White paper

Data democratization:

How a data-driven culture is key to organizational success

Methodology

Experian conducted a survey to look at data usage, operations, and data literacy trends in the United States. This study looks at how organizations are making data available more broadly and the impact of a data-driven culture on organizational success.

Produced by Insight Avenue for Experian in April 2020, the study surveyed more than 500 people across the U. S. Organizations that were surveyed came from a variety of industries, including finance, IT, business services, health, manufacturing, retail organizations, and more. As for roles, we surveyed C-suite executives, directors, and managers sitting in departments like IT, data, operations, finance, customer service, and more.

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1. Introduction

This past spring, the world changed. While the global pandemic initially started as a health crisis, it quickly impacted more of our daily lives than many of us ever thought possible. Every decision we make as individuals and as a business has been impacted by health concerns, the constricting economy, and changes in consumer behavior.

Digital transformation accelerated at a rapid pace these past few months. Consumer shopping and overall behavior has moved online, organizations have had to adapt to remote workforces, and less is being done in person to mitigate health concerns. This has left many businesses reeling.

Data is vital to digital transformation. As employees have fewer in-person interactions and move at a faster pace, data is needed to understand the consumer, better ensure positive experiences, streamline operations, and empower employees in a challenging work environment. As we adjust to this new way of doing business, one thing is certain; data is not going away, if anything, it has become even more valuable.

Unfortunately, data is an asset that has often been for the few, not the many. Data practitioners and key executives often review dashboards and analytics, but few organizations have empowered a wider range of staff to leverage data and even fewer have teams that would be considered data literate. This makes a rapid shift to digital more difficult. Few colleagues can read, understand, and argue with the data that is presented to them.

Luckily, we started to see a shift before the pandemic to data democratization. This is a concept where more individuals have access to and can leverage data as part of their daily operations. That is underpinned by the concepts of data literacy and DataOps, which allow staff members to be educated around data and move quickly to iterate on data pipelines and processes. These new trends, when leveraged properly, can help organizations maximize the power of their data for a host of business practices. While these concepts are still in their infancy, they have the potential to drive great impact in the coming years.

This research will demonstrate how organizations today are working on data democratization, the challenges that arise when driving enterprise-wide data accessibility, and how DataOps and data literacy are essential components to creating a holistic data-driven culture.

Key findings

81%

say data democratization is a key initiative over the next 12 months.

85%

say DataOps and data literacy are essential to achieving data democratization.

87%

say data insight is essential to managing the customer experience and operational efficiency in the digital environment.

72%

say staff members often don't realize they are creating or using data in daily operations.

81%

say a lack of data literacy hurts their ability to meet key business objectives.

50%

consider that they have started a data literacy program.

To better take advantage of digital routes to market, **organizations need to better leverage accurate data insights and empower data literacy** across all levels of the business.

2. Democratizing data

To efficiently and more intelligently operate in the digital environment, stakeholders at all levels need data insights to better execute their responsibilities. Enter data democratization. For our study, we defined data democratization as the process of making data and insights accessible to a wider range of roles within a business.

We see that most organizations view data democratization as critically important. Four out of five businesses say data democratization is a key initiative over the next 12 months. Fortunately, 57 percent of business leaders are already underway with data democratization. This means many are already thinking about how to leverage insights across a wider stakeholder group.

The level of maturity around those initiatives varies widely and it is important to keep in mind this is not an easy endeavor. However, providing data insight to a wider stakeholder group is essential to managing the customer experience and operational efficiency.

Over half of business leaders are already underway with data democratization.

The justification for data democratization

Over half of businesses are moving forward with data democratization not because it is easy or nice to have, but because it is essential to succeeding in today's market. Eighty-seven percent of respondents say data insight is essential to managing the customer experience and operational efficiency in the digital environment.

