The Economic Impact of Data Innovation 2023

Industry Insights

How 7 key industries build resilience and increase profit

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The Economic Impact of Data Innovation 2023 Industry Insights

Data leaders are more profitable, more resilient and more successful. The Economic Impact of Data Innovation 2023 report takes a holistic look at the advantages and opportunities of data innovation. This focused report breaks down opportunities and challenges unique to seven key industries.

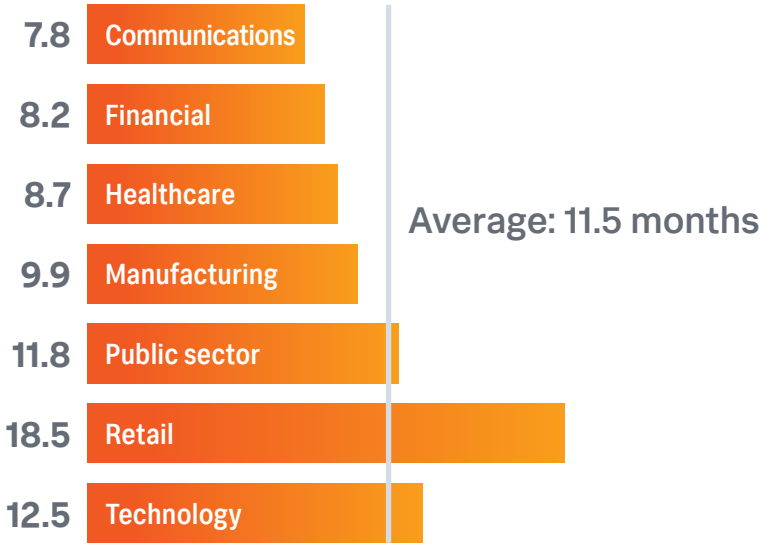
Industrial-Strength Innovation

The right investments pay off. We see this from research in The Economic Impact of Data Innovation, a survey of 2,000+ data leaders from 11 countries and seven industries. The report identified an array of data maturity's concrete outcomes: Data innovation leaders develop more new products and services and get them to market faster than competitors — and have a 9.5% profit edge too.

The general takeaways from the main Economic Impact of Data Innovation report are also worth exploring by industry, with the unique opportunities and challenges experienced by each. Financial services organizations more often appoint executive roles to own customer experience and data innovation — and tend to see better customer success outcomes. A key strategy for healthcare organizations has been to incentivize IT roles around innovation capabilities. And so on.

Market Competitiveness Industry Comparison

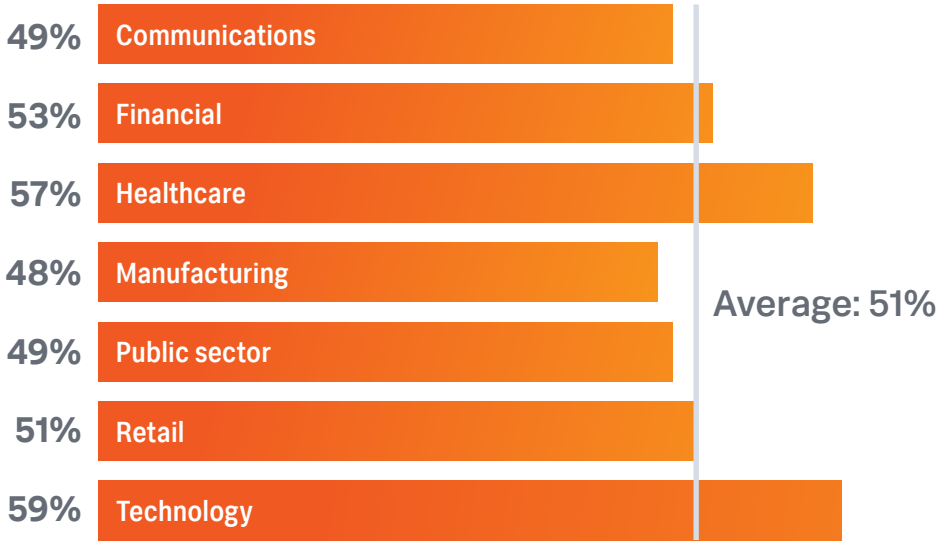
Months faster to market versus competitors



Majorities across all industries say that their data is growing faster than they can keep up. At the same time, organizations face rising customer expectations and an ever-more-complex macroenvironment — and must bolster security and resilience. The challenge is turning the increasing-data "problem" into a results-oriented solution.

