Talend Data Health Barometer 2022

Annual survey report about the state of data
Executive summary

The pandemic taught us that the greatest weapon against uncertainty is information. Companies that had already begun their data and digital transformations before COVID fared far better as the market shifted.

So it should come as no surprise that in response to our annual Talend Data Health Barometer survey, 99% of our respondents said that data is important to their organization. As a company whose entire existence is dedicated to helping other businesses maximize the value of their data, we couldn’t be happier with that stat. Half our job is already done — you value the data you have.

Here’s the not-so-good news. While nearly everyone knows that data is important, almost no one is able to use it to its full potential. No exaggerations here: fully 97% of our survey cohort admitted that their organizations are dealing with challenges in using data effectively. There is still a lot of work ahead, and the pressure to get it right is increasing. With a full-fledged recession looming, businesses that are successful at making data management a priority now are much more likely to weather an economic downturn successfully — and emerge on the other side with an established competitive advantage.

Key results

- 99% of companies recognize that data is crucial for success
- (Yet) 97% face challenges in using data effectively
- Nearly half say it’s not easy to use data to drive business impact
- A full one-third say that not everyone in the company understands the data they work with
- 46% don’t feel that their data has the speed and flexibility to satisfy the demands of the business
- The year’s survey recorded a 10-point YoY drop in satisfaction on all five markers of data health: timeliness, accuracy, consistency, accessibility, and completeness

With strong economic headwinds, the timing of this downward trend in data health could not be any worse. These results suggest that for every business going forward, the focus needs to be on the final mile: bringing companies that lag behind up to par on their data initiatives and helping companies that already prioritize data get even more value from their investment.
A company’s overall data health describes not just the state of a company’s data, but how well it supports its business objectives. Compared to a year ago, we’ve seen a precipitous slip in all markers of data health. In particular, we saw an 18-point drop in the timeliness of data, leaving 1 in 4 companies questioning whether their critical data is up to date.
01 Data importance

99% of data experts and leaders believe that data is important to their organization.

How important is data for your organization?

- VERY IMPORTANT: 77%
- FAIRLY IMPORTANT: 22%
- SLIGHTLY IMPORTANT: 1%
- NOT IMPORTANT AT ALL: 0%
The overall rating on companies’ data capabilities is far from completely satisfactory, and overall worse than a year ago. We’ve seen an approximate 10 point drop in how experts and leaders rate their ability to deliver on data timeliness, accuracy, consistency, accessibility, or completeness.

The most significant change was in timeliness, with only 77% rating ability to deliver up-to-date data as “very good” or “somewhat good” vs. 95% in 2021.

Rate your company’s current capabilities as it relates to ensuring data quality and reliability.

- Timeliness: -18pt drop
- Accuracy: -11pt drop
- Consistency: -11pt drop
- Accessibility: -9pt drop
- Completeness: -11pt drop
Ensuring data quality is the top concern, coming in first with almost half of all respondents. But the skills gap is also a serious problem: The lack of skilled resources to both manage or analyze data is a challenge for 38% of companies, and understanding data is a challenge for more than a third of respondents.

97% of the people we surveyed face challenges in using data.

Which challenges does your company face in using data effectively?

- Ensuring data quality: 49%
- Getting fast access to the data we need: 41%
- Having enough skilled resources to manage or analyze data: 38%
- Meeting compliance and security requirements: 37%
- Trusting data to make business decisions: 36%
- Understanding the data we work with: 34%
- Sharing data with the right people and/or applications: 34%
- Using modern, cloud-based infrastructure and applications: 31%
- My company faces no challenge in using data effectively: 3%
Increasing revenue remains the top reason to use data (+10 points compared to last year’s survey), but optimizing costs placed a close second (+13 points over 2021).

At your company, why are you using data?

- To increase revenue: 69%
- To optimize costs: 62%
- To mitigate risks: 50%
Driving impact with data is a challenge. Nearly half of companies say it’s not easy to use data to make a difference where it matters most.

Of note, there is a significant gap in perception between leaders and experts when it comes to how well data supports their business and its key objectives: 68% of data leaders say it’s easy to use data to drive business impact, while only 54% of data experts agree — a difference of 14 points.