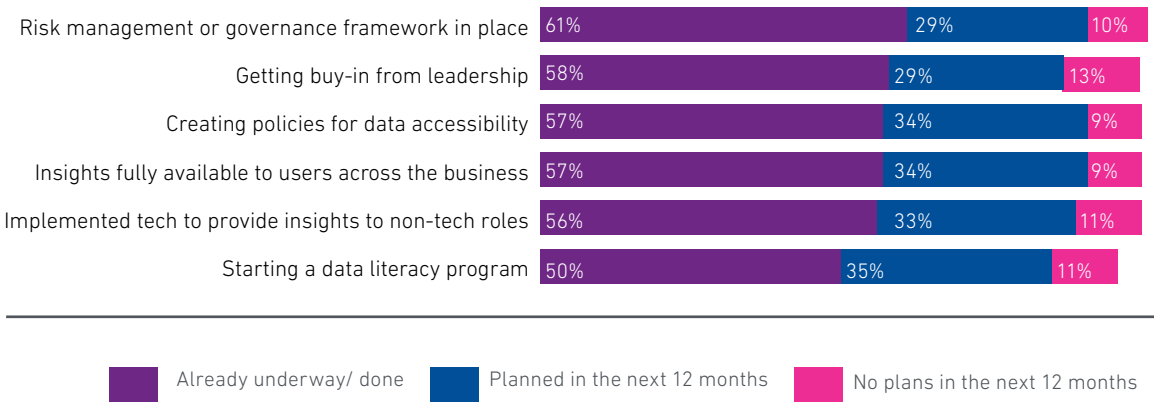
Employees can and need to get better at leveraging data insight. While it would be nice if this applied to only one particular discipline, our research shows that all functions could be better about using data including, data professionals (91%), customer-facing staff (88%), compliance (88%), and IT professionals (88%).

There are several key benefits to getting more employees across the business to properly leverage data. Those include better and faster decision-making, improved operational efficiency, better customer experience, and more empowered employees. And for those businesses already going through data democratization, almost all are seeing some degree of these benefits.

Data democratization is only becoming more essential with the current global crisis. Nine out of ten businesses say data democratization is more important than ever when large numbers of employees are working from home.

86% say almost every employee across the business should be using data insights to improve their performance.

Progress with data democratization



Where democratization has an impact

As we mentioned previously, the level of maturity around data democratization varies widely depending on the organization and the program. However, we do see some common areas where data democratization is having an impact.

Over half are starting with risk management or a data governance framework. This is not surprising given the increasing number of data regulations that can impact a wide range of business practices. Compliance and risk often drive new data and analytics initiatives within an organization.

However, there are other areas where data democratization is having an impact. Fifty-eight percent are using data to get buy-in from leadership and 57 percent are leveraging data to create policies for data accessibility or to make data fully available to users across the business. We also see organizations starting data literacy programs as part of this effort, but more on this topic a bit later in the study.

