2020 Data Leadership Report

Data assets and their (mis)management

anmut

Executive summary

With data, actions do not speak louder than words. This is something we heard again and again from people in positions of data leadership, but one they're struggling to overcome. That's why we surveyed 86 data leaders, in organisations with combined revenues of $1 trillion, and spoke with three experts to write this report.

We found that 91% of business leaders say data's critical to their business success, 76% are investing in business transformation around data, and two-thirds of boards say data is a material asset.

Yet, just 34% of businesses manage data assets with the same discipline as other assets, and these businesses are reaping the rewards. This 34% spend most of their data investment creating value, while the rest spend nearly half of their budget fixing data.

This is a big problem because it means most businesses are running on data that isn't fit for purpose.

One study says data-related activities account for 4 – 7% of operating expenses. For a big bank like HSBC, that's $1.5bn–$3bn. If nearly half the data budget's spent on fixing data, the chances of this 4 – 7% being an efficient investment are slim. That's a lot of wastage, particularly when lots of businesses are cutting jobs to save money. In June 2020 HSBC announced it was cutting 35,000 jobs to save $4.5bn by 2022.

Why?

Data is misunderstood. We found that technology overshadows data, despite depending on it to work, with technology receiving three times the attention and five times the budget. We found that most businesses just aren't focused on the majority of benefits data can bring.

What can be done?

Our external experts and survey respondents agreed that change has to be systemic. This can only happen when data leaders have earned trust.

Data literacy should be considered carefully. It boils down to the question, do you bend people to fit the data, or bend the data to fit the people?

87% of data leaders think putting a monetary value on their data would better help their business manage it. Money is the language of business. Translating data into this language means it can be measured, incentivised, prioritised and compared across the business.

One of our experts did something else. He created board level KPI, see page 11 for details.

With data, actions don't match the words. As data leaders, its our job to change this, read on to learn more.

'To be blunt, the biggest problem I have is…'

That's how Chief Data Officers (CDOs) often opened the sentence we kept hearing again and again. The problem that created this report. One that needs real evidence, not anecdotal stories, to tackle.

We make data something everyone in the business understands, values and knows how to manage.

The problem

CDOs kept saying that their businesses, and its leadership, can't see past technology to clearly understand data. It's no wonder then that most data initiatives, and initiatives that depend on data, like digital transformation, fail. It's a fundamental problem, a far bigger one than just some failed projects.

When reality repeatedly falls short of expectations, people stop believing. When data doesn't deliver against the promises others have made on its behalf, how supportive will people be of data projects and people? Not very.

When the world's economies are facing double digit falls in GDP, and companies are making mass redundancies, is wasting money on initiatives that don't work okay? Not at all.

When the companies that do get data start striding ahead of the rest, like Amazon, we create a two-tier economy and global monopolies. Does this best serve society? We think not.

Helping you turn problems into opportunities

The insights in this report will help you show others the opportunity of managing data as an asset. We're also doing a few other things to help data leaders.

The **Data Business Case Slide Deck** is a compilation of the best evidence we've found from others. Email me if you would like a copy.

You can watch our **Managing Data as an Asset Webinar** here.

Finally, we will run more of these surveys, because we're part of the data community and want to help it move forward. Get invited to take part in future surveys. We share additional insight and analysis with participants.

What we did

We surveyed:

- **86 data leaders**
  (roles included Chief Data Officers, Director or Heads of data and technology roles).

- **Companies totalling $1 trillion in revenue.**

- **Headquartered across five continents.**

Alongside anecdotal input from our clients, we also spoke to three expert practitioners about the findings to get their views:

- **Barry Panayi**
  Chief Data Officer at Lloyds Banking Group, Non-Executive Director at Ofgem.

- **Darren Russell**
  Chief Digital Officer and Founder of Mott MacDonald Digital Ventures.

- **Miranda Sharp**
  Stream Lead at the National Digital Twin programme (Centre for Digital Built Britain) and Greater London Authority Smart London Board Member.

Leaders are committed to data

91% of business leaders say data is a critical part of their business' success. Three quarters (76%) are investing in a large-scale data or digital transformation. The size of these investments varies, but estimates by the International Data Corporation (IDC) put the global spend on digital transformation at $1.3 trillion. That's the same as a third of the total value of all FTSE listed companies.

