

How leaders can drive sustainable behavioural change to create a Data Culture

Background

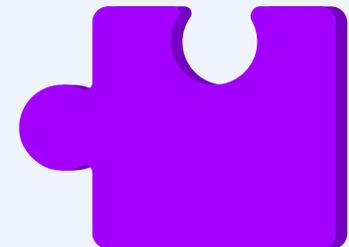
The following paper sets out our approach to driving more effective utilisation and adoption of data within organisations by drawing a spotlight on observable behaviours - the experiences people have (or don't have) with data, insights and Artificial Intelligence as part of their everyday work.

It was created under Accenture's 'Emerge Stronger' initiative: An internal initiative, launched during the COVID-19 imposed lockdown period, bringing people with shared passions and interests together to surface new thinking, ideas and approaches. Our approach to Data Culture has been emergent, growing out of the experiences, experiments, success and the lessons we've shared with clients.

We've come to define Data Culture as the meeting place of data, insight and the experience of work. We use data, insights from behavioural science and principles of Human-Centred Design to help integrate data into people's everyday experiences, how they make decisions and use data to drive value. In the following pages, we start with why organisations need to create a Data Culture in the first place, presenting what we refer to as "The Astonishing paradox" (Section 1). Then, in Section 2, we present some key insights gained from our work on Data Culture across different organisations and industries ("The 3 Puzzle pieces"), including real examples from our work with clients. Section 3 ("What comes next") includes a set of recommendations/

way forward for the leaders that want to start acting on Data Culture now.

This paper is intended to trigger thoughts and encourage the exploration of new ways to think about extracting value from data. It intends to focus not only on technology or the data itself but on people, and how we can 'nudge' culture to foster collaboration between people and data.



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Helen M., CEO of a UK based insurance company is reading a report on data & analytics solutions across the underwriting community over the last 6 months.



Usage tends to drop off. There is a fairly good engagement when a new dashboard is released, but the adoption of new tooling is poor.



This is not looking good. Usage dropped by 77% in the last quarter..

I'm wondering what's causing people to disengage?



See you soon Scott



Meet you there at 2pm



She calls Scott.W - the Head of the Data and Analytics team - to discuss

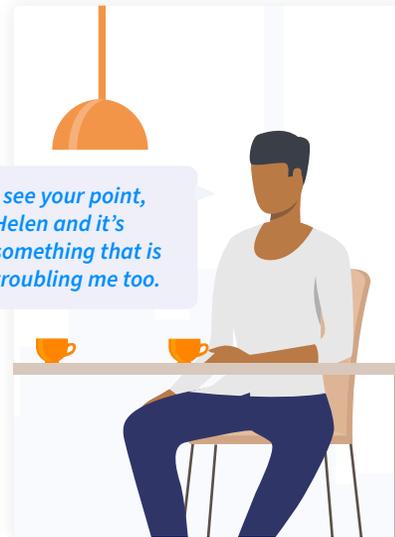
On a Monday Morning...

The latest report on data usage worries me, Scott

We have made significant investment in business intelligence and yet we are not seeing the adoption needed to prove that all this money & effort spent are actually adding value.



I see your point, Helen and it's something that is troubling me too.



Helen M. knew that the Data & Analytics team had been making lots of data solutions-lots of dashboards- and from what she was hearing, no one objected to the idea of data-led decision-making.

