

KX REPORT

THE REALITY OF **REAL-TIME DATA**



Every business wants to make smarter, faster decisions. And with data pouring in across every area of the organization, it's already clear to most that the ability to respond to data at speed is critical.

It's why more and more attention is being focused on real-time data and streaming analytics to inform business choices. Relying on a mixture of historic data and gut-feel decision making is not enough: [Gartner trend reports](#) have already flagged that the age of 'organizations using traditional analytics techniques that rely heavily on large amounts of historical data' is over.

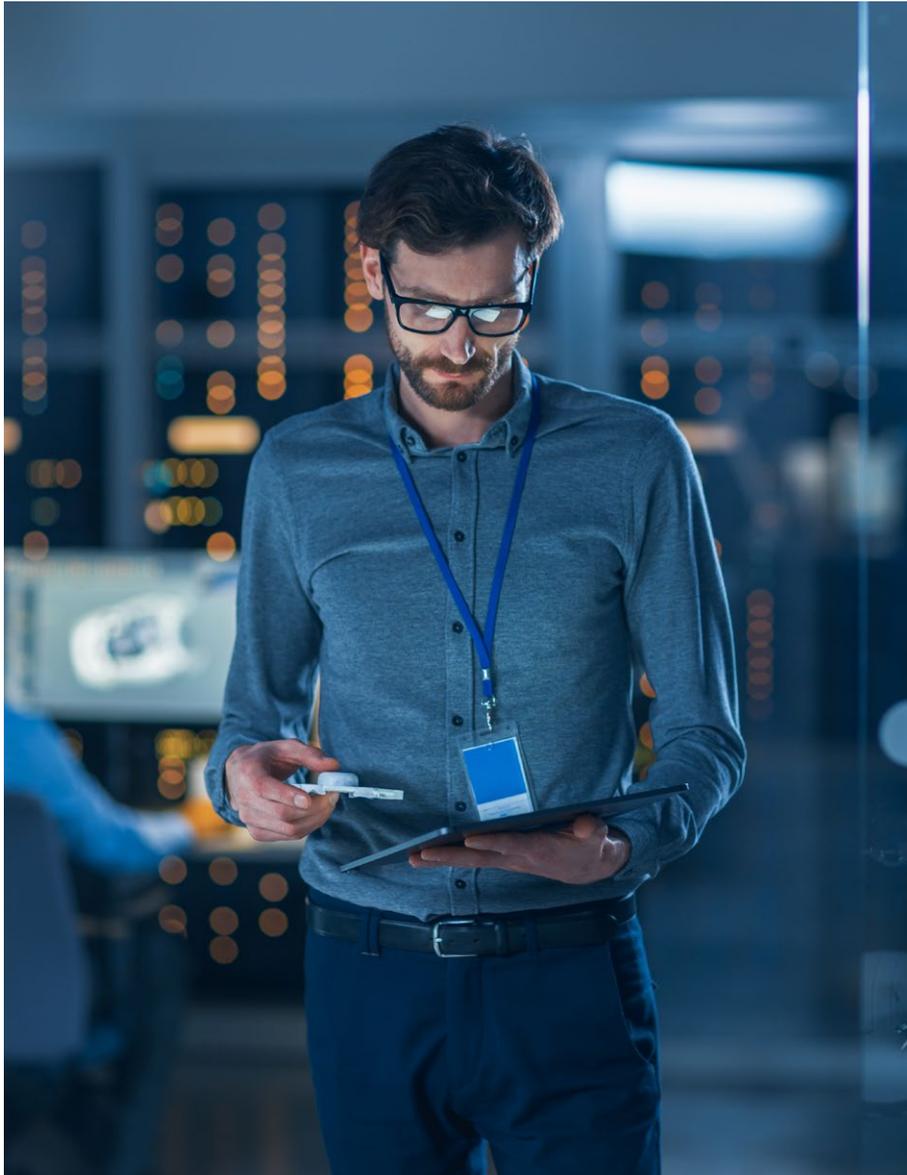
At KX, we know that harnessing insights from data quickly – no matter its type, size or location – is critical for transforming commercial and operational performance. Across industry sectors including finance, automotive, telecommunications, manufacturing and oil and gas, our customers tell us that shifting decision-making from minutes to microseconds can be a game changer for them. And as this research indicates, real-time 'data leaders' are already poised to win in their markets.

So – what's driving the need for real-time analytics? What benefits are those in front of the real-time data pack already realizing? How can your organization join them?

And how can you nurture a culture that leads to continual business intelligence across the entire organization?



Navigate through the report to discover the answers to these questions and more. Or use the menu above to find the insights you need quickly.



