Everyday AI: Harnessing Artificial Intelligence to Empower the Knowledge Worker
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INTRODUCTION

There is no question that artificial intelligence (AI) and its closely associated technologies like machine learning (ML), advanced data analytics, robotic process automation (RPA) and even blockchain are poised to revolutionize society, disrupt industries and transform individual companies. But the true power of AI will not be realized until such tools become embedded within day-to-day business processes, or in other words, in the hands of knowledge workers.

Given so many headlines about self-piloting road and warehouse vehicles, of massive automation of manual activities or big data providing transformational marketing and product development insights, it’s easy to suspect it’s all hype. But the fact is, as more organizations gain hands-on experience through initial forays into AI—seeing the productivity and performance improvements for themselves—their broader interest skyrockets. For example, in 2017, Gartner reported “that 7% of top-performing companies rank AI/ML as a game-changing technology.” But in just one year, that figure swelled to 40%.

So how quickly is the era of AI arriving? Likely faster than most business leaders recognize. Certainly, any discussions of the technologies themselves can become extraordinarily complex in short order. But the most important issue for business decision makers isn’t necessarily how the technologies work, but rather how they can be harnessed to enable individual knowledge workers, boosting their productivity and feeding them timely information furthering key business objectives.

To gain clearer insight into how AI is impacting knowledge workers, Forbes Insights surveyed 387 senior executives and interviewed representatives from five companies implementing the technology. This research provides an unbiased, clear and up-to-the-moment picture of what is being done in AI today, what is possible, and—most important—the most effective means of getting programs up and running.
KEY FINDINGS

A significant majority of executives believe AI and related technologies will have a transformational impact on society, industries and ultimately their own businesses.

Seventy-nine percent agree that AI is already having a transformational impact on workflows and tools for knowledge workers, but only 5% of executives consider their companies to be industry-leading in terms of taking advantage of AI-powered processes.

Companies are ramping up their AI efforts in a way that appears to be mimicking cloud adoption—slow at first, but then quick, widespread implementation. Twenty-six percent have at least one significant process up and running, 22% have a handful of pilot programs, and 32% are exploring one or more specific proofs of concept.

Seventy-eight percent of executives see AI driving a high degree of performance improvement in their overall business as well as their teams (75%), their value chains (72%) and individuals (66%).

The top three benefits executives predict AI will deliver to their businesses overall include eliminating repetitive tasks, streamlining decision making and providing new insights.

For knowledge workers, the mission-critical benefits of AI are security, assistance with data collection and streamlining collaboration.

Today, those in IT roles are making the most use of AI, but over the next 18 months, business unit leaders, frontline knowledge workers and the C-suite will become much more active in leveraging such technologies.

Businesses are taking, or plan to take, a range of specific steps to enhance their cultural AI readiness, including implementing AI-specific training, engaging with technology consultants, recruiting AI talent and furthering partnerships with suppliers and customers.

The ultimate cultural insight for success going forward is to focus first on business needs, not AI—an idea permeating the research.
What is AI? In truth, the definition is in constant evolution, referring to anything that could be viewed as a machine—a computer program—accomplishing tasks that would seemingly require human intelligence. Unquestionably, as machines improve in their abilities to interact using natural language, compete in games like chess or even pilot driverless vehicles, the threshold advances.

AI is essentially any digital program capable of emulating human thought in accomplishing its goals. This report describes AI in its broadest possible sense, including all digital subroutines and physical components with which it is often enabled or associated. For the purposes of this report, when we say AI, we may at times more specifically mean some combination of:

- **APPLICATION PROGRAMMING INTERFACE (API):** APIs are building blocks—subroutines that have already been developed to accomplish specific tasks. Data-, analysis- or other-focused APIs are often incorporated into AI applications.

- **BLOCKCHAIN:** A highly secure means of verifying, storing and controlling access to highly specific data. Blockchain is not by itself a highly advanced technology, but it is increasingly a component within more sophisticated, AI-enabled processes.

