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DATA TRENDS REPORT

2020

To address the
data skills gap,
businesses take
inspiration from
academia with
training and
certification

Digital transformation demands that businesses be data-driven, so organizations are forced to address the analytics skills gap across their employee base, with Gartner estimating that 80% of organizations will initiate data literacy efforts in 2020. More people have greater access to data than ever before, but are unable to "speak the language" of data. Companies are solving this barrier to growth by cultivating analytics capabilities outside of data scientist roles. Academic institutions have been developing critical-thinking and analytics skills in students for years, and corporations are taking a page out of academia's playbook by forming their own data literacy programs, centers of excellence, communities, and subsidizing certifications. Workers with data literacy have the agency to understand and use—to "translate"—the data they are increasingly exposed to, empowered to answer business questions and add greater value to their companies.

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On average, organizations plan to spend $15.3 million on digital initiatives over the next 12 months. Of this, 59% will be allocated to technology, and 41% will be dedicated to people and skills.

IDG, **2019 DIGITAL BUSINESS RESEARCH**

"One thing we see is important for basic data literacy is really understanding where your data is used and how it's used and why it's important."

— Anthony Brown, Enterprise Analytics Leader, Lockheed Martin

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ARTIFICIAL INTELLIGENCE

AI moves from abstract to actionable

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Domain and technology experts overcome the hype to create a shared vision for artificial intelligence and machine learning

Artificial intelligence is on everyone's lips as the next wave of digital transformation, while new technology and services have set the foundation for a new stage of AI maturity. Instead of piloting AI projects in innovation labs, organizations are taking a more practical approach—starting with how they structure the teams responsible for AI and machine learning. Instead of developing AI projects in a silo, organizations are starting to bring domain experts into the strategy and planning process to ensure that AI-powered recommendations are useful and actionable. This approach is also uplifting domain experts to become AI champions and educators, teaching business users how to effectively leverage AI recommendations for decision making.

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79% of enterprises say they have already developed specific strategies for their AI infrastructure, and a further 18% plan to do so.

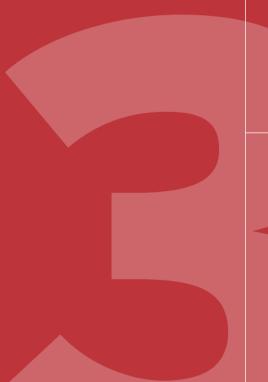**451 RESEARCH, 2020 TRENDS IN DATA, AI, AND ANALYTICS**

"Business units must lead AI projects and be responsible for their success."

— HBR, *Building the AI-Powered Organization*, 2019

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Brands apply narratives to consumer data for more authentic and enlightening engagements

Data storytelling is an effective way for brands to illustrate our behavior and engage us in ways that pure facts and figures could never achieve. We're accustomed to companies collecting our data and even anticipate their recaps of our habits in weekly or yearly summaries. Now, these insights are more pervasive than ever. Brands are taking it to the next level, boosting consumer engagement by making our data stories more meaningful, convenient, and interactive. This also offers significant value to us as consumers, including creating more meaningful interactions for people who don't typically engage in data analysis.

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Accenture Interactive found that 87% of consumers think it's important to purchase from brands or retailers that understand 'the real me.'

ACCENTURE INTERACTIVE, 2019 CONSUMER PULSE SURVEY

" It's the context around the data that provides value and that's what will make people listen and engage."

— Christy Pettey, Gartner, Use Data and Analytics to Tell a Story, 2018

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DATA EQUITY

Transparency around workplace data leads to equity and organizational success

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Data as a resource shows equity is a prerequisite to improved employee satisfaction and business performance

Data is becoming a critical resource for organizations working to increase equity. Transparent data allows organizations—from non-profits to corporations and beyond—to uncover inequity and be intentional in identifying individuals or groups who are underrepresented or facing barriers to full representation. Beyond addressing the moral imperative, establishing equitable environments has positive impacts on both individuals and the organizations that initiate them. For corporations, transparency about their workforce data creates the opportunity to improve employee retention and satisfaction, while also accurately reflecting the communities and customers they serve. Research shows that diverse and equitable workplaces experience increased profitability, optimal operational efficiency, and competitive talent acquisition, among other benefits.

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A Deloitte report shows that inclusive organizations can deal with individual performance problems 3.6 times better than those that lack intentionally-inclusive talent strategies.

DELOITTE, TALENT MATTERS, 2017

"Data can show schools their inequities and the pathways to more equitable environments. With data at their fingertips, we're not making up stories, we're using data to help schools have more dynamic views."

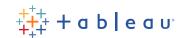— Sasha Rabkin, Equal Opportunity Schools Chief Strategy Officer

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DATA CULTURE

Accountability for data stretches across the C-suite

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Executives share responsibility for the future of data & analytics

In the digital era, organizations are looking for ways to stay competitive, starting with data. While Chief Data Officers are driving digital transformation efforts, now all executives are committed to treating data and analytics as a shared responsibility. All functional leaders—beyond the CDO and CIO—are expected to inform their organization's data and analytics strategy with critical inputs from their own teams. This creates a holistic view of data and analytics across the entire organization and ensures that executives have a more informed perspective when advocating for data initiatives. When executives model and support data-driven behavior, it creates a trickle-down effect—embedding data into the fabric of day-to-day conversations and behaviors for every department and role.

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By 2022, 90% of corporate strategies will explicitly mention information as a critical enterprise asset and analytics as an essential competency.

GARTNER, *WHY DATA AND ANALYTICS ARE KEY TO DIGITAL TRANSFORMATION*, 2019

" Data formed the unifying bridge to help achieve the best outcomes."

— Danielle Beringer, Regional Data Officer, Nissan North America

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Organizations expand data management participation to support data-driven decision-making at scale

With more applications creating more data and use cases for analytics than ever before, organizations are challenged to integrate, govern, and promote their data assets at scale. Traditional methods no longer work at scale—preparing and moving data through centralized warehouses can't maintain governance and keep up with the business needs. Technologies are already evolving to bring data management functions closer to the business—including self-service data preparation and data catalogs. Now, organizations need to evolve roles and processes so business can share data management responsibilities, helping IT curate and promote governed data at scale.

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Core data management functionalities (such as data profiling, data cataloging, metadata management and data integration) now appear in many individual data management applications and tools. The distinction among them is getting blurry, driving confusion in the market."

GARTNER, MODERN DATA AND ANALYTICS REQUIREMENTS DEMAND A CONVERGENCE OF DATA MANAGEMENT CAPABILITIES, 2019

"

We need to help everyone understand the story that we're telling. And one of the ways that we do that is by using a data catalog. We can start helping our residents and those who are consuming information to understand what we mean when we say those specific words."

— Jefferson McMillan-Wilhoit, Director, health informatics and technology, Lake County Health Department

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tableau.com/reports/data-trends