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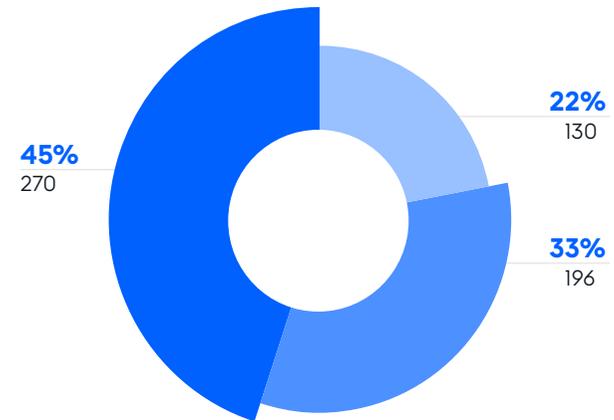
METHODOLOGY

In December 2020, KX conducted an online survey with 596 professionals from a range of sectors in the UK and US with responsibility over data and IT for their organization.

We asked about their drivers for data readiness, their perceptions towards data, the influences on their data culture, and what role they see data playing in their future success.



Job roles



- ◆ Business data DM/User
- ◆ Data specialist
- ◆ IT decision maker

Sector

Total	596
Manufacturing	113
Finance	194
Telecoms	57
Utilities	26
Oil & Gas	26
Automotive	27
Retail	53
Healthcare	86
Marketing	14

Turnover

£25m-£100m	150
£101m-£250m	182
£251m-£500m	136
More than £500m	127

Employee size

250-499	87
500-999	137
1000-1999	141
2000-4999	85
5000+	146



DATA LANDSCAPE

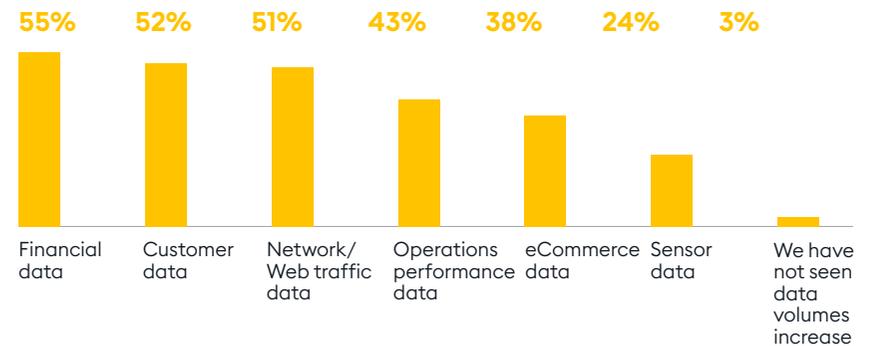
Why speed matters

In 2020, nearly all businesses (97%) saw an increase in the volume and variety of data entering their business.

And, unsurprisingly, data growth is higher in certain categories. Network or web traffic data and eCommerce have seen significant growth. Sensor data is another notable area of increase, as more businesses tap into connected networks and the IoT in order to drive business benefits.

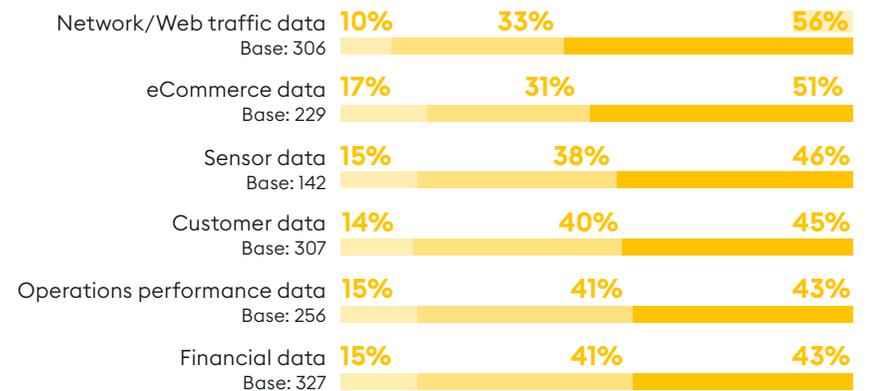


Data volume increase in the following areas due to remote working & greatest automation of business processes



Data volume increase in each of the following areas

◆ Slightly ◆ Moderately ◆ Significantly



Whatever industry you're operating in, one thing is clear: growth in data volumes across a range of areas is huge, and only set to continue. The challenge for businesses, then, is to ensure they can process and respond to this data at pace.

➤ Overall, 64% believe it is very important to be able to access real-time data in order to make smarter business decisions. While 56% agree that real-time data and insights creates a competitive advantage to a large extent.