The majority, two thirds (67%), of Boards see data as a material asset for their business. But a third don't, which is the first sign that, despite data being critical to business success, it isn't being treated as such.

Data vs digital, what's the difference?

Data and digital are intertwined. Digital technology without data doesn't work, like a car or an appliance with no electricity. Data without technology is like electricity with no applications to power. Despite the relationship, they are distinct. Technology is something that needs to be bought, installed, operated and maintained. Data is the information that runs through that system that needs to be collected, sometimes bought, shaped and managed in the best way to fulfil its purpose. Technology is tangible, at least from an accounting perspective, we interact with it, often to use data. Data is intangible.

Leaders say data's critical for success	Business is investing in large-scale transformation	Boards say data's a material asset
9%	24%	33%
91%	76%	67%

Yes
No

Data isn't managed to the same standards as other assets

While two thirds say data is material, just one third (34%) say data is frequently, very frequently, or always, managed with the same management disciplines as tangible assets.

At its simplest, business is a way of managing people and assets to create value. Data is an asset, an enabling one, it magnifies the impacts of all other assets because it influences decisions. This is why, the more data mature an organisation is, the bigger margins it has. Of the five stages of data maturity, those at stage four, typically see margin gains of 5–20% above the competition.
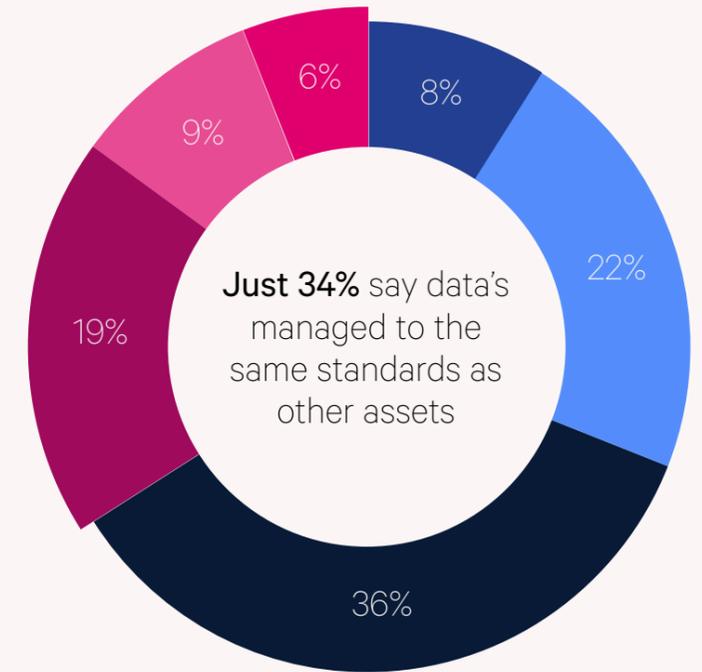
"Data's not on an even playing field, it should be a BAU investment, like keeping the loos clean or having a finance department. It's an enabler, so proving a clear line of sight to ROI is hard, and in itself requires investment. When investment in data projects have to compete on short term ROI measures to get signed-off, you create all sorts of problems for the future."

Barry Panayi
Chief Data Officer, Lloyds Banking Group

How often would you say the same management disciplines that are applied to tangible assets in your business, are applied to data?

How often data's managed like other assets:

- ■ Always
- ■ Very frequenty
- ■ Frequently
- ■ Occassionally
- ■ Rarely
- ■ Very rarely

Just **34%** say data's managed to the same standards as other assets

6% · 8% · 22% · 36% · 19% · 9%

Managing data as an asset

Gartner famously said between 60–85% of big data projects fail. Not surprising when only a third treat it with the same discipline as other assets.

Asset management disciplines may sound sophisticated but are in fact common-sense.