In your company, how easy is it to use data to drive business impact?

**Leaders**
- 24% Very difficult
- 8% Difficult
- 50% Neutral
- 18% Easy

**Experts**
- 2% Very difficult
- 12% Difficult
- 32% Neutral
- 39% Easy
- 15% Very easy
06 Extracting value from data

20% of respondents struggle to extract value from their data.

Once again, we see a pronounced gap — 9 points — between the data experts and leaders.
With data in doubt, we don’t trust our decisions. Nearly one-third of the people surveyed report a lack of company-wide confidence in decisions backed by data.

As the economic uncertainty and looming recession apply more pressure to organizations, data leaders and stakeholders will expect more from their data starting with the ability to show tangible and significant return on investments. For the 75% of respondents who already see value and ROI on their data investments, this will be business as usual – though under more intense scrutiny – but the remaining quarter will have to catch up quickly.

### Lack of confidence in data-driven decisions

<table>
<thead>
<tr>
<th>Statistic</th>
<th>Strongly Disagree</th>
<th>Somewhat Disagree</th>
<th>Neutral</th>
<th>Somewhat Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Everyone at my company feels confident in the business decisions we make on our data</td>
<td>2%</td>
<td>10%</td>
<td>19%</td>
<td>43%</td>
<td>26%</td>
</tr>
<tr>
<td>Data at my company leads to better business results</td>
<td>2%</td>
<td>4%</td>
<td>13%</td>
<td>43%</td>
<td>38%</td>
</tr>
<tr>
<td>I see value from and return on the investments my company has made in data</td>
<td>2%</td>
<td>5%</td>
<td>17%</td>
<td>45%</td>
<td>30%</td>
</tr>
</tbody>
</table>
The #1 barrier to getting real value from data isn’t about budget or technology — it’s about people. Building a data culture that fosters a common understanding about data and how it’s used should be a top priority for organizations that want to realize the promise of data initiatives.
More than one-third of data experts can’t confidently agree that everyone in their organization understands the data they work with. This is another area where we see a marked deviation between the experts who are closest to the data and the leaders who rely on it.

08 Low confidence around understanding data

Everyone in my company understands the data they work with.

<table>
<thead>
<tr>
<th></th>
<th>All</th>
<th>Leaders</th>
<th>Experts</th>
</tr>
</thead>
<tbody>
<tr>
<td>STRONGLY DISAGREE</td>
<td>11%</td>
<td>5%</td>
<td>13%</td>
</tr>
<tr>
<td>SOMEWHAT DISAGREE</td>
<td>19%</td>
<td>17%</td>
<td>19%</td>
</tr>
<tr>
<td>NEUTRAL</td>
<td>42%</td>
<td>44%</td>
<td>41%</td>
</tr>
<tr>
<td>SOMEWHAT AGREE</td>
<td>26%</td>
<td>32%</td>
<td>24%</td>
</tr>
</tbody>
</table>
but when they describe the rest of the business, the outlook is less rosy. Nearly one-third are concerned about the level of data literacy and understanding of data across the business.

85% of respondents believe the data they work with...

...but when they describe the rest of the business, the outlook is less rosy. Nearly one-third are concerned about the level of data literacy and understanding of data across the business.

I believe the data I work with

- 1% STRONGLY DISAGREE
- 3% SOMEWHAT DISAGREE
- 10% NEUTRAL
- 43% SOMEWHAT AGREE
- 42% STRONGLY AGREE

My company has a high level of data literacy

- 2% STRONGLY DISAGREE
- 8% SOMEWHAT DISAGREE
- 18% NEUTRAL
- 41% SOMEWHAT AGREE
- 30% STRONGLY AGREE

Everyone at my company knows which data points are actually useful for their work

- 2% STRONGLY DISAGREE
- 10% SOMEWHAT DISAGREE
- 15% NEUTRAL
- 47% SOMEWHAT AGREE
- 26% STRONGLY AGREE
Recognizing this problem, **65%** of the organizations surveyed have started some kind of data literacy program. Half of the time (48%), it’s driven by the CDO or Chief Analytics Officer. More than a third (35%) are led by the CIO, and 16% are led by the CTO.