Evolving the Data Innovation Practice

Incentivizing IT roles based on progress

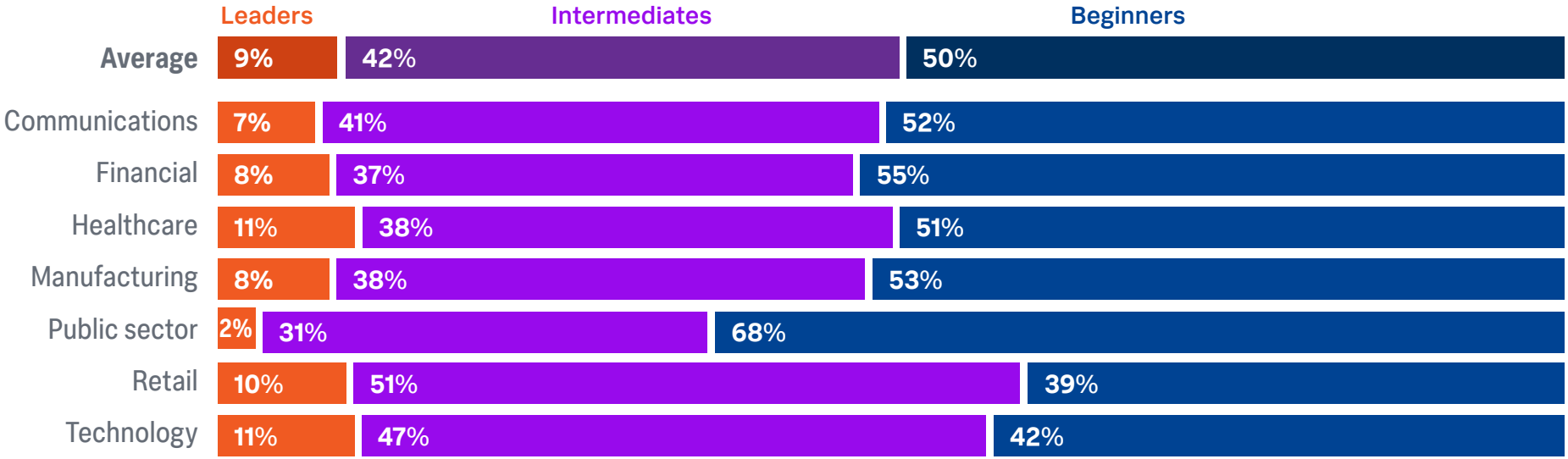


So how well are organizations using data to drive innovative solutions? To measure this, we assessed them in six areas:

- **Data classification**
- **Data aggregation**
- **Data quality**
- **Data analysis skills**
- **Data analysis tools**
- **Data monitoring**

Leaders achieve excellence in all six; intermediates any 3-5; beginners any 0-2. Overall, the percentage of leaders is holding steady from a year ago, at 9%, and most industries fall within a couple of points. The technology and healthcare industries score highest, with 11% at the leadership level. On the other end of the spectrum, the public sector has just 2% and communications 7%.

Where Are Organizations on Innovating With Their Data?



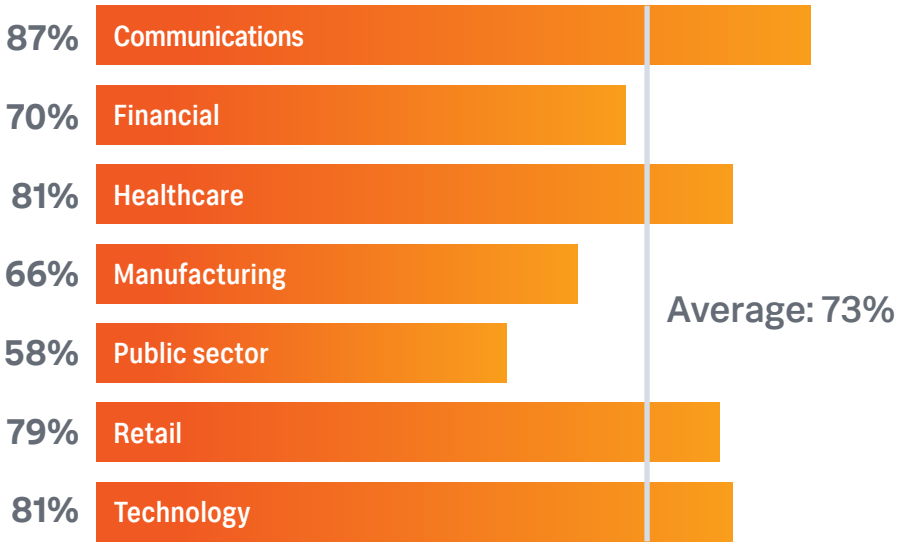
Financial services has the smallest percentage of beginners. Industries that have a below-average percentage of leaders tend to be more heavily regulated — such as financial services and public sector organizations — which may limit the amount and kinds of strides they can make toward data innovation maturity.

Nearly every industry professional we interviewed mentioned talent — recruiting and retaining the right workers — as a top-of-mind challenge. More than a fifth of survey respondents identified not having the right skills in house as an inhibitor to data innovation, and a clear cross-industry majority (60%) agree that identifying, recruiting and retaining talent is either "challenging" or "very challenging" — especially those from financial services and healthcare organizations. These two industries also happen to take a less aggressive approach to talent management. Financial services and healthcare wait for attrition and then restaff (42% and 43% respectively, well above the 35% average), versus actively replacing existing staff with new hires that have the needed data skills.