On a personal level you may have a variety of different assets; a pension, investments, a bank account, a house and a car. You know what each is for, you check in on them to make sure they're on track, paying more attention to the most valuable ones, and adjusting them as their situation or your needs dictate.
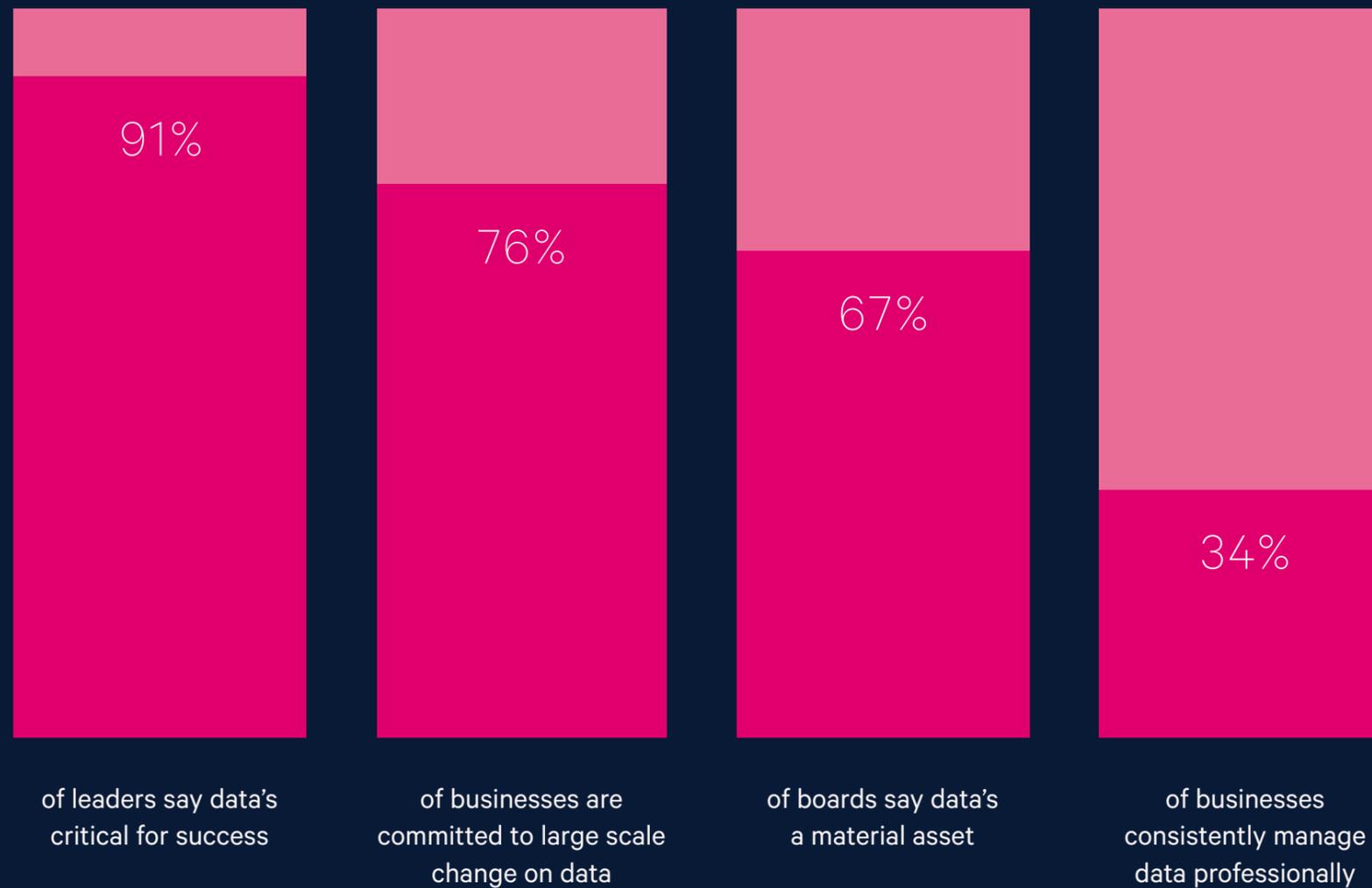
For data, it's the same set of questions. In our experience, the answers lie in getting clear about the purpose of the data, the contribution it makes to value creating activities and what condition it's in to best make that contribution. A line of enquiry that broadens the perspective and reveals the real issues in the business.

Asset Management Disciplines

Asset management is a consistent way of developing, operating, maintaining, upgrading, and disposing of assets efficiently. There are huge fields of work dedicated to the management of all sorts of assets. At its simplest though, there are eight questions that underpin good practice.

1. What are our assets?
2. Which are most and least valuable?
3. What do we want to achieve with them?
4. How are we going to do that?
5. How do we know we're on track with that?
6. How is the condition of our assets changing?
7. How are we responding to those changes?
8. How do we get the best ROI out of the asset?

