2021 Global data management research

Rapid change in a global pandemic impacts data perception and usage
Methodology

Experian conducted a survey to look at global trends in data management. This study looks at how data practitioners and data-driven business leaders are building data resilience to weather the COVID-19 pandemic.

Produced by Insight Avenue for Experian in November 2020, the study surveyed more than 700 people across three countries: The United States, the United Kingdom, and Brazil. As for roles, we surveyed C-suite executives, directors, and managers sitting in departments like IT, data, operations, finance, customer service, and more.
The data-informed organization, a transformation in progress

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“Strong customer interactions are dependent on trusted data and our ability to serve that data when needed.”

Andrew Abraham
Global Managing Director
Data Quality, Experian

Report highlights

**Section 1: Rapid transformation**

In rapidly changing times, learn what businesses are prioritizing, why digital transformation is top-of-mind, and how data is being used for good.

**Section 2: Was the data ready?**

Data has always been on the to-do list, but now learn how poor-quality data has impacted your ability to be agile.

**Section 3: Preparing for what’s ahead**

Data is more important than ever before. Learn what you can do today to prepare for the future.
Executive summary

For all business leaders, this past year has been a time of unprecedented challenge. When we have time to draw breath and look back on what we have collectively achieved in the circumstances, I think we can be rightly proud.

But we will also be highly conscious of preparing for the future. Experian’s annual global data management survey shows that data played a huge part in protecting peoples’ livelihoods and businesses are determined to protect, understand, and improve it further in the years to come.

The numbers in the survey speak for themselves, but I will highlight just one here: Ninety-three percent of companies had data management issues as a result of the pandemic. With enormous consumer behavioral changes and supply chains impacted across virtually every industry, there has been a massive need for digital transformation to support online shopping, digital experiences, and remote fulfilment.

An equal amount of strain has been placed on our underlying data and processes. Strong customer interactions are dependent on trusted data and our ability to serve that data when needed. From the efficiency of the customer experience online to the data that helps us analyze markets and attitudes changing at a dizzying pace, the right data has become indispensable.

There’s no doubt the COVID-19 crisis has tested our mettle. However, the pandemic has also been a catalyst for positive change. I see this in two main areas.

Firstly, our respondents are optimistic that agile data management is the key to building data resilience to secure their future. They believe investing in data management initiatives today will help them through the next crisis.

More importantly, we have also seen a large upswing in the data for good movement—the sharing of data for community and humanitarian purposes. We see that business leaders want to explore how they can use data to help solve societal problems, and to help those who have lost employment to acquire data skills to help them back into work.

We are all having to find new ways of working. However, many organizations will be unable to meet new demands without quality, actionable data. While that has been the case for many years, our research clearly shows that this problem has only become more acute with the global crisis. My hope is that we can take time to reflect on what we have learned and take meaningful action today to ensure future agility for ourselves, our customers, and our societies.

Andrew Abraham
Global Managing Director
Data Quality, Experian
Section 1: Rapid transformation

In the past year, we have seen more accelerated change than ever before. That change brought about rapid business transformation. Priorities, which have been top of mind for years, were suddenly accelerated to cope with the impact of the pandemic.

This rapid transformation made businesses focus on digital transformation and deeper customer insights, which were required to enable new types of customer interaction. As business priorities shifted, so did the projects needed to support those objectives.

Current business priorities

Over the last few years, we have asked about top business priorities. Once again, customer experience and data security are at the top of responses, which is not surprising given the current environment. However, what is required to support those two priorities has changed dramatically.

Our study finds that 75 percent of respondents say they have seen a dramatic change in their customer’s behavior during the pandemic. As countries locked down, consumers changed buying patterns and moved to eCommerce and online experiences. Many consumers struggled to find essential items. The types of purchases being made echoed patterns few could have predicted. These changes resulted in a more rapid adoption of digital transformation to shopping and marketing channels, as well as significant changes in supply chain and logistics processes. Fulfillment became a problem for many industry verticals.

Data security also remains top of mind. With more digital interaction points and employees working remotely, new weaknesses were exposed in security. Technical teams had to work quickly to fill these gaps, especially as remote working has now been in place much longer than initially predicted.

Other priorities listed on our survey included workforce management, business resiliency, cost efficiencies, and risk reduction. In the past year, businesses have focused heavily on retaining customers, keeping their business secure, managing their talent, and operating as efficiently as possible.

While these priorities are not much different than previous years, the pandemic and push to digital transformation forced many to look at data far more heavily than they had in the past. Organizations needed to react in real-time to the changes being presented by the consumer. While much more data was collected through online channels, few were ready to manage the speed at which decisions had to be made.

