THE AI REVOLUTION: HOW TECH COMPANIES CAN USE AI TO SCALE UP

By Aftab Jamil, global leader of BDO's Technology practice

Tech industry leaders are finding themselves in the precarious position of managing financial and operational risks while investing in innovation for the business to succeed long-term. Atop the list of technologies anticipated to cause the greatest industry disruption in the near future sits artificial intelligence (AI), with 35% of tech CFOs surveyed in BDO's 2019 Technology Outlook Survey looking to this emerging technology to help scale their business.

These technological advances are changing the way we live and operate. From chatrooms to boardrooms, public spaces to bedrooms, AI is already influencing consumer behavior and business operations. For companies adopting the technology effectively, AI is bringing about cost savings, improving efficiency and growing competitive advantages. The onus is on business leaders to explore the business case for AI. This is especially true for the technology industry, where the pressure mounts to be on the cutting edge of innovation, constantly prepared to evolve and meet the needs of tomorrow, today.

But while AI is anticipated to become as commonplace as the Internet and email, before jumping into emerging opportunities, you will need to determine exactly how you would incorporate it into your business strategy and operations, and whether it makes sense for you to do so now, or later.

SCALE UP: NOW—OR NEVER?

According to our Technology Outlook Survey, scaling the business is the top priority among tech company CFOs. Scaling up your business is about anticipating opportunities and leveraging them to expand the potential of your organization. To that end, AI offers a great deal of opportunity for pushing the bounds of operational excellence—especially so for tech companies that are already innovating and reimagining the ways the world connects and engages with their customers. Other top technology leaders cite growing concerns around product or service innovation, data privacy, digital transformation and regulatory compliance—all issues that could be potentially better managed through a robust AI program.

From data creation and management, to cyber and fraud threats, to employee recruitment and retention, it behooves technology leaders to identify where and how to augment internal capabilities with AI—or risk losing your relevance.

Here are a few AI use cases that have real potential to impact the bottom line:

Managing Big Data

The right system will be able to take large quantities of data and scale it to your business to make it manageable—and meaningful. Tasks such as collecting communications data from calls and emails and redistributing them to usable records, responding to customer concerns with natural language processing, identifying gaps in information or flagging issues in the supply chain to determine actionable endeavors are just a few functions AI could serve.

Detecting and Thwarting Cyberattacks

Through the monitoring of vast amounts of data, AI can be applied to prevent fraud and mitigate cybersecurity threats. By analyzing revenues or simple expense claims, AI technology can flag cases that are suspected of being inconsistent (or fraudulent). In the case of a ride-sharing company, AI facial recognition tech has been applied and scaled to its drivers to prevent fraud in its ride-hailing services.

As noted in our **Tech Predictions for 2019**, AI will become increasingly present in the world of cybersecurity—not only in securing systems as noted above, but also, unfortunately, in perpetuating risks. AI can aid cyber attackers by providing automated hacks that learn more about their target's vulnerabilities over time. Bloomberg reported earlier this year that Microsoft, Google and Amazon had incorporated machine learning algorithms to engage with ever-expanding and adapting hacker capabilities and successfully thwarted attempts to break into their systems.

While it may be impossible to thwart all hacking attempts, the deployment of an appropriate defense system can make it feasible to reduce risk and more quickly restore your operations. In some cases, machine learning programs can detect threats and suspicious activity before it even enters your network.

Employee Recruitment

Most tech companies expect to increase their number of employees this year, and the Bureau of Labor Statistics (BLS) projects a **13% increase** in computer and information technology jobs from 2016 to 2026—that will add an additional 557,100 new positions. With growing industry competition comes a tighter job market— July unemployment was a low 3.7%, holding steady with the previous month, as documented by the **BLS**. AI can streamline the recruitment process for HR teams by automatically screening resumes, locating desirable candidates, scheduling interview appointments and automating the onboarding process through chatbot services.