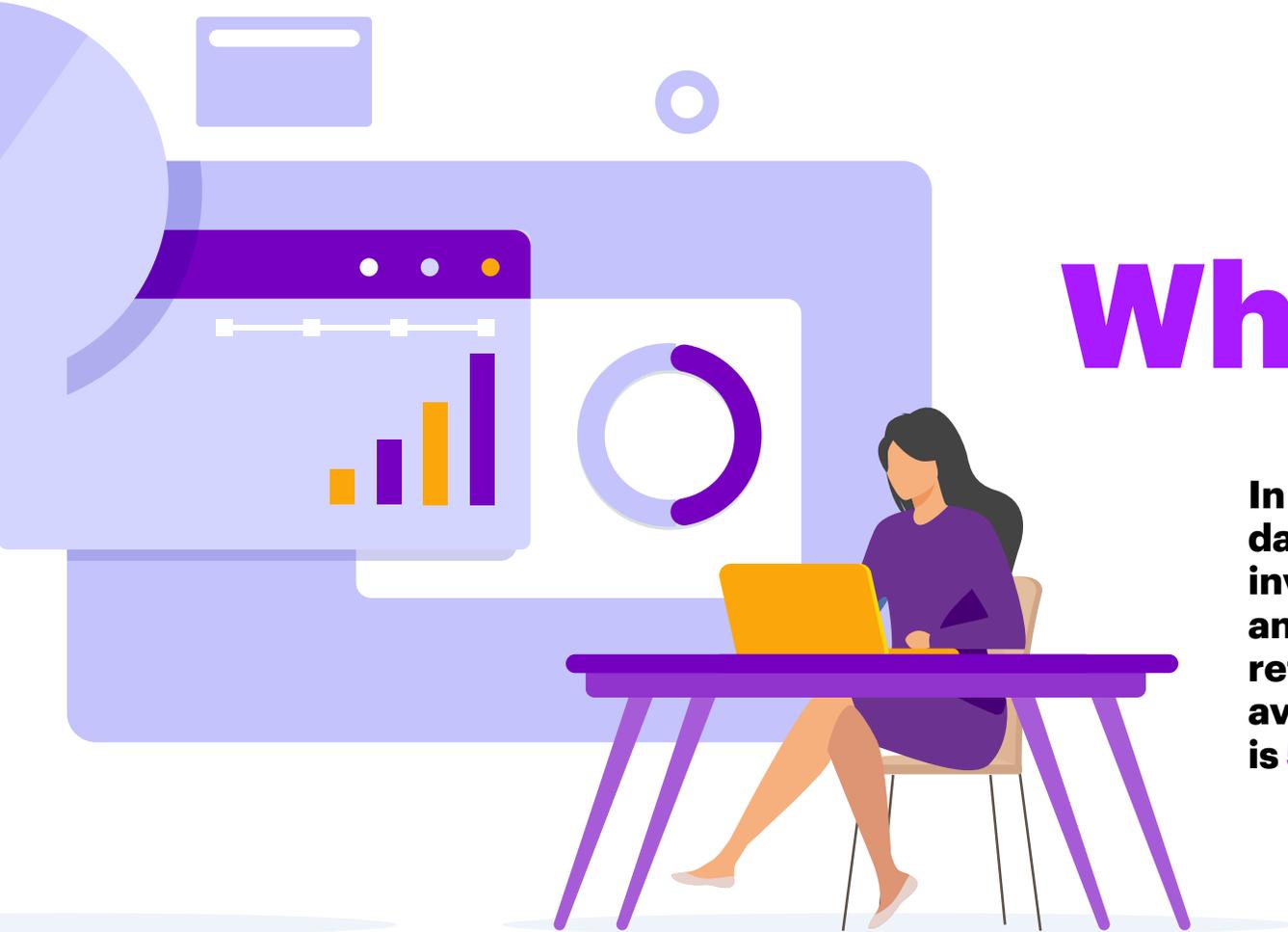
With Scott, they had already fought quite a few challenging battles to create that shared sense of value and to secure significant investment in business intelligence and analytics capabilities.

She, as CEO, had also personally approved a budget for all the underwriters in the company to go through a series of data literacy related training.

Yet, she wasn't seeing the adoption needed to prove that all this money and effort spent was actually adding value.

What are we missing here?





Why bother?

In a world increasingly powered by data, companies are making large-scale investments in digital technology and analytics. But they don't always see the returns they had envisioned. In fact, the average return on "BIG DATA" technology is 55 cents in every dollar¹

Where is all this investment in data and analytics capabilities going?

Usually, to the technology and data itself, solely, not necessarily to the integration between the data, the technology and the people who need to use it. And it's here that we witness something that we like to refer to as the [astonishing paradox](#) :

More companies having unprecedented access to data and technology, but very few of them actually manage to use data effectively. As a result, they fail to get the expected value out of their investments in AI and data and fail to increase their enterprise value as a whole.

Put more simply, we can think of this paradox as a gap: A [gap](#) between the amount of time and money spent on technology or building data and analytics tools and the people actually using them meaningfully in their work.

But [Why](#) do we see this gap, this paradox?

Going back to Helen's question, what might be the essential, but missing, piece of the puzzle hindering senior leaders from getting the most bang for their buck when it comes to AI and data investments?

That 'something' is [Data Culture](#) - the meaningful integration of data, insight and the experience of work. And it is that last bit, the experience of work, that is so important but so often overlooked. How can data solutions support and even enhance that everyday experience of people's work, helping them overcome challenges and making them do better the things they care about?