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Rapid change in a global pandemic impacts data perception and usage

Acceleration of digital transformation

The pandemic has expedited digital transformation across all industries. Businesses are relying on digital channels for customer interaction, but also digital channels for nearly every aspect of their operations. To effectively drive these digitized efforts, businesses need data.

Our study found that 72 percent say an acceleration to digital transformation has made their business more reliant on data and data insights. On the other hand, 67 percent say COVID-19 has accelerated many of their data initiatives. The need for a data-driven digital operation has made companies realize how mature their data functions are.

84% of respondents say there has been more demand for data insights in their organizations with COVID-19.
Most companies did not need to start net-new data initiatives. For many, projects around data have been in the pipeline for years but lacked the priority to move forward. For instance, moving data to the cloud became a top priority this year.

A higher demand for data means a need for more investment in staffing and hiring talent with expertise in both data and data management tools. This also calls for more automated processes, the right technology, and data literacy programs. Trustworthy data, managed by sophisticated data systems and support for data literacy programs, facilitates the transition to a highly digital operation.

With this shift to digital and an increased reliance on data, we find more individuals across the organization are interested in reliable data insight. Eighty-four percent of respondents say there has been more demand for data insights in their organizations with COVID-19. When data is democratized across the business, data-driven decisioning can continue to grow.

A defining moment—data for good

The pandemic has brought about usage of data in new ways. Consider how many politicians and public officials in the last year reference data daily. Data has played a critical role in assisting many in fighting this deadly disease and trying to determine the right response. Data is clearly being used for good.

The pandemic has inspired a broader use of data for overall societal good. Seventy-eight percent of respondents say COVID-19 is a defining moment for organizations to set up and use data for societal good where they can. Many organizations found ways to leverage data assets to assist public health and safety officials in combating this terrible disease.

However, we believe that using data for good goes far beyond the pandemic. The research finds that 86 percent of leaders are interested in ‘data for good.’ Most notably this could mean increasing collaboration with other organizations to better support those in need. It can also be sharing talent and resources to develop or deliver data products for societal good, providing training, tools, or opportunities to those who have lost employment, or allowing data staff time to spend on voluntary projects.

Our study uncovered 77 percent of respondents say that in the wake of the pandemic, they would like to be able to use their data in some way for societal good.

“From the efficiency of the customer experience online to the data that helps us analyze markets and attitudes changing at a dizzying pace, the right data has become indispensable.”

- Andrew Abraham, Global Managing Director Data Quality, Experian
Interest in using “data for good”

- Increasing collaboration with other organizations to better support those in need: 37%
- Sharing data talent to develop or deliver data products for societal good: 35%
- Providing data training, tools or opportunities to those who have lost employment due to COVID-19: 31%
- Allowing our data staff time to spend on voluntary projects (including applying big data to real-world problems): 29%
- Sharing data with non-profit organizations or government agencies: 28%
- Providing data tools or methodologies for free or subsidized amount for non-profit organizations or Government agencies: 27%
- We aren’t interested: 8%
- Don’t know: 6%
Section 2: Was the data ready?

While becoming data-driven can provide a multitude of benefits for organizations—from an improved customer experience to better decision-making to increased innovation—many organizations still struggle to leverage data to achieve a competitive advantage.

While many industries had been preparing for some type of recession, few predicted a global pandemic. The impact to workforces and drastic changes to consumer behavior were unlike anything leaders had ever seen. However, as we discussed, such rapid change pushed many to rely on data more heavily. The underlying question we wanted to explore in our survey was if the data was ready for the challenge.

Current levels of data quality and maturity

For many years, we have looked at the maturity level of data quality. Our hope was that this maturity level had increased to handle the new demands and desire for insight. Unfortunately for many, levels of quality data fall short. Fifty-five percent of business leaders say they lack trust in their data assets, hurting their ability to be fully data driven.

The level of inaccurate data is high and has remained high for the past five years of this study. Organizations believe about a third of their customer and prospect data is inaccurate in some way. In addition, only 50 percent believe their CRM/ERP data is clean and can be fully leveraged, which has not changed since last year’s survey.

The level of trust in data exhibited by our respondents differs depending on the data quality approaches they have taken. Institutions with the highest level of data quality maturity—those who have clear data ownership and where data quality is monitored as part of their standard business practices—trust their data. Organizations with lower data quality maturity—those with little data ownership and only ad hoc approaches to data quality—often lack trust in their data.