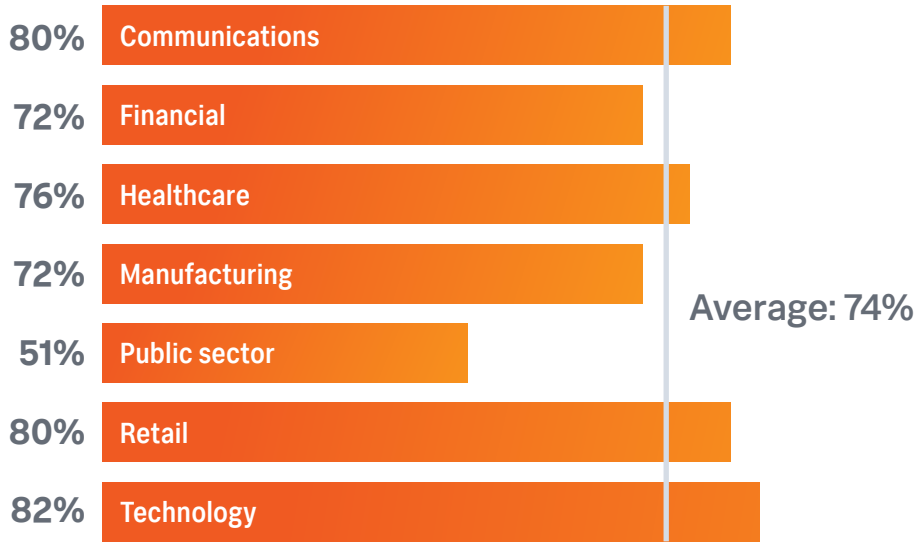
On the customer experience front, 88% across all industries agree that leveraging data to transform customer experience is the single biggest opportunity to improve customer experience (CX). Communications/media organizations lead in using data to improve CX, whereas the public sector has the most room for improvement.

Improving CX With Data

Strong ability to develop real-time customer segments and send relevant info or proactive notifications



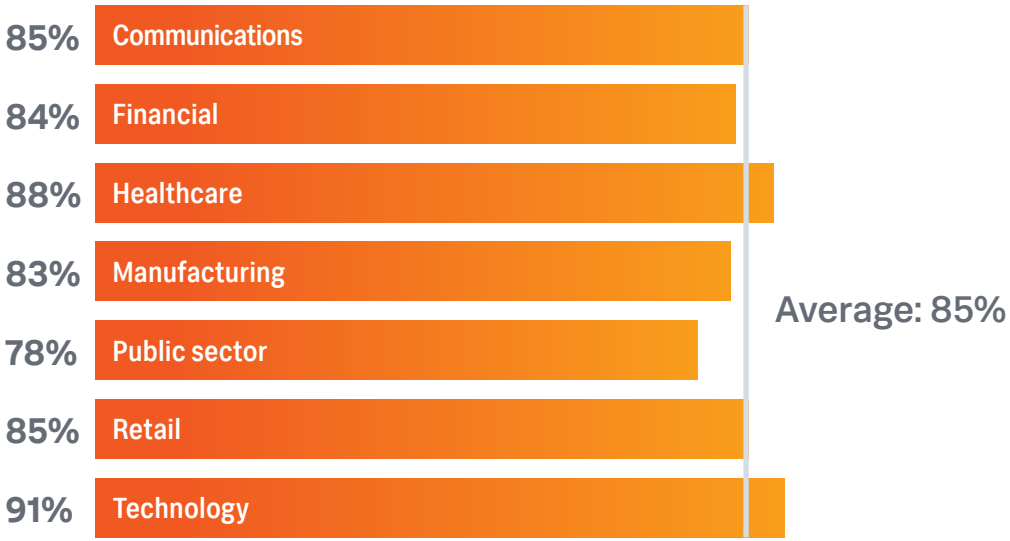
Strong ability to use customer data to predict interest and make recommendations



Across industries, 85% feel that their company is in a "strong" or "very strong" position, and slicing the data by industry reveals that three-quarters or more within each industry agree.

Looking Ahead

My organization is well-positioned to perform over the next few years in the market.



Taking steps to prioritize data innovation, such as investing for success and bringing innovation to the executive level, pays off across industries. But each industry also has unique strengths, challenges and opportunities. And for every industry, there are frontiers yet untouched and outcomes yet unrealized. Making the right data innovation investments is the key to getting there.

Top Areas of Application for Data Innovation

Communications: Customer service and support, 56%

Financial: Customer service and support, 53%

Healthcare: Customer service and security operations, 47%

Manufacturing: Supply chain and manufacturing operations, 54%

Public sector: Security operations, 56%

Retail: Sales and marketing, 52%

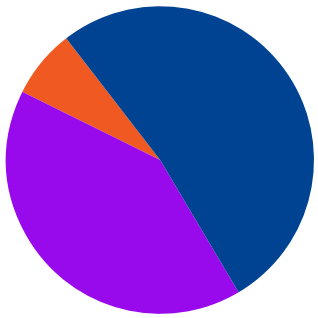
Technology: Product/service development and launches, 53%

Communications and Media

Communications and media organizations have a lower proportion of data innovation leaders (7% versus 9% average). This correlates with an industry-wide struggle to keep up with the growing amount of data (83% versus 78% average) — as well as a lack of investment in innovation-oriented executive talent. Nearly a third of respondents cite a risk-averse culture, while 27% note that leadership does not understand the kinds of innovation that data can drive.