More companies have unprecedented access to data and technology, but very few of them actually manage to use data effectively.

Organisations reporting upper quartile levels of data skills, data-literacy and data-informed decision making have between \$320 to \$534 million more enterprise value over organizations with lower levels of these very human aspects of utilising data².

Essentially, companies that don't see the challenge as a combination of human capital and culture coupled with technology and data-not solely technology and data but also people - are wasting time and money and are missing out on huge opportunities.

So, how should leaders bring Data Culture into the picture?

Below, we provide insights on how other organisations across different industries we have worked with have already started extracting the true value locked in their data ,by focussing on creating a sustainable Data Culture; ultimately managing to get more out of their data and AI investment.





Data Culture: The missing puzzle pieces

We've worked with companies across different industries to help them develop their Data Culture. Here is what we've learnt.

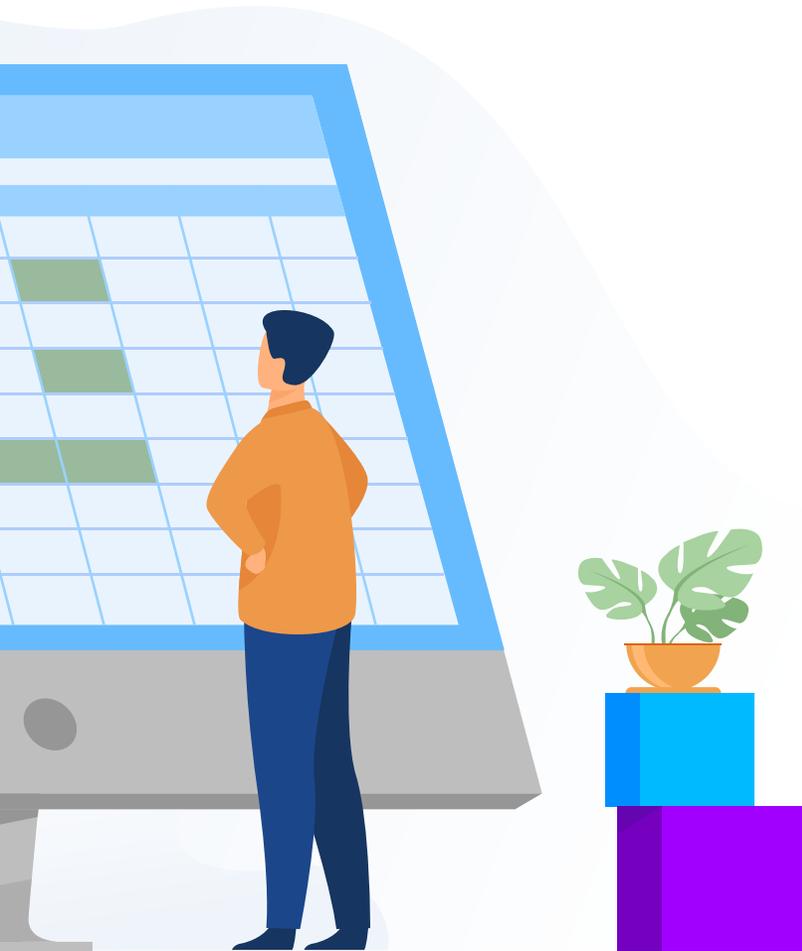
Puzzle piece 1:

It's not about culture, it's all about behaviours

When it comes to developing a 'Data Culture', organisations are often seduced by creating definitions and measures of culture itself. But culture is, by definition, complex and difficult to model or measure. As a result, organisations spend inordinate amounts of time and money defining data principles and values, as well as crafting grand sounding visions of a data-driven future, but rarely do they step meaningfully towards the creation of a solid and sustainable 'Data Culture'.

As [culture only exists through the observable behaviours of its members](#), we believe that organisations will benefit from a shift of focus from considerations of culture itself to observable behaviours around data. As such, instead of wasting time on well-crafted definitions of Data Culture, that get easily forgotten, we advise organisations to start by taking a different, more pragmatic approach to Data Culture:

[Start by understanding the behaviours and environments people in your organisation see around them when it comes to data. Once the existing attitudes and behaviours around data are known, you can focus on what needs to be changed today and change it.](#)



For instance, we invite leaders to start considering questions like:

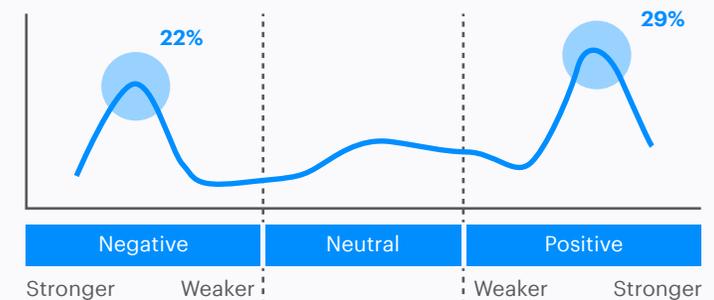
- How do people in the organisation think, feel and act in relation to data?
- Does data empower them to make better decisions and do the things they care about more effectively?
- How do people use data in the flow of their daily work?
- Do people trust and feel confident in using the data solutions provided? If not, what are the things that are hindering them from doing so?

We start by looking to capture stories and describe the behaviours, interactions and experiences people see and feel around them. For example, we helped an organisation to map the attitudes people held towards the use of data and analytics in the context of their decision making by collecting and codifying stories. Stories about experiences and interactions with data, about the challenges of making effective decisions

and the things people found most engaging and meaningful in their work.

We found stories of almost polar opposite perspectives amongst people doing the same role, using the same tools and with access to the same data. One group saw data, insight and AI positively, as a tool to help them perform more effectively. The other group were far less accepting and embracing of data and insight in the context of informing the decisions they make. The stories we collected gave us insights into why these opposing perspectives existed.

Data Temperature - the prevalence of attitudes towards data and analytics



Only when new behaviours have become the new norm - good enough to be considered valid and repeatable - can we say we've developed a Data Culture.

Looking at the prevailing narratives around data in this organisation, we found that where a specific data and analytics tool or piece of insight had enabled an individual to improve performance they deemed it useful and their attitudes were positive. Where individuals had continually struggled to find useful insights they deemed all data and insight of limited value, forming negative and cynical attitudes over time.

We've found that the more dashboards and data people have, the less likely they are to find the data they need. And the more times they can't find what they need the less they'll perceive these tools as useful. So you can end up with these rather unhelpful stories, attitudes and beliefs about the utility of data and insight.

To change these attitudes, we needed to design new interactions and experiences with data - new ways of demonstrating the art of the possible when it comes to making data-informed decisions

and using insights to improve performance. This is the real value of focussing on behaviours, rather than culture. Our discovery methods allow us to describe desired behaviours; the ones organisations want to see more of- the ones that will serve them well when it comes to data, as well as behaviours and interactions people see around them today. This helps us to build a 'big picture' view of the data landscape in an organisation as it is used by the people on the ground.

Having an aggregated picture of which behaviours and barriers around data exist at specific points in time, we can "nudge" the behaviours we want to see more of and create interventions that mitigate the behaviours we want to see less of.

When we work on Data Culture, we don't just focus on observable behaviours to power discovery and the design of meaningful interventions. By understanding which behaviours exist and to what

degree, we can actually [measure behavioural change over time](#). We call this an organisation's 'Data Pulse'. And measuring that pulse is useful for two reasons. Firstly, we can track the existence of 'Data Culture' in an organisation at any point in time. Secondly, we have measurable evidence of the interventions that increased data adoption actually worked and which didn't. Mapping these, sometimes nuanced, shifts in behaviours over time paints an accurate picture of an organisation's data maturity and the behaviours they display, as well as those they don't.

The value of this shift from culture to behaviour? Only when new behaviours have become the new norm - good enough to be considered valid and repeatable - can we say we've developed a Data Culture.

Puzzle piece 2:

If you want people to do something make it easy for them, not hard

When it comes to changing behaviours, there's a universal truth: *If you want people to do something you should make it easy for them, not hard.* And this goes back to the fact that as humans, we have limited attention span and finite cognitive bandwidth; the latter being how scientists refer to the brain's

ability to use cognitive resources effectively. Essentially, when you have low cognitive bandwidth, it's harder to solve problems, your attention and ability to focus decreases and your ability to make good judgments drops.



When we look at the tools people in most organisations are provided with to help them make data-driven decisions or the processes that are in place to serve the same purpose, we don't usually see the universal truth of "making it easy for people" being properly taken into consideration. Data solutions are often difficult to access. For instance, there might be too much friction or sometimes, there is just too much information -lots of dashboards- and limited amount of time to process them. All the above are acting as restraining forces to data adoption as they create a feeling of overwhelm. No wonder why people in organizations end up feeling either confused or frustrated rather than supported by data solutions.