However, organizations are optimistic about their data quality. Sixty-three percent believe the overall quality of the data in their organization has improved in the last 12 months. Furthermore, 32 percent say their data’s quality has stayed the same, and only 5 percent think it got worse.

Despite the confidence, most organizations don’t find themselves with a data-driven culture yet. A lack of data quality maturity significantly impacts the ability for businesses to effectively leverage data insights for daily operations, digital transformation, market segmentation, and much more. Not surprisingly, poor quality insights also create more challenges, continuing the lack of trust in data within a business.
Poor data provided real costs to struggling organizations

Poor quality data negatively impacts organizations across industries, regardless of their maturity. While data can be inaccurate for a wide variety of reasons, such as human error or natural data decay, the impact is the same. We find 95 percent of businesses have seen impacts related to poor data quality.

Respondents of our survey indicated poor quality data damages the reliability of analytics (36%), negatively affects customer experience (32%), and negatively impacts reputation and customer trust (32%). It’s important to remember these challenges are difficult to overcome in any economy, but especially one facing a pandemic.

Across the board, more than half of our respondents say their organizations lack the skills and resources required to fully leverage their data assets. Furthermore, 62 percent agree that a lack of basic data literacy skills impact the value they get from their investment and technology.

Businesses are recognizing the value of their data more than before the pandemic. Untrustworthy data, backed by a lack of DataOps and data literacy, is slowing operations down, resulting in real costs—an inconsistent brand experience, decreasing bottom line, and a lack of resilience.
Inability to be agile

The biggest challenge for businesses during the pandemic has been their inability to be agile—to be able to quickly pivot and act on decisions around the market, digital strategy, and operational tactics. While 84 percent experienced greater demand for data insights, 62 percent admit that a lack of agility in data processes hurt their response to changing business needs.

When faced with the need to drive change related to data processes and management, 40 percent were able to identify the changes needed for their practices but could not easily adjust, 39 percent rapidly adjusted in an agile fashion, and the remainder made minimal changes. The higher a business ranked in terms of data quality maturity, the more likely they were to be able to make rapid adjustments. However, there are noticeable challenges as businesses undertake these changes.

Given the low level of data quality maturity, it is not surprising that many businesses’ data was not ready to handle the stress of the global pandemic. For years, we have seen organizations operating with a high degree of inaccurate information and legacy data management practices, which had an impact on business agility.

Most businesses we surveyed experienced challenges around their data management processes. Technology, skills, and data quality challenges have been the biggest barriers to making changes to these processes during the pandemic.

37% of business leaders reported technology challenges including a lack of tech, tech was too complex to change, or issues integrating with other systems.

35% reported skills changes including a lack of experience, shortage of specialist skills, or lack of data literacy.

34% reported data quality challenges.

As our global economy continues to shift, it’s important to have the flexibility to effectively and efficiently redirect strategies to sustain growth in uncertain times.

How bringing agility to data initiatives

- Implementing new tooling that is more user friendly: 35%
- Gathering consistent feedback from internal stakeholders: 33%
- Bringing agile development practices to data: 32%
- Hired more data staffing and resources: 32%
- New reports and dashboards: 31%
- Treating data pipelines and processes as a product: 29%
- Implemented a DataOps program into our business: 27%
- Created a CDO office to better connect the business with data: 25%
- None of the above: 5%
Hindsight is 2020

Looking back, many businesses may not have recognized their data’s full potential before the pandemic. Although organizations may have been on track to become data driven, 72 percent say better data insight could have helped improve the response to the pandemic and they recognize the value of their data now, more than before the pandemic.

The value of accurate data is especially important given the shifting consumer behaviors and desperate need for digital operations. Businesses with established digital outlets ahead of the pandemic, were impacted less than those that did not.

Data-driven organizations have an advantage as they face the economic challenges, so now others are getting on board. We find that 74 percent say business users are taking more responsibility for data quality than before the pandemic. It is clear that for many, an overhaul of data practices will be required to handle the current challenges as well as any future business interruptions.

72% say better data insight could have helped improve the response to the pandemic.
Section 3: Preparing for what’s ahead

Now that we have hindsight into 2020, we can prepare for the future. We saw from the pandemic that most organizations did not have the trusted data required for agile data practices. They were not able to leverage data and adapt to rapid market changes. This lack of agility uncovered cracks in legacy data systems, resources, and processes.

It’s time to fix those gaps. More robust data management practices that are built with modern techniques will be needed so, businesses are not only ready for the aftershock of the pandemic, but also future crises.

