Gartner Research

Drive Business Outcomes by Measuring the Value of Data Literacy

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14 March 2022
Data literacy skills are a new core requirement for all employees in digital business. Executive leaders must ensure their workforce is fit for digital business success by using data literacy metrics as the basis for communicating the value of fostering data-literate talent.

Additional Perspectives

- Summary Translation: Drive Business Outcomes by Measuring the Value of Data Literacy
  (13 April 2022)

Overview

Key Findings

- The role of the data and analytics function has changed. It is now at the core of an organization's business model and digital capabilities. Yet less than a third (29%) of respondents to Gartner's Annual Chief Data Officer Survey indicated that they are successfully meeting the objective of "ROI from data and analytics investments."

- Change management is a primary focus of high-performing Chief Data Officer Survey respondents.

- Quick wins can build momentum, but lasting and meaningful change takes time, because it requires people to learn new skills, behave in new ways and for those to be embedded across the organization.

Recommendations

To achieve their digital business goals, executive leadership should update business initiatives with data and analytics by:
- **Measure business success.** Communicate the business success of any data literacy training by demonstrating clear evidence between business outcomes and the training.

- **Measure program/training success** by developing targets around employee engagement and satisfaction scores to show that data literacy training is well-received by the organization.

- **Measure employee success.** Train employees, equipping them with sufficient knowledge to improve their personal levels of data literacy. Organizations should measure employee data literacy before and after training, and also track the linkages to resulting business impact.

**Analysis**

*This research is adapted from How to Measure the Value of Data Literacy, which guides data and analytics (D&A) leaders in reforming and upgrading their D&A strategy to meet digital business goals.*

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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.

— **Gartner IT Glossary**
Data and analytics (D&A) is pervasive in all aspects of all businesses, in communities and in our personal lives. Organizational and personal success increasingly rely on data literacy and the ability to communicate with data and analytics (see Unlock Digital Business Value With Data Literacy and Data-Driven Culture). While executive leaders increasingly recognize the inherent need for data-driven decision making, knowing how to drive or realize specific business benefits and outcomes can be difficult. In turn, this deters stakeholder buy-in and support. Data from Gartner’s 7th Chief Data Officer (CDO) Survey suggests that while top-performing CDOs drive specific measurable business outcomes, many CDOs still aren’t measured on the business value of their data and analytics programs, while those that are measured on value are often still unable to meet their measurable objectives:

- The overwhelming majority of respondents explicitly include data-driven culture/change management (81%) and data literacy/skills training (68%) within their data and analytics strategies, with data-driven culture being the No. 1 priority for 2022.

- Respondents also identified talent shortages, culture challenges to accept change, and lack of resources and funding as the most important barriers to the success of data and analytics initiatives.

- In contrast, only just over half of respondents identified that they invested in the areas of data-driven culture (61%) and data literacy (53%) during 2021.

- At the same time, less than a third (29%) are successfully meeting the objective of “ROI from data and analytics investments.”

- A gulf persists between the perceived need for D&A skills and culture across an organization and the subsequent lack of action (the same challenges are identified year over year). This indicates that organizations are still not making sufficient progress, and that investment in data-driven culture and data literacy needs to increase.

There are some real impediments to taking decisive initiative on these matters. Business transformation programs are difficult; they take significant time and resources, particularly given that data literacy efforts in particular are likely to have an impact on the entire workforce. Yet it is hugely challenging to quantify and communicate the value of improving the data literacy of the workforce. Additionally, the half-life of a professional skill is only five years, according to research by the World Economic Forum — meaning that the skill is innovated, flourishes and becomes irrelevant in that period of time.
To address this, executive leaders must step up and ensure that their organizations are explicitly using metrics to quantify and communicate the measurable value of fostering a data-literate workforce, in three different and complementary ways (see Figure 1). They must measure program rollout success, the success of individual employees and the resultant business outcomes.

**Figure 1: Approaches to Measuring the Efficacy of Data Literacy Initiatives**

**Approaches to Measuring the Efficacy of Data Literacy Initiatives**

1. Data Literacy Program Success
2. Employee Success With Data Literacy
3. Business Outcome Success

Measure Data-Driven Business Outcomes

Data and analytics strategies have to shift from “how to create a successful initiative” to “how to use our capabilities to make the organization successful.” As a result, the role of the D&A function has changed. It is now at the core of an organization’s business model and digital platform. The focus of the strategy now has to become using your D&A capabilities to make the organization successful (see Quick Answer: How to Create a Data-Driven Enterprise).