"Making it easy for people" primarily refers to either 1) building intuitive user interfaces which need little or no training or 2) lean processes, or even better, 3) both. But, it doesn't have to be limited to tools and processes only.

You can go a step further and look at the context, the environment in which people operate. Sometimes it's the environment -the system - you have to change in a way that will demand more of the behaviours and stories you need, not necessarily the process or tool.

And this goes back to research evidence from behavioural science that posit that people are motivated to learn and change their behavior when a changing context demands new behaviours³.

A focus on the environment in which people make decisions was exactly what we did in one of the projects we delivered for a large UK Retail Banking

By changing the environment in which people operate rather than trying to change people's minds you increase your chances of actually changing behaviour.

Group with a £3 billion change portfolio and a 2000-people organisation of projects to manage and orchestrate. The organisation wanted to be more data-driven however, old ways of working were hard to change.

By acknowledging the power that the built environment has on behaviour and by applying choice architecture⁴ we concentrated on the physical space within which decisions were made in order to change the decision-making process itself and drive the desired behaviours.

So, we created Obeya: A physical collaboration space that empowers teams to make informed decisions in a more efficient manner, following a lean and value-focused decision-making process.

In Obeya, the set-up of the room is designed to enable the team to physically move across the different areas of the room as they mentally walk

through the various stages of the decision-making process. Essentially, a guided physical movement acts as a 'nudge' for following a lean and value-focused decision-making process. At the same time, the environment is underpinned by data displayed on digital dashboards. Participants stand on their feet and interact with real-time portfolio data resulting in more engaging and data-driven discussions in the room. We have also developed a digital approach to Obeya for remote and dispersed workforces - to cover the bases of the current and likely near-future way of working.

Before Obeya, the organisation managed their change portfolio through 100+ page slide decks. People had to print off the slides a week or two before the project meeting, and there was no single source or truth as different participants would come into the meeting with different versions of project related data in custom-made excel spreadsheets. Before Obeya, the entire

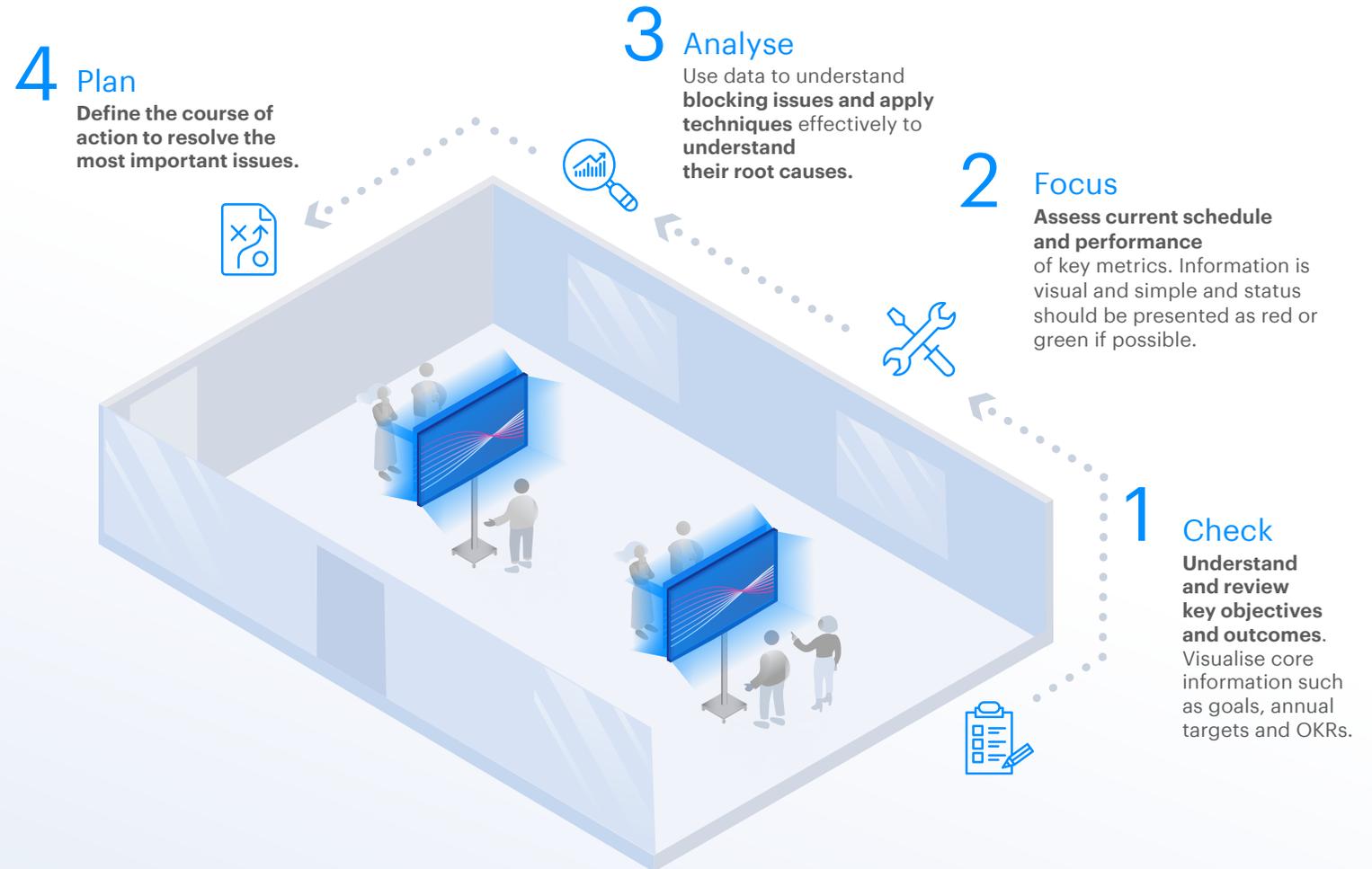
decision-making set-up was counterproductive to achieving the team's overall delivery goals.