Urgent need for better data management

Now more than ever, data management should be top of mind. Over the next 6 months, 63 percent see data management initiatives becoming more urgent—and the reason is resilience. Nine out of ten businesses are focused on improving data management resilience to at least some degree over the next year.

Given the business priorities, we see three major areas where data needs to be applied to tackle current and future problems based on the findings. These include:

1. Deeper customer insight
   Customer experience is a top priority for many, and this year is no different. However, consumer behavior is shifting faster than ever before. Data-driven businesses have the insights to understand who their customers are and what they need. This is helpful when organizations capture more data from their eCommerce, POS, CRM, and other platforms and pivot strategies to meet their customer expectations—which is a bigger challenge when there is a lack of trusted data.

2. Collaborating for societal good
   Over three-quarters of respondents say that in the wake of the pandemic, they would like to be able to use their data in some way for societal good. Data for good allows organizations to come together in a variety of ways; for example, leveraging data to share talent and deliver public safety products, like contact tracing or vaccinations. This past year, we have all relied on valid data to better understand the scope of this pandemic and the economic burden we are facing on a global scale. Continuing these data-driven practices helps businesses and our society at large.

3. Investing in talent, skills, and tools
   To start data management practices now, a business needs the right talent, skills, and tools. This means hiring data professionals, like a chief data officer, to head these initiatives and train staff on data literacy. Providing such resources enables data experts and business users to effectively manage and analyze the right information to make business decisions. Setting this foundation will not only create business resilience now and in the future, but also set up an organization to rapidly transform with, or even ahead of, the market.
Investing in data management initiatives today will help businesses better weather the next crisis, say 77 percent of our respondents. To better tackle the problems outlined above, organizations are investing in several key areas of data management.

First, over half are looking to improve data quality. Given the lack of trust, many organizations cited in this study that it is good to see this as the top area for data management investment. Implementing or improving data governance is another area of focus given changing regulations and increasing data usage by a broader range of stakeholders within the business. Many organizations are also looking to automate and leverage machine learning to improve accuracy and reduce the need for manual intervention. Finally, we see many organizations moving their data infrastructure to the cloud to improve the speed at which improvements can be made, and better leverage the scale that cloud infrastructure provides.

Although these improvements—tacked onto hiring the right talent, implementing technology, and training data literacy skills—are not quick wins, businesses will be able to overcome the negative impact of this year and prepare for the future.

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77% of our respondents say investing in data management initiatives today will help businesses better weather the next crisis.
What will organizations need?

For many organizations that are lower on the data quality maturity curve, significant investment will need to be made in terms of data management. However, while technology certainly plays a role in making improvements, organizations also need to think about staffing, and agile ways of working to build the right team within the organization.

People

There has been speculation for many years around why organizations are suffering from the same data quality challenges that have persisted for what seems like decades. While there are many potential conclusions that can be reached, one area of focus in recent years has been around staffing.

Over the past several years, we have watched the journey of the chief data officer (CDO) very closely. This role was brought into the business to put more structure around the usage of data and promote collaboration across various departments. This is one of many roles that is now being hired specifically to provide focus on and address challenges around data.

Our research showed 85 percent of organizations are hiring data roles in the next six months. These roles could be data analysts, data quality analysts, data engineers, or data governance managers. While these roles are critical, there is another problem around people that must be addressed—data literacy.

Data is pervasively used across the business. In today’s environment, data insights are leveraged not just by IT and senior management, but by every call center representative, marketer, and sales representative. However, many of those individuals do not have the background or understanding of the data insights put in front of them to effectively leverage the analytics.

While data experts are essential, that expertise will be limited in what it can provide if business users lack data literacy skills. Seventy-four percent say data literacy is a core competence that all employees need to have in the next five years. Additionally, 62 percent say a lack of basic data literacy skills is impacting the value they get from their investment in data and technology. With a data literate workforce, a business is armed with talent that can make timely, data-driven decisions.

Technology

Technology has a critical role to play when it comes to modernizing data management practices. We find that 85 percent say sourcing more technology for staff is a priority. However, the right technology needs to be leveraged to ensure it is effective.

Microsoft Excel is still the most popular tool used for data. Although, a powerful tool, Microsoft Excel can limit agile data management practices. Microsoft Excel is a personal productivity tool, ill-suited to the needs of businesses expressed in the survey—automation, resilience, governance, repeatability.

While more sophisticated data management tools have existed in the market for years, many of those are also used poorly or in silos. Perhaps these tools are too technically focused, or individuals leveraging these tools don’t have access to the right data. It could also be a cost and licensing issue. Regardless, while these tools offer more data sophistication, they have to be leveraged by people who provide the necessary domain expertise to get the data in a trusted state.

