had the most “don't know” responses of any questions in the survey. It is clear that whilst most organisations are not against the idea, they may have not considered the business benefits, competition concerns, and architectural challenges, and therefore could not give a confirmed response. This question is not included in the rankings on page 2.

TWO

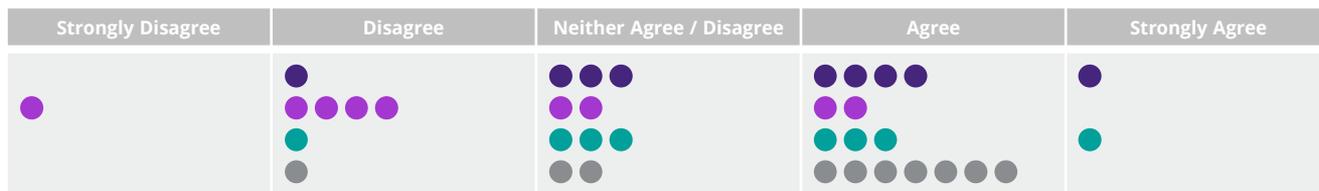
People & Digital Capability

How are organisations developing digital skills, and ensuring capabilities of their people?

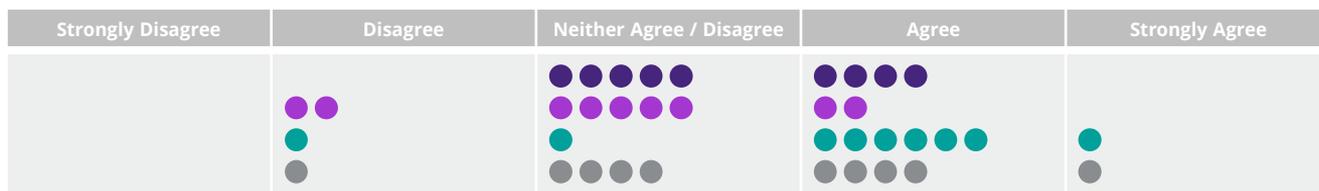


DIGITAL SKILLS AND COMPETENCE

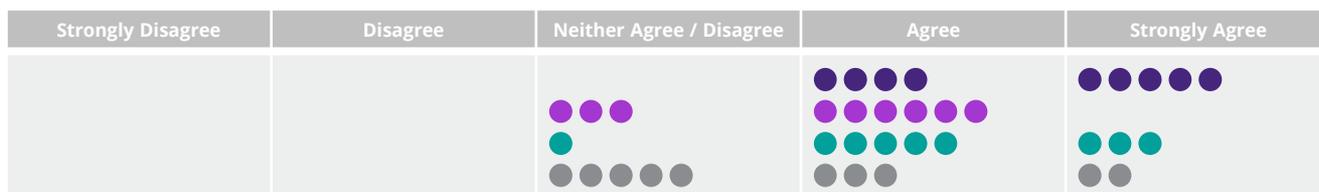
Our people have been given the tools and training on digital initiatives to do their jobs:



The people in my organisation are equipped with the skills they need to make good use of data and technology:

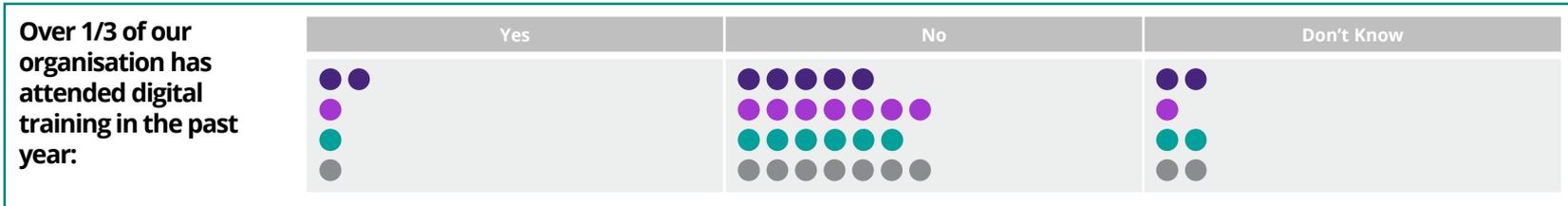
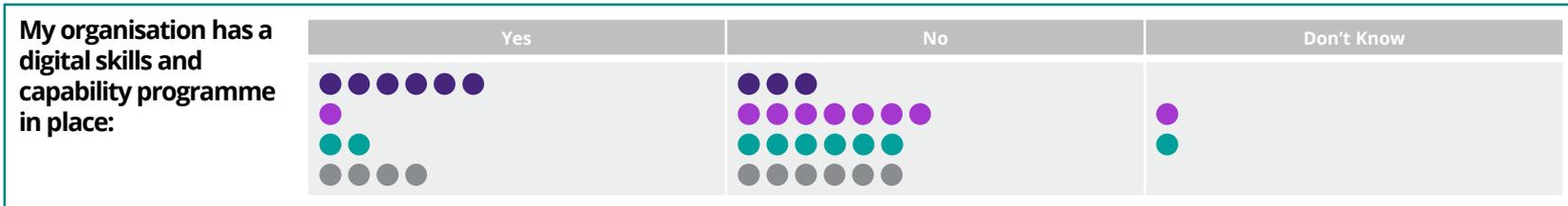
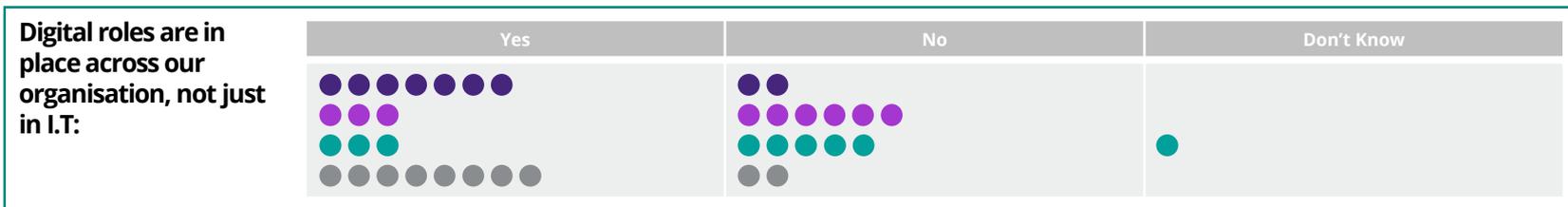