Businesses believe that if they can shorten the time it takes to ingest, store, process, and analyze data, they can confidently tackle a range of operational and performance challenges.

And the faster they can do it, the more benefits they can unlock – as one specific group of real-time data leaders from this research illustrate.

Business challenges and opportunities giving impetus to real-time data projects



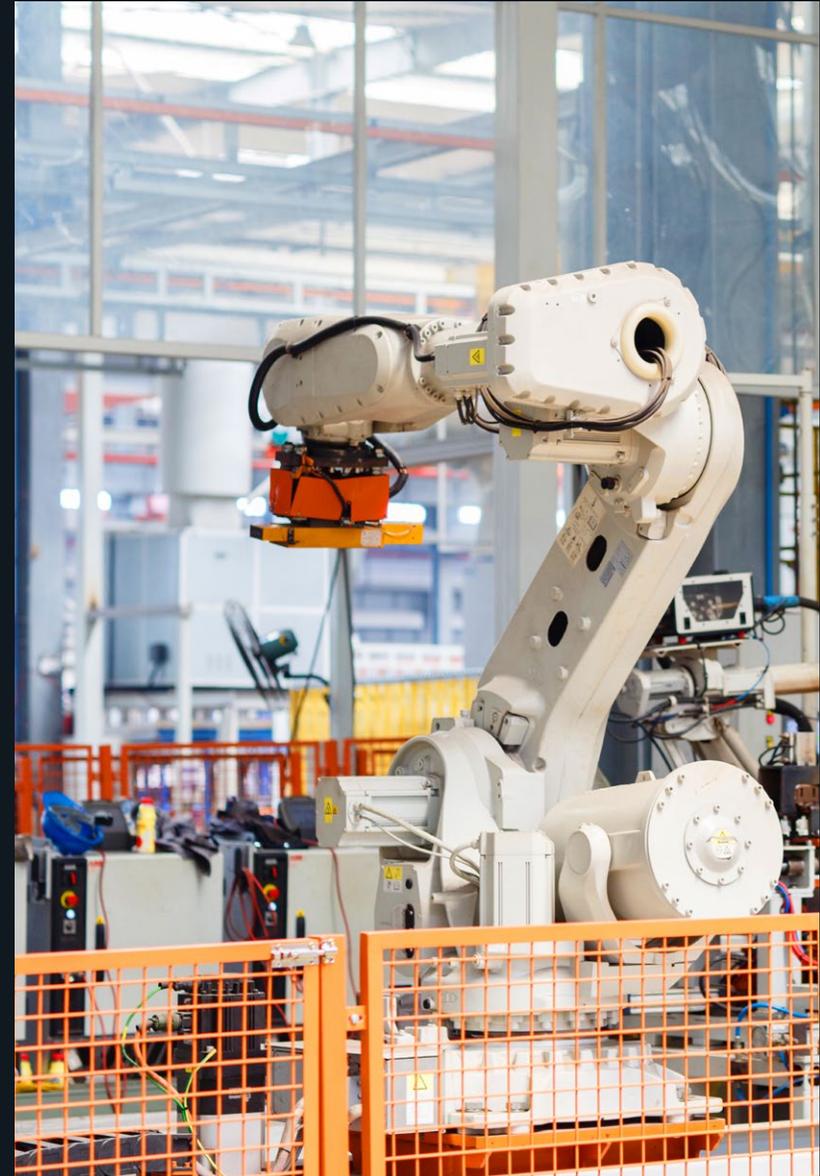
KEY TAKEAWAYS

We've moved from big data to fast data - you need to have the right technology in place to lead in the next decade

Over the past few years we've collated and collected petabytes of data. What will set the winners and losers apart in the next decade is how quickly you can process the data you have.

The leaders of the pack know this, and they've already entered the era of fast data. They know that being able to utilize and respond to this data quickly and meaningfully will be a competitive differentiator that will define who leads the way.

You have to ensure they have the technology and the right partners to handle this. Because if you can't handle fast data, you'll lose out.





DATA LEADERS

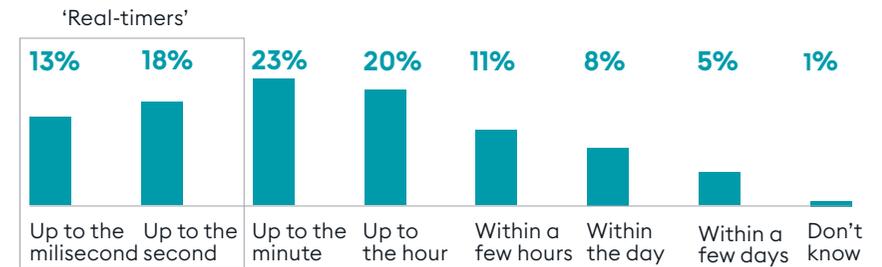
From speed to competitive advantage

The faster you can use data, the more gains you can make – as illustrated by the 31% of ‘data leaders’ in our survey who currently view ‘real-time’ as meaning ‘the ability to use data up to the second or millisecond’.