Interestingly, while communications and media organizations struggle to actualize product innovation and CX outcomes, they report above-average confidence in their ability to use data to drive CX. Forty percent rate their use of data to understand and market to their customers as "very strong" (compared to the 34% average).

Maturity Breakdown



Leader: 7%
Intermediate: 41%
Beginner: 52%

Data Operationalized

52% (versus 53% average)

Where communications leads

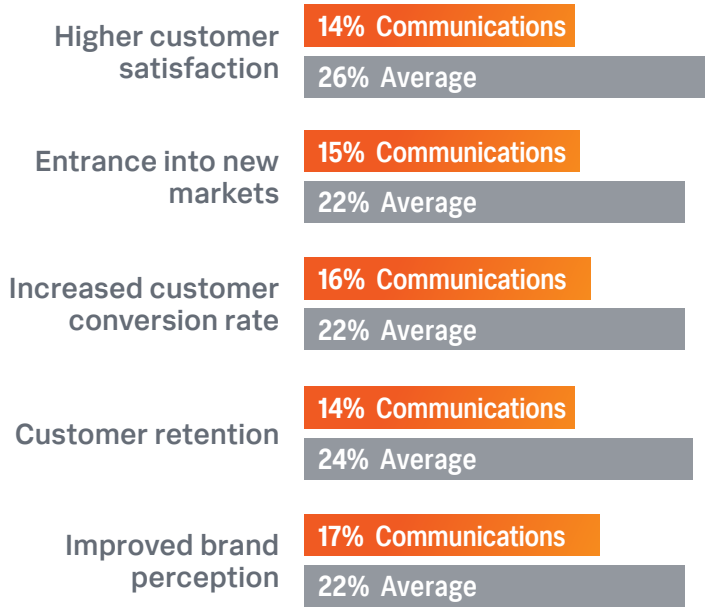
Using Data to Drive CX

Strong ability to understand and market to customers with data

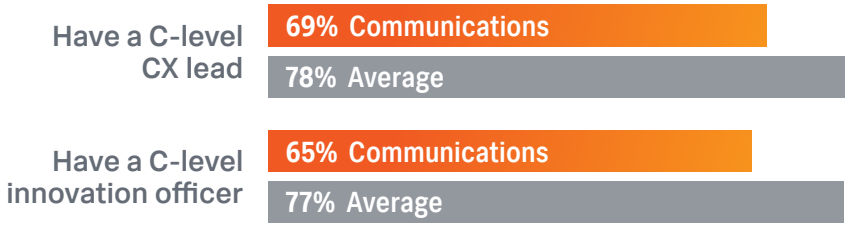
Using data has improved customer satisfaction.

Where communications lags

Production Innovation Outcomes Lag



Staffing for Data Innovation Success



Main Data Innovation Challenges

- Innovation taking too long: 33%
- Risk-averse culture: 32%
- Data quality issues: 30%

"The competition is severe. You can hire the best people from anywhere in the world. However, you can also lose your people to any company anywhere."

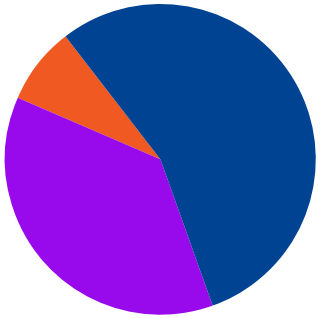
— Chief Data Officer, Digital Gaming

Financial Services

Financial services leads in data innovation measures. Organizations in this sector are most likely to adopt AI/ML, cloud analytics and observability for data innovation. They are also most likely to invest in executive talent that fosters a culture of data innovation, such as employing a data governance officer (80% versus 74% average). And an above-average 91% are leveraging data to improve customer experience.

Financial services organizations have a harder time both identifying and recruiting those with the right skills. In fact, only public sector respondents were more likely to say they lack the right skills to innovate with data.

Maturity Breakdown



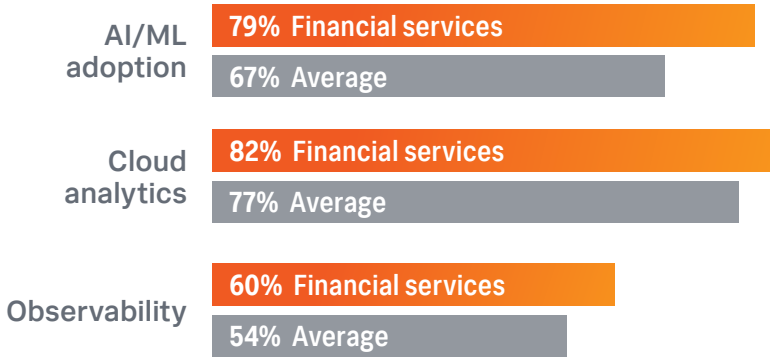
Leader: 8%
Intermediate: 37%
Beginner: 55%