Our organisation has a culture of internal collaboration and data sharing:



Whilst most organisations believe their people have been given the tools to do their jobs, they are less likely to have the skills, tools and environment to maximise the value which can be derived from the data through the application of their subject matter knowledge in a digital workflow, or a more digital way of working.

DIGITAL ROLES & PROGRAMMES



Group 1 operators and supply chain organisations are most likely to have digital roles in place across the organisations. The majority of organisations do not have a digital skills and capability programme in place, with the exception of most Group 1 operators. There were only a handful of organisations where over a 1/3 of the organisation had attended digital training in the past year.

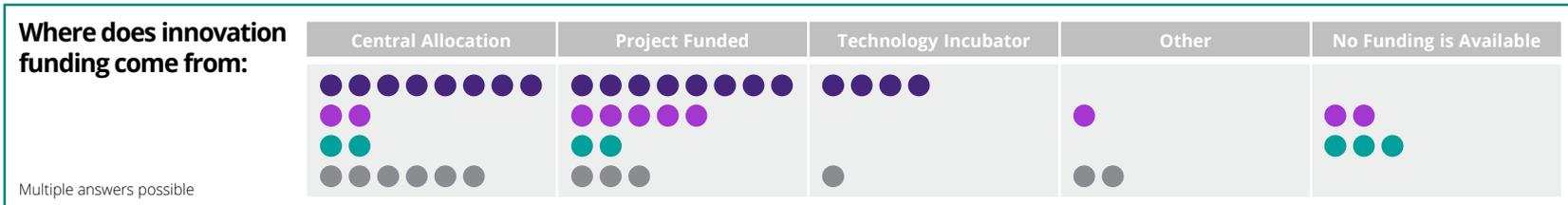
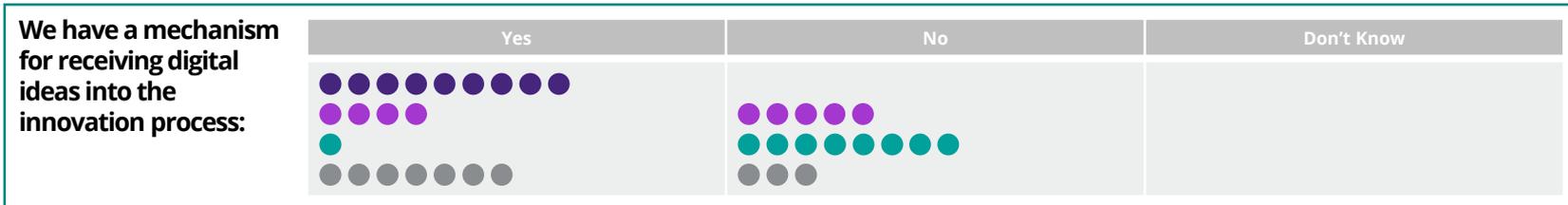
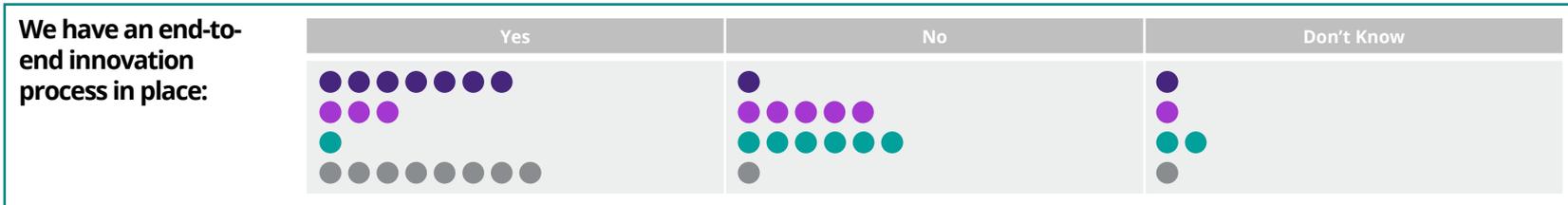
THREE

Digital Innovation

Do organisations have innovation processes in place, and how are these being used?