These real-time data leaders are:

- More likely to already be using data to a large extent to make business decisions (62% versus 48% in total).
- More likely to recognise that being able to access real-time data to make smarter business decisions is very important (76% versus 64% in total).
- More likely to feel well prepared with their current tools and resources to take advantage of real time data (64% versus 52% in total).
- And they’re even more likely (57% vs 47% in total) to feel they need real-time intelligence to tackle competitive pressures, suggesting they’re actively using data to win in their market.

Immediacy of data in order to qualify as ‘real-time’

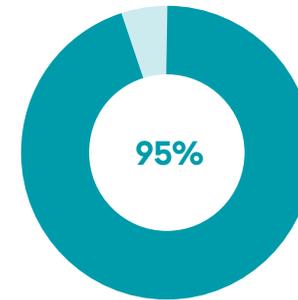


Real time data leaders are most likely to work in telecoms (44%), manufacturing (25%) and retail (32%). These leaders can be found fairly equally across business sizes - but American organizations are more likely to be data leaders (36%) than their British counterparts.

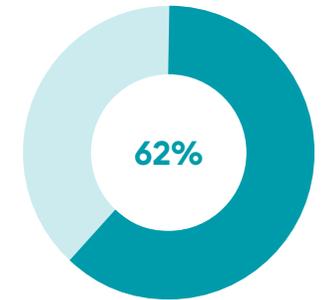
Greater usage goes hand in hand with data sophistication in other ways, too. Those businesses who report using data to a large extent in their business are also more likely to use data to predict the future, with 56% saying they regularly use it as a resource to predict the future. And 95% of those using data to a large extent see themselves investing more in real-time analytics and streaming, compared to just 62% only using data to a small extent.

But as the relatively small percentage of data leaders reflects, achieving this ideal state – and the ability to process and respond to data at speed for continuous business intelligence – isn't easy for most. There are cultural, technological and challenges to overcome first, and these must be tackled if businesses are going to thrive in the world of fast data.

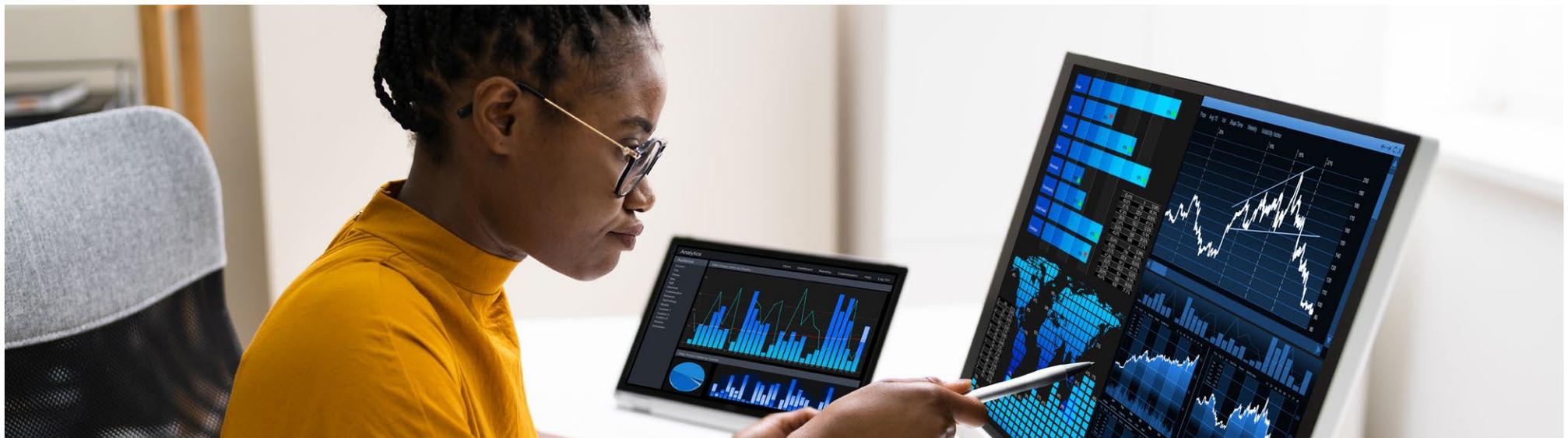
% expecting to increase investment in real-time analytics and streaming