- **CHATBOT:** An interface where humans enter questions using natural language and a system of algorithms sifts through data in search of the most appropriate response.

- **CLOUD:** Access to computing resources or data via servers.

- **INTERNET OF THINGS (IOT):** This consists of mechanical devices that can detect events or conditions, then report the information as appropriate to a network. IoT generates massive amounts of data, which, increasingly, is fed to AI-powered systems for analysis or action.

- **MACHINE LEARNING (ML):** Often thought of as a subset of AI, machine learning uses statistical algorithms to explore data to better understand its meaning. This learning can be supervised (humans intervene and assist) or unsupervised (the algorithm learns on its own).

- **NATURAL LANGUAGE PROCESSING (NLP):** This is the interface between humans and machines. Machines face challenges in understanding typed or spoken human expressions. As NLP improves—often by using tools such as machine learning—the quality of interaction improves.

- **ROBOTIC PROCESS AUTOMATION (RPA):** The difficulties in communication between humans and machines can be a barrier in automating basic tasks. RPA uses a graphics-based approach, where the machine actually "watches" as a human pulls together the data needed from various sources to accomplish a goal. The machine thus learns to emulate the actions. RPA is appropriate for highly structured, rules-based business processes.

The above list is by no means exhaustive—there are nearly unlimited technical components that are often associated with AI. But it should provide greater context for mentions of AI in this report.
EVERYDAY AI: HARMONIZING ARTIFICIAL INTELLIGENCE TO EMPOWER THE KNOWLEDGE WORKER

SETTING THE STAGE: AI IS TRANSFORMING SOCIETY, INDUSTRIES AND COMPANIES

Expectations for AI are high. Consider these three topline findings from our survey:

• FOUR OUT OF FIVE (79%) executives believe AI and related technologies will have a transformational impact on society. For those with more experience with advanced technologies, these numbers are even higher: 88% of those describing their current AI deployments as industry-leading or above average hold this view, and 85% of those who were early adopters of cloud have this belief.

• THREE OUT OF FOUR EXECUTIVES (74%) believe AI and related technologies will have a transformational impact on their industry. This figure is again significantly higher among early cloud adopters (91%) and those describing their existing AI programs as industry-leading or above average (86%).

• NEARLY THREE-QUARTERS (72%) believe AI and related technologies will have a transformational impact on their company. Again, this figure is significantly higher for those with higher than average technological prowess (88% among AI leaders; 86% among early cloud adopters).

AI and its close associates—like ML, NLP and RPA (see glossary, p. 5)—are on the rise. In particular, these tools are being put to work improving the efficiency, productivity and effectiveness of knowledge workers. Consider examples from companies such as:

• CADENCE DESIGN SYSTEMS: Tarak Ray, VP, IT, says his group’s introduction of an NLP-enabled chatbot to all employees to provide support to service desk tickets is already producing very encouraging results. The focus of the chatbot is to solve repetitive, lower complexity IT tickets so that service desk agents can focus on the “more difficult and important issues.” Next up, the company is developing a similar chatbot, this time focusing on helping employees with their HR-related inquiries.

• A MAJOR COMMERCIAL REAL ESTATE, RETAIL AND CONSUMER ENTERTAINMENT CONGLOMERATE: The company’s CTO says that early on, AI was able to improve predictive capabilities based on analysis of data from the company’s SaaS-based CRM system. But success is building upon success, and the group is now using cloud-based business analytics software “to improve data visualization” for the group at large. His team now, in fact, supports some 680 ongoing, AI-infused reports for key knowledge workers and decision makers. The reports are so powerful, says the CTO, “that today, no one makes a decision—nothing moves—until they have a look at their [AI-powered dashboards].”

