TECH TACTICS

AI, How it will Transform Business Models

ore data has been created in the last two years than in all of human history combined. Companies are awash in data, but how can you derive strategic advantage from it? That's where artificial intelligence (AI) comes in.

Google, Facebook, Amazon and Uber are data-driven companies. AI is central to their business models, top line revenue and profitability.

Google looks at the sites you visit, what you discuss in Gmail and predicts which ads would best serve you. Facebook knows your interests, your network of friends and predicts which ads you are likely to click on. Amazon knows your purchasing history and predicts what you want to buy next. Uber and Lyft know customers' travel patterns and predict the number of drivers needed to meet anticipated demand.

AI Knows What You Want

As AI's predictive power improves, it will transform industries and business models. Imagine that Amazon's AI gets so accurate that it knows what you intend to order before you've ordered it – and preemptively ships it to you. If you choose to keep it, you get a discount or you can return it at no cost.

Sound crazy? This is Stitch Fix's model. Customers pay \$20 for a personal shopper who reviews your Facebook feed and photos and then predicts which clothes you are likely to wear. Five items are shipped and if you keep all of them, you get a 25 percent discount. Stitch Fix was founded in 2011, but is already changing online fashion retailing. Today, it is worth more than \$2 billion.

But imagine when AI becomes so accurate that it can replace a personal shopper. If Amazon used such an AI, it could ensure you stay committed to only buying products from its online store. This is why Amazon wants to collect as

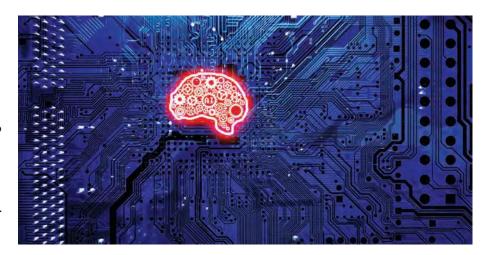
much data as they can with devices like the Echo. The more it knows about you the better it predicts what you'll buy.

Amazon's "Subscribe and Save Service" automatically delivers thousands of frequently purchased items to subscribers who get 15 percent off. What was ever fun about buying toothpaste, anyway? Globally, the logistics and supply chain industry move trillions of dollars of goods. What happens when AI so accurately predicts what customers want that the supply chain management becomes irrelevant?

Digital companies benefit most from AI because they collect vast amounts of information about customers, like the time spent researching products online, which reviews they read, which photos they download and which competitive sites they visit. All this feeds the predictive AI engine: 87 percent of people who spent more than 60 minutes reading flat-panel TV reviews bought one. More specifically, your own personal pattern is such that if you spend an hour on reviews, you overwhelmingly intend to buy that product. AI will create trillions of dollars of value for strategic companies.

Companies need to experiment with AI now to see how it will impact their business and profitability. ■

Jim Harris is the author of Blindsided. Follow him at @JimHarris.



IMPROVING AI ACCURACY VIRTUALLY

Another changing business model was discussed at CES 2018 by NVIDIA CEO Jensen Huang. He described how AI in video games – or virtual worlds – can train autonomous vehicles (AVs). NVIDIA's GPUs (Graphic Processing Units) – are the chips that drive the 3D graphics in video games. Rather than put an autonomous

car on a road to see how it performs, why not observe it in a virtual world – like a 3D driving game – where the car has to predict the movement of pedestrians or children chasing a ball. The autonomous program using AI can improve its driving over millions of virtual miles before it drives on the real road.

35