Why You Should Care About Data Culture

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By Chandana Gopal, Research Director, Business Analytics, and Dan Vesset, Group Vice President, Analytics and Information Management
Data is important...but is it enough?

“Organizations don’t need a big data strategy; they need a business strategy that incorporates big data.”
Bill Schmarzo, Chief Innovation Officer, Hitachi Vantara

“Every company has big data in its future, and every company will eventually be in the data business.”
Thomas H. Davenport, Babson College Professor of Information Technology and Management, Thought Leader, and Author

“The human side of analytics is the biggest challenge to implementing big data.”
Paul Gibbons, Management Consultant and Author

“The goal is to turn data into information, and information into insight.”
Carly Fiorina, CEO, Hewlett-Packard

“Without big data analytics, companies are blind and deaf, wandering out onto the web like deer on a freeway.”
Geoffrey Moore, Management Consultant and Author
Organizations must look beyond data strategy and think about data culture

Just having data, even a lot of data, does not guarantee success. Data can be an asset but simply having more data is not enough, having only the right technology is not enough, and having only the right analysts is not enough.

A growing number of enterprises are recognizing that turning data into information, knowledge, and insights requires a data culture.

Data culture encompasses values, behaviors, and attitudes of executives and employees that promote and enable use of relevant data as the driving force of decision making.

“Culture eats strategy for breakfast.”

Peter Drucker, Management consultant, author, and business visionary
IDC set out to look for and understand data culture

The Approach

• We undertook an online survey of 1,100 respondents who use data within organizations.

• The respondents came from large enterprises (500+ employees).

• They comprised a mix of executive and managerial positions as well as technical and non-technical roles across a wide spectrum of industries.

• We drew from a global audience including Brazil, Canada, China, France, Germany, India, Japan, Mexico, U.K., and the U.S.

The Objectives

• Identify key visible and invisible elements that influence data culture.

• Collect attitudinal and behavioral measures of these elements.

• Build scales to measure the presence and depth of key drivers and an overall measure of data culture.

• Examine whether the extent to which organizations embraced a data culture made a difference to their business outcomes.

• Identify best practices that lead to a strong data culture in organizations.
Does a strong data culture impact business performance?

IDC asked survey respondents about attitudinal and behavioral elements that influence data culture and tested their impact on business performance metrics.

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Respondents and their organizations were segmented into four quartiles and their differing characteristics assessed.

**Lowest Data Culture Score**
- **Data-aware**
  - Very early stages in the data culture journey

**Data-adopting**
- Some data culture initiatives; adoption in parts of organization

**Data-mature**
- Tool adoption, training, and leverage of data in most departments

**Data-leading**
- Leading-edge organizations with strong enterprise-wide data culture

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**Data Culture Scale**
Data-savvy employees are the driving force of a strong data culture

Skills/Competencies: Data-leading organizations have employees who know how to best use data

People in data-leading organizations are:

» 3X better than peers in data-aware organizations at finding and connecting with data.

» 54% better at data analysis and 50% better at accurately and critically interpreting the analysis than workers in data-aware organizations.

Hiring: The data-leading hire people with advanced data skills

Q: What is the minimum level of data and analytic skills that newly hired knowledge workers are required to already possess in each of the following areas? (% advanced skill)

- Data-savvy employees are the driving force of a strong data culture
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- Hiring: The data-leading hire people with advanced data skills
- Q: What is the minimum level of data and analytic skills that newly hired knowledge workers are required to already possess in each of the following areas? (% advanced skill)

- Data-aware
  - Finding data: 10%
  - Analyzing data: 20%
  - Interpreting data: 30%
- Data-adopting
  - Finding data: 20%
  - Analyzing data: 30%
  - Interpreting data: 40%
- Data-mature
  - Finding data: 30%
  - Analyzing data: 40%
  - Interpreting data: 50%
- Data-leading
  - Finding data: 40%
  - Analyzing data: 50%
  - Interpreting data: 60%
In a strong data culture, people help each other with data-related activities

81% more respondents from the data-leading were extremely/very confident that they could get help on data and analytics questions compared to the data-aware group.

Helping: Employees at data-leading organizations feel confident about getting data and analytics help

Q: How confident are you that individuals in your organization can get help with analytics or data-related questions from their colleagues?

- Extremely confident
- Very confident
- Confident
- Somewhat confident
- Not confident at all

Sharing: Data-leading organizations openly share data and insights

79% more respondents from the data-leading were very/extremely willing to share data compared to those from data-aware organizations.