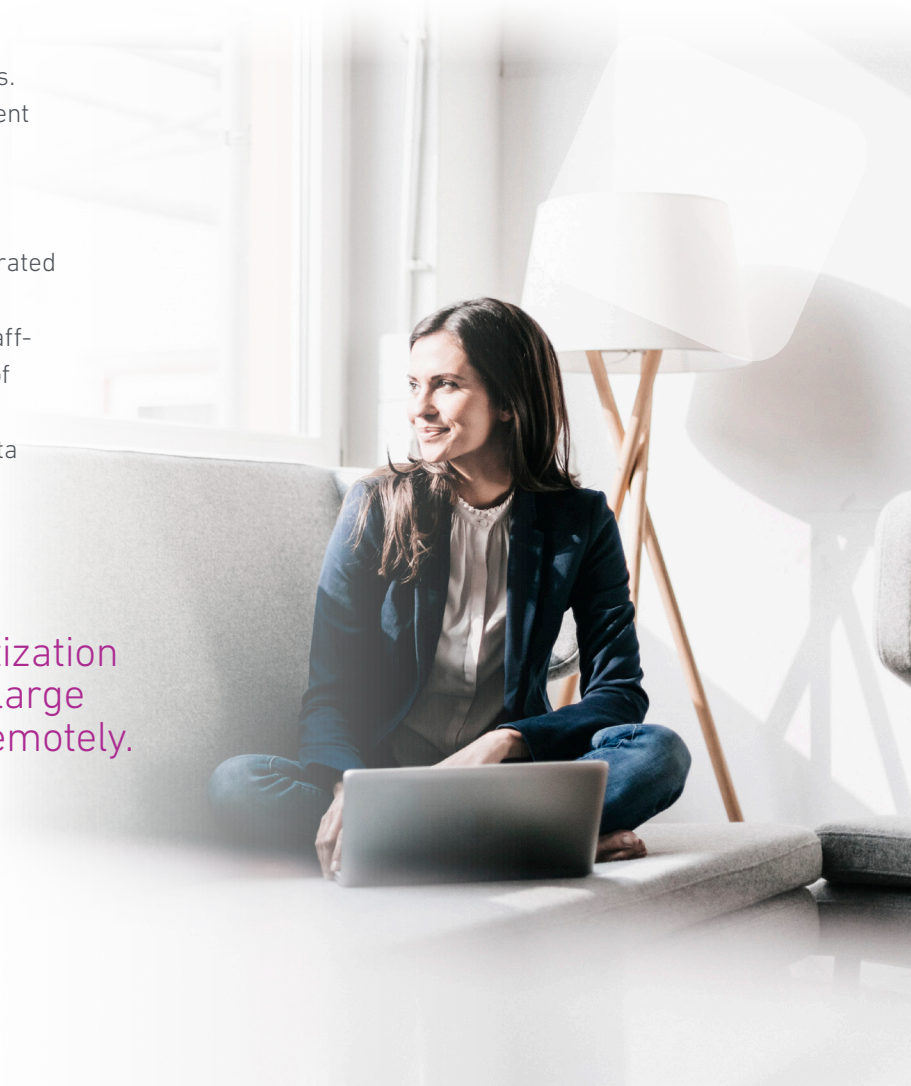
For data democratization to work, insights need to be put into the hands of more people across the business. Depending on the organization, there are many different techniques to accomplishing this task, and much of it depends on how the business is organized and the resources available. We see from the research that insights are provided by leadership, reports are generated at specific times, end users have direct access to business intelligence or analytics tools, and finally staff-wide meetings distribute data intelligence. The level of effectiveness of each of these tasks can vary, but it is encouraging to see the effort being made to share data insight with more members across staff.

The devil is in the details

While it sounds great to say organizations are going to provide data insights to more individuals and democratize data, it is important to remember that many businesses face challenges leveraging data. Companies are behind in terms of their data management practices and many staff members are not trained to leverage and understand data insight.

Even with a strong recognition of the importance of leveraging data, our research finds that 62 percent of companies still do not operate with agility when it comes to data operations. In addition, 61 percent say that they struggle to build a data-driven culture.

Driving cultural change is difficult, but it can be even more challenging with so many employees working remotely. Eighty-nine percent of companies see challenges when adopting data democratization.



Nine out of ten say data democratization is more important than ever with large numbers of employees working remotely.

When it comes to challenges related to data democracy, we see several emerging trends:

1. **A lack of trusted data or data quality.**
Data quality has been an issue for years. Poor investment in data management, changing data usage, and a high volume of data have made it difficult for organizations to keep up. Even for a mature data organization, where there is clear ownership of data across data practitioners and a basic understanding of where the insights are coming from and how they are being used, there are challenges with data quality.

While data practitioners may understand these challenges and be able to work around them to still leverage data insights, the average employee does not always have the base knowledge or ability to fix data. In addition, if they lack trust in information, they are more likely to rely on a gut instinct rather than allowing data to drive their decision-making.

2. **End users lack expertise in using data insights.**
Even if trusted data is being provided to staff members, it needs to be served in an actionable and easy-to-understand fashion. Sending employees spreadsheets of high-level data or pivot tables is not necessarily going to result in them taking the next best action. There needs to be a good deal of training around data literacy, which many businesses are only just starting.

3. **A lack of budget and data access.**
Many of these data democratization programs are underfunded, which is the same challenge general data management has suffered for years. Organizations need to provide tailored, governed data access to trained and data literate staff members to see the benefits of data democratization, which does require some funding.

89% of companies see **challenges** when adopting data democratization.