• MELLANOX TECHNOLOGIES is itself a leader in the provision of sophisticated technologies underpinning high-performance computing, including data centers, AI, ML, plus cloud and related deployments. But according to Udi Weinstein, VP, IT, the company is now using these same technologies to significantly enhance its own performance. “We have a number of initiatives,” says Weinstein. These include AI-assisted applications “that can detect anomalies and their root causes in manufacturing, better optimize inventories, as well as create a series of productivity applications for knowledge workers and managers in everything from finance to IT to HR.”

• BECTON DICKINSON (BD): Not all applications of AI directly assist knowledge workers. Some focus on the needs of customers or other groups. For example, Douglas McClure, senior director, and Bryan Memmelaar, head of software development at the company’s Digital Health division say their company is just beginning its exploration of AI. Yet successes are already taking shape as various chatbots and related tools are being provided to patients and quickly gaining traction. “We’re learning fast and improving rapidly,” says Memmelaar. Without question, “these are tools that are going to make a big improvement in our products and services.”
• **EVEN GOVERNMENT ORGANIZATIONS, SUCH AS TRANSPORT CANADA**, an agency executing oversight of rail, sea, air and land operations and policies, are moving fast to better understand and harness the power of AI. Two years ago, says Julie Leese, chief digital officer, “we realized this is something we needed to start exploring.” Today, “we have two pilots of our own and momentum is building.” Overall, says Leese, “when you see all the growth in everything relating to this—in cloud, in RPA, in IoT, so many other components that make everything come together more efficiently—it’s easy to understand how all of this is accelerating.”

**How fast is this growing?**

The above vignettes are compelling and explored in greater detail below. But despite these examples, such companies are relatively rare. Today, only 26% of companies seem to be running with AI—that is, they already have at least one significant AI-infused process in production. But this figure is indeed poised to rise. Another 22% have a handful of pilot programs, and 32% are exploring one or more specific proofs of concept (Figure 1).

**Driving breakthrough performance**

Survey respondents believe AI-fueled innovation and disruption can drive breakthrough performance across the enterprise and beyond. For example, more than two-thirds of executives believe the adoption of AI and associated technologies can significantly drive not only overall business performance (78%) but also that of teams (75%), individuals (66%) and also broader ecosystems/value chains (72%). Note that in all cases, those companies whose AI capabilities are self-described as industry-leading tend to be even more optimistic than the sample at large (Figure 2).

For now, the focus is primarily internal, says Mellanox’s Weinstein “because those are the easiest data sets to gain access to initially.” However, as more and more businesses begin to better understand the value of data-driven strategies, the executive anticipates more customer-, and for that matter, supplier- and other stakeholder-facing solutions. For example, Weinstein expects “greater cooperation between customers and suppliers by linking their data in order to build end-to-end understanding of external data sets. Blockchain, cloud, AI, ML, NLP—all of these tools will come into play across value chains.”
HOW CHATBOTS REDUCE WORKLOADS FOR CADENCE DESIGN SYSTEMS

NLP, ML—these are just building blocks of a bot. But by “combining these and other elements into a solution,” explains Cadence Design Systems’ Tarak Ray, “we are planning to roll out next-generation applications which will increase efficiency in the areas like search by finding the right document/solutions for customers/employees. Then we will get the real value of this initiative.”

THE CHALLENGE: REDUCE TICKETS

Whenever there are IT-related questions or problems, employees would understandably need to contact the IT department. IT agents there, in turn, would need to listen to the issues and then develop an answer, or better still, a solution.

Anything requiring more than a word or two needed to be formalized, or “written up into a ticket,” says Ray. Such queries and requests were at times repetitive yet critical, but in total “they consumed a great deal of time. So, our immediate goal of the initiative is to reduce the number of such tickets [workers needed to handle]—focusing on eliminating the easy, repetitive queries through the chatbot.”

The group began working with a chatbot program. Working with the Microsoft Cognitive stack, says Ray, “is a matter of taking an already developed technology and building a solution above it, which suits our need. This eliminates the need to reinvent anything which is already in place. Once it’s sufficiently trained and enough knowledge documents are developed and fed into this system, we expect a significant number of service desk tickets will be resolved by chatbot without any or minimal human intervention. This will help achieve our first goal, which is to learn how ML, NLP, etc., do work,” says Ray.

