Q3 2019 TDWI BEST PRACTICES REPORT

DRIVING DIGITAL TRANSFORMATION USING AI AND MACHINE LEARNING



TDWI'S BEST PRACTICES REPORT: DRIVING DIGITAL TRANSFORMATION USING AI AND MACHINE LEARNING

Artificial intelligence (AI) is the phrase du jour and market hype around it is soaring. From self-driving cars to using deep learning to identify cancers, AI is capturing our imaginations. Businesses, too, see AI and machine learning (ML) as a path to gain competitive advantage, change how they operate, and provide business value. TDWI recently explored AI/ML in a new report. (Note: Totals may not sum to 100 percent due to rounding.)

85%

Currently in use Planned for use in next few years

0 (1%)

There are numerous use cases for AI, but machine learning dominates. ML models are often embedded in

WHAT USE CASES DOMINATE THE AI LANDSCAPE TODAY?

systems to take action. However, there are other use cases, using other AI technologies that are also in place today and planned for the future. When you think about AI in your organization, what use cases dominate?

Building predictive models using tools such as ML



Organizations making use of AI/ML are utilizing it across multiple departments and in multiple projects to gain competitive advantage, operational efficiencies, and insights for innovation.

AI IS BEING USED IN MULTIPLE PROJECTS ACROSS THE ORGANIZATION

On how many projects are you using AI/ML?



IT



Vendors are putting significant effort into software that is infused with "smarts" to assist or augment human

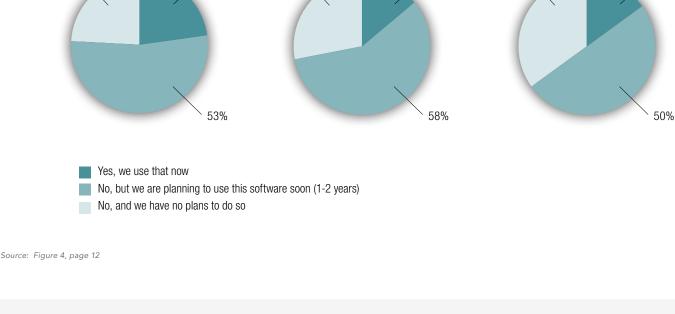
Source: Figure 3, page 10

Do you use/plan to use the augmented intelligence below?

AutoML AutoDQ **AutoInsights** 35% 14% 15%

intelligence. Augmented intelligence is used to automate the building of machine learning models, for automated data quality, and to automatically suggest insights from data. Users are starting to take notice.

24% 23% 28%



Al often requires disparate data types. To deal with more complex data, many organizations are deploying "multiplatform data environments" that consist of traditional relational databases as well as newer platforms,

both on premises and in the cloud.

Plan to deploy **Platform** Use now within next 3 years No plans

25%

Hadoop on premises Data lake in the cloud

NoSQL/semantic data platform

MODERN PLATFORMS TO SUPPORT AI/ML ARE ALSO GAINING STEAM

9% DW/data marts on premises 79% Data lake on premises 23% 43% 33% **51%**

34%

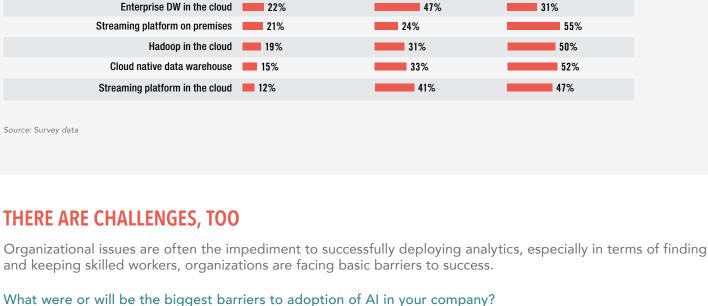
41%

Insufficient

data

Governance

considerations



Lack of skilled

personnel

understanding

Cultural issues/

lack of trust in

Business case

not strong

Business analysts

are responsible for Al projects

and they are put

into production by

DevOps

Other

Insufficient

budget

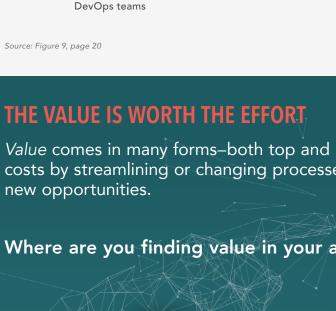


An external

partner has

helped with our AI

projects



Al projects are

built by data

scientists and

deployed into

production by

Al projects are

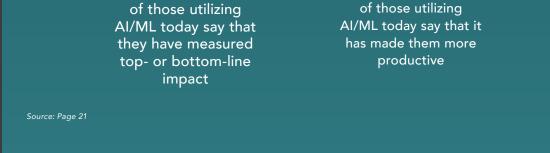
built/trained by

developers who

put models into

applications





of those utilizing

AI/ML today say that

it has delivered on its

promise

analytics and data management industry.

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enables that evolution by augmenting the intelligence of an organization, democratizing analytics and speeding time to insight. With augmented intelligence, organizations can overtake and stay ahead of the competition: create new, disruptive business models; deliver exceptional customer experiences; and optimize operations. TIBCO Analytics and Data Science helps organizations apply the latest analytics and data science technologies by enabling insights for everyone, from business user to data scientist to chief data officer. With TIBCO's

For an organization to evolve and thrive in the digital economy, it is imperative

that its data deliver value faster. Al-fueled, machine learning-infused analytics

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can rapidly connect to all data—big or small, streaming or historical. Our solutions democratize analytics and data science, balancing ease of use with sophistication, enabling all users to access, wrangle, visualize, and analyze data from all sources to discover insights. With TIBCO, you'll find an integrated portfolio that is scalable, flexible, and enterprise ready, providing controls for governance, consistency, and collaboration in your organization, while maintaining compliance with data privacy and security regulations. Recognized by industry analysts for leadership across the platform, TIBCO Analytics is the choice of companies like JetBlue,

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