99% of companies see **benefits** once data democratization is underway.

Top benefits of data democratization

Better and faster decision-making (62%)

Improved operational efficiency (59%)

Better customer experiences (57%)

Realizing the benefits

To unveil the benefits of data democratization, it's vital to remember to find the solutions that take the known challenges into account. From the research, we saw techniques that companies are leveraging to take data insights to a broader group of stakeholders.

Specifically, companies are leveraging technology that is easy to use, improving data transparency, building trust in data through improved quality, increasing data literacy training, and improving cross-departmental communications.

Each of these techniques require a different level of investment, but some are more about the cultural shift rather than a specific technology investment, like communication. There are ways to get started with data democratization with the resources available today. Many companies have existing data quality tools that could be used more aggressively or can start a pilot on data literacy training with a specific group. In fact, 84 percent of respondents say they could be doing more to encourage data democratization across the business.

That said, many organizations are turning to technology to help make data more readily available. Some of the common tools being used are data quality, data preparation, business intelligence, and data governance applications. We also see 44 percent of companies leveraging Excel. Whenever you are looking to buy tools for data democratization, remember that they will be leveraged by non-technical users. This means ease-of-use becomes critically important.

When rolling out data democratization, organizations need to take a multi-faceted approach. Not only do stakeholders need to think about the people, processes, and technology around bringing data to a broader set of individuals, they also need to consider training and the agility it takes to adjust data models to better adapt to a wide range of employee feedback and learning.

How data democratization is encorouaged across the business

3. Bringing agility to data practices

As part of bringing data to a wider group of stakeholders, organizations need to think about the agility in which they approach data management and data distribution. Many organizations are still using old data management techniques or creating data processes that do not respond to changes within the business or to changing data regulation.

Several years ago, many organizations looked to move toward agile development. This is an idea where organizations make a minimum viable product and then put it out into market. They would receive real-time feedback and then iterate quickly to develop and respond to market forces in a much more effective manner.

This concept is now moving to data. DataOps was 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. DataOps aims at shorter development cycles, increased deployment frequency, and more dependable releases of data pipelines, in close alignment with business objectives.

This concept is especially important when we consider bringing data to a wider set of stakeholders. As organizations build and leverage more data pipelines and analytics, it is important to iterate quickly and not waste time on areas that are not working. In fact, our study found that 85 percent of business leaders believe DataOps and data literacy will help them achieve data democratization.

Benefiting from DataOps

Just over half of businesses have some sort of DataOps program today and another quarter would like to implement a DataOps program. Given that this is a relatively new practice, the level of maturity for these programs varies dramatically. However, organizations clearly see the importance of bringing more agility to data management.

DataOps provides a number of benefits to organizations. We see from the research that DataOps allows organizations to be more efficient in business practices, to ensure accuracy in data management, and to improve data accessibility. In addition, 14 percent of businesses said DataOps supports innovation as well.

Advocates vs skeptics

While DataOps is a relatively new discipline, it already has created some advocates and some skeptics across the business. In our survey, we asked who the biggest advocates for DataOps within an organization are. Not too surprising, those who are traditionally more responsible for data are largely in favor. These include the CIO/CTO, the CDO (chief data officer), and the CEO.

We also asked who are the biggest skeptics of DataOps. These included end users, the CFO and the CMO. Some of these skeptics may not fully understand the discipline, which does relate heavily to technology practices, or are not seeing the benefits DataOps can provide.

That delay in seeing the benefits could be directly related to key challenges that organizations are facing. Given the fact that DataOps is fairly new, we do see organizations pointing to a lack of expertise in this area. We also see a lack of specialized technology as DataOps is more of a set of defining principles rather than a specific set of technology that one can purchase and turn on to solve a problem. Finally, there is a lack of budget and staffing resources, which certainly will not subside in the near future.

Top challenges with DataOps

Lack of expertise (43%)

Lack of specialized technology (39%)

Lack of budget (38%)

Lack of staffing resources (37%)

While DataOps is new, it is essential to getting data in the hands of more individuals across the business and bringing a new degree of speed and agility to the data practice.