With data, actions don't speak louder than words

91%
of leaders say data's critical for success

76%
of businesses are committed to large scale change on data

67%
of boards say data's a material asset

34%
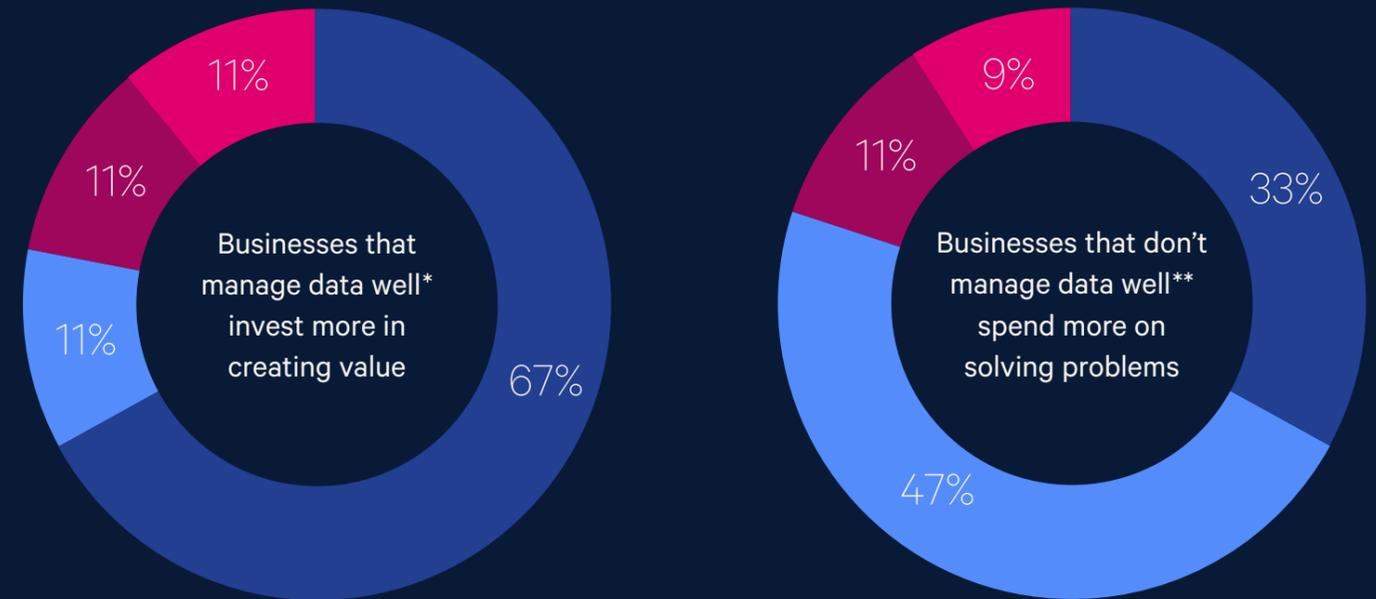of businesses consistently manage data professionally

The money reflects the management

Data is critical to a business's success, but the majority of businesses don't treat it with the same discipline as other assets. The results of this can be seen in where they spend their money.

The third of businesses that treat data, at least frequently, with the same discipline as other assets, invest double the amount in creating value from their existing data assets. Whereas those that don't manage data well (treating it only occasionally to the same standards as other assets), spend four times as much on fixing data.

This reinforces Barry Panayi's earlier point about the challenge of measuring data's short-term ROI. Without the maturity of knowing data is an enabler, spend will only ever be signed off to fight fires or seize straight-forward opportunities. Investment in improving the quality of the underlying data assets won't happen. So, the business never matures in its understanding or use of data.

How often are the same professional management disciplines, that are applied to other tangible assets, applied to data?

Businesses that manage data well* invest more in creating value

11%
11%
11%
67%

Businesses that don't manage data well** spend more on solving problems

9%
11%
33%
47%

Data budget spent on:

- Creating new data assets
- Protecting data
- Fixing data
- Creating value from existing data assets

* Those that answered their businesses frequently, very frequently or always manage their data with the same discipline as other tangible assets.

** Those that answered their businesses occasionally, rarely, or very rarely manage their data with the same discipline as other tangible assets.