Is there a data literacy program in place at your company?

- Yes: 65%
- No: 28%
- I don’t know: 7%
With the rise of self-service applications and a broadening sense of data ownership, data users are imagining a more independent approach. Ideally, nearly 40% of data users would like to rely on themselves for data access.

In addition to asking for more autonomy, data users are moving away from IT teams. 38% of data users would like to rely on data teams for data access, while only 18% would turn to IT.
The majority of organizations are missing key opportunities to extract measurable value from their data. Less than half are currently using data to develop new products and services, and only 37% of companies have figured out how to monetize their data.

Looking ahead, the #1 project on most companies’ roadmaps is adding AI/ML functions, closely followed by making data a team sport by involving more people in the data lifecycle.

### Key opportunities for data

<table>
<thead>
<tr>
<th>Opportunity</th>
<th>ALREADY HAVE IT</th>
<th>PLANNING FOR IT IN THE NEXT 2 YEARS</th>
<th>PLANNING FOR IT IN THE NEXT 3-5 YEARS</th>
<th>NO PLAN FOR IT YET</th>
<th>I DON’T KNOW</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-service access to data</td>
<td>46%</td>
<td>30%</td>
<td>12%</td>
<td>10%</td>
<td>2%</td>
</tr>
<tr>
<td>Equipping every team with analytics</td>
<td>41%</td>
<td>36%</td>
<td>12%</td>
<td>8%</td>
<td>3%</td>
</tr>
<tr>
<td>Involving more employees in the data lifecycle (i.e., data preparation)</td>
<td>40%</td>
<td>40%</td>
<td>10%</td>
<td>7%</td>
<td>3%</td>
</tr>
<tr>
<td>Always-on data sharing with 3rd parties and partners</td>
<td>38%</td>
<td>32%</td>
<td>11%</td>
<td>13%</td>
<td>6%</td>
</tr>
<tr>
<td>Automation of business reporting and most data-related projects</td>
<td>45%</td>
<td>35%</td>
<td>11%</td>
<td>5%</td>
<td>4%</td>
</tr>
<tr>
<td>AI and ML functions in products and internal initiatives</td>
<td>32%</td>
<td>40%</td>
<td>12%</td>
<td>10%</td>
<td>5%</td>
</tr>
<tr>
<td>Monetizing data</td>
<td>37%</td>
<td>33%</td>
<td>10%</td>
<td>14%</td>
<td>7%</td>
</tr>
<tr>
<td>Using data to develop new products and services</td>
<td>48%</td>
<td>33%</td>
<td>10%</td>
<td>4%</td>
<td>3%</td>
</tr>
<tr>
<td>Making real-time data available to all employees</td>
<td>43%</td>
<td>34%</td>
<td>12%</td>
<td>8%</td>
<td>2%</td>
</tr>
</tbody>
</table>
As we dive into the main challenges to data and digital transformation projects, schedule issues and a lack of skills are hampering companies’ success, not technology or budget concerns. The main barrier to data success and digital transformations is on the people side of the equation. This underlines the importance for companies to bring their employees along on the data journey. Driving greater data literacy, creating an organization-wide data culture, and meeting the needs for more data agility are crucial levers for companies of all sizes to succeed.

What are the main challenges to your data and transformation projects?

- We don’t have people with the requisite skills: 28%
- We don’t have enough time to execute them properly: 28%
- Data and digital transformation are lower priority for the business: 25%
- We don’t have the right technology in place: 20%
- There are no obstacles for these projects: 20%
- We don’t have the budget: 16%
- We can’t get sufficient executive buy-in: 16%
Overall, **17%** of respondents doubt they’ll accomplish all the data and digital transformation projects on their road map.

But the closer to the business respondents are, the less confident in their company’s abilities they are. There is a 7-point difference between those sitting on the business side and those belonging to IT teams.

Are you confident that your company will accomplish all the projects on the data and digital transformation road map?