4. Creating a data literate workforce

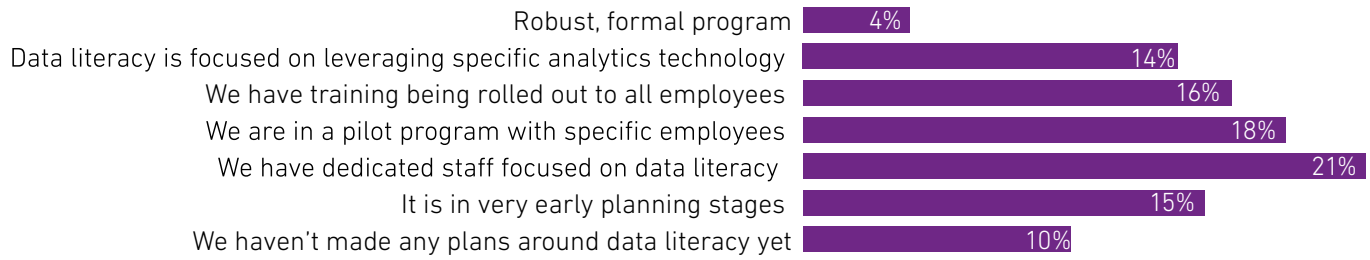
The key to data democratization is having a wide range of stakeholders who can make more efficient and effective decisions leveraging data insight. Data becomes even more valuable when supported by users who are confident in leveraging insights. However, stakeholders need to understand the data in front of them.

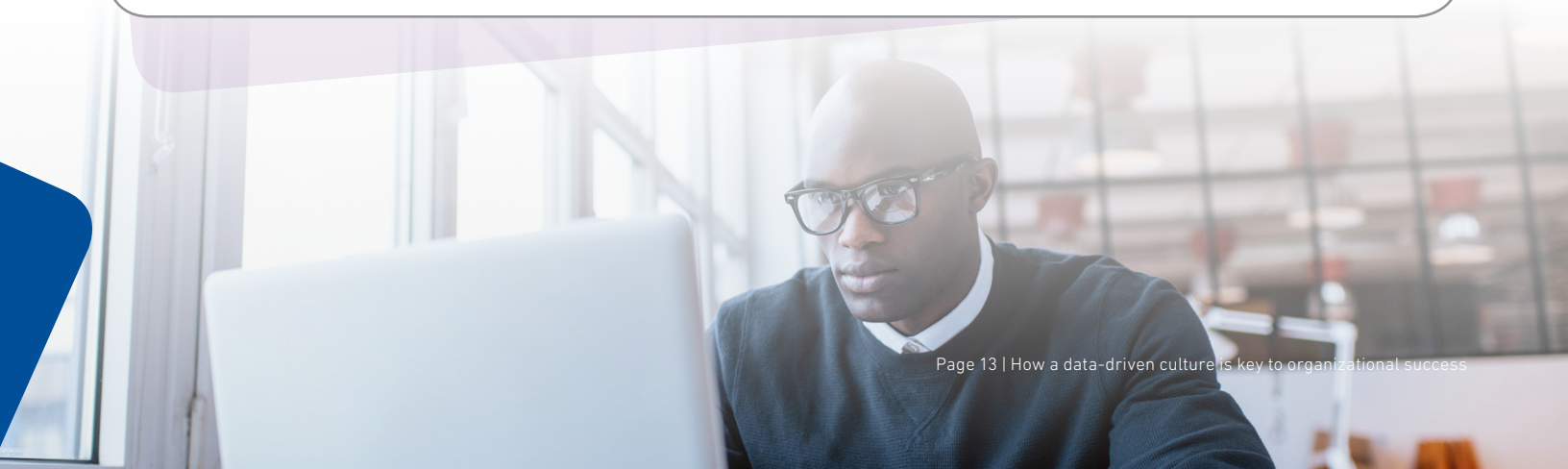
Data literacy is the ability to read, write, and argue with data. For businesses to maximize the value of data, they need to have a workforce that is educated to understand the insights they are being given and to challenge the information as needed. Not having a data literate workforce is impacting key initiatives. Eight out of ten businesses say a lack of data literacy hurts their ability to meet key business objectives.