Data Operationalized

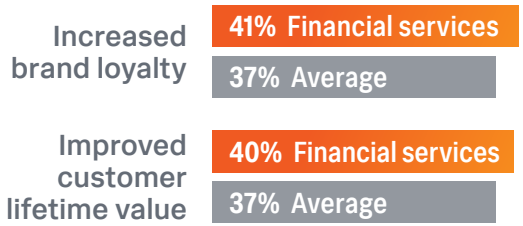
55% (versus 53% average)

Where financial services leads

Tech Adoption for Data Innovation



Data Innovation Improves CX



Where financial services lags

Staffing Challenges

Recruiting candidates is challenging/very challenging

Retaining candidates is challenging/very challenging

Improving Business Performance

- Improved customer satisfaction: 50%
- Greater brand loyalty/reduced churn: 41%
- Increased customer value/upsell/cross-sell: 40%
- Improve close/win rates: 36%

Main Data Innovation Challenges

- Team coordination: 36%
- Leadership doesn't understand the kinds of innovation that data can drive: 30%
- Marketing innovations to customers: 27%
- Innovation taking too long: 27%

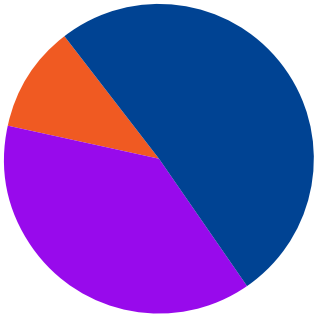
79% agree that their organization's data is growing faster than its ability to keep up.

Healthcare and Life Sciences

Healthcare ties with the technology sector for the highest percentage of data innovation leaders (11%). Factors that might explain the maturity of this sector include prioritizing structured data sources (a characteristic of leaders), as well as its manifold investments toward evolving data innovation practices.

When it comes to challenges, healthcare and life sciences organizations were more likely, by several percentage points, to report they struggle with recruiting and retaining the right talent.

Maturity Breakdown



Leader: 11%
Intermediate: 38%
Beginner: 51%

Data Operationalized

52% (versus 53% average)

Where healthcare leads

Focus on Structured Data

63%
(versus 55% average)

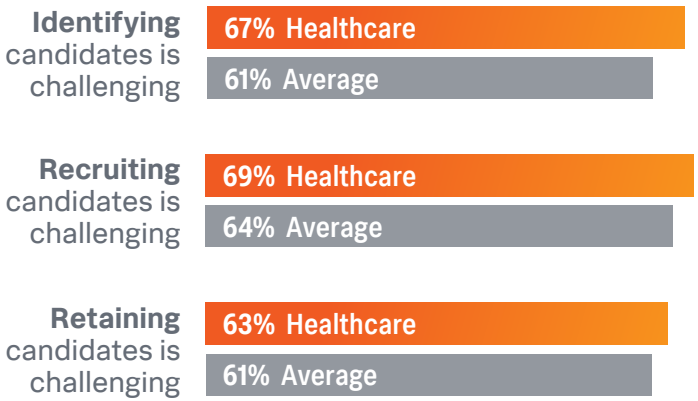
Evolving the Data Innovation Practice

Actions taken to advance data innovation

- **More C-suite/board briefings: 43% vs. 41% average**
- **IT roles are incentivized: 57% vs. 51% average**
- **Line of business roles are incentivized: 44% vs. 41% average**
- **New KPIs for tracking initiatives: 44% vs. 46% average**
- **Emphasis on data-centric training certifications: 44% vs. 45% average**
- **New hires to drive projects forward: 39% vs. 43% average**

Where healthcare lags

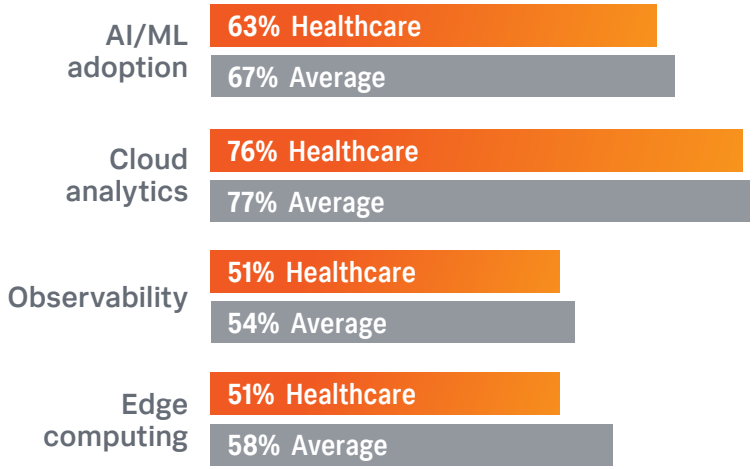
Talent Challenges



Main Data Innovation Challenges

- Leadership doesn't understand the kinds of innovation data can drive: 36%
- Data quality/format won't support innovation: 32%
- Team coordination: 27%

Using Tech for Data Innovation



"If a patient walks into a clinic, the first thing hospitals will do is quickly check their eligibility and benefits. This means you have to get the data to market as fast as possible."