**IT side**
- 5% No
- 9% Not Sure
- 86% Yes

**Business side**
- 8% No
- 14% Not Sure
- 79% Yes
Now more than ever, organizations must be ready to adapt to changing conditions — and that requires data agility. Agile businesses have the speed and flexibility to satisfy their data demands quickly, reliably, and at scale. This year, we found that companies are falling short of their need for fast access to trusted data.
Only half of the respondents feel like their organization has the speed and flexibility to completely satisfy the demands of the business.

Do you feel that your company’s data has the speed and flexibility to satisfy the demands of the business?

- Yes, completely: 52%
- A little, but not enough: 44%
- No, absolutely not: 2%
- I don’t know: 1%
The impact of remote work

COVID-19 made remote work an immediate priority, but for many, the data infrastructure hasn’t kept pace with new working styles.

57% of companies report that remote working has had a negative impact on their data agility.

Around a quarter of companies are concerned about how prepared they are for new data security and privacy regulations — roughly the same proportion that report issues around access and protection of sensitive data.
Without data trust, organizations will continue to hesitate and second-guess their data-driven decisions — potentially losing precious time when being strategic and responsive matters most. In 2022, data quality is a serious concern, leaving companies doubting both their data and the decisions they make based on that data.
But the breakdown by responsibility is interesting: trust degrades the closer you get to lines of business, with a 10-point difference between IT and business.

82% of respondents always trust the data they work with.

<table>
<thead>
<tr>
<th>Category</th>
<th>Percentage</th>
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</thead>
<tbody>
<tr>
<td>All</td>
<td>18%</td>
</tr>
<tr>
<td>IT side</td>
<td>15%</td>
</tr>
<tr>
<td>Business side</td>
<td>25%</td>
</tr>
</tbody>
</table>

Do you always trust the data you work with?

- All: 82% yes, 18% no
- IT side: 85% yes, 15% no
- Business side: 75% yes, 25% no
80% of organizations have standard metrics to assess and describe the quality of their data.

This leaves 20% of data leaders and experts without any way to measure the health of data in their organization.

Technology companies and Financial Services and Insurance (FSI) lead the pack when it comes to standard metrics for data; healthcare, manufacturing, retail, and education lag behind.

Does your company have any standard metrics or Key Performance Indicators (KPIs) — such as recency, completion, or relevance — to assess and describe the quality of its data?
In your opinion, should there be common standard metrics and benchmarks for assessing the quality of all enterprise data across companies?

- Probably not: 40%
- Definitely not: 1%
- Probably: 3%
- Yes, definitely: 57%

97% agree that there should be cross-industry standard metrics to assess the quality of all enterprise data.

This is a gain of 2 points since our 2021 survey.
Conclusion

In the coming years, we are only going to become more reliant on data to meet the challenges of a turbulent economy and a highly competitive marketplace. By putting a focus on healthy data — supported by a strong data culture with a focus on agility and trust — businesses can weather the storm and come out ahead.

Talend’s unified, end-to-end data management gives organizations the power to run lean in tough times while still serving their long-term strategy.
Appendix: Where we got our data

In June 2022, Talend led a global survey via Qualtrics of independent data experts and leaders from medium and large companies who regularly work with data. Because data has become a key asset for many types of organizations, the respondents represent a variety of industries and departments. 892 answers were considered complete for analysis.
20 Data roles

64% of respondents say their role is more on the IT side while 36% say it’s more on the business side.

Would you say your role is more on the IT side or the business side?

64% 36%
21 Role activities

25% say they primarily deliver data,

22% say they primarily analyze data, and 21% say they both deliver data as well as analyze data for their organization. 32% manage teams that deliver and analyze data for the rest of their company.

- 32% I manage teams that deliver and/or analyze data for the company
- 25% I primarily deliver data or reports to the rest of the company
- 21% I deliver data as well as use and/or analyze it
- 22% I primarily analyze data and/or use insights backed by data
22 Data job titles

25% of respondents are VP or C-level executives (data leaders) and 75% are data experts with titles ranging from BI Analyst to Data Quality Engineer. The top 5 titles were Data Analyst and Big Data Analyst (16%), CDO (8%), CIO (8%), Data Administrator (8%), Business Analyst (7%).

