

Innovating in the Exponential Economy:

CHAPTER 2

Is data closing or widening the
innovation-execution gap?





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From well-established businesses to new start-ups, innovation is crucial for competitiveness and survival, but it is notoriously hard to get right. Bridging the innovation-execution gap is a persistent challenge for senior business leaders. The ability to consistently turn new ideas into business outcomes has become a strong differentiator between winners and losers.

Recap of Chapter 1: The 2018 innovation-execution report

My 2018 study in association with VMware found most organisations are not short of new ideas in the digital age. But despite growing digital capabilities, only a small proportion of organisations can consistently identify and execute good ideas and successfully manage the transition from where the business is to where its senior leaders want it to be.

Emerging intelligence derived from internal and external data inevitably reshapes both the path and destination of the innovation. To succeed, innovation must be continuously re-evaluated and re-calibrated. The new iterative approach creates significant leadership challenges around technology, culture, risk, and impact that need to be addressed.

Has the gap been bridged?

Four years on from the original report, I want to explore whether business leaders have been able to heed the advice it offered and look at whether the innovation-execution gap has been bridged – or at least narrowed?

To answer this, we must look at some of the significant changes to the environment that businesses are operating in.

1. First, a plethora of new technologies are emerging and increasingly adopted in real applications. Technologies including artificial intelligence (AI), machine learning (ML), big data analytics (BDA), multi-cloud, edge computing, blockchain, augmented and virtual reality (AR/VR),



and the metaverse are making material impact on the way data is captured, analysed and used, the way decisions are made, how products and services are developed, and, ultimately, how customers are served. The very notion of digital technology – and new capabilities based on such technology – has expanded rapidly. Although many applications have helped bridge some traditional innovation-execution gaps (e.g. in product and business model innovation), these emerging technologies are creating new gaps as we learn to extract business value from them.

2. Second, since early 2020, the Covid-19 pandemic has drastically accelerated digital transformation efforts, forcing widespread adoption of flexible working. Some organisations successfully exploited new digital capabilities to maintain business continuity, inform decision-making, accelerate product and service innovation, and drive strategic and organisational transformation. From my own research, I've witnessed a proliferation of the platform business model, disrupting a growing range of domains and markets. New approaches have emerged to support senior business leaders in managing the transition to new strategies and business models, organisational designs, and products and services. Examples include innovating by experimenting (such as the evolution of TikTok as the new social media star), achieving radical innovations via an evolving portfolio of incremental innovations (such as the rise of Zipcar in cities around the world), and gaining sustainable competitive advantages through successive temporary advantages (Amazon and Alibaba being the most obvious examples). These new approaches have helped bridge the innovation-execution gap in some of the most innovative organisations in the world – just look at the success of the giants like Google and newer tech-led companies like Spotify and Klarna, and apply the above filters to how they've been successful.

3. Third, the digital environment has become more complex, as the rules governing the collection, storage and use of data vary substantially across industries

and countries. Since how data is collected, stored, transferred and used can have a significant impact on civil society, economic development, geopolitical relationships, industry growth and national security, the notion of data sovereignty has become a critical strategic issue for senior business leaders. Clear decisions are required about whose rules and regulations data should be subject to, particularly in relation to meaningful control, ownership, cross-border data flows, and other claims in data. Breaching data sovereignty laws can result in significant reputational damages and heavy fines.

The impact these factors have on the innovation-execution gap is mixed. For example, cloud technologies have made data sovereignty more challenging for many businesses, but services from leading cloud providers with comprehensive expertise and cutting-edge technologies can offer agility, scalability, and integrated solutions to ensure security and compliance, offering significant strategic and operational benefits to business users. This is clearly reflected in the rapid rise of sovereign clouds in recent years, which are architected and built to deliver security and data access to meet the strict requirements of regulated industries and local jurisdiction laws on data privacy, security, access and control.