Results from the rollout are “excellent,” says Ray. Within a very short period, “the chatbot was actually answering about 30% to 40% of the queries. So those are all calls that are no longer going to our call center.”

An interesting initial observation is that the questions posed to the chatbot tend to be significantly more basic than what was typically being fielded by live agents. “When dealing with another person, they probably don’t feel comfortable to ask those more basic questions,” says Ray. But with the chatbot, “they are not as hesitant to ask.”

FOR NOW, INTERNAL USE ONLY

Recognize, however, that thus far, the chatbot is for internal use only; external customers do not have any access. But the work goes on, training and refining the program, making it more effective day by day.

Ray and his team are next turning their attention to HR. Again, says Ray, “the HR department gets a great deal of HR questions from managers and employees.” A good portion of those questions are similar in nature, such as employment verification. Of course, HR data is both highly personal and strictly regulated, “so we have to build the bot in a very secured way.” But Ray is envisaging that the bot will be able to address a good percentage of HR queries.
HOW COMPANIES PREDICT AI WILL IMPACT THEIR ORGANIZATIONS— AND KNOWLEDGE WORKERS

Unquestionably, the machines are coming. So much so that 79% agree that AI is already having a transformational impact on workflows and tools for knowledge workers. Indeed, as is borne out throughout this research, such tools, in the right hands, can dramatically improve performance and productivity.

Fundamentally, respondents indicate that AI efforts should focus on three key areas:

1) ELIMINATING REPETITIVE TASKS (51%): AI is proving highly effective in automating basic processes, enabling knowledge workers to spend less time on formatting, searching and compiling, and spend more time on higher, value-added processes. For example, Transport Canada's Leese, who leads her department's digital strategy, says that with RPA, “you can use [machines] to take actions based on precise business rules.” In general, these are actions a human would take on their own, following a review of the available information, considering business rules. But using RPA, a bot can gather the needed information from various systems, “then act using those same rules, but in a much more efficient manner.” Note also that such systems often feature an interface such as NLP so that humans can query, supervise and understand system inputs and outputs. Moreover, many of the most effective AI systems offer machine learning-based capabilities to observe, interact with, teach and continuously improve the application.

2) STREAMLINING DECISION MAKING (33%): “Humans are very good at certain things, things machines cannot yet do,” says Cadence’s Ray. For a basic example, “you can teach a machine to identify a flower.” However, “if you ask a machine to draw a picture of a flower, or to determine which is the prettiest flower, it will struggle.” Placing this in context, Ray explains: “Today we can use [machines] to find the information [its human counterpart] needs to make a more informed decision, whatever that may be. But the point is, we can automatically collect the information [on behalf, or at the request, of workers], and therefore reduce the effort required to find the right document.”

3) PROVIDING NEW INSIGHTS (31%): As the commercial real estate (CRE) CTO explains, “data visualization, all by itself, can lead to some fascinating discoveries.” Any tool that can pull together data from various sources in visually enlightening ways “puts a business ahead of others immediately.”

But in addition, once a business begins applying tools like ML or deep learning to a given set of data, unexpected insights often follow. As the executive explains, “You’re often going to head down a blind alley and get nowhere, there’s no silver bullet here.”

84% agree that by eliminating repetitive tasks and streamlining decision making, AI empowers knowledge workers, freeing them up for more creative, intuitive and laterally thinking activities.
However, “AI continuously holds out the promise of helping your business see things that just wouldn’t be visible otherwise. You can’t be afraid to experiment. You have to explore.”

Finding ways for “technology to augment and benefit the workforce and give them the information they need to do their jobs” is critical, continues the executive. Indeed, 84% of survey respondents agree that by eliminating repetitive tasks and streamlining decision making, AI empowers knowledge workers, freeing them up for more creative, intuitive and laterally thinking activities.