Those who use data to a large extent



Those who use data to a small extent





KEY TAKEAWAYS

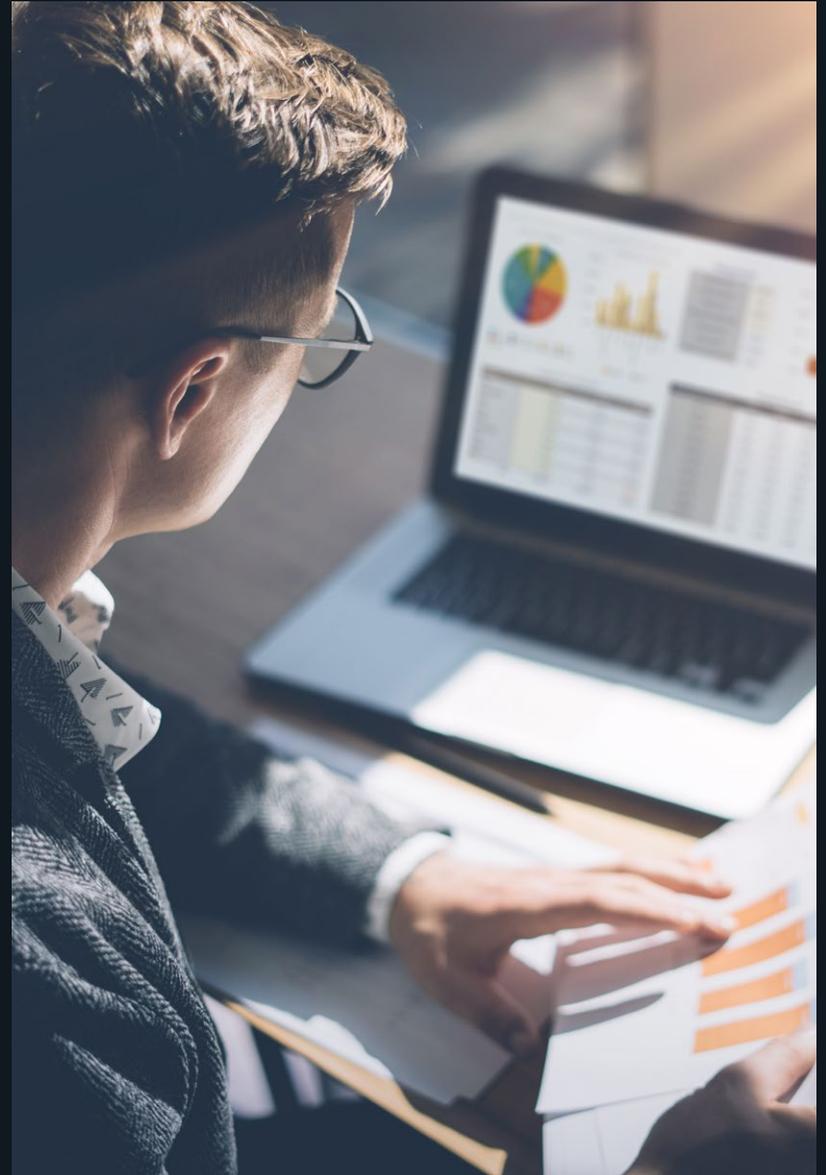
Consider how you can use data more widely and faster to gain your competitive advantage

Data leaders who use data up to the second or millisecond are better placed to succeed - and they're planning to increase this investment to boost their real-time analytics and streaming capabilities.

Speed is clearly key to success, and the more you can use data to inform decision making, the more value you will realize from it.

The data leaders are quickly learning this - and if you currently view real-time as a second or longer, then your organisation may benefit by thinking faster when it comes to real-time data analytics.

As the findings show, making faster decisions can deliver greater operational performance and competitive advantage.





DATA CHALLENGES

Overcome roadblocks to become a data leader

There are numerous ways businesses can create the conditions for real-time intelligence. But there are also challenges along the way – so businesses should consider how they plan to tackle these, even as they eye up the opportunities real-time intelligence brings.