To overcome these challenges, many organizations have a data literacy program underway. Our study finds 50 percent of business leaders have started a data literacy program within their organization.

For those who have started a data literacy program, there are a variety of strategies being leveraged. These include various pilot programs, training techniques across employees, dedicated staff focused on data literacy, etc. That said, only 4 percent of organizations have a robust, formal data literacy program in place today.

Progress with data literacy





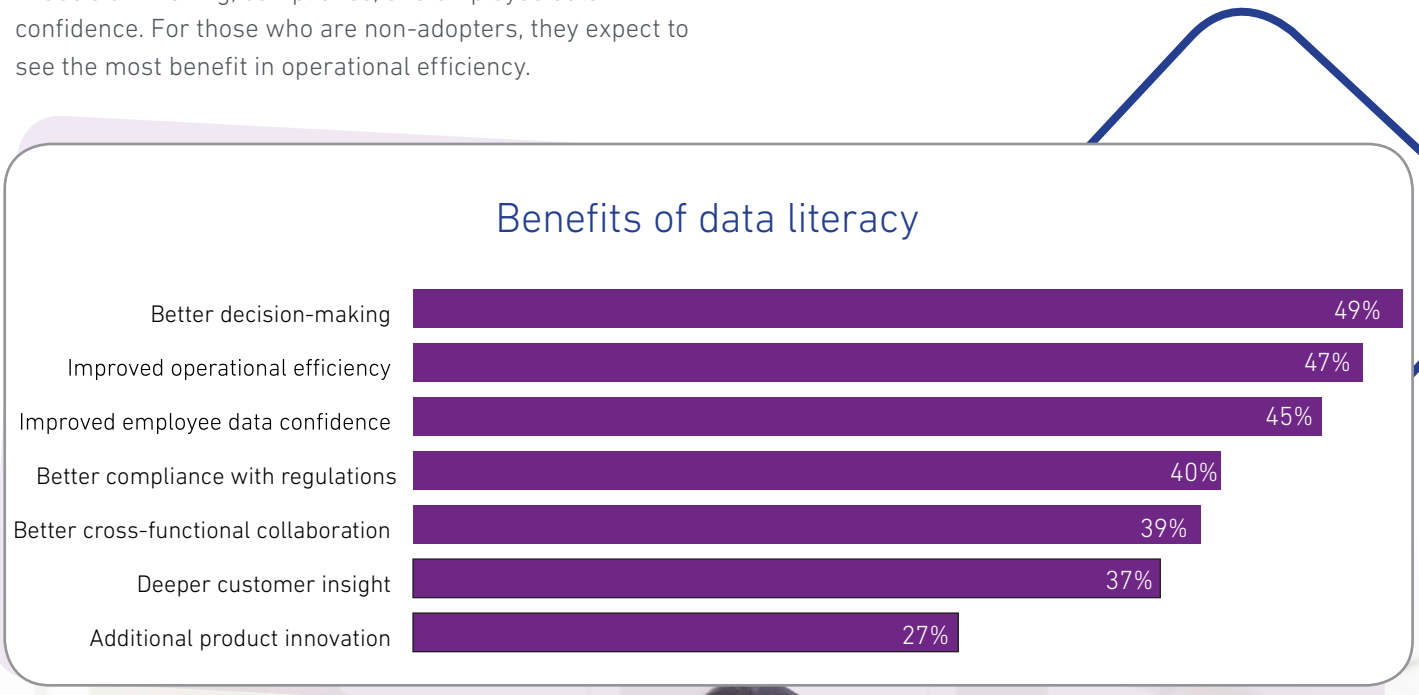
Insight for all is the key to success

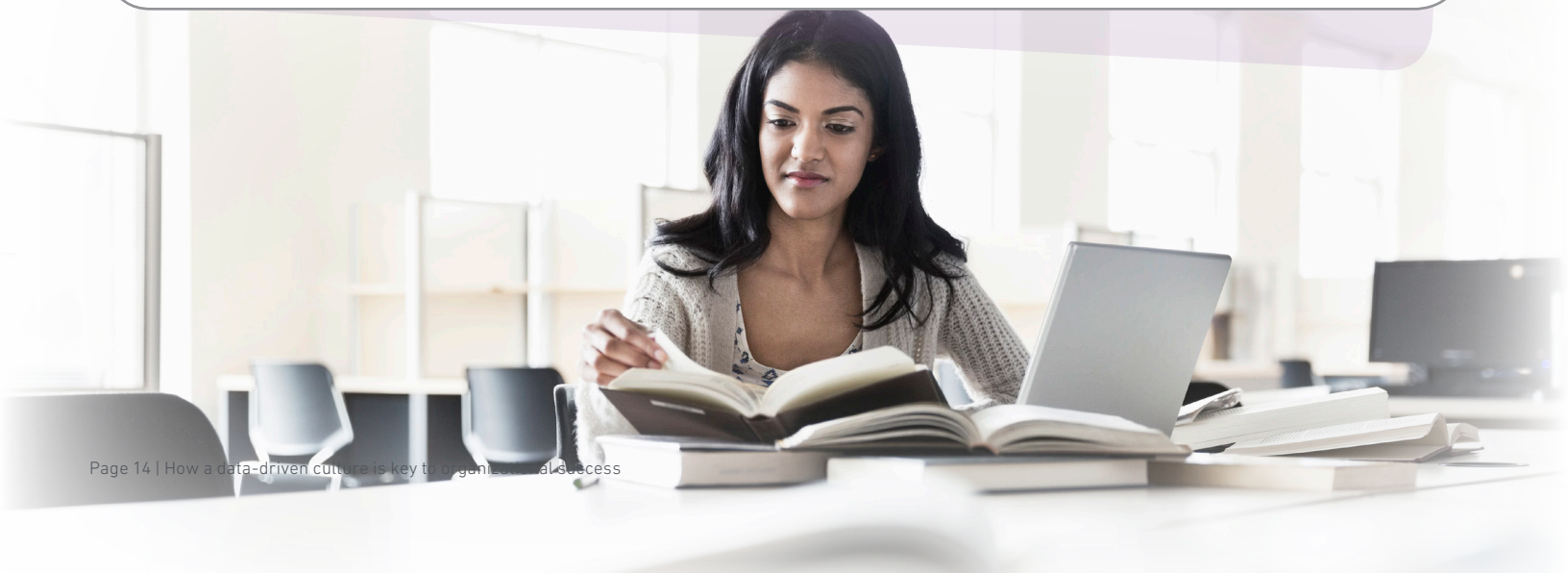
Data literacy can bring many benefits to an organization, which is why we believe the market is adopting these programs so rapidly.

Eighty-nine percent say operationalizing data literacy across the business will help organizations leverage higher quality data and more quickly see ROI from data initiatives.

Better data skills directly impact decision-making, operational efficiency, employee data confidence, and even compliance with regulations. We do see a difference in those who have started a program already and those that are still exploring the possibility. For those already underway with data literacy, most expect to see benefits in decision-making, compliance, and employee data confidence. For those who are non-adopters, they expect to see the most benefit in operational efficiency.

While data literacy brings many benefits, it also brings challenges. We see organizations struggling with budget and investment, a lack of time, insufficient staff resources, a lack of leadership buy-in, and a lack of technology. In many instances, organizations are struggling to relay the benefits of data literacy in a tangible way, resulting in a lack of resources. It is important when starting a program, to realize these challenges and determine ways to overcome resourcing constraints.





Getting started with data literacy

It is easy to see how data literacy could provide a myriad of benefits to a given business, hence why so many people are starting to explore this discipline. However, in taking an approach to data literacy, it is important to think of it as a holistic, ongoing program, and not a one-off training exercise.

There are four key areas to consider when starting data literacy:

1. Program ownership

When considering a data literacy program, ownership can fall into various departments. This is in large part due to the concept of data literacy touching many disciplines. The function could easily fall into training, IT, data teams, and more. In previous studies we have watched the rise of the chief data officer (CDO). For many organizations with a CDO, data literacy will typically fall under that remit. However, there are still a large number of organizations without that central data office. In those instances, IT or HR may take the lead for a data literacy program.