When survey respondents were asked to identify the mission-critical and “nice to have” benefits of AI on knowledge workers, monitoring/preventing threats to business data topped the list of must-haves. What this points to is that in any data-intensive activity, like AI and related technologies, data security will remain paramount. Indeed, says Transport Canada’s Leese, “any AI initiative is going to have to pay critical attention to privacy—who has access to which data and when.” As AI advances, this will be true not only of public sector government agencies but also the private sector.

Other capabilities scoring highly on the must-have scale include automation/assistance with data collection (53%), streamlining collaboration/teaming (47%) and “learning” (allowing knowledge workers to “finetune” algorithms/actions (46%)) (Figure 3).
Mellanox Technologies is itself a leader in the provision of sophisticated technologies underpinning high-performance computing, including data centers, AI, ML, plus cloud and related deployments. “We have a leading market share for both InfiniBand and Ethernet solutions, as they enable our customers and users to analyze more data, to gain more knowledge and to improve their decision making and product development,” says Udi Weinstein, VP, IT.

Mellanox is a relatively small company, comprising fewer than 3,000 employees. Nonetheless, says Weinstein, “we are looking to wherever AI can improve our processes or our performance.” Moreover, he declares, “our CEO has made it clear that for any new initiative, AI or ML is first. So, we’re an AI-focused culture.” Still, he insists, “if you want to really look at the leading-edge in AI, look to our customers.”

ELEGANT SOLUTIONS

Weinstein maintains that too many people make AI, RPA or ML seem more complex than it needs to be. In truth, he says, “today there are modules, APIs and graphics processing units (GPUs) that are task-focused and can be utilized too.” And so, his group has put together a handful of highly useful AI/ML-powered tools to help with a number of things like:

• **ENHANCING PREDICTIONS:** Weinstein says his team began working with a machine learning program, feeding it data from the company’s CRM system. Following a pilot and then one year in production, “we found that ML gave us much better predictions about customer demand than anything we had been running before. Down to the quantities of individual products, it was much more accurate.”

Note, however, that not all data sets are going to lead to breakthrough insights or results. In a parallel pilot focusing on another set of customers and products, the ML performance was “merely okay; it wasn’t all that effective because there’s just no way to predict volumes of completely new products and markets—the future was coming too fast.”

• **DETECTING ANOMALIES:** AI combined with cloud technologies “is also very effective in helping to detect and determine root causes,” says Weinstein. Here “we collect the raw manufacturing data using the most effective storage solutions. And we don’t move the data around: There’s U.S. data for the U.S. hub, Far East data for the Far East hub.” From there, “ML scours the data for anomalies and insights, and it is very effective.” As for the future, “our next step is to migrate to structured query language (SQL), which will improve our ability to explore the data and the reporting.”

• **“MY APPROVAL”:** Harnessing cloud, ML and a few additional tools, the company has pieced together an elegant little application known as “my approval.” As Weinstein explains, this is “approval for payment, approval for a new hire, approval for anything—whoever is in a role to approve things, everything they need is now put into one place.” Essentially, “we’re learning how to pull information from multiple sources and put it in one place. AI/ML is helping us find what our people need in order to do their work and also to keep it simple.”

ENABLING THE “CITIZEN” DATA SCIENTIST

Going forward, Weinstein believes the greatest advances in AI, ML and related technologies will come from the world’s largest organizations: businesses whose scale can enable investment and refinement of highly specialized AI tools that can be adapted to specific business needs by individual knowledge workers. “Not every small company or mid-sized company can afford data scientists or has the scale to develop these tools on their own.” So, Weinstein looks to large-scale businesses to increasingly develop modules and capabilities that can plug into the businesses they serve. “Large banks, large transport companies, large software-as-a-service companies—I expect these to invest much more, and to innovate and to ultimately help end-users with ready-to-go platforms that will instantly give me access to amazing AI- and ML-fueled tools.”