<table>
<thead>
<tr>
<th>Data Job Title</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Data Analyst</td>
<td>10%</td>
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<tr>
<td>Chief Data Officer</td>
<td>8%</td>
</tr>
<tr>
<td>Chief Information Officer</td>
<td>8%</td>
</tr>
<tr>
<td>Data Administrator</td>
<td>8%</td>
</tr>
<tr>
<td>Business Analyst</td>
<td>7%</td>
</tr>
<tr>
<td>Big Data Analyst</td>
<td>6%</td>
</tr>
<tr>
<td>Data Scientist</td>
<td>6%</td>
</tr>
<tr>
<td>Data Engineer</td>
<td>5%</td>
</tr>
<tr>
<td>VP Data Management</td>
<td>5%</td>
</tr>
<tr>
<td>BI Developer</td>
<td>4%</td>
</tr>
<tr>
<td>Database Administrator</td>
<td>4%</td>
</tr>
<tr>
<td>BI Analyst</td>
<td>3%</td>
</tr>
<tr>
<td>Business Intelligence Architect</td>
<td>2%</td>
</tr>
<tr>
<td>Head of Data and Architecture</td>
<td>2%</td>
</tr>
<tr>
<td>Resource Analyst</td>
<td>2%</td>
</tr>
<tr>
<td>VP Analytics</td>
<td>2%</td>
</tr>
<tr>
<td>Data Architect</td>
<td>1%</td>
</tr>
<tr>
<td>Data Warehouse Engineer</td>
<td>1%</td>
</tr>
<tr>
<td>ETL Developer</td>
<td>1%</td>
</tr>
<tr>
<td>Integration Specialist</td>
<td>1%</td>
</tr>
<tr>
<td>ML Engineer</td>
<td>1%</td>
</tr>
<tr>
<td>Statistician</td>
<td>1%</td>
</tr>
<tr>
<td>Data Quality Engineer</td>
<td>1%</td>
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</tbody>
</table>

Which of the following most closely matches your job title?
Respondents report that data visualization, BI, and data management and integration are the most-used data tools.

### Which of the following do you regularly use as part of your role? (Please select all that apply)

- Data visualization and BI tools (e.g., Microsoft PowerPoint, Tableau, Power BI) - 62%
- Data integration and management tools (e.g., Oracle, SAP, IBM, Informatica, Collibra, Talend) - 58%
- Statistical data analysis tools (e.g., SPSS, R, Python) - 48%
- Customer Relationship Management (CRM) tools (e.g., Salesforce, HubSpot) - 37%
- Financial or market information (e.g., pricing, news, mapping, screening, analytics) - 33%
- HR management tools (e.g., Workday, SuccessFactors, Dayforce) - 28%
- Marketing automation tools (e.g., Marketo, InfusionSoft, Autopilot) - 25%
- None of the above - 2%
The vast majority of organizations live — at least partly — in a cloud world. Almost half of the respondents describe their data environments as hybrid, and an additional 22% say theirs is multi-cloud. Only 11% have an on-prem data environment.

Which best describes the data environment of your company?

- **Sovereign cloud** (i.e., data is stored and processed in the country where your organization operates) - 4%
- **Private cloud** (i.e., dedicated instances on public cloud) - 14%
- **Multi-cloud** (i.e., data hosted in multiple public cloud instances) - 22%
- **Hybrid** (i.e., data hosted in a combination of cloud instances and on-premise databases) - 47%
- **On-premise** - 10%
- **Not sure** - 3%
The Data Health Barometer 2022 was global, with a focus on France, Singapore, the UK, and the USA. This base of respondents is large enough for region- and country-specific analysis.

In which country is your organization headquartered?

- **Singapore**: 16%
- **USA**: 28%
- **UK**: 28%
- **France**: 28%
Respondents represented all industries, but Technology was a significant leader at nearly a quarter of respondents.