Overall, there exists a need to shift the burden of responsibility around changing behaviours from the individual to the system in which people operate. By changing the system to demand more of the behaviours and stories we need, the focus is shifted and less burden is placed upon individual shoulders. The individual is the secondary target. The system comes first.

When aiming to change behaviours on an organisational level don't move the goalposts, change the game. Obeya radically changed the way decisions were made across an entire change portfolio, and improved the speed and effectiveness of collaborative problem solving and decision-making.

In the words of our customers:

“Obeya has shifted the dynamic of the conversation around project delivery. While in the room the greater proportion of meeting time is spent on discussing the data and underlying stories revealed.”





Puzzle piece 3:

It's not all about data literacy, it's mostly about making data matter for people

There is a common story when it comes to the way people use data and analytics tools in many organisations and the short version of the story is that they often don't. Less than 30% of the people who are supposed to use these tools actually do⁵. Assumptions often lead us to believe that the people using the tools lack one capability or another. Maybe they lack essential skills to understand or argue with data or maybe they just don't care enough.

But when it comes to improving the way people use data and analytics tools, instead of asking ourselves how people need to be changed and what training they need, we might be better asking ourselves ‘[what opportunities exist for data and insight to help people do something meaningful as part of their everyday experience of work?](#)’

That’s exactly what we did when we were asked to help a Financial Services organisation better understand the barriers facing the adoption of data and analytics tools.

- We looked at people’s experience of work when it came to data, analytics and decision making.
- We mapped everyday activities to form episodes which set out the focus of people’s decision making;
- We captured, per episode, the data and platforms people used, where they were, who they were with and importantly, how they felt.

Data Experience Mapping - the mismatch between the context of decision making and the use of data and analytics tools



What we found was an incongruence. [There was a mismatch between the context in which the real work happened and the context in which data and analytics tools were designed to be used.](#) In reality, high-stake decisions were made away from an individual’s office space, with other people, as part of collaborative and exploratory processes. But analytics tools to support decision making had been designed (exclusively) for a person to use in the office, at their desk, on their own. In addition, very little was known about how people experienced work everyday, let alone when it came to the challenge of using data to make decisions. [As it turned out, this wasn’t a problem of technology or training - it was a lack of meaningful opportunity.](#)

Indeed, behaviour happens when a few things come together. Firstly, people need to be motivated to some degree to want to do something. They also have to be able to do it by possessing the right capabilities. But also, there must be an appropriate opportunity to make use of that motivation and ability.

■ [If we need people to engage in specific behaviours relating to data, we need to make sure that they are given opportunities to do so in a meaningful way, -a way that matters to them- in the flow of their work.](#)

Organisations all too often focus on training people to do the things that aren't happening, when the reason they don't occur in the first place comes down to a lack of opportunity, not a lack of time in the classroom

Simply put, embed analytics and AI where the work happens. It's easier to fish where the fish live, than it is to train a fish to walk and ask it to come to you.