The innovation-execution gap revisited: the new study

This new study not only substantiated some nascent trends in the original report, but also identified significant new trends emerging today. Amongst the key findings:

- The digital transformation of products, processes and business models has gone mainstream across different sectors. Decision-making is becoming increasingly data-driven, or data-informed. Emerging technologies – from AI, ML and big data analytics to multi-cloud and edge computing – are increasingly adopted in real applications at scale, empowering organisations to capture, access and exploit data for innovation and business outcomes.
- Despite such progress, however, the innovation-execution gap has persisted, due to a lack of digital capabilities and skills, rigid digital infrastructures, and various constraints and risks associated with data sovereignty and compliance. Interestingly, having too much data and issues over access to the right data have been cited as major barriers, and the current technological stack in many organisations is preventing them from becoming more data-driven, resulting in strategic opportunities being missed.
- The fear of data regulatory breach and heavy fines is real, and as a result, 70% of C-suite executives believe the innovation-executive gap will likely widen in the next three to five years. Failing to address data sovereignty and compliance will also have a significant impact on employees, customers, and the bottom line.
- Six in 10 respondents feel their organisations are currently struggling to maximise the value of data, but major investment over the next two years will boost their digital capabilities and data-driven decision-making.



When rhetoric and reality collide

We often hear “*digital disruption is everywhere*” or “*digital transforms everything*”, but such sweeping statements lack nuances and are unhelpful for understanding current changes or guiding innovation efforts. The gap between what digital can do and what is happening in real organisations is persistent – and is likely to get wider in the next few years.

Digital transformation of products, processes and business models is not an objective, but rather a strategic choice by senior business leaders from an array of alternatives.

As advanced digital technologies, infrastructures and services become progressively more accessible and affordable to all types of organisations, our ability to

capture, access and use data from different sources will continue to improve. Since few organisations have all the expertise and skills to maximise the value of data to inform decision-making and drive innovation, business leaders are increasingly taking strategic responsibility to combine internal competence and resources with the expertise and digital assets from external specialist providers when pursuing new opportunities.

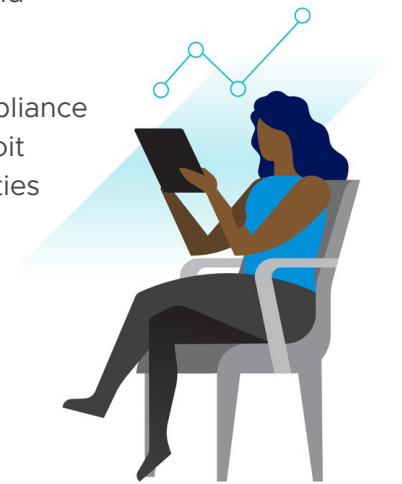
The rapidly growing digital capabilities to extract new insights from internal and external data will empower us to make informed decisions and choices. Doing so effectively and consistently will help organisations bridge the innovation-execution gap and find continued success. Those failing to do so will risk being left behind.

Recommendations

The original report made seven recommendations to bridge the innovation-execution gap. The key messages included anticipating and preparing for future disruptions; understanding innovation is not always about creating something new; innovating by experimenting; and addressing leadership challenges around culture, risk, technology, and impact using joint approaches. These recommendations are still valid today.

Based on this new research, looking at the growing role of data, I am urging business leaders to consider the following six recommendations as they look to close the innovation-execution gap:

1. Adopting a flexible and scalable digital architecture to ensure the organisation is well positioned to embrace emerging technologies.
2. Developing iterative approaches for innovation and execution, using emerging intelligence to continuously recalibrate ideas and actions.
3. Pursuing an evolving portfolio of innovations to explore emerging opportunities while mitigating risks.
4. Employing external specialist providers of technologies, infrastructures, services and skills to ensure the organisation's digital capabilities stay at the cutting edge.
5. Building and nurturing comprehensive data capability to inform decisions, continuously evaluate progress, adjust directions, and calibrate actions.
6. Going beyond compliance to proactively exploit strategic opportunities around data sovereignty for competitive advantage.