BARRIERS TO ADOPTION

Robots are Tools, Not Friends

A common concern of AI is that it will replace human employees. While it is true that robotic process automation (RPA) *does* reduce time-intensive work tasks, it does *not* mean that robots will replace human workers. Instead, RPA provides an opportunity to reserve employees' time for "higher-value" tasks such as projects that require critical thinking, rather than routine or tedious tasks that can be automated through AI. Take **NASA**, for example. With the cultivation of innovative, mission-driven support services, NASA has applied RPA to create "digital employees"—bots—that run on automated instructions, allowing employees to allocate their time to more complicated assignments. **Harvard Business Review** found that of 71 RPA projects, organizations did not operate with the intention of replacing administrative employees, nor was it a common result.

The fact of the matter is, operations that can be outsourced can likely also be automated. RPA provides an opportunity to increase a company's impact so instead of decreasing the workforce, there's a chance to *do more* with the in-house team. Of course, successful adoption here requires integrating the new tech throughout the company, upskilling everyone—not just the IT department. A digital transformation of this magnitude requires a champion at the senior executive level to spearhead this new strategic approach.

Scale Your Scaling

The prevalence of legacy systems runs a real risk of undermining the full potential of AI implementation. A valuable first step on the path to full AI implementation then may be to upgrade an old system with cloud computing, which would assist with managing large quantities of data, while adding transparency to digital decision-making. This shift could support a single source of truth (SSOT) for data integrity, which would support the efficacy of an eventual AI platform.

Before going full-bore on a large-scale AI initiative, consider a pilot project first. That way, the risks are lower if you do not have an ideal first-run; lessons can be learned and strategy tweaked on the next try. Don't forget to plan for a trial run of the AI system before scaling your whole business with it. A scalable initiative, alongside the right guidance, is crucial for successful implementation.

Transcending IT

Making AI work for your company involves creating a data-driven culture. There's no "IT" in "AI"—becoming data-forward involves data becoming an integral component of business teams, not just the IT department. This means team cohesion will be of utmost importance in the successful implementation of AI. You need support from leadership, a strong partnership with AI experts, human resources to be aware of AI capabilities and recruit accordingly and an investment in training for augmentation.

A robust data governance program that directs how data is collected and managed within an organization is also key to AI implementation. At the end of the day, AI performance will be judged on the veracity of the inputted data. This responsibility needs to be a whole-company effort to not only gather data from often disparate sources throughout the company, but also to verify its accuracy and timeliness. To get started, the C-Suite should set the tone at the top when it comes to creating a data-driven culture.

CHECK YOURSELF BEFORE YOU AI YOURSELF

It's clear that AI has the potential to help organizations scale up. For example, it could allow employees to focus on higher-value work, extend the reach of organizations' services and products, reduce outsourcing costs as well as the risk of financial fraud and cyberattacks.

Here are some questions to explore before starting down the road to AI implementation:

1. What is the scope of the problem I am trying to solve?
2. How vulnerable is my company's data?
3. Are our legacy systems slowing us down?
4. Can I scale a trial run?
5. Do I have the other executives on board?
6. Will this system augment my team's abilities?
7. What will be the impact on internal data transparency?
8. Do I need to adjust legal overview for data and privacy compliance?
9. How forthcoming can I be with AI consultants and partners for optimizing in-house scaling?

BDO's **2019 Middle Market Digital Transformation Survey** found that 39% of companies are currently deploying AI technology, while another 45% are considering following suit. It's predicted that AI will eventually become 'table-stakes' for organizations so now is the time to begin the hard work of guiding your business to take the next step in its digital transformation.

39%
45%

Currently Deploying   Considering Deploying
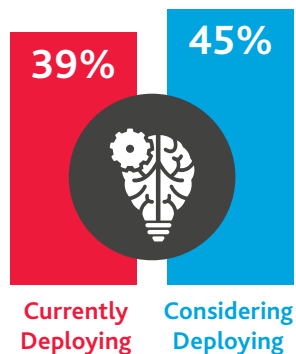
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