But in order to find out where and how work happens, there is a need to be much closer to it and to the people themselves. We call this understanding the decision system. We use approaches from ethnography and Human-Centred Design to get closer to the important decisions and actions people need to take, the challenges they face in taking them and the things they care about most in their work. This allows us to identify the best opportunities and possibilities for data and analytics to underpin the things that matter most. This enables us to highlight the barriers stopping desired behaviours relating to data.

This is exactly how we helped the same Financial Services organisation to increase the adoption of data and analytics tools by as much as 20% month-on-month. Through a series of small experiments we re-designed their delivery model, changing the way

they thought about and approached the design of data solutions to support decision making. Rather than starting with the data itself, how people should access it and how they should be trained, we began to focus on the context in which specific decisions are made. As such, we helped them begin to design tools focussing first on the simplification of data consumption as well as ensure that they connect data solutions with real-world opportunities to make use of them.



Organisations all too often train people to do the things that aren't happening, when the reason they don't occur in the first place comes down to the processes, structure and experience of work, not a lack of time in the classroom.

This is not to say that targeting things like increased data literacy through training is without merit. But a lack of opportunity to use data in the flow of work is a greater barrier facing the adoption of data and analytics tools than a lack of training.

When we consider developing a Data Culture, we need to be closer to people, their interactions, the challenges they face and the things they care about achieving.

If we can support those things more effectively with data and insight, we can increase the adoption of analytics tools and improve decision making.

Over time, new experiences and interactions will change attitudes and sustain new behaviours relating to data.

What comes next

For organisations who want to take action on Data Culture

Start the journey towards Data Culture by asking the right questions

When it comes to culture, things can get complex and there is no such thing as a “future state”. You have the culture you have, and a better one can only evolve and emerge through time and by design. As such, Data Culture is more of a journey rather than a destination. There is an advised way to embark on this journey, though: [Start by asking the right questions.](#)

Data can help you with that by revealing underlying patterns, things that you weren't aware of and as such can guide you in crafting the right questions to ask. However, there are times when the data should come second and the [questions first](#). For instance, you may begin by determining the critical decisions that are taken during the course of a day (for example, of an underwriter) and build out the right questions from there that will help to improve organisational Data Culture.

Start with a few, specific and well-defined questions in mind and use these questions to guide you through your journey towards creating a Data Culture.

It might be things around the barriers to adoption of data and analytics solutions, the things that are hindering people in your organisation from using the data solutions created. Questions might equally revolve around how to increase trust in data or how to increase data literacy for instance.

Start with a few, specific and well-defined questions in mind and use these questions to guide you through your journey towards creating a Data Culture.

Treat your employees as your 'data customers'

Treat your employees as your internal 'data customers', as they are the 'consumers' of the data and analytics solutions you create. For example:

Would you go about launching a new product or service without running initial market research to identify your clients' challenges?

Would you leave to fate knowing what are the things they care about and what they value?

Isn't it better to get answers to these questions and then tailor the solutions to them accordingly?

The same applies for your employees.

Deploying a methodology such as design thinking means starting with a discovery phase- the equivalent of market research when it comes to your customer's needs. This taps into current attitudes relating to data and its perceived value, challenges and people's needs.

People's needs, challenges and values are the things that you should continuously aim towards forming a clearer understanding of. They can then be used as your design principles for the data solutions you create.

Start small, learn fast

Often, organisations search for a 'silver bullet' solution- they search for that "one thing" that will create a Data Culture. But there is no such 'one thing' - you cannot hope to develop a Data Culture with one fell swoop. Data Culture is a complex problem and we need to acknowledge that complexity. Acknowledging that complexity means that you are not in search of an elusive silver bullet solution. Instead you start small, by embracing a culture of experimentation; introducing changes at a smaller scale, testing them to check their applicability to local conditions and constraints and then deciding whether to scale them up or not.