As part of quantifying the business impact of improved data-driven culture and data literacy, executive leaders need to ensure that their organization is tracking the resultant quantifiable business outcomes and then communicate the business success using this evidence. Identify and agree upon the success metrics that will be used to track realized value. Use structured, visual methods to describe your stakeholder business outcomes and the related key performance indicators (KPIs; see Tie Your Data and Analytics Initiatives to Stakeholders and Their Business Goals).
Measure the Success of a Data Literacy Program Rollout

Formal data literacy programs are critical to achieving the ambitious goals of establishing a data-driven enterprise, and from a delivery perspective, measures of program rollout are the easiest to track. Measuring the success of a data literacy program ensures sound investments in both formal and informal training activities. This includes tracking and measuring the effectiveness of the providers and content and delivery mechanisms, as well as the performance and results that are achieved within the organization. Align training objectives to learner application by using assessments to obtain feedback, and validate that the employees found the training relevant to their jobs and that they acquired the intended knowledge and skills.

Evaluate the Successful Progress of Employees With Data Literacy Improvement

Employees and their managers need greater clarity about what's supposed to be achieved during and after data literacy training programs. This is helped if executive leaders foster an approach to talent management where learning D&A skills and acquiring data literacy knowledge are a part of the organizational culture and the individual expectations. This attracts, retains and motivates employees, and prepares them to fulfill the future goals of the department and enterprise.

Note that data literacy competencies encompass a range of business-oriented knowledge, personal effectiveness competencies, data and analytics process disciplines, and technical skills. Note also that members of the workforce will vary in their “skill” and “will” to engage — some will be more or less capable to learn new skills, and more or less amenable to doing so (see Chief Data Officers Must Address Both ‘Skill’ and ‘Will’ to Deliver Data-Driven Business Change and Tool: Data Literacy Personas).

Paradoxically, best results occur when line-of-business staff learn and understand more about technical competencies, while more technical roles are encouraged to learn about the business context, as well as developing their interpersonal skills.
Evidence

1 2022 Gartner Chief Data Officer Study: This study was conducted to explore and track the business impact of the CDO role and/or the Office of the CDO and the best practices to create a data-driven organization. The research was conducted online from September through November 2022 among 496 respondents from across the world. Respondents were required to be the highest-level data and analytics leader in the organization: chief data officer, chief analytics officer, the most senior leader in IT with data and analytics responsibilities, or a business executive such as chief digital officer, or other business executive with data and analytics responsibilities. The survey sample was gleaned from a variety of sources (including LinkedIn), with the greatest number coming from a Gartner-curated list of over 4,519 CDOs and other high-level data and analytics leaders. The study was developed collaboratively by Gartner D&A Analysts and the Primary Research Team.

Disclaimer: Results of this study do not represent global findings or the market as a whole but reflect sentiment of the respondents and companies surveyed.

2 “The Half-Life of Professional Skills Is 5 Years,” EAB.


Recommended by the Authors

Driving the Business Value of Data and Analytics: A Gartner Trend Insight Report

Roadmap for Data Literacy and Data-Driven Business Transformation: A Gartner Trend Insight Report

How to Design an Effective Data and Analytics Training Program to Improve Data Literacy

Measure Training Program Value to Boost Reskilling Outcomes

Defining Metrics to Track the Success of Your Strategy

Outcome-Driven Metrics for the Digital Era

Tool: How to Connect Data and Analytics to Business Value

Client Question Video: How Do We Become Data-Driven?
Explore these additional complimentary resources and tools for Data & Analytics Leaders:

**Webinar**
100 Data & Analytics Predictions Through 2026
Elevate D&A strategies to advance business problem solving.

**Webinar**
Drive Better Business Outcomes by Improving Your Organization’s Data Literacy
Foster improved data literacy and link your data initiatives to measurable business outcomes.

**Roadmap**
5 Stages to Enhance Your 2023 Data and Analytics Strategy for Digital Growth
Align all stakeholders and drive business value.

**eBook**
Understand the Role of Data Fabric
Good decisions rely on shared data, but to share the right data at the right time, consider data fabric.

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