Why managing data like an asset matters

Asset management means managing something valuable in a safe, consistent and efficient way to get the most out of it. For physical assets, there are standards like ISO 55000, and before that PAS55. Meeting these standards means an organisation can prove to their shareholders, customers, partners, local communities, governments and others, that it manages important assets well.

We don't have anything like this for data. Frameworks like ISO 8000, ISO/IEC 25012 and DAMA-DMBOK are too theoretical. They don't talk about tangible actions needed to create real change. Without good management discipline, more is spent on fixing data than on using it. Unlike physical assets, like a car, using data doesn't degrade the condition of it. The condition of data, for the jobs it needs to do, is determined by the ecosystem around it. Data problems are symptoms of business problems, typically a lack of alignment, communication, clarity of definition and policy follow up and enforcement.

Take a company that builds and runs shopping centres. One part of the business gets a contractor in to build a new wing. It's a big job that will take 18 months. Procurement don't understand what the Estate Management team managing the new wing need to run it. Procurement don't know Estates need the data for drains needs to be recorded precisely, nor do they know those

records should include exactly when the drains were installed, so they can be changed in three years when parts rust and degrade. All procurement know is they need a 'map of the drains'. This is misalignment and miscommunication.

The new wing is built. It looks great. The contracts give a PDF map of the drains, and a list of when the drains went operational. But operational means when the whole system was finished, they were installed and exposed to the elements nine months before.

When Estates get brought in, not only do they now have to map and survey every drain again, they have to do it for every heat vent, hot water pipe, wifi router and more. Then the tenants come in, rent their unit and start their building work. Their contracts specify keeping detailed records of when and how they change them. But this is never enforced, because the position that fulfils that role has a high turnover. Estates face the same challenge again. This time with 100 units all making different changes at different times.

These problems would be avoided if data was treated as an asset like the new building itself, but it isn't. Data is invisible, complex, assumed, and as we see later, overshadowed by technology.

The majority miss out on most of the data opportunity

We asked data leaders which of the following benefits from data their businesses are focused on. Of the 12 options, three quarters of data leaders said their businesses are focused on just one third of the possible ways data can create value. While the focus could be said to aid productivity, it does leave significant value on the table. Especially because the data benefits that get less attention are the ones that deliver longer term value.

"It comes back to what's needed to make the business case. The top items here are all about the short term, which is what happens when data isn't seen as an enabler. Ironically, hitting ROI now means making it harder to hit in the future, because the foundations aren't being built."