Part I – Data, digital transformation and the innovation-execution gap in 2022

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Data has become one of the most critical competitive advantages; the winner is someone who can use the data to make essential business decisions.

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**General Manager,
Spanish retailer**

So said one of 12 senior executives from across Europe interviewed as part of the research for this report. Take Japanese beauty retailer, Shiseido, for example, who gathered reams of data to revamp the customer experience across its stores in Europe. Its much-hyped ‘cosmetic mirrors’ are digital screens that customers can use to scan product barcodes and see a virtual image of their face with that product virtually applied to it. Not only has this helped deliver greater value per customer on each visit to the store, but it has captivated and engaged customers that had increasingly become accustomed to moving their shopping habits to online-only.

The supporting study¹ of over 100 European C-Suite leaders found that, of the top seven strategic business objectives for the next two years, two explicitly mention data, and four require accurate, relevant and up-to-date information to inform decision-making. Even those organisations that don't see data as a primary focus require data to drive the business – from understanding workforces and productivity, to determining which workspaces can be merged with others without impacting the employee experience.

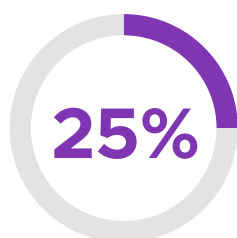
The message is simple: organisations need to be able to access and utilise data. This is both a challenge and an opportunity.

64% of businesses admit their struggle to maximise the value of their data is hindering their ability to innovate and say they are still years away from unlocking the data economy.

20% are struggling with their increasing volumes of data, and as a result have seen no improvement, or even a decline, in innovation.

Certainly, organisations recognise the problems that can be caused by not being able to use data effectively. More than half (59%) believe organisations that are prioritising data-led decision making are stealing market share, with nearly as many (58%) fearing that they will fall behind the competition if they do not make better use of their data.

And this is not just at a business level either:



fear losing their own job if their organisation does not improve its data utilisation.

This all leads to a central point: that four years after the first report, a mix of existing and new trends means the innovation-execution gap is still very much a barrier to business success. From compliance, regulation and the implications for data sovereignty, the complexity of systems and infrastructure, to accessing the right technology and having the appropriate culture, there are many reasons why companies struggle to get data where it needs to be.

The past two years have seen an acceleration in digital transformation. But if organisations are unable to use data to its full potential, how truly successful can they be? What is clear from the research is that even those organisations that consider themselves data-driven are striving to do more with data.

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We are trying to capture every opportunity to grow and adapt to the changing environment...therefore how we use our consumer data always needs to be improved.

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General Manager, Spanish retailer

¹ Coleman Parkes conducted 100 phone-to-web surveys and 12 in-depth telephone interviews with C-level execs across Europe listed in Forbes Top 2000 global. Each respondent came from non technical / IT- roles. The fieldwork was completed between May and June 2022.

Part II - The innovation race – expectation vs reality

While organisations clearly recognise data's potential to inform strategic direction and offer new opportunities, they are still struggling to use that data to turn ideas into new products, services and strategies, at the pace required.

This is the innovation-execution gap, a challenge most organisations face. While many do not struggle to come up with ideas, they do face challenges in turning them into effective business outcomes, particularly if these challenge internal thinking or culture too much. A classic example is that of Kodak – the company that dominated the photographic film market during most of the 20th century.

Steve Sasson, a Kodak engineer, actually invented the first digital camera back in 1975. *“But it was filmless photography, so management’s reaction was, ‘that’s cute—but don’t tell anyone about it,’*” said Sasson. The leaders of Kodak failed to see digital photography as a disruptive technology.

The inability to turn ideas into business outcomes was a challenge in 2018. It is clear from the research that this is still one in 2022, exacerbated by organisations’ inability to use data effectively. As a result, many are not as ahead in the innovation race as they believe they are:



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There were many challenges initially, such as a lack of proper infrastructure, outdated systems used to store this collected data of the customers and data loss in the event of a system failure. All these challenges made it difficult to manage the data correctly.