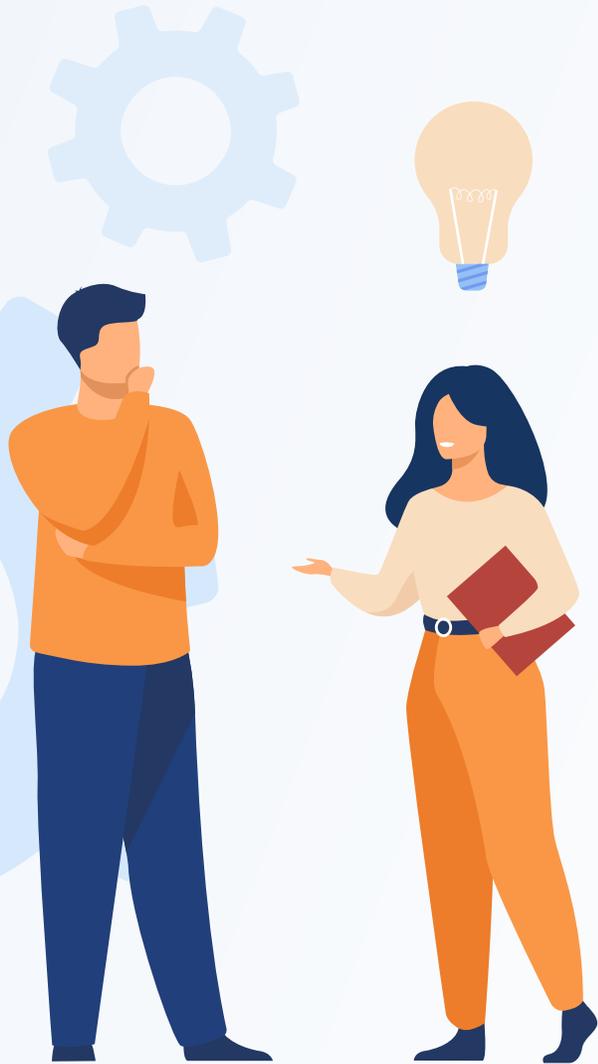
People's needs, challenges and values are the things that you should continuously aim towards forming a clearer understanding of. They should act as your design principles for the data solutions and experiences you create.

1

2

3

What comes next



Adopting a mindset of experimentation (test - learn - adapt) can show you the way towards sustainable behavioural change. Starting small, testing and scaling: changing behaviours, one step at a time.

Aim for a collaborative (humans + AI & data) intelligence

A significant aspect of the Data Culture of an organisation is the way it perceives and responds to AI and data solutions in the workplace. AI might present itself as a force of disruption and displacement of human work but in reality it shouldn't be. Actually, it is expected to empower people rather than replace them. Based on many estimates by the likes of Gartner, World Economic Forum and the Organisation for Economic Cooperation and Development (OECD), AI is expected to create new jobs that we can't even imagine now as well empower existing ones. For example, organisations today are starting to acknowledge the need for new job roles such as 'data translators', sitting between data scientists and business

teams acting as interpreters of the algorithms or 'data storytellers' who explain everyday language the output of AI recommendation systems.

As such, on the journey towards creating a Data Culture, we invite the leaders of today to approach AI and its impact on the organisation as *what one makes out of it*, aiming at what is often referred to as *Collaborative Intelligence*: Humans and AI working together to enhance each other's complementary strengths⁶

It isn't what you let AI & data solutions do to your organisation. It is what you make out of it with your decisions and actions. It is how you use it for the benefit of your organisation and its employees, aiming at productivity gains, performance improvements and employee well being alike.

Adopting a mindset of experimentation (test - learn - adapt) can show you the way towards sustainable behavioural change. Starting small, testing and scaling: changing behaviours, one step at a time.

Summing it all up

Nowadays, more and more organisations across different sectors and industries witness an astonishing paradox:

(Businesses have) An unprecedented access to data and technology, but poor results when it comes to using data and AI solutions effectively. As a result, they fail to get the expected value out of their investments in AI and data and to increase their enterprise value as a whole.

Our approach to addressing this paradox is by helping organisations develop a Data Culture. But what does this mean in practical terms and how can leaders of today drive a sustainable behavioural change to create a Data Culture?

In this article, we explore three fundamental 'lessons learned' from our work with companies we have helped develop to their Data Culture. We consider these the missing puzzle pieces when it comes to helping them to extract the expected value out of their AI and data investments.

Puzzle piece 1

It's not about culture, it's all about behaviours

Puzzle piece 2

If you want people to do something make it easy for them, not hard

Puzzle piece 3

It's not all about data literacy, it's mostly about making data matter for people

When it comes to acting on Data Culture, our recommendations are included in the "What comes next" section where we invite leaders to:

Start the journey towards Data Culture by asking the right questions

Start small, learn fast

Aim for a collaborative (HUMANS + AI & DATA) intelligence

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