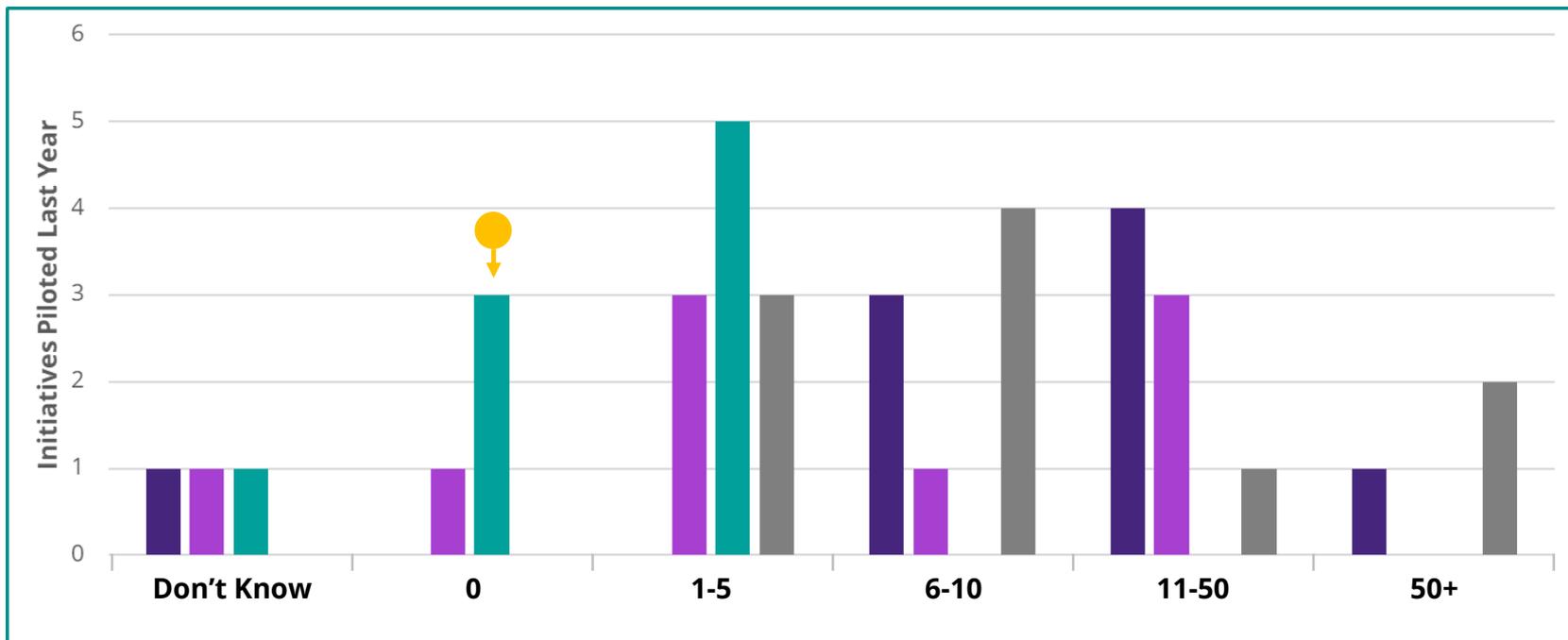


INNOVATION PROCESSES



For most Group 1 operators and suppliers, innovation processes are in place, and there is a mechanism for receiving digital ideas. For Group 2/3 operators, this is likely to be the case. There is a mix of sources of funding for digital innovation, but there are still several Group 2/3 operators who do not have any innovation funding.