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Managing Director,
French financial services firm

Skills also hamper innovation

A lack of skills or data knowledge among employees is also hampering organisations' ability to extract value from their data. People, from the top down and at all levels across the business, need to be data literate, so they can understand how their roles, output and decisions can be enhanced using data. Without this, organisations will be unlikely to succeed in the innovation race.



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To get value from that data, we need skilled people who can understand it, interpret it, and create valuable insights. A lot of customer data has been generated from the sale of appliances. So, it becomes extremely crucial to manage this extensive data since the right management of data is a big challenge. It also resists our ability to utilise this extensive data fully. This creates an urgent need for an excellent data storing and managing infrastructure, a team of well-trained analysts, and data security experts.

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**Managing Director,
Swedish manufacturer**

Part III – The data dilemma - fear of compliance and regulation stalls progress

The introduction, and need of data sovereignty is widely regarded by those familiar with the concept as helping, rather than hindering businesses, with 65% believing it has had a positive or extremely positive impact on their organisation across many strategic areas, especially innovation capabilities. Yet striking the balance between extracting value from their data and being sure they are acting responsibly and in accordance with national and international regulations appears to be holding many back:

- **Innovation suffers due to data concerns:** Nearly two thirds (64%) believe they are falling behind on innovation because they are concerned about losing or storing data.
- **Regulation concerns fuelling caution:** Two thirds (65%) admit to being fearful of storing data that could help close the innovation execution gap, due to compliance, regulation and local laws around data. In addition, industry compliance and regulation is preventing 64% of organisations from making the most of the data available to them.

Unsurprisingly, heavily regulated sectors have similar challenges to overcome.

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Every country has its own set of data regulations and laws. Being a multinational corporation operating in different countries makes it really difficult for us to manage this critical data of our customers. We are currently facing challenges and need to consider which country, where, how, and what data we store and transfer. Similarly, governments seeking to improve the quality of life of their citizens, such as by improving medical services, are also suffering from these data sovereignty laws. These regulations restrict us from transferring data and information outside the country, which could be very useful in some cases.

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Chief Medical Officer, Danish healthcare firm

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Initially, some degree of challenges existed that made it difficult to utilise the full potential of data that we generate...Even as one of the top Investment and Asset Management companies, we still had to increase our spending on data management after the arrival of [the European Union's General Data Protection Regulation] and other norms concerning data. If we are to keep innovating, we have to keep increasing the dedicated team responsible for data management and governance. They are the team that keep us informed, and ensure we stay relevant with changing regulations and trends taking place in the industry.

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Chief People Officer, UK investment and asset management firm

Technology offers hope

In many circumstances technology appears to be hindering as much as helping organisations extract data value. However, when deployed in the right way, technology can help solve the challenges created by having adhere to data regulations. Solutions such as sovereign clouds provide the data regulations and compliance that businesses need to adhere to, allowing them to tap into the scale and compute power organisations need to innovate, while providing regulators with the assurances needed around data privacy and where private information is held.

Even then, however, challenges remain. The interconnected nature of business, while driving many opportunities, has an impact on how companies use data.



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Revenue avenues are not limited to or dependent on just one company- one company or industry cannot tackle these challenges alone. One would require lots of collaboration to make data a success...because it is part of a much bigger supply chain. Hence, a collaboration between industry stakeholders and multiple industries would be one of the biggest challenges to using data to its maximum potential.

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Chief Procurement Officer, UK manufacturer

Part IV – Bridging the innovation-execution gap

Four years ago, the first innovation-execution report proposed that a combination of people, process and technology that would bridge the gap between ideas and tangible impact. Today, it is still just as relevant.

People: Building data literacy

Organisations understand the value of their people. Equipping them with the right tools alone won't suffice in this data-driven world. Building an organisational culture where emphasis is placed on how employees across the organisation can grow their data literacy and knowledge has now emerged as the key factor in helping to foster an environment where individuals are empowered to generate ideas and try new things. All of these are critical to enabling not just innovation, but impactful execution as well.