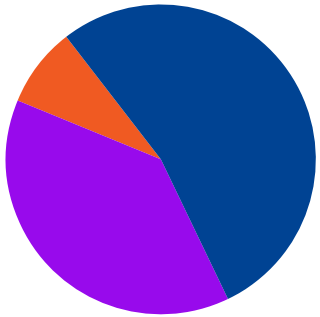
— Director, Data Platform Engineering, Healthcare

Manufacturing and Resources

Manufacturing leads in transforming supply chain operations and product and service launches with data innovation.

However, this sector struggles to use data to directly improve customer experience and lags in using tech like AI and edge computing to improve data innovation. These respondents cite team coordination and data quality as some of the main challenges to data innovation.

Maturity Breakdown



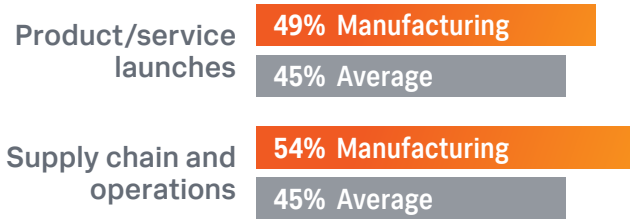
Leader: 8%
Intermediate: 38%
Beginner: 53%

Data Operationalized

51% (versus 53% average)

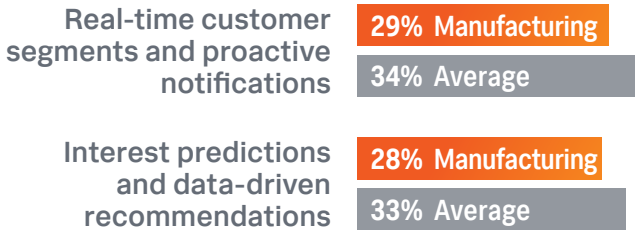
Where manufacturing leads

Impact of Innovation Efforts

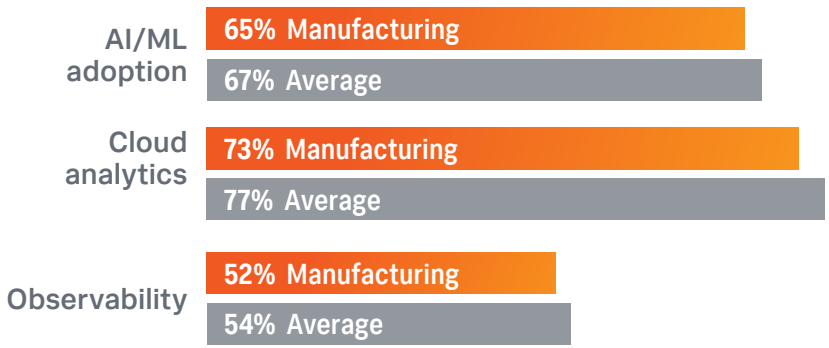


Where manufacturing lags

Using Data to Drive CX



Employing Tech to Improve Data Innovation



Main Data Innovation Challenges

- Team coordination: 31%
- Innovation taking too long: 28%
- Data quality/format issues: 28%

54% of manufacturing organizations favor a balanced product innovation approach, weighing speed and success equally.

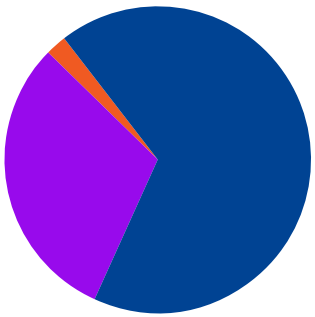
Public Sector

The public sector generally trails the private sector in digital transformation (only 2% of its organizations rate as leaders, versus the 9% average), but nonetheless leads in a few areas:

- **Operationalizing data (54% of their data, ahead of the 53% average)**
- **Having a data innovation center of excellence in place for more than five years (40%, a whole 15 points above the average)**

Key opportunities to advance data innovation maturity among public sector organizations include staffing executive talent to foster data innovation, which correlates with the top reported challenges to data innovation: a risk-averse culture and leadership that isn't on top of data's possibilities.

Maturity Breakdown



Leader: 2%
Intermediate: 31%
Beginner: 68%

Data Operationalized

54% (versus 53% average)

Where public sector leads

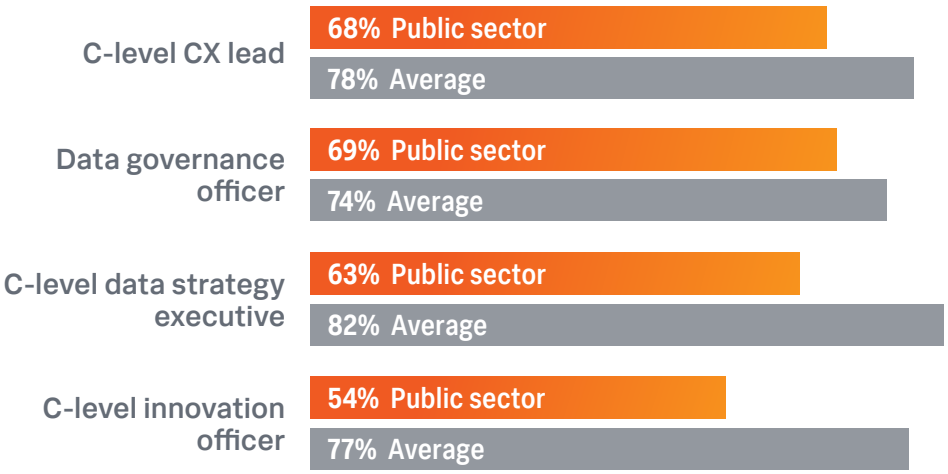
Security Operations Efficiency

MTTR following a security issue

20% of public sector orgs (versus 8% across all industries) spend more than a quarter of their IT budgets on solutions and staff that investigate, monitor, analyze and act on data.