Tools/Activities: The data-leading enable employee engagement with data and analytics

71% more respondents from data-leading organizations said activities that fostered data and analytics communities were very/extremely successful compared to their data-aware peers.
When trusted with data, employees feel more accountable and produce better results

Accountability: Data-leading organizations trust workers with data, making them feel more accountable

70% more respondents from the data-leading felt extremely/very accountable for the data they have access to compared to the data-aware group.

Q: How accountable do you personally feel for the data that you have access to?

Access: The data-leading also do better at providing employees safe access to job-related data

53% more respondents from the data-leading said employees got access to most/all company-level data compared to those from the data-aware.

Q: Rate the ease with which you can get access to data that you need.
Decision making becomes data-driven when data is key to an organization’s and employee’s identity

Identity: Being data-driven is a core part of employees’ work identity in organizations with great data culture

73% more respondents from the data-leading group felt they were quite strongly data-driven compared to the data-aware.

Q: To what extent do you think of yourself as a data-driven person?

Expectations: Organizations leading in data culture require data to be part of any decision-making activity

The data-leading had the following characteristics compared to the data-aware:

60% more respondents said they always require use of data in meetings.

67% more respondents always require data to support recommendations/decisions.

55% more respondents said > 80% of their meetings were driven by data.
Organizations with a strong intrinsic data culture have senior executives that actively use data and analytics

**Leadership: Executives set the tone for data and analytics use at data-leading organizations**

Q: To what extent do senior executives actively work with data themselves?

59% more respondents from data-leading organizations said their executives model working with data compared to data-aware respondents.

48% more said their organizations treat data as an asset and recognize its value compared to the data-aware.

**Investments: It is not about spending a lot on technology. Data-leading organizations also invest in people and culture**

89% more data-leading respondents were very/extremely satisfied with investments in data capabilities compared to the data-aware group.
Investing in data culture results in the improvement of a variety of business metrics.

- Financial metric (profit)
- Employee metric (productivity)
- Customer metric (satisfaction)
- Offering metric (time-to-market)
Business metrics improve as organizations progress on their data culture journey

Financial metrics
- Revenue
- Profitability
- Capital costs

Comparing data-adopting organizations with data-aware organizations:
- 18% more saw revenue increase
- 20% more saw profit increase

Comparing data-maturing organizations with data-aware organizations:
- 41% more data-leading organizations reduced capex than the data-aware.

Employee metrics
- Employee productivity
- Employee retention

Comparing data-maturing organizations with data-aware organizations:
- 29% more saw employee retention improve
- 24% more saw employee productivity increase

Customer metrics
- Customer satisfaction
- Customer retention

Comparing data-maturing organizations with data-aware organizations:
- 19% more saw customer satisfaction/loyalty increase
- 20% more saw customer retention increase

Comparing data-adopting organizations with data-aware organizations:
- 37% rise in new customer acquisitions seen by the data-leading compared with the data-aware.

Offering metrics
- Innovation
- Speed-to-market

Comparing data-maturing organizations with data-aware organizations:
- 24% more saw numbers of products/services grow
- 31% more saw speed-to-market increase

Comparing data-adopting organizations with data-aware organizations:
- 41% more data-leading organizations reduced capex than the data-aware.

Comparing data-maturing organizations with data-aware organizations:
- 37% greater improvement in retention seen by the data-leading than the data-aware.

50% more data-leading organizations said that data provides a competitive advantage compared to data-aware organizations.
Essential Guidance

» Strong data culture and people are vital components for success in the digital economy. Data strategy and technology are not enough to make an organization truly data-driven.

» Data culture can be honed step by step, with benefits compounding exponentially as organizations strengthen their commitment.

» Changing mindsets can yield immediate improvement. Many of these elements can be started very simply without a big price tag.

» Executive role-modeling and support significantly speeds up data culture maturation.

» Look beyond financial metrics when measuring the outcomes of improving data culture.
IDC Analyst Profiles

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Becoming truly data-driven requires changing mindsets, attitudes, and habits—embedding data into the identity of the organization. The real aspiration is to get every person in your organization to see the value in your data, to nurture confidence in using data to answer questions, and inspire others to do the same. At Tableau, we believe building a data culture focused on five key elements – trust, mindset, sharing, community, and talent – will pave the way for organizations to be more successful and vibrant.

Learn more at https://www.tableau.com/data-culture