INNOVATION - NUMBER OF PILOTS

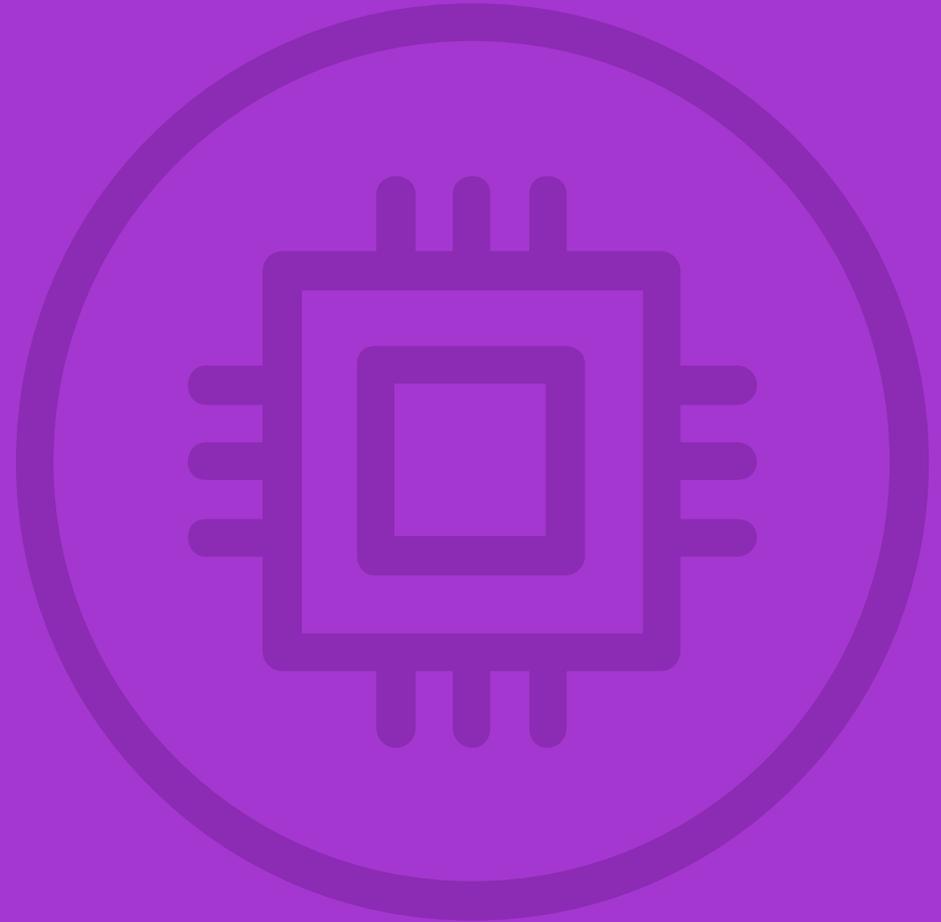


There is a trend between the size of the operator and the number of pilots the organisation has deployed in the last year. Although there is a reasonable number of organisations that deployed 11-50 pilots last year, there are only a handful of organisations that deployed over 50 pilots. There is also a trend between higher numbers of pilots, and those who have an innovation process in place.

FOUR

Technology

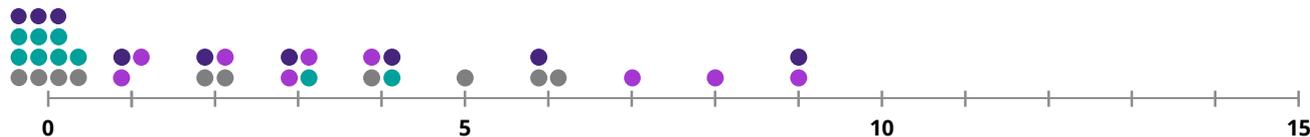
Which technologies are organisations exploring, trialling, piloting and scaling?



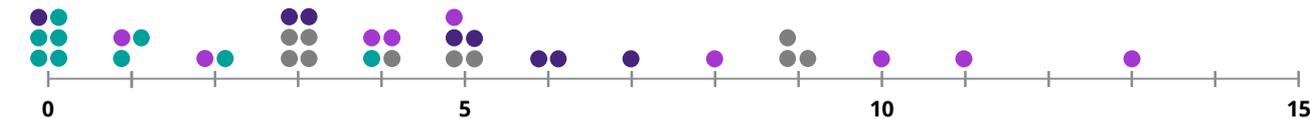
TECHNOLOGY – DEPLOYMENT NUMBERS



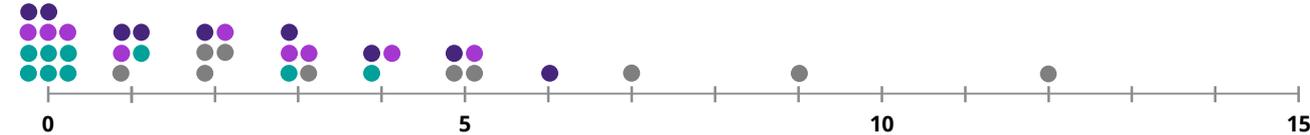
Number of technologies being explored:



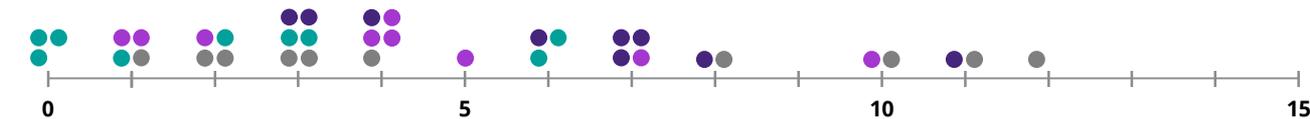
Number of technologies being trialled / piloted:



Number of technologies undergoing widespread rollout:



Number of technologies widely utilised:



There are significant numbers of Group 3 operators only deploying small numbers of technologies across all four categories. Group 2 operators are exploring the most technologies, but numbers gradually drop through trialling, and scaling to widespread use. Group 2 operators and suppliers generally have the highest figures for technologies undergoing widespread rollout and wide use.

TECHNOLOGY – MOST POPULAR



% of organisations 'exploring' or 'trailing/piloting' technology

Top 10 technologies

Technology	Group 1	Group 2	Group 3	Suppliers	
Wearable Technology	56%	78%	0%	78%	Exploring
AI / Machine Learning,	67%	67%	11%	44%	Trialling
Virtual / Augmented Reality	44%	22%	11%	78%	Exploring
Additive Manufacture 3D Printing	56%	33%	0%	56%	Rollout Ongoing
Robotic Process Automation	22%	56%	11%	56%	Trialling
Digital Twin	33%	33%	11%	67%	
Wearables and/or Camera Surveys	33%	67%	0%	33%	
Camera Surveys (Drones)	56%	56%	0%	22%	
Mobility Technology	22%	78%	0%	33%	
Track & Trace (RFID)	44%	33%	0%	44%	

% of organisations 'undergoing widespread rollout' or 'widely utilising' technology

Top 10 technologies

Technology	Group 1	Group 2	Group 3	Suppliers	
Reporting Dashboards	100%	78%	33%	90%	Widespread Rollout
Automated Reporting (BI)	100%	67%	0%	90%	Widely Utilised
Mobility Technology (Apps)	67%	22%	22%	80%	Widely Utilised
Cloud/ Saas (Software as a Service)	0%	44%	56%	50%	Widely Utilising
Photogrammetry/R2S	56%	56%	0%	30%	Widely Utilised
Offshore 4G/WiFi/Sigfox	67%	33%	11%	20%	
Mobility Technology	56%	11%	0%	50%	Trialling
CCTV/Dashcams	22%	33%	22%	40%	
Cloud Applications & Processing	11%	22%	33%	40%	Exploring
Camera Surveys (Drones)	33%	22%	0%	40%	

For the more popular technologies being explored and trialled/piloted (left graphic), % of organisation is generally a majority, except for Group 3 operators, for which figures are low. Even for technologies which are generally undergoing widespread rollout or being widely utilised, uptake among Group 3 operators is under 50% for all technologies except Cloud/Saas.