It is critical that any new investment in technology be made in tools that provide user experiences for non-technical roles, automation for more manual processes, active suggestions for next best actions, and methods for collaboration across various user experiences.

For data to be leveraged by a broad range of people, data quality will have to become everyone’s responsibility. However, that will require both education and the right technology.

New ways of working: DataOps

This year businesses have struggled with a lack of agility when it comes to their data. We saw from the research that many businesses were not able to quickly adapt data practices to the changing needs of their business. However, there are some new practices in the market designed to help with that very challenge in the future.
DataOps—defined in this study as the automation and monitoring at all steps of data pipeline construction, from data integration, testing, releasing to deployment and infrastructure management—is an emerging practice that many businesses are looking to adopt. DataOps aims to shorten development cycles, increase deployment frequency, and create more dependable releases of data pipelines, in close alignment with business objectives.

This practice helps organizations adapt more quickly to changing conditions. In the survey, we asked respondents how they were looking to bring agility to their data initiatives moving forward. While some are certainly focused on more user-friendly tooling, others are looking to gain more feedback from internal stakeholders, to hire more staff, and to bring agility to development practices around data.

However, finding agility in data practices has been challenging for many business owners, especially during the pandemic. Almost two-thirds of cases say a lack of agility has hurt their response to a changing business. A fluctuating global economy and shifting consumer habits have forced businesses to frequently pivot strategies.

Although overall data sophistication is increasing, poor quality data impacts resources, reliability in analytics, and negatively affects customer experience, creating roadblocks to an agile operation and rapid transformation.

Getting back to basics
Organizations have identified a lack of trusted data within their systems. Before new initiatives complicate the issue, go back to basics—people, processes, and tools. To build resilience against future risk, invest in the right areas now to more quickly recognize a return on investment.

During the pandemic, businesses are struggling with a lack of technology, data quality, and skills. Data validation software verifies data at the point of capture and can automate the data cleansing process, ensuring data pipelines are squeaky clean with valuable insights. This will enable team members to analyze and manage valid data and streamline their time to focus on growth-building strategies.

Educating staff members, even the data experts, on data literacy skills ensures the return on investment on the data technology remains high. Despite the format of the data literacy program, users can understand the importance of data quality and data management. A data-literate staff leads to better decision-making, operational efficiency, and improved employee data confidence.

The right people, processes, and tools will not only help a business respond to the challenges they face in today’s environment, but also ensure a stable foundation of resilience to secure their future.

**People**

Our research shows 85 percent of organizations are hiring data roles in the next six months.

**Tech**

We find that 85 percent say sourcing more technology for staff is a priority.

**Data Ops**

Almost two-thirds of cases say a lack of agility has hurt their response to a changing business.

**Getting back to basics**

During the pandemic, businesses are struggling with a lack of technology, data quality, and skills.
Conclusion
This past year, we have been struck by a global health crisis causing economic instability. Major changes to consumer behavior, supply chains, and business models have forced businesses to innovate as they accelerate data initiatives to rapidly transform to the digital environment to meet consumer needs.

Leaders across the globe see the value data has today, more than before the pandemic, and have fast-tracked any data-driven initiatives to sustain the impact of the crisis. By realizing gaps in legacy data systems, businesses have a game plan to automate processes, govern quality data, and hire the right talent to continue high-quality data management.

Seeing data in a new light, businesses are using data for societal good through sharing insights or talent to help those in need and uphold public health safety. Likewise, data has also allowed businesses across all industries to stay engaged with their consumers and deliver a seamlessly remote experience through digital transformation.

Trustworthy data has provided businesses a stable foundation, even in economic distress. Building resilience on data can protect businesses now and in the future. Today is the day to be data driven.

Key learnings
Across this report, we have looked at key trends around data usage and management; we have provided insight on how organizations can tackle the tasks in front of them and prepare for the future through high-quality data. Here are a few of the key findings from the report:

Learning 1
Accelerating digital
Digital transformation is essential as the global health crisis continues. Rely on high-quality data to prepare your business for the future.

Learning 2
Investing in data
Now, more than ever before, is the time to invest in your data. With the right people, processes, and tools, you can ensure your data is always ready for action.

Learning 3
Doing good with data
Data is being used for societal good. In a time of crisis, build bridges with other companies by sharing insights, data talent, and more.

Learning 4
Preparing for the future
It’s time to prepare for what’s ahead. Make sure to leverage the right information, with the right tools and processes, to sustain negative impact of COVID-19.
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