Creating the conditions for real-time intelligence

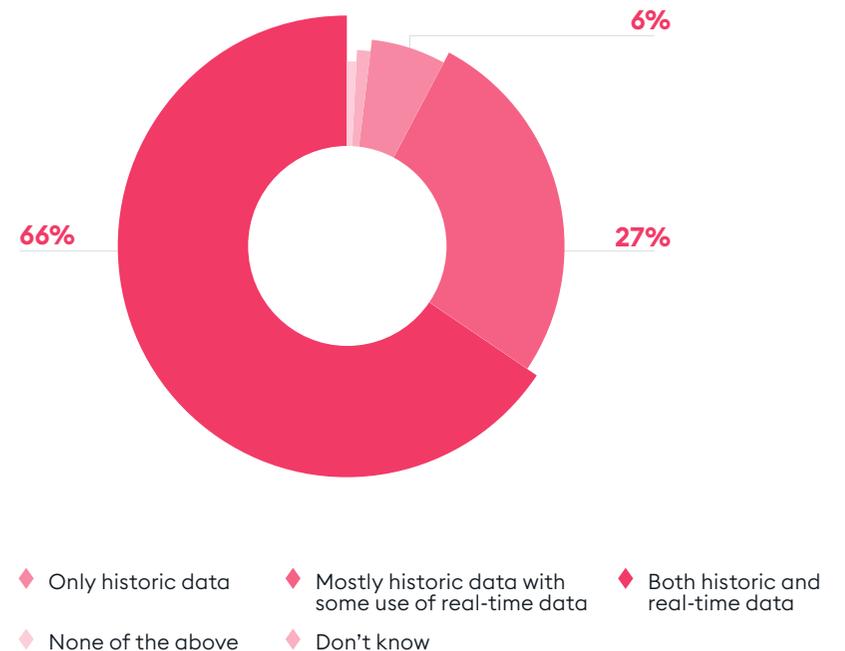
According to the businesses we surveyed, these challenges can be overcome in numerous ways. Such as:

Combine real-time and historic data

A big challenge for businesses is ensuring that fresh insight and hard-won wisdom can be combined effectively. To create true business intelligence, the value of real-time data should be combined with the context of historic data. As it stands, 66% use a mixture of both to guide their decision making.

Retail (81%) and manufacturing (73%) lead the pack in terms of combining historic and real time data. Marketing are by far the most likely to use primarily historic data with some real-time input (57%), suggested marketers could value from faster processing of insight.

Data used to make business decisions

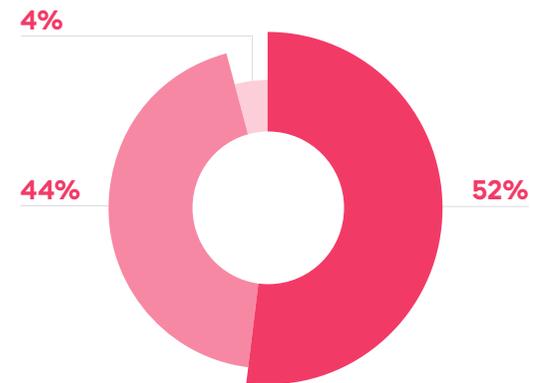


Invest in the right tools

Without the right tools, analytics systems or platforms to support their business intelligence goals, businesses have little chance of success. Almost half (48%) feel their current tools only make them somewhat prepared (44%) or not prepared at all (4%) to take advantage of real-time data to drive decisions. The utilities industry is currently best place to succeed through its tools, with 69% saying they're well prepared – but only 47% in healthcare feel the same.

Given the volumes of data businesses are working with, technology is fundamental to achieving any sort of insight – so for many, there's work to be done here. Cloud-based solutions should be a particular consideration, offering the scale, flexibility and agility required to respond to any data deluge quickly.

How prepared businesses are with its current tools/resources to take advantage of real-time data analysis to drive decisions



◆ Well prepared ◆ Somewhat prepared ◆ Not prepared



— Empower every employee and every function

For the businesses in our survey who aren't currently using data to a large extent, the absence of the right people or skill sets to manage data effectively is a big problem; 49% identify this as an issue. And in some industries, like automotive, this spirals even higher: 70% say that having the right skill set or people is an obstacle to driving smarter decision maker.

There are also issues more broadly around who has the skills and access to use data to inform decision making. Unsurprisingly, data specialists (including research and development) are the most likely to be data-led (56%). Finance follows close behind (51%), with sales and marketing in third place.

In terms of how broadly data is used across the business, telecoms have the best track record: 89% say business data is being used more by broader, more diverse groups across their organizations. C-suite telecoms leaders are also more likely to be perceived as data led (51%, compared to 36% on average.)

But executive leaders and the c-suite are significantly less likely to be perceived as data driven. Given this group's influence in overall decision making, data teams should work to identify the operational and performance gains on offer; this will help to bring the c-suite on the journey.