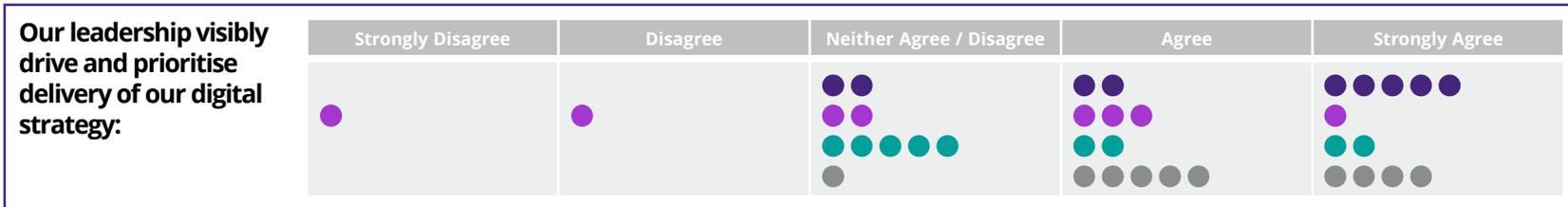
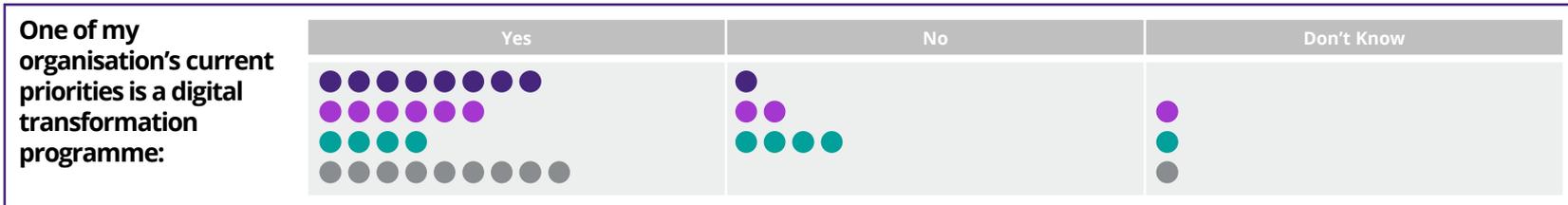
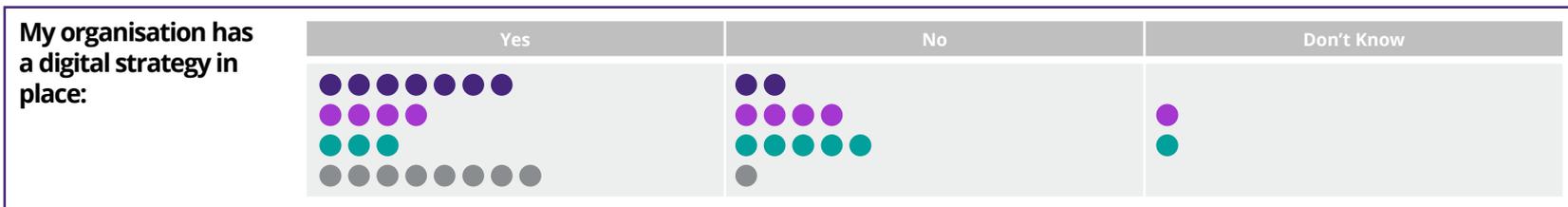
FIVE

Digital State

Existence of digital strategies, programmes, perceptions of maturity and progress, and key investment areas.

