A Data and Analytics Leader's Guide to Data Literacy

Data & Analytics

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Champion data literacy and teach data as a second language to enable data-driven business

Imagine an organization where the marketing department speaks French, the product designers speak German, the analytics team speaks Spanish and no one speaks a second language. Even if the organization was designed with digital in mind, communicating business value and why specific technologies matter would be impossible.

That's essentially how a data-driven business functions when there is no data literacy. If no one outside the department understands what is being said, it doesn't matter if data and analytics offers immense business value and is a required component of digital business.

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"The prevalence of data and analytics capabilities, including artificial intelligence, requires creators and consumers to 'speak data' as a common language," says Valerie Logan, Senior Director Analyst, Gartner. "Data and analytics leaders must champion workforce data literacy as an enabler of digital business and treat information as a second language."

As data and analytics becomes a core part of digital business and data becomes an organizational asset, employees must have at least a basic ability to communicate and understand conversations about data. In short, the ability to "speak data" will become an integral aspect of most day-to-day jobs.

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What is data literacy?

Gartner defines data literacy as the ability to read, write and communicate data in context, including an understanding of data sources and constructs, analytical methods and techniques applied — and the ability to describe the use case, application and resulting value.

This all boils down to a simple question, "Do you speak data?"

Data literacy is an underlying component of digital dexterity

The ability to understand and communicate in a common data language is a core skill for a core technology. It is the difference between successfully deriving value from data and analytics and losing out competitors who have made it a core competency in their organizations.

Further, data literacy is an underlying component of digital dexterity, which is an employee's ability and desire to use existing and emerging technology to drive better business outcomes, another important skill for digital business.

Why is data literacy important?

Poor data literacy is ranked as the second-biggest internal roadblock to the success of the office of the chief data officer, according to the Gartner Annual Chief Data Officer Survey. Gartner expects that, by 2020, 80% of organizations will initiate deliberate competency development in the field of data literacy to overcome extreme deficiencies. By 2020, 50% of organizations will lack sufficient AI and data literacy skills to achieve business value.

As organizations become more data-driven, poor data literacy will become an inhibitor to growth.

Ask the right data and analytics questions

Data and analytics leaders are responsible for creating the narrative for data literacy, highlighting the business value to be gained.

Start by assessing data literacy at your organization with a few questions:

- How many people in your business do you think can interpret straightforward statistical operations such as correlations or judge averages?
- How many managers are able to construct a business case based on concrete, accurate and relevant numbers?

- How many managers can explain the output of their systems or processes?
- How many data scientists can explain the output of their machine learning algorithms?
- How many of your customers can truly appreciate and internalize the essence of the data you share with them?

"Not only must organizations take steps to educate professionals who are involved in crafting data-driven solutions, products and services, they must also ensure those steps achieve the goal of teaching all relevant employees to speak data as their new second language, as well as developing and nurturing communities in which the language will flourish," says Logan.

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Establish a data literacy program

Start by identifying the fluent and native data speakers. Look at business analysts, data stewards and architects who are able to speak data naturally and effortlessly. Also, identify skilled translators who can serve as mediators for business groups.

Second, look for areas where communication barriers mean that data isn't being utilized to its full business potential. Conduct data literacy assessments to identify gaps and use as a baseline.

Data and analytics leaders and data teams must lead by example

When it comes time to teach groups about data, make sure it's in a fun and open environment, and think outside the box for training ideas. Don't focus solely on slides or presentations — use games, quizzes and other creative ways to teach.

Next, try a data literacy proof-of-concept workshop in an area where language gaps exist. Have participants describe real-life common use cases as well as a use case specific to the organization. Make sure to capture lessons learned and then repeat the exercise, ensuring that participants use others' languages. Share the lessons with other groups to raise awareness and understanding of the literacy gap.

Finally, don't forget that data and analytics leaders and data teams must lead by example. Ensure that teams are speaking data in all meetings when discussing business outcomes and in other business situations. Champion data literacy and evangelize the benefits of eliminating the data literacy gap.

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