➤ **Having the people or skill sets needed to manage data analytics is the second biggest barrier (49%) to using data more efficiently - close behind having the technology needed to effectively capture data (50%)**

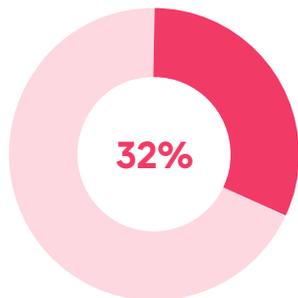


Foster data reverence

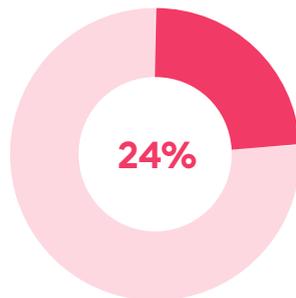
Two thirds of businesses agree that their data challenges are more about the culture of their business, than the data and data tools they use. While some (32%) believe that data always wins the argument when they're making big decisions, others (24%) say that 'gut feel' or even internal politics always win the day. For oil and gas, this is even higher, at 35%. The latter approach could leave businesses exposed to poor decisions that could easily be avoided.



% who strongly agree that...



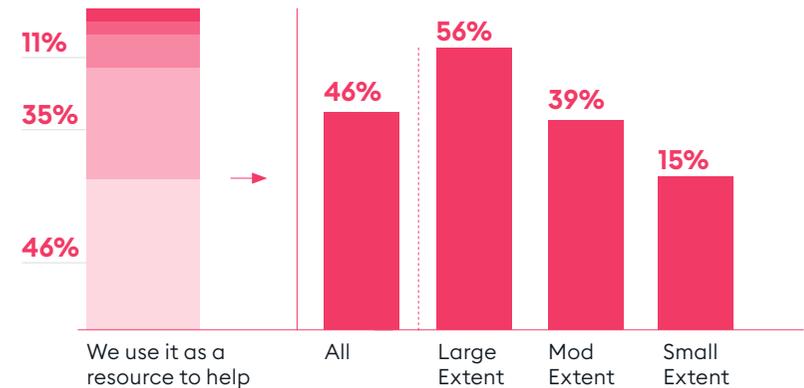
Data wins the argument in our business every time



Gut feel and politics are more likely to prevail over objective data analytics in our organization

The use of data in predicting future business outcomes

"We use data regularly as a resource to help us predict the future" – cut by those who use data in their organisation to a large, moderate and small extent



We use it as a resource to help us predict future outcomes for the business

- ◆ Don't do this and don't plan to
- ◆ Do this occasionally
- ◆ Don't do this but plan to
- ◆ Do this regularly
- ◆ Do this rarely

Beginning the journey: invest to become a data leader

As data leaders are already proving, real-time capabilities offer serious benefits. So it's no surprise that other organizations are keen to unlock data insight. Eight in ten (78%) businesses agree that:

➤ Real time data and insights create a competitive advantage for a business in our market

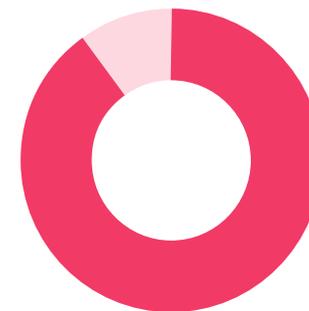
In today's world, the ability to process real-time data and receive insight as speed isn't just a nice-to-have. It's a key competitive differentiator, and could make the difference between simply getting by, or being in pole position to race ahead.

Even for those who don't need to operate at the sub-second level, the fact remains that all data is created in real-time – and the more businesses can shorten the time it takes to process the data, the more opportunities they'll win.

So – what needs to happen first, to move businesses forward? The vast majority (90%) agree that they need to increase investment in real-time data management and analytics systems in order to remain competitive.

Fortunately, this is a natural place to start. With the right

technology in place to respond to data quickly, other challenges (like a lack of data reverence) can soon be overcome as the business sees the value being unleashed. Likewise, choosing tools that are user friendly can help to overcome barriers around skills within the organization. Working with the right partner to establish the appropriate tools and technology is the obvious step.



90%
agree that they need to increase investment in real-time data management and analytics systems in order to remain competitive