<table>
<thead>
<tr>
<th>Industry</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technology</td>
<td>23%</td>
</tr>
<tr>
<td>Retail</td>
<td>12%</td>
</tr>
<tr>
<td>Finance</td>
<td>10%</td>
</tr>
<tr>
<td>Manufacturing/Aerospace</td>
<td>9%</td>
</tr>
<tr>
<td>Construction</td>
<td>8%</td>
</tr>
<tr>
<td>Healthcare and Life Sciences</td>
<td>7%</td>
</tr>
<tr>
<td>Education</td>
<td>5%</td>
</tr>
<tr>
<td>Professional Services</td>
<td>5%</td>
</tr>
<tr>
<td>Government</td>
<td>4%</td>
</tr>
<tr>
<td>Transportation</td>
<td>3%</td>
</tr>
<tr>
<td>Energy/Utilities</td>
<td>2%</td>
</tr>
<tr>
<td>Insurance</td>
<td>2%</td>
</tr>
<tr>
<td>Telecommunications</td>
<td>2%</td>
</tr>
<tr>
<td>Tourism/Hospitality</td>
<td>2%</td>
</tr>
<tr>
<td>Other (Please specify)</td>
<td>4%</td>
</tr>
</tbody>
</table>
The respondents represented a range of medium and larger businesses.

### P6 (dollars): What is the approximate total annual revenue of your company (in US dollars)?

<table>
<thead>
<tr>
<th>Revenue Range</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than $10 million</td>
<td>0%</td>
</tr>
<tr>
<td>$10-$100 million</td>
<td>34%</td>
</tr>
<tr>
<td>$100 million-$1 billion</td>
<td>43%</td>
</tr>
<tr>
<td>More than $1 billion</td>
<td>18%</td>
</tr>
<tr>
<td>Not sure</td>
<td>5%</td>
</tr>
</tbody>
</table>

### P6 (UK): What is the approximate total annual revenue of your company (in GBP)?

<table>
<thead>
<tr>
<th>Revenue Range</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than £10 million</td>
<td>0%</td>
</tr>
<tr>
<td>£10-£100 million</td>
<td>36%</td>
</tr>
<tr>
<td>£100 - £1 billion</td>
<td>45%</td>
</tr>
<tr>
<td>More than £1 billion</td>
<td>14%</td>
</tr>
<tr>
<td>Not sure</td>
<td>5%</td>
</tr>
</tbody>
</table>

### P6 (France): What is the approximate total annual revenue of your company (in Euros)?

<table>
<thead>
<tr>
<th>Revenue Range</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than €10 million</td>
<td>0%</td>
</tr>
<tr>
<td>€10-€100 million</td>
<td>41%</td>
</tr>
<tr>
<td>€100 - €1 billion</td>
<td>34%</td>
</tr>
<tr>
<td>More than €1 billion</td>
<td>13%</td>
</tr>
<tr>
<td>Not sure</td>
<td>13%</td>
</tr>
</tbody>
</table>
The respondents represented a range of medium and larger businesses.

Approximately how many employees does your company have in total, including all locations?

- Not sure: 1%
- Less than 5: 1%
- 5 to 499: 19%
- 500 to 999: 20%
- 1,000 to 4,999: 34%
- 5,000 to 9,999: 12%
- 10,000 or more: 12%
- Not sure: 1%
About Talend

Talend, a global leader in data integration and data management, is taking the work out of working with data.

To compete and win, organizations need to use data more effectively. Talend offers the only end-to-end platform that combines enterprise-grade data integration, integrity, and governance capabilities to unify data across any cloud, hybrid, or multi-cloud environment. Innovations like the Talend Trust Score™, which instantly quantifies the reliability of any dataset, remove barriers to becoming data driven. Talend’s no-code and low-code modules give data experts and business users alike the means to actively promote the health of their data. With Talend, users across the organization actively collaborate to understand, improve, and create value from data organization-wide.

Over 7,250 customers have chosen Talend for healthy data and a healthy business. Top analyst firms and industry media recognize Talend as a leader in data management software.

Talend is headquartered in San Mateo, California.

For more information, please visit www.talend.com and follow us on LinkedIn.com and Twitter @Talend.