Barry Panayi
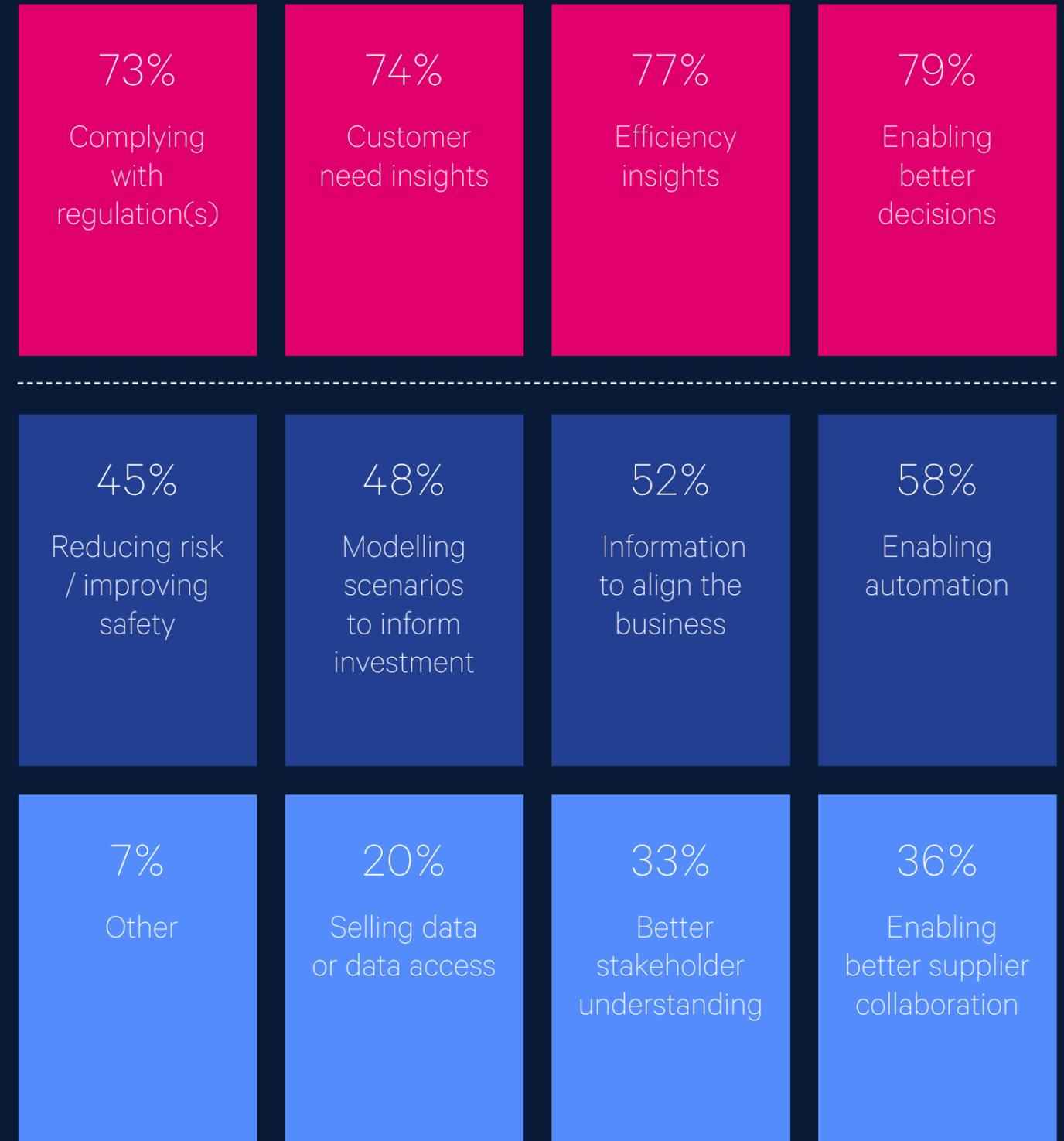Chief Data Officer, Lloyds Banking Group

This narrow and short-term focus is another indicator that data, and how it works, isn't understood.

Darren Russell says they have been working hard to embed data-driven thinking into all aspects of their business and culture. For less data mature organisations than Darren's, where data projects have to meet short-term ROI measures, it's much harder, as Barry says.

This isn't a new challenge. Research by PWC (page 29, exhibit 12) shows that the condition of data hasn't improved in the last ten years, despite all the money invested. Clearly there is an opportunity for those that can make this change. Which takes us into what to do.

Which ways of using data to create value is your business focused on?

75% of businesses focus on 33% of data's benefits

73% Complying with regulation(s)	**74%** Customer need insights	**77%** Efficiency insights	**79%** Enabling better decisions
45% Reducing risk / improving safety	**48%** Modelling scenarios to inform investment	**52%** Information to align the business	**58%** Enabling automation
7% Other	**20%** Selling data or data access	**33%** Better stakeholder understanding	**36%** Enabling better supplier collaboration

