Artificial Intelligence:
A Priority For Financial Institutions?

Artificial Intelligence (AI) is one of the most disruptive technologies of this century—and its emergence is often compared with the industrial revolution of the last century. What value can be delivered by AI? Is now the right time for financial institutions (FIs) to scale up their investment in this technology? We talked to AI expert Tom Lin and our own Chase Andrews to explore where AI is at in the maturity curve, and how it can benefit your organization.

Tom Lin
Senior Manager,
Accenture Applied Intelligence

Q&A

Chase Andrews
Vice President - Global Field Operations,
Diebold Nixdorf

WHY ARE BUSINESSES ADOPTING DATA-DRIVEN INTELLIGENCE?

Data-driven intelligence with capabilities such as AI is expected to boost revenue by over 30% for certain industries. Tech companies were early adopters, but we are now seeing other industries use data to not only improve operations but generate a new revenue stream. Caterpillar, for example, has an installed base of almost 1 million connected machines and provides a subscription-based IoT data service that enables their customers to reduce downtime, cut operating costs and improve safety.

Efficiency, agility and scalability. The ability to turn massive amounts of data into functional insights is invaluable. AI makes it much easier and faster to recognize opportunities and adjust based on those insights provided from the machine and/or the customer. In some cases, you can find opportunities in places you didn't even know they existed. Data-driven intelligence can speed up that process, scale it and make it more agile.

WHAT HAS CHANGED IN THE TECHNICAL LANDSCAPE?

Three key capabilities have reduced the barrier to entry. (1) Cloud has the economy of scale in storage and computes at a low cost. (2) AI can analyze large amounts of data and find patterns that humans simply cannot accomplish. (3) 5G not only provides high speed, but also high connection density (up to 1M devices per km2). Elasticity, intelligence and connectivity in conjunction have been game changers.

The big change in the technical landscape over the past several years is the accessibility and reduced cost of cloud computing, coupled with high speed connectivity. Hyper connectivity, elastic storage and cloud computing have made AI technologies accessible to businesses that have historically been blocked by the cost of running an on-premise solution. Being able to feed vast amounts of data from endpoints into an environment that can spin the computing power up/down quickly has transformed companies' perspectives.

HOW FAST ARE AI CAPABILITIES CHANGING AND HOW ARE THEY EVOLVING?

Although AI is still evolving, real world business outcomes are already being achieved by early adopters. What started as efficiency plays with automation (i.e. Robotic process automation – RPA -, and virtual agents) has now led to innovative capabilities in personalization, fraud detection and security. Accenture's approach to AI is to combine analytics and automation to enable innovation at scale. Underpinning all these capabilities is having good data, which continues to be a bottleneck for our clients and where investments continue to be made.

AI capabilities continue to increase at a logarithmic pace. As these models get faster and better, their applications open up. Do an internet search on the phrase "how do I know if I'm talking to a bot" and you'll see how close we are getting to passing the Turing test. Humans always did better than computers at recognizing patterns, but in recent years computers have taken over that title and the implications can't be overstated. Regardless if you believe that achieving a singularity is an inevitable reality or not, it's difficult to deny that we will continue to outsource more and more cognition to the AI around us.

HOW CAN IOT-ENABLED AI ENHANCE SERVICES PROVIDED BY FIS TO THEIR CLIENTS?

FIs are facing competitive pressures from fintechs as well as increased customer expectations. IoT-enabled AI, however, can unlock new capabilities. New methods of payments such as smart cards and wearables will improve accessibility. Enhanced security through identity verification and privacy protection is essential. The importance of self-service and virtual customer engagement is at an all-time high. Conversational AI and smart ATMs play a big role in that need through teller automation, mobile connectivity and intelligent customer engagement.

We should not ignore the opportunity to create and improve the customer experience through real, personalized interaction. Creating the personal relationship between the business and the customer is paramount. Leveraging data from the end point and the customer to create a personal experience will endear the consumer to the business. For example: I go to the same ATM every Friday and withdraw $100 using the same five steps. Imagine this time I go to the ATM and I am greeted with "Hi, Chase, would you like to take out $100 today?" A seemly small step has established me as a unique and valued customer.

THE TAKEAWAY

AI comprises a set of technologies that will change business as we know it. FIs have not been among the earliest adopters of AI so far, but there is no doubt that the ecosystem has consolidated; now is the time to make the most of every investment in the field as more and more tasks will be automated, brand-new business models will appear and banks and credit unions will need to offer new intelligent services to remain relevant and protect themselves from the entry of new players.

For more on this topic, check out our blog:

Learn more at DieboldNixdorf.com/Mindshare.