To bring AI into the business mainstream, companies need to complement their technology advances with a focus on governance that drives ethics and trust. If they don’t, their AI efforts will fall short of their expectations and lag the business results delivered by competitors that responsibly embrace machine intelligence, our latest research findings suggest.
EXECUTIVE SUMMARY

Artificial intelligence (AI) has migrated from science fiction to lab experiments and, now, to actual business operations. Most people already encounter these technologies as they read product recommendations on Amazon, receive automated fraud alerts from credit card companies or ask their Google Assistant to play a certain song. But AI is also at work in less visible ways, as well - scoring bank customers for creditworthiness, analyzing warranty claims to uncover upstream production problems, grading college essays and even helping courts determine how to sentence criminals.

Nevertheless, businesses are in the early stages of AI adoption, and companies are still learning how to put the technology to work. The challenge today is less about understanding technical questions and technology capabilities, and more about crafting a strategy, determining the governance structures and practices needed for “responsible AI,” and accelerating the move from experiments to full-scale AI adoption.

Earlier this year, we assessed the state of AI in business through the eyes of 975 executives across industries in the U.S. and Europe (see Methodology, page 5), asking them about their attitudes, expectations and plans. Key findings include:

• Executives are enthusiastic about the importance and potential benefits of AI. Roughly two-thirds of executives say that AI is extremely or very important to their companies today, and more than eight out of 10 expect this will be the case three years from now. About three-quarters foresee major or significant benefits from the technology, in terms of lower costs, increased revenues, the ability to introduce new products or services, and enter new businesses.

• Faster-growing companies are more optimistic and aggressive when it comes to AI. Executives at faster-growing companies are more likely than others to view AI as important, and more likely to expect major benefits in the coming years (see Figure 1, next page). Eighty-six percent of executives at these companies say AI is extremely or very important to their company’s success, compared with 57% of those at their slower-growing competitors. These industry leaders say they plan to use AI to drive further growth, solidifying their leading positions and pulling even further away from the pack.

• There is a major disconnect between executives’ optimism about AI and actual AI implementation. While two-thirds of executives said they knew about an AI project at their company, only 24% were aware of projects that were fully implemented. It appears that the large majority of AI projects are still in the early planning or pilot stages.
Many companies appear to lack a strategic focus for AI. When identifying the challenges they face in implementing AI and the technologies they’re targeting, executive responses were relatively undifferentiated in both areas – essentially adding up to “all of the above.” This suggests that companies have yet to hone their strategic plans for integrating AI into the business core. In addition, roughly 40% of respondents said that securing senior management commitment, buy-in by the business and even adequate budget were extremely or very challenging, indicating that many companies are not yet fully committed to AI’s central role in advancing business objectives.

Many companies are not addressing the ethical dimensions of AI. Only about half of the executives surveyed said their companies have policies and procedures in place to identify and address ethical considerations – either in the initial design of AI applications or in their behavior after the system is launched. What’s more, about two-thirds of that group said the ethical governance structures they have in place are extremely or very effective. That view may be overly optimistic, and an indication that many executives are underestimating or unfamiliar with the challenging ethical questions likely to emerge as AI becomes more sophisticated and pervasive.
Companies will need to take action on several fronts if they are to achieve significant business benefits with AI. The key agenda items include:

- **Formulate AI strategies.** AI strategies should focus on opportunities that promise measurable value - not only reduced costs and increased revenue, but also benefits such as improved customer service, entry to new lines of business and enhanced employee experiences. It’s especially critical that strategies take a human-centric view of AI, so that machines can work successfully alongside and for people.

- **Develop governance structures.** Companies will need to work proactively to ensure that AI decision-making is transparent to those involved; that AI earns trust by avoiding errors and data-driven biases; and that AI is personalized and able to provide tailored, relevant, and context-aware support as it interacts with humans.

- **Create and maintain responsible AI applications.** Because of AI’s potential ubiquity and power, ethical concerns need to be interwoven into everything companies do with the technology. That means building AI systems ethically, and then providing oversight to ensure that those systems operate ethically over time, even as the AI applications learn and evolve. To be successful, companies will need to boost their ethics-related efforts as AI touches more and more parts of business and society.

In many ways, these non-technical considerations - regarding trust, transparency, ethics and human-centric approaches - are more critical and complex than those related to developing and running the technology itself. But they are absolutely critical to the success of AI, because they will determine how well these technologies can be leveraged to accomplish business objectives.

AI operates in the real world. Companies that do not find solutions in these areas could see their AI efforts fall short, or fail completely. This, in turn, has the potential to irritate customers, alienate employees, drive up R&D and deployment costs, and lead to lost business opportunities - causing businesses to fall behind competitors in the race to unleash the vast business potential of AI.

*Stay tuned for our full report that analyzes these findings and provides prescriptions on how to build a responsible and effective AI strategy. Please visit the AI & Analytics section of our website for additional insights.*
METHODOLOGY

We conducted a survey, through a combination of online and telephone interviews, with 975 respondents from companies in the U.S. and Europe in June and July 2018.

The companies represented a variety of industries and sizes, as measured by their annual revenues.

Fifty percent of the respondents were from companies headquartered in the U.S., 48% from companies headquartered in Europe, and 2% from companies in other locations. The respondents from European companies were located in the following countries: UK (11%), Germany (11%), France (10%), Netherlands (5%), Sweden (4%), Belgium (4%) and Norway (3%).

More than half the respondents had C-suite titles, with an additional 16% being an executive vice-president, senior vice-president or vice-president. Respondents work primarily in the following functional areas: information technology (39%), management (19%), finance (13%), operations/manufacturing (9%), research & development (4%), sales & marketing (4%) and customer service (3%).
ABOUT THE AUTHORS

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Poornima Ramaswamy is Vice-President of Cognizant Digital Business’s AI and Analytics Practice. With her 20 years of experience, she consults and works with clients across industries in North America to leverage their vast amounts of data and convert it into meaningful insights to improve revenue goals and drive business process efficiencies. Her focus has been to help clients in their analytics and AI transformation journey and help them transition from a data-driven business to an insights-driven business.

Poornima also runs Cognizant’s Chief Data & AI Officer Advisory Council, which is a community of analytics executives who focus on making AI/analytics a strategic imperative in their organization. She has an MBA (technology and finance) and an undergraduate degree in mathematics. Poornima can be reached at Poornima.Ramaswamy@cognizant.com | www.linkedin.com/in/poornima-ramaswamy-4b97021/.

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As part of Cognizant Digital Business, Cognizant’s AI & Analytics Practice provides advanced data collection and management expertise, as well as artificial intelligence and analytics capabilities that help clients create highly-personalized digital experiences, products and services at every touchpoint of the customer journey. We apply conversational AI and decision support solutions built on machine learning, deep learning and advanced analytics techniques to help our clients optimize their business/IT strategy, identify new growth areas and outperform the competition. Our offerings include AI to Insight, Customer Intelligence, Intelligent Automation, Product Intelligence, and Risk & Fraud Detection. To learn more, visit us at www.cognizant.com/cognizant-digital-business/applied-ai-analytics.

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