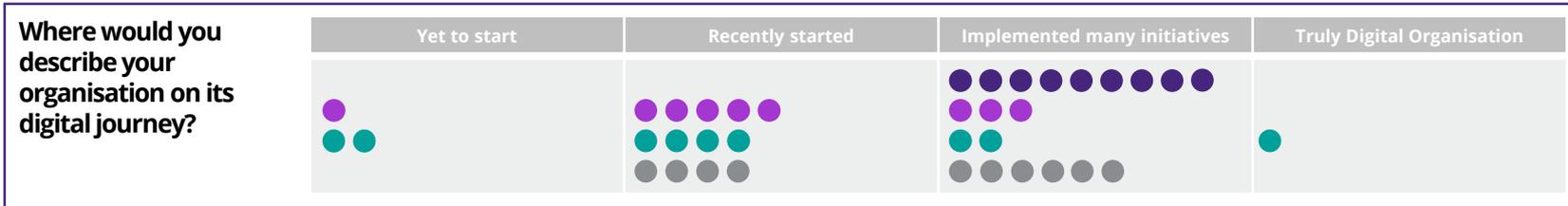
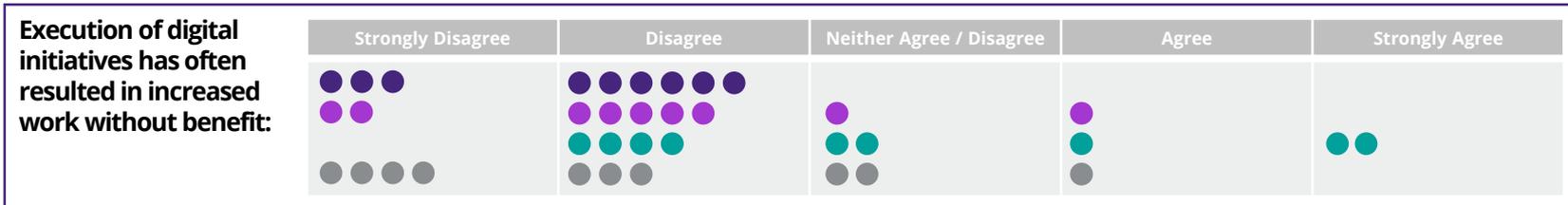
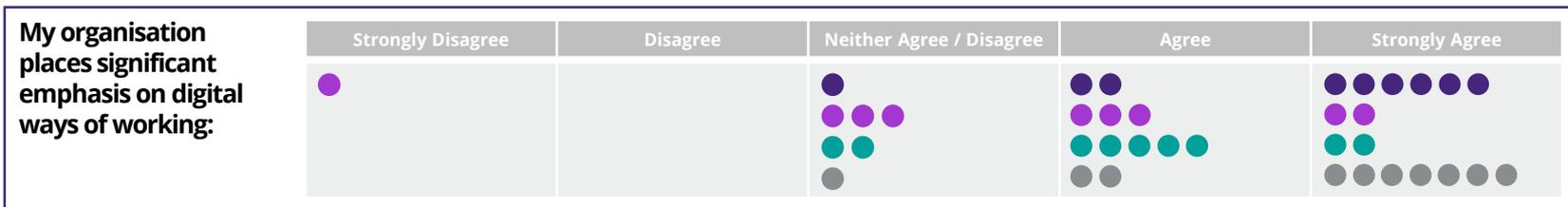


DIGITAL STRATEGIES & PROGRAMMES



For both existence of a digital strategy, and a digital transformation programme, there is a clear correlation between operator size, and likelihood of having these in place. The large supply chain organisations almost exclusively have strategies and programmes. Leadership drive of digital strategies is generally good, although positive responses drop from Group 1 through to Group 3.

DIGITAL PROGRESS

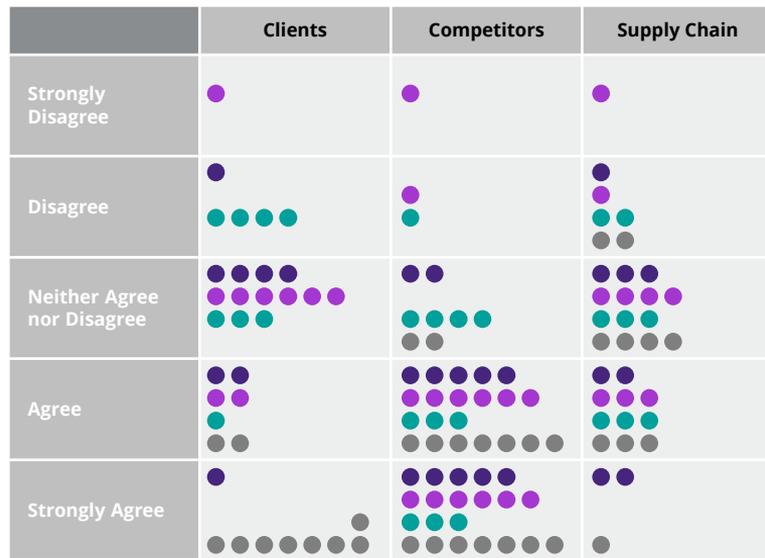


The results of the above questions are consistent with each other. Suppliers and larger operators are more likely to place significant emphasis on digital, and more likely to have seen benefits from digital, and more likely to describe themselves as “having implemented many initiatives”. Operators in Group 2/3 generally indicate lower digital maturity across all three questions.

DIGITAL DRIVERS



The below bodies have a significant impact on your organisations digital ambition:



Which are the top digital value drivers for your organisation?