The future is one “where companies will do what they can on their own, and they will be very successful,” but the real advances “will be fueled by solutions developed at scale that can be adapted to individual use.”
CREATING THE AI-READY CULTURE

As the data and case studies illustrate, momentum is already building for a surge in AI deployments. But the research offers a handful of additional suggestions for advancing initiatives, or at the very least, easing the path forward. Broadly speaking, says Transport Canada’s Leese, “you have to make sure your people are integrated into your digital strategy; you must address culture.”

The survey shows that businesses are taking steps to this end. For example, 40% of executives say their companies are using training/continuous learning initiatives to enhance AI awareness, and 30% say such actions are being planned. In addition, 39% of executives are engaging with technology consultants to improve their firm’s understanding of AI, with an additional 33% already planning to do so. Note that in both cases—in fact, in all cases—those self-described as leading-edge in AI are again already well ahead in terms of taking such steps (Figure 4).

However, the ultimate cultural insight—echoed by all of those interviewed—is the vital importance of focusing AI efforts on business needs. The CRE company, for example, is still in the early phases of its advanced analytics journey. But a key lesson, says its CTO, is the importance of partnering with business units and avoiding any sense that AI/ML/RPA is an IT initiative. “Whenever we speak with anyone about AI, we don’t talk about the technology. Instead, we make certain the focus is on their fundamental business needs.”

So the executive asks, “What do you need for your business?” And what he hears back are things like, “if we could just increase revenue by 2%, the increase in EBITDA would be incredible.” Or, “we just want more people to accept our credit card offers.”

It is by listening intently “that we are able to come up with our most effective business use cases,” explains the CTO. “Once you understand what it is [the business] wants to accomplish, the AI-based tools that could help become clearer and your chances for success [and cooperation] improve.” Overall, says the CTO, “this has to be driven by the businesses. If you approach this like an IT project, you will fail.”
BUILDING A DATA-CRAVING CULTURE

A major commercial real estate company not only develops but also maintains and manages a wide array of retail and consumer service touchpoints. As the company’s CTO explains, “It’s truly a unique company, with loads of customer-focused data.”

“So we asked ourselves,” says the CTO, “where might we find the most value from our data the quickest? What can we do to put more and better information in the hands of decision makers?” After a bit of self-reflection, the company decided to organize its efforts under three pillars.

The first of these was to build a digital picture of its customers. “We started first by taking the data we had in hand and then trying to describe our customers. Who are they? What are their key characteristics? How can we understand them better? And from there, we took our data and tried moving from descriptive to predictive.”

The second pillar, says the CTO, is all about digital efficiency. “How can we use digital tools to better integrate the data we use for day-to-day decision making and workflows?” In this phase of evolution, the focus is on data,” but in particular, “we’re looking at tools like ML and RPA” to simplify workflows and processes, says the CTO.

The third pillar is culture. And in this regard, the challenge, the executive explains, “is helping people understand that the focus is still our core business. AI, ML and these sorts of tools, they’re here to augment and improve how we do business.” Perhaps even more important, “the focus is never on the technologies, but always on the business need,” says the CTO. “Tell us your business challenge, your need, and we’ll figure out how advanced analytical tools can assist.”

GETTING PRACTICAL

Circling back to the first pillar, the first step here, says the executive, “is we’re just going to work with the data we know, with what we have in our hands, and see what we can learn.” The executive and his team began their work by building a data warehouse supplemented by Power BI (business intelligence), “a data analysis tool,” says the CTO. The software led “to spectacular success” as “we were able to visualize data in ways that made it clear what was happening in any given business.”

Initially the company was generating only a handful of reports for one of its fashion businesses. But success built upon success, “and now we are providing 680 reports, which managers are themselves using to inform their businesses.” Today, says the CTO, “no one makes a decision—nothing moves—until they have a look at our business intelligence reports.”