Technology overshadows data
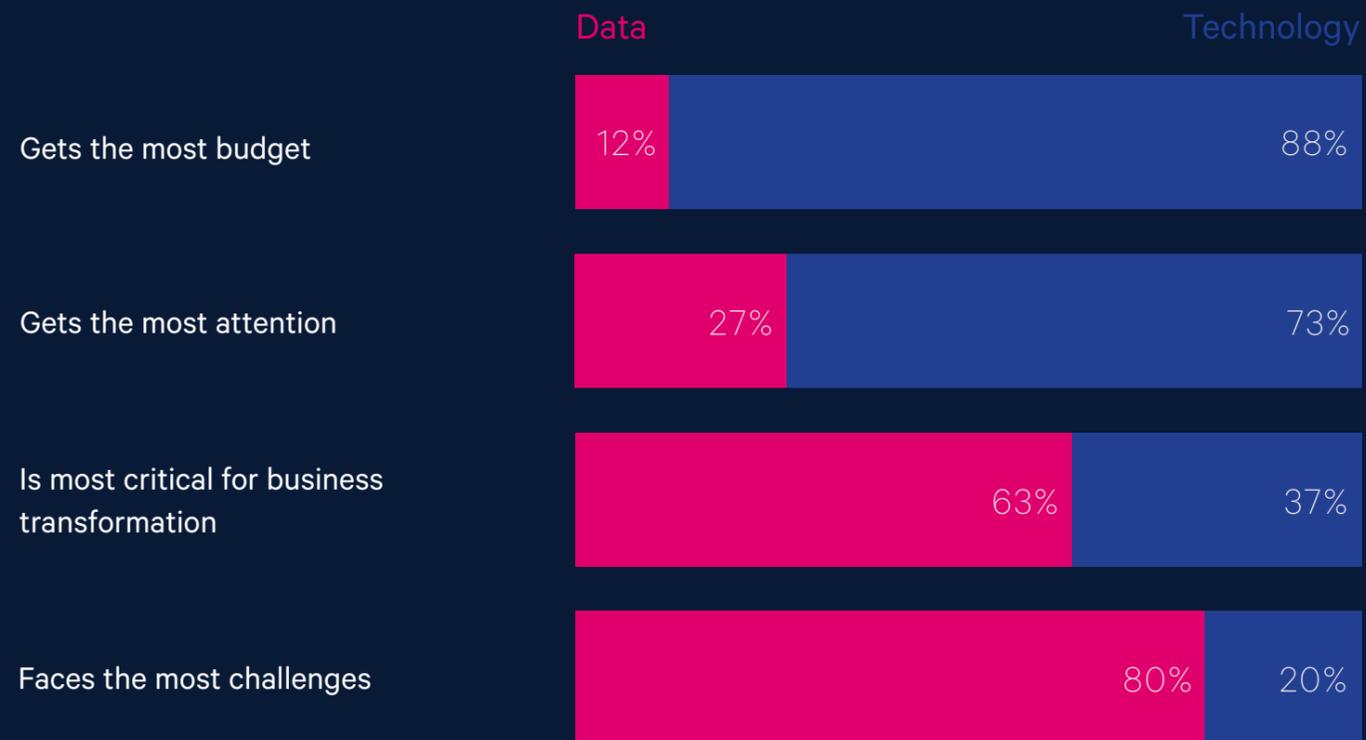
When it comes to transforming a business, data leaders say data is almost twice as critical than technology and faces four times the challenges. Yet data receives just under a third of the attention and a seventh of the budget.

It's a stark picture. One that could be challenged.

One could argue technology, particularly the large ERPs, are far more expensive than data. But technology isn't something to be continually changed, upgrades don't cost that much, so what's going on? It could be that to solve their problems, businesses keep buying new tools, instead of improving the data to make their existing tools work.

One could say data leaders would say this anyway, it certainly paints a heroic picture of the underdog standing up to a huge challenge. But business isn't about heroism, business is about making the best decisions to create the most value. And we've already seen business leaders saying data is critical. It may just be that technology feels like a simpler, safer solution. The value of technology is more easily packaged, promoted and bought. The value of data is far harder to understand, because the contribution it makes to an organisation isn't as straight forward as technology. This makes buying the system, hardware or software feel more like solving the problem. In reality, it's just prolonging it.

Our experts say it well.

"It's easy to get confused. People see a problem and think they need new technology to solve it, when in fact it's a data problem. And data problems are much harder to fix compared to buying a new bit of kit. So CDOs face a double challenge. First you've got to tell people they're wrong, then tell them it's going to be much harder and more expensive to fix than they first thought."

Miranda Sharp
Stream Lead at the National Digital Twin programme (CDBB) and Smart London Board Member (GLA)

"This is what happens when data is pitted against technology to hit short term ROI for business case sign off. Data's consistently underinvested in. Put Artificial Intelligence and Machine Learning in the mix and, instead of exponential growth, it's going to be exponential disaster. Put bad data in and you have no idea what the machine is doing."

Barry Panayi
Chief Data Officer, Lloyds Banking Group

So, despite data being critical, and seen as material, data does not get managed as an asset. Nor is it given anywhere near the attention or investment as technology, the very tools that depend on it. What can be done?

Chart

Data | Technology

	Data	Technology
Gets the most budget	12%	88%
Gets the most attention	27%	73%
Is most critical for business transformation	63%	37%
Faces the most challenges	80%	20%

Moving forward means changing the fundamentals

We see strong words and commitment to change that isn't followed through with comparative action, focus or investment. We see technology overshadowing data, despite that very technology depending on data to deliver. We've heard how pitting data against other investment opportunities, in a short-term ROI race, without a clear line of sight into the value data creates, will always be a challenging battle. What to do about it?