Value drivers ranked by # of responses

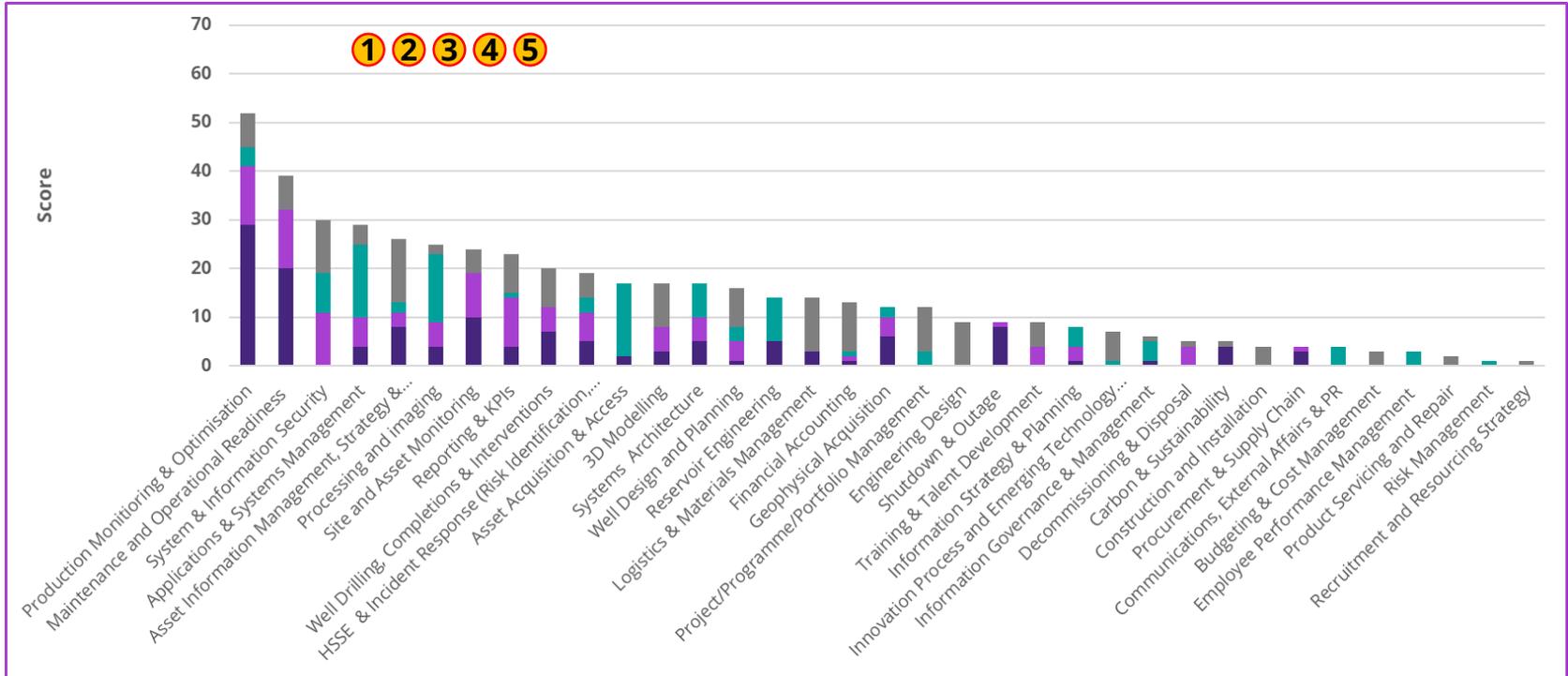
	Group 1	Group 2	Group 3	Suppliers	
Increase Access to information	Rank 1	Rank 2	Rank 3	Rank 2	Rank X
Increase quality of information	Rank 2	Rank =5	Rank 1	Rank 1	Rank X
Reduce risk	Rank 3	Rank 1	Rank 4	Rank =3	Rank X
Increase insight gained from info.	Rank 5	Rank 3	Rank 2	Rank =3	Rank X
Reduce cost	Rank 4	Rank 4	Rank =5	Rank 4	Rank X
Reduce time	Rank 7	Rank =5	Rank =5	Rank 5	Rank X
User centric working	Rank 6	Rank 6	Rank =5	Rank 6	Rank X
Other	Rank 8	Rank 8	Rank 8	Rank 8	Rank X

There are a varying mix of the types of bodies that have an impact on digital ambitions. Group 3 operators are less influenced by their competitors/peers than the large operators and suppliers. Drivers relating to data were generally ranked the highest, with insignificant differences between the top 4 value drivers.

PROCESS AREA INVESTMENT - HISTORICAL



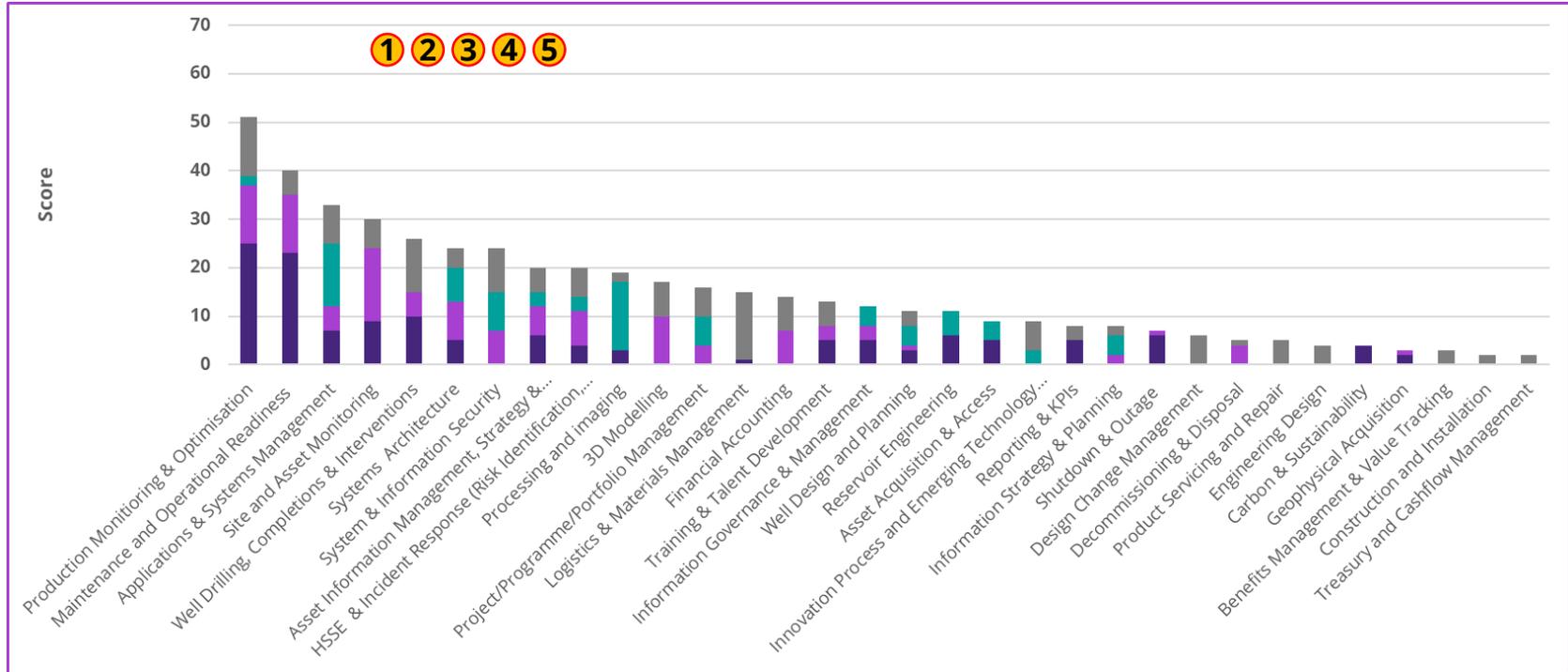
Respondents ranked their top 5 areas based on those with most historic investment. Scores were then assigned based on the number of respondents including each process area in their top 5. (Five points awarded for a number one ranking, four points for a number two etc.)