KEY TAKEAWAYS

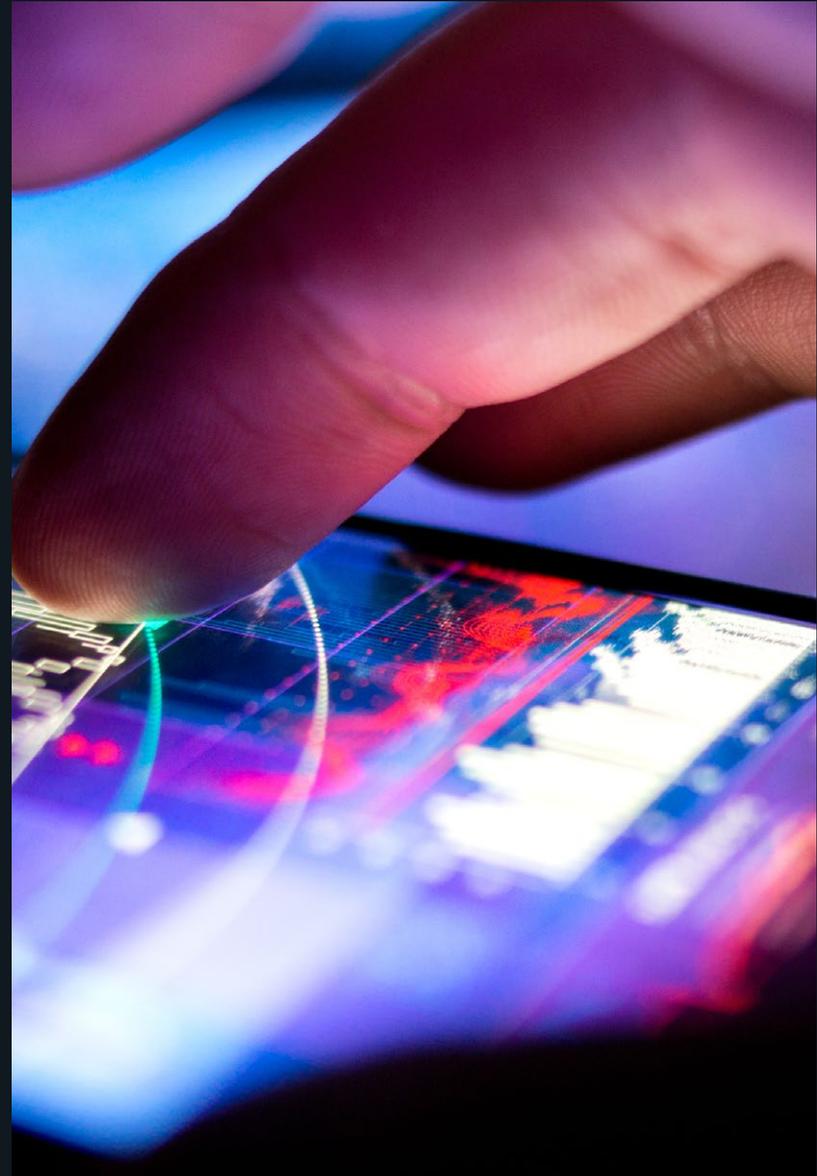
Be aware of any skills gap and ensure colleagues have access to the right software and systems

A large majority of businesses still aren't well-prepared when it comes to utilising real-time data to their advantage.

The biggest reason why lies in a lack of skill-sets or the right people at the company that can not only drive the real-time agenda forward, but are also trained and knowledgeable to spot these data opportunities.

Confusion still remains around who is using data and how. And what's clear is that not everyone is empowered to use it in the same way or to full effect. While in the minority - still too many businesses are ruled by gut-feel and politics when it comes to who leads on data.

Clearly, if businesses are to become data leaders, you have to look at ways in which data is understood across your business, that training is at the forefront and that you have the right tools in place to succeed.



CONCLUSION

Shifting the dial towards real-time continuous intelligence

The time for a mindset shift is now. Every business' journey towards real-time analytics will look different, and will require expert consultation to ensure success. But these five guiding principles, based on our research, can offer a starting point.

Five steps to Continuous Actionable Intelligence

01

Focus on understanding and managing the speed at which data is hitting the business as much as the volume

04

Democratize access to the right tools and training; data literacy should be shot through the organization

02

Challenge yourself to think faster when making decisions based on insights from analytics

05

Follow the data leaders, what can you learn from those already adopting a Microsecond Mindset?



03

Audit the software stack; are there barriers preventing historic and real-time data combining effectively?



Continual business intelligence can guide smarter decision making, generate efficiencies at scale, and power growth, all of which is high on the agenda for businesses in a post-Covid world.

And as the respondents in our research illustrate, the more sophisticated and closer to real-time your data analysis becomes, the more benefits can be unlocked. Not every business needs micro-second real-time capabilities, but every business can benefit from responding to changes in minutes, rather than months.

With that in mind, businesses should start considering how they can take advantage. First, they need to invest in the right technology platforms. Combined with the right training, a new culture of data can flourish – moving towards a world in which everyone across the organization both respect data, and can wield its power comfortably.

If you can manage that, organisations can foster a real time data leader culture, leading to a thriving business environment built on real-time continuous intelligence.



Ready to take advantage of real-time?

Download [5 Steps to a Microsecond Mindset](#) and learn how to approach real-time data analytics to harness the value of continuous intelligence.



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