Where public sector lags

Staffing for Success



Main Data Innovation Challenges

- Innovation taking too long: 32%
- Risk-averse culture: 31%
- Leadership doesn't understand the kinds of innovation data can drive: 31%

"Data quality is my biggest fear."

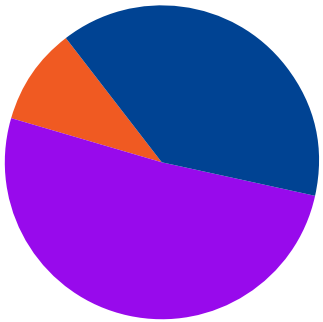
— Director of Data Engineering, Public Sector

Retail

Retail as an industry leads in nearly every respect. An above-average 10% are data innovation leaders, and its organizations are more likely to report greater brand loyalty, customer lifetime value, revenue from data monetization, product innovation and a multitude of other data innovation-fueled outcomes.

The secret? Retail organizations use customer data to understand the markets they serve and drive sales, and also make the right investments on the talent front. (They're more likely than organizations in other industries to have a C-level innovation officer and CX lead, for instance.) And these efforts are paying off.

Maturity Breakdown



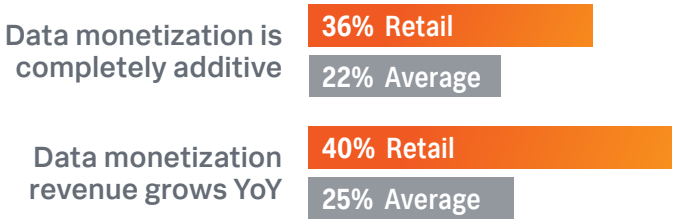
Leader: 10%
Intermediate: 51%
Beginner: 39%

Data Operationalized

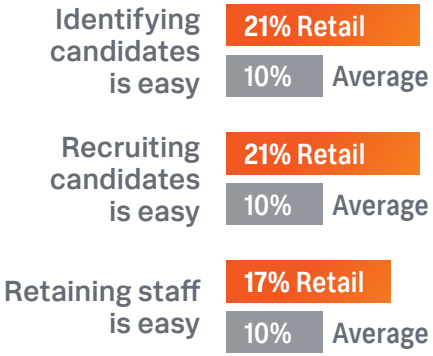
55% (versus 53% average)

Where retail leads

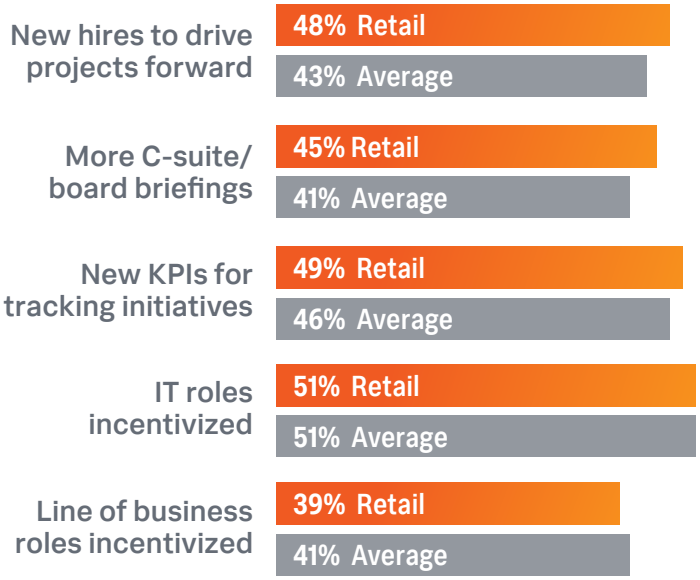
Major Monetization



Talent Success



People and Processes



Quantified Product Innovation

- Launched 6.1 new products per year through data innovation
- 13.2% of revenue is from new products/services (compared to 10% average)

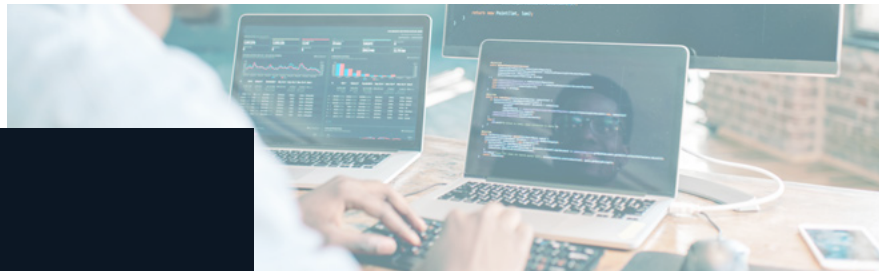
Main Data Innovation Challenges

- Team coordination: 34%
- Innovation taking too long: 31%
- Marketing innovations to customers: 29%
- Data quality issues: 29%

“It’s a challenge maintaining a digital experience that is attractive to customers … if you are not actively listening to [the] customer and using the data they provide you.”