2. Target audience

In our study, we asked about three main targets for a data literacy program: data professionals, business users, and technical users. We then asked respondents to rank those targets in terms of targeting them with a data literacy program. Data professionals is on the top the list. While this may seem strange, there are some data professionals who are relatively new to their roles and many are continuing to hone their skills. Data literacy could help them better meet their objectives. Next business users were mentioned. A wide range of non-technical and non-data specific roles can benefit from leveraging better data insight and many do not even realize they are using and creating data. In fact, 72 percent say staff members often don't realize they are creating or using data in their daily operations. Finishing up the group were technical users.

3. Required resources

With an owner and a target audience, organizations then need to think about resources. Some common resources associated with data literacy programs include access to online training portals, informal internal training, formal training from consultants, and ad-hoc support from specialized data experts. One size will not fit all when it comes to resources and individuals' need to define the objectives of their individual data literacy program. However, resources for employees need to be outlined before the onset of a program and then refined over time.

4. Execution at scale

In many cases, data literacy may start as a pilot program or focus on just one element of employee training. It also may start with just an assignment of ownership to get the ball rolling. These small efforts are a good initial experiment as they allow stakeholders to learn and justify the value of the program. However, for those experiencing success with data literacy, many are starting to think about how to execute their program at a larger scale across the organization. Next steps often include the development of a formal plan, working data literacy into standard employee training practices, and creating custom programs that vary for different users.

5. Data democratization brings maturity

Data-driven organizations who already have data democratization underway are driving momentum for data accessibility across their business. Our study shows that organizations who are implementing data democratization are seeing benefits and advancing data usage across their business.

Those underway with data democratization are more likely to understand the benefits.

70% Better and faster decision-making

63% Better customer experience

61% Improved operational efficiency

58% Better security or reduced risk

53% Improved business reputation

53% More empowered employees

Data democratization is encouraged across the business.

91% say almost every employee across the business should be using data insights to improve their performance.

90% say data insight is essential to managing the customer experience and operational efficiency in the digital environment.

91% say operationalizing data literacy across the business will help the organization leverage higher-quality data and more quickly see ROI.

More likely to have a DataOps program

63% of those with data democratization programs also have a DataOps program in place today, or something like it.

Companies are more likely to leverage technology to improve data usage

66% Have data quality solutions.

55% Have data preparation solutions.

47% Use Excel.

Data literacy programs are underway in sync with data democratization.

Those with data democratization underway are six times more likely to have a robust data literacy program in place.

60% Have access to online training portals.

56% Have informal internal trainings.

59% Have formal training from consultants.

37% Have ad-hoc support from specialized data experts.

6. Conclusion

Leaders across North America are seeing the benefits of data accessibility throughout the business. Once data democratization is synced with a DataOps and data literacy program, stakeholders can realize improved operational efficiency, better and faster decision-making, exceptional customer experience, and more empowered employees. Our research discovered the journey leaders should take to be proactive, push through roadblocks, and achieve a strong data-driven culture.

Businesses founded on trustworthy data stay ahead of the competition. Rather than relying on gut instinct, teams can confidently make decisions and better adapt to changing market forces. What we do know about the months ahead is that they will be full of rapid change. Companies need to leverage data and insights in the digital and remote economy to stay ahead of the curve and make adjustments as quickly as possible.

By making data available to a wider group of stakeholders, businesses can share insights and enable a more empowered workforce. Look at how you can provide high-quality data access that will support your operation and empower your people to feel data confident.

Next steps

1

Provide wider data insight.

Enable data usage across your organization with data democratization. Empower team members with trusted insight to improve operational efficiency and customer experience.

2

Bring agility in data practices.

Bring agility to data practices with DataOps. These iterative development principles will allow you to fail fast and improve data pipelines and operations quickly.

3

Educate your staff on data.

If team members don't understand data insights, they can't leverage them to improve daily operations. Educate staff on reading, using, and questioning data so they can meet key business objectives.

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