PROCESS AREA INVESTMENT – FUTURE PLANNED



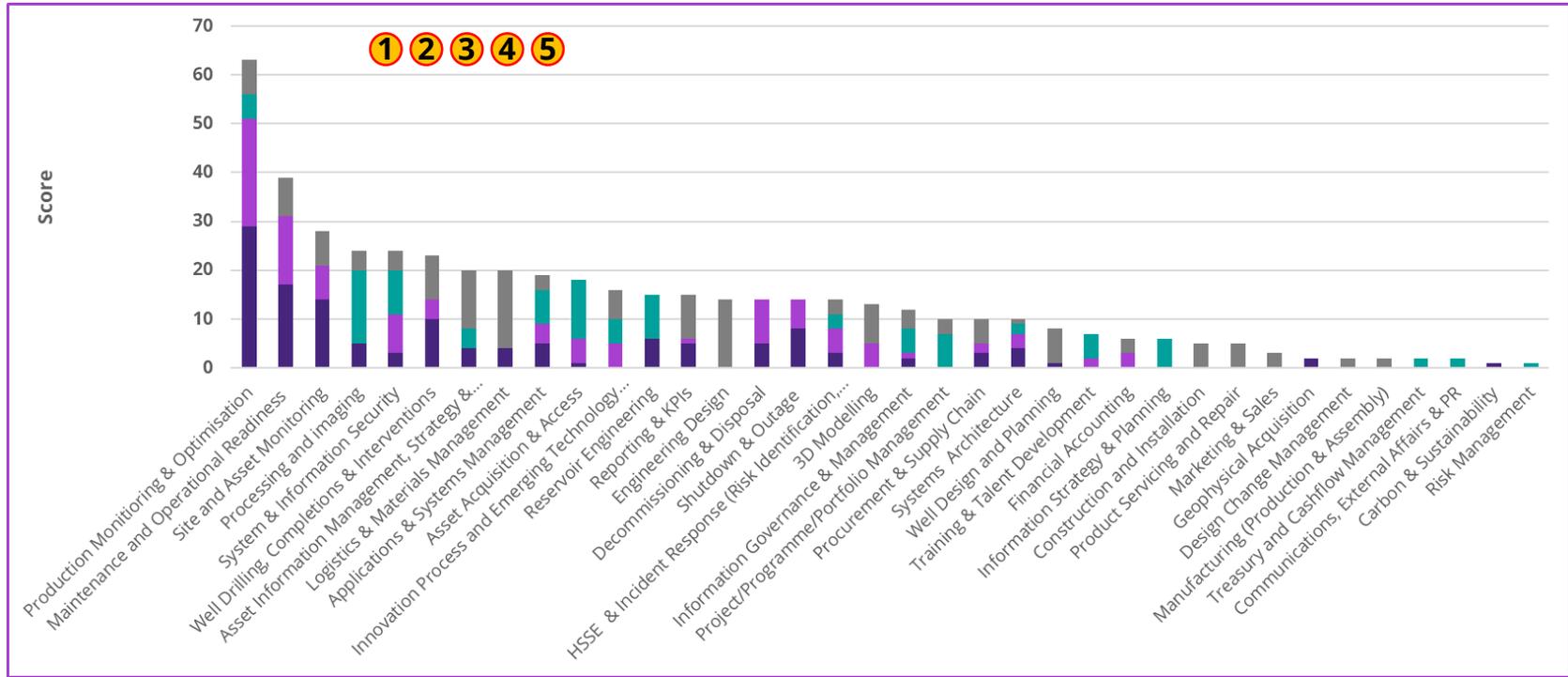
Respondents ranked their top 5 areas based on those with most future investment. Scores were then assigned based on the number of respondents including each process area in their top 5. (Five points awarded for a number one ranking, four points for a number two etc.)



PROCESS AREA INVESTMENT – VALUE DELIVERED



Respondents ranked their top 5 areas based on those with most value delivered. Scores were then assigned based on the number of respondents including each process area in their top 5. (Five points awarded for a number one ranking, four points for a number two etc.)



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 technology
leadership board

ONE
OPPORTUNITY NORTH EAST

 The
Oil & Gas
Technology
Centre
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