— Senior Manager, Digital Analytics and Data Engineering, Retail

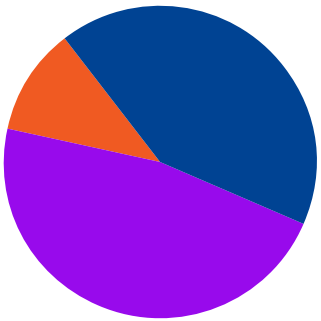
Technology



Technology organizations perform well across the board and have a more visionary approach to data. They want to use data to fundamentally reshape their business and are more likely to expect new data use cases to drive entrance into new markets.

There are a few challenges, including less data operationalized (51% versus the 53% average), and stronger agreement that their data is growing faster than they can manage (84% versus 78%).

Maturity Breakdown



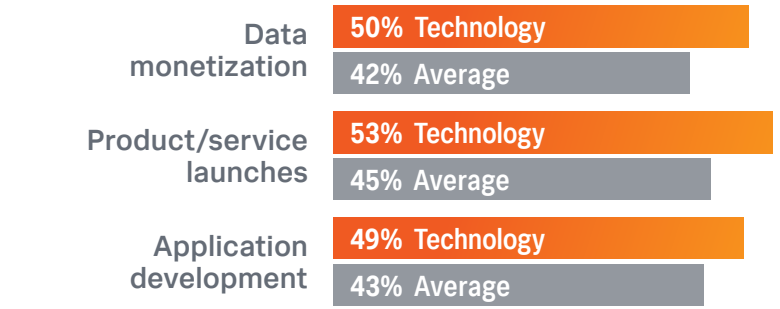
Leader: 11%
Intermediate: 47%
Beginner: 42%

Data Operationalized

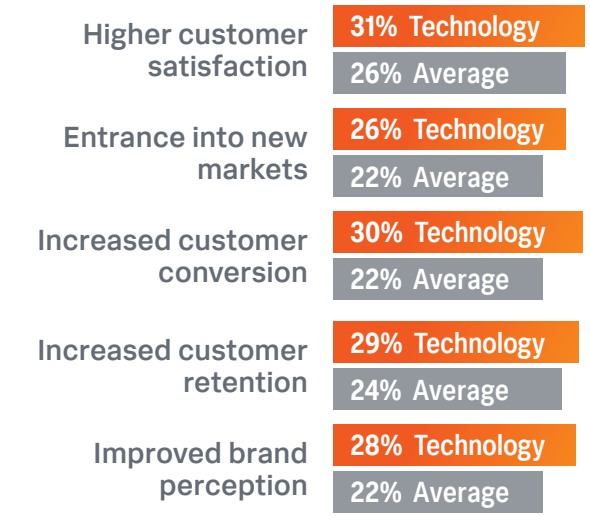
51% (versus 53% average)

Where technology leads

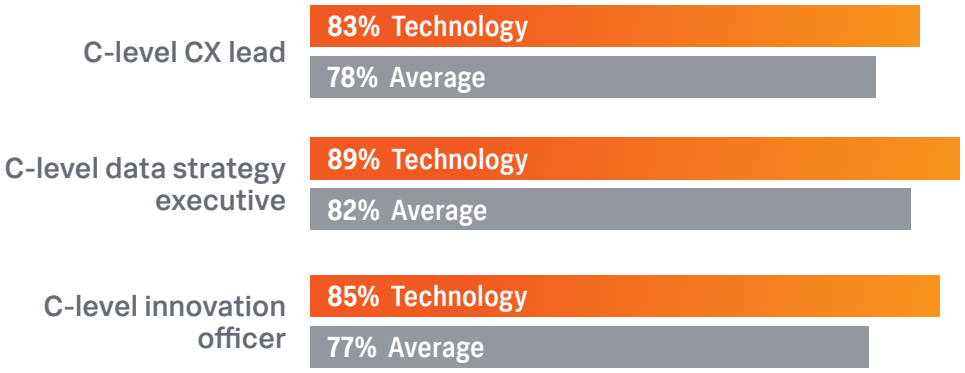
Data Innovation Initiatives



Product Innovation Outcomes



Staffing for Success



Movers, Shakers and Reshapers

- Target a fundamental reshaping of the business: 49% versus 43% average
- Expect new data use cases will drive them into new industries: 60% versus 52% average

"If you ask, 'What is the hardest thing in the last two years?,' it was hiring. It is very hard to get smart people into data science."

— Director of Product Strategy, AI and ML, Technology

Next steps, deeper dives

Across every industry, data is an opportunity, an array of ones and zeroes that in the right hands can yield literal profit. For more insights on how data innovation leaders get ahead, read the main Economic Impact of Data Innovation report.

And if you're wondering how much data innovation could improve *your* bottom line, spend five minutes with Splunk's data maturity calculator to find out.

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