To enable this, many are exploring the benefits of:

- **Incentivising innovation:** So important is this to organisations that more than half (52%) incentivise their teams to be more innovative and find new ways to bring products, services and strategies to market.
- **Going all in on skills development:** More than half (51%) said skills development was the key to using data more effectively for half of those surveyed and three-fifths (58%) said they are investing to help their employees become more data literate.
- **Using data to grow talent pools:** Nearly two thirds (61%) are using their current data to overcome bias in recruiting. This helps expand talent pools, improve diversity in employee bases and, through that, generate a broader spread of ideas and ways to work.

If organisations, however, are unable to create the right culture: they will lose what talent they have. More than two-fifths (45%) said their staff will seek jobs elsewhere, and 39% believe they will no longer be an attractive place to work, if they're unable to foster a data-driven culture.



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Our company is data-driven in its decision-making. There is no denying how crucial data is for our organisation... We actively encourage a data culture because data is what shapes and steers our operational activities. We can perform well and achieve our business goals because we utilise our data efficiently.

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**Chief Claims Officer,
German financial services company**

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We don't want to lag behind our competitors, so we are encouraging a data culture in our company to hold our ground in the competition. In its decision-making, our organisation aims to be dependent entirely on data in the coming years. For example, we have developed and digitised human and machine interactions in our production lines by integrating technologies using data we have accumulated over the years.

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**Chief Procurement Officer,
UK manufacturer**



While data informs decisions, human knowledge, experience and insights need to be mapped on. One famous piece of research on how firefighters act under pressure highlights the need for both. Veteran firefighters were able to make decisions so quickly they did not even realise they were considering options; they classified situations based on what they had previously seen and would visualise how a course of action would play out and adjust their model accordingly. The psychologist behind the research, Gary Klein, called it “*a blend of intuition and analysis*”, which can only come from having access to the right data and the experience to interpret it effectively.

Process: A balancing act required for innovation to take off

The barriers to incorporating data into the innovation process can be significant, ranging from cultural to organisational, technological and budgetary. However, the opportunities are also clear: being quicker to market with new products and services; identifying weak product and service candidates earlier in the development cycle; eliminating features that customers don't want while adding features they are willing to pay a premium for; and identifying and prioritising requirements for specific markets. The bottom line is that the more organisations know about their customers, and the more they incorporate that knowledge into products and service, the more positive the impact on revenues, margins and market share.

This is perhaps why almost a third of business leaders interviewed (31%) admit their organisation needs to become more data-driven, but it needs to create the right processes first.

Process enables, but can also restrict, so it is important that all processes are considered in terms of how they aid innovation. For innovation to flourish, there needs to be the systems in place that allow a front-line worker to share, and retain credit, for an idea, on an equal footing with a sales manager or head of department.

The original innovation-execution report noted that in the digital age, traditional linear approaches of developing an innovation and then executing it following a preconceived plan are no longer fit for purpose. So, the processes that were set up to facilitate that approach need to change to; a ground-breaking idea is as likely to come from the shopfloor as from the C-suite.



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We have been looking at digitalisation since 2015 and support data-driven decision-making by collecting a large volume? of company data and running data analytics to gain business insights. Also, hiring data experts and professionals has added good value to the process.

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**Chief Financial Officer,
German manufacturer**

Technology: Empowering people and processes

Technology delivers it all – having the infrastructure to underpin the services and applications that empower people and processes.

Nearly three-quarters (70%) of business leaders admit they need to become more data-driven but their current tech set-up does not support this goal.

For several years now, we've been talking about the new opportunities that cloud computing offers. It used to be a simple choice between public and private; now we're in a 'mix-and-match' era of multiple kinds of cloud – private, public, hybrid, edge and different combinations of all of these.

Why? Modern business demands flexible, tailored environments that allow an explosion of applications – from cloud-native to legacy and increasingly, modern apps running in containers – to deliver powerful and personalised digital experiences to individual customers and employees. The mindset is evolving from *“we should use this cloud because it's great”* to *“we need to allow our teams access to the data they need when they need it, without compromising our security”*.