"Most CDOs are in tricky situations. You've got to tell someone they're wrong, that their ideal technology solution won't work. Then you've got to show them just how bad the situation is, because you need them to understand how much work is needed. That's a tall order, like telling someone their baby is ugly. You can't do that without first building up a lot of trust."

Miranda Sharp
Stream Lead at the National Digital Twin programme (CDBB) and Smart London Board Member (GLA)

"You need to have the right processes and tools in place so people get value from the data. Once they see the value the data can bring to their roles, they start to value data themselves."

Darren Russell
Chief Digital Officer, Mott MacDonald

Building trust with senior decision makers is one answer, as Miranda points out. It takes time to earn but unlocks new ways to move forward. This trust can then be used to have the conversations that change people's perspectives, so they understand data in a different way.

Understanding is not the same as being literate. Data literacy, while desirable is, in our view, an option to consider carefully. Do you reshape the data so it meets people where they are? Or reshape the organisation and everyone in it, so they meet the data where it is? The latter is a herculean task, because people and change is hard. And it's made harder by the way people in an organisation keep changing too. With these points in mind, perhaps it's better to reshape the data.

Data leaders agree. 87% said putting a monetary value on data will enable people in their business to manage data better.

This is part of the work we do–putting a monetary value on data based on the contribution it makes to value creating activities. It creates a systemic change in an organisation. As one of our clients said, "the numbers give people the language they need to think about data as a strategic asset and compare investments in the way they're comfortable with."

"I've worked hard on building trust with the board and getting them to understand what data is and how it works. When there was talk of Artificial Intelligence and Machine Learning, I showed them lots of examples of where it goes wrong if the data's not right. I presented it as a choice. Do we want to stay where we are, get a bit better, a lot better, or get worse. Now we've got a data management maturity metric at board level. Independently assured and bonus linked. We're the only bank in Europe with it. It's about systemic change to move us forward on data."

Barry Panayi
Chief Data Officer, Lloyds Banking Group

87% of data leaders say putting a monetary value on data would enable people in their business' to manage data better

Yes   No

It's not the only solution though, as we've seen with Barry's Data Maturity Management Metric at Board level. But like this, it is a systemic, measurable change, which is critical because without this structural change, persuading people of data's importance will be a job that never leaves the to do list.

The ideal(istic) remedy

All this would be made much easier if data was a recognised asset on the balance sheet, with clear value for all to see and an agreed set of international standards to account for it. We all know that number would be sizeable, signalling data's strategic importance.

But that's a long way off. An idealistic solution.

In summary

Until then, solutions must be built on trust. The value of data must be articulated in a way the business understands. The implications of how data is being managed needs to be understood and communicated. Interventions must create systemic change in the business. Ultimately, solutions mean data leaders taking leadership in, and for, the business.

Making your job easier

You can use the evidence in this report to start conversations. To help those conversations deliver change, we've got a few more things to help.

The **Data Business Case Slide Deck** is a compilation of the best evidence we've found from others. Email me if you would like a copy.

You can watch our **Managing Data as an Asset Webinar** here.

Finally, we will run more of these surveys, because we're part of the data community and want to help it move forward. Get invited to take part in future surveys. We share additional insight and analysis with participants.

About us

We're a consultancy that turns data into an asset so everyone in the business understands, it, values it and manages it.

Our approach is underpinned by a unwavering focus on how your organisation creates value and the role of data in that. We don't work with your data, we work on your data and the ecosystem around it.

If you have any questions about the report, about what we do, or just want to say hello, you can email me, David Willans, CMO.

www.anmut.co.uk

Map

We show you where you are, where people think you are and where to go, so you know how to move forward.

Assurance

You show the business the progress made on realizing the value in data data.

Valuation

We show everyone how valuable your data assets are, in monetary terms, so they know how to make better investment decisions.

Analytics

You know what stakeholders value and have the data, so you can show the business insights on its biggest opportunities.

How **we** set **you** up for success

Conditioning

We show you how fit for purpose your data assets are, so you know where to invest to make the biggest impact.

Remediation

You show the business how data remediation is solving the biggest challenges.

Prioritisation

We show you which projects to prioritise, so you know how to deliver the ROI you need.

Thank you

anmut