From this point the company began to ask itself, “Okay, where do we have the most data to work from?” This pointed the focus squarely on its financial services arm, where, due to regulatory requirements and related issues, “we had an enormous amount of precise information,” says the CTO. So next, “we began building cohorts: hundreds of cohorts of groups of 40 to 50 people who earned the same, lived in the same places or situations, spent their money on the same sorts of things.” These were still individuals, “but we could infer how they might behave based on what we knew about others just like them.”

Models were then built. Four out of five from a given group are spending on X but 20% aren’t. “So let’s make those that haven’t spent in this area an offer,” says the CTO. And this concept was by no means limited to credit cards or car loans. For example, in the cinema [segment], “we came up with the idea of ‘what’s the next best offer?’ You’ve got a soda and candy—the most likely next thing to offer you while you’re still at the register is nachos.”

What the group learned is that AI is by no means a silver bullet. “Some of the offers were okay, but others were not.” Indeed, says the CTO, “one of the benefits of AI is that it can help you quickly decide whether or not your idea is a good one; you can avoid spending time on something that isn’t working.” But in other cases, by staying with the approach, by tweaking things continuously, performance began to improve to the point where the executive maintains “the ROI is phenomenal.”
A DATA-FOCUSED CULTURE

Results have been so positive that today, the company now craves data. “We’re becoming a data-focused culture,” says the CTO. So now, “when we have customers at a register, we ask them for additional information.” The company is trying to get to the point “where we have a complete picture of our customers, wherever they shop [or use any of the company’s services]—we want to be able to look more closely at that and improve their experience with us.”

Going forward, the executive believes his company will become even more data-focused. For example, the company just acquired software “that gives us more insight into our digital assets—if someone is scrolling, watching trailers on our [cinema] website, we learn from that and adapt” offers and even the look and feel of the site in response.

Overall, says the executive, “we are happy and very passionate about all of this. AI, ML, all of this, it’s a fundamental shift, and we intend to embrace these changes as they evolve.”

CONCLUSION

Expectations for AI and related technologies are high. Executives are anticipating no less than transformation across society, industries and their own companies. And indeed, momentum is building. A small vanguard, for example, is already infusing a wide range of business processes with AI and plans to pursue many more. Close behind are cadres of businesses taking their own first steps, ranging from the automation of a single significant business process to the pursuit of a pilot program or POC.

There is enthusiasm, optimism and activity. Organizations looking to improve their odds of success with AI should place AI in the hands of knowledge workers—and encourage innovation among citizen data scientists. Along these lines, consider launching education and training programs, appoint AI champions, and reward and highlight early successes.

Without question though, the greatest step an organization can take to create an AI-ready culture is to avoid any semblance of a strict AI focus. Instead, think about what matters most to your business. From there, work backward: What data do we have on hand that could aid in this challenge, and what AI tools can be brought to bear?

Understand the business challenges. Then engage with technology providers to identify the most appropriate, constantly evolving but often already existing, AI tools. There will be failures. But given time, the success stories will write themselves.
**METHODOLOGY**

The findings in this report are based on a Forbes Insights survey of 387 senior executives conducted in the summer of 2018. Key demographics include:

**TITLE**
- CEO: 22%
- Manager: 12%
- CTO: 10%
- CIO: 11%
- VP: 8%
- EVP/SVP: 7%
- COO: 5%

**FUNCTION**
- IT: 37%
- Customer service: 7%
- Finance/accounting: 7%
- "Other" (HR, legal, engineering, etc.): 7%

**INDUSTRY**
- Business/professional services: 28%
- Technology: 14%
- Financial services: 14%
- Retail: 12%
- Healthcare: 8%
- Construction: 8%
- Manufacturing: 7%
- "Other" (media, life sciences, government, etc.): 9%

**REVENUE**
- $5 billion or more: 45%
- $1 billion to $4.9 billion: 32%
- $500 million to $999 million: 23%
- $100 million or less: 7%

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