The size of the opportunity that the data economy represents means sovereign states and organisations who need to both utilise and protect their data need a digital capability that prevents them from becoming dependent on foreign organisations and operators for processing their own data. At its core, cloud sovereignty is about the emerging data economy and protecting and unlocking the value of national, corporate and personal data. In a way, it is an innovation that enables further innovation: by creating an environment that meets regulatory requirements while providing the scope to fuel better use of data, cloud sovereignty is giving businesses the ideal platform to grow.

And when that connection is made, organisations have the opportunity to not only realise value from their data but use it to unlock greater levels of innovation: 64% are using AI and machine learning to inform innovation.



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The companies that get this right at the right time will increase their market presence and share. They will be in an advantageous position, ahead of their competitors. Improving data quality and managing data well by maintaining customer privacy improves the company's reputation and increases its revenue. Also, by adhering to all the regulatory norms set by the authorities, companies can innovate by using the available data and gain a competitive advantage.

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Chief Medical Officer, Swiss healthcare firm

Informed decision making

Organisations understand the importance of data, helping them make more effective and accurate decisions.

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Data at times has pushed us to go against our gut feeling. This is because data has tremendously reduced the cost of prediction, and we heavily rely on it. We can achieve innovation by using data and creating constraints that propel people to think outside the box.

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**Chief Claims Officer,
German financial services company**

But what is also highlighted is the role of experience: the business mentioned above is not completely dispensing with people, but using data to get them to think differently. Data is very definitely informing the decision, but it is ultimately an element within the whole process. For it to play its role effectively, it needs to be relevant, timely and easily accessible, something many organisations still struggle to deliver consistently.

And it is that inconsistency that results in uneven innovation. Many organisations have pockets of people and teams doing amazing things, but this rarely stretches the length and breadth of their operations. What's needed is a way to break down silos and ensure everyone has equal access to the data that is relevant to their needs.



Part V: Can the better utilisation of data help close the innovation-execution gap?

The world runs on data. It informs company decisions, strategic direction, product and service development; it aids the delivery of those services to users; and it is generated by users of those services, in the form of applications. It's a virtuous circle, and when it works properly, the opportunities appear limitless.

To drive it all requires the right technology, solutions that are being deployed to support data and the apps it enables. No one can build a modern multi-cloud and app-led infrastructure without understanding data.

The research shows there is the will to use data; what's missing is the way: people who are data literate, supported and empowered to work with data in the way they see fit, with processes that support data utilisation to drive innovation, all underpinned by technology deployed to enable the use of data effectively. Only then will organisations be able to close the innovation-execution gap and find continued success.

As Professor Feng Li points out in the opening Foreword, *"Bridging the innovation-execution gap is a persistent challenge for senior business leaders."*

If business leaders are to pursue a strategy that delivers on bridging the innovation-execution gap they need to consider their responses to the following questions:

1. Do they have the digital architecture in place that can ensure the organisation is well positioned to embrace emerging technologies?
2. Does a culture exist that encourages employees to use data-driven ideas and intelligence innovation to form iterative approaches for action?

3. Is the organisation set-up to explore emerging opportunities while mitigating risks – the consequences of which may mean a change in risk appetite to ensure forward-thinking progress?
4. Is the dynamic between the organisation and specialist providers of technologies, infrastructures, services and skills one that will ensure the businesses remains at the cutting-edge?
5. Does the business have the capability to ensure its decisions, evaluation and actions are data driven? If not, what plans does it have in place to ensure these essential capabilities are met?
6. How can the business approach compliance as an opportunity to reevaluate its approach to data sovereignty and create a competitive advantage as a result?

From compliance, regulation and the implications for data sovereignty, to the complexity of systems and infrastructure, and the ability to access the right technology and foster the appropriate culture, there are many reasons why companies struggle to optimise their use of data.

