A new day is dawning for the customer experience, driven by the application of artificial intelligence, machine learning, and automated technologies to CRM data. The potential exists to transform the customer's experience by providing service in a more predictive and intuitive way than ever before.

by MIT Technology Review Custom, July, 2017

Everywhere you look, customer data is exploding. People (and their devices) are all connected - even household products are sharing data. Behind each and every interaction, device, and product is a customer. This equates to an unprecedented opportunity for companies to delight customers with experiences that are more intuitive, relevant, and predictive than ever.

Artificial intelligence (AI) embedded into commerce and customer relationship management (CRM) platforms creates striking new possibilities for the customer experience and beyond. Indeed, the business world is now entering a golden age of AI, and both customers and employees can expect to reap the benefits. AI startups received more than $5 billion in venture-capital funding in 2016, according to CB Insights, and IDC projects that worldwide revenues from cognitive systems and AI will reach $47 billion by 2020. Across industries, regions, and functions, the opportunities are significant. In fact, Accenture predicts AI could double annual economic growth in 12 countries by 2035.

Meanwhile, the implications for the internal and external customer experience are equally compelling. Advances in algorithms and computing power, combined with the abundance of data from which AI algorithms can learn, equate to powerful new uses of AI that are transforming customer and employee experiences to be not only responsive and personalized, but also predictive.

The challenge is determining how to start developing the right processes and expertise for collecting data - as well as building AI algorithms and models - swiftly enough to fully reap the benefits. Most companies find it difficult, if not impossible, to accomplish those tasks on their own, given the dearth of data scientists, the fact that disparate systems and data are
not AI ready, and the need to rapidly build new systems, apps, and capabilities. In addition, the concept of applying AI to improve the customer experience is new, and companies don’t even know where and how to begin. That’s why having AI already embedded into CRM significantly boosts companies’ ability to deliver smart, high-impact customer experiences quickly and effectively.

**Zooming Past the Competition**
A case in point is ski equipment e-commerce retailer Black Diamond Equipment, Ltd. Long before its competitors, Black Diamond recognized that the old-school experiences for browsing, shopping, and service just wouldn’t cut it anymore. Increasing customer demand drove the company to provide a personalized experience for every shopper.

Black Diamond shoppers don’t have time to browse idly at the local ski shop. These skiers often already know exactly what they need to keep them safe and competitive in the mountains, including such high-end equipment as avalanche airbags and climbing skins. To expedite their shopping experience, www.blackdiamondequipment.com takes an active role in predicting customers’ needs and immediately pushes the right items to shoppers, rather than waiting until they check out to make suggestions. Powered by AI, this shopping experience incorporates the ability to predictively sort products based on the learnings from a particular shopper’s browsing habits, to auto-complete that shopper’s search terms, and to return relevant search results. So, if a customer searches for “boots in coral,” the engine returns a selection of orange boots via natural language processing (NLP).

The site relies on a sophisticated analysis of a customer's past purchases, current weather conditions, and other points of insight to inform its decisions on what products it pushes to customers. Shoppers obviously appreciate this customized experience: purchasing has increased by 10 percent, and cart abandonment rates have dropped significantly.

**AI Embedded into CRM: How It Works**
Customer intelligence starts with rich customer data that resides in one location and provides a single, comprehensive view of each customer. Without data, AI algorithms - no matter how advanced - will not be able to deliver meaningful predictive experiences.
Providing that sort of rich insight into the customer has been a challenge to date, because doing so requires companies to have the right data analytics expertise and staffing to collect, mine, analyze, and use the data to predict behavior - and organizations typically store customer data in a number of disparate systems. However, a comprehensive CRM platform - such as Salesforce powered by Einstein, which is an integrated set of AI technologies - provides users with access to all the possibilities of data without the complexities.

Moreover, this approach turns a CRM platform into an ideal technology choice not only to manage customer relationships, but also to build all types of apps and experiences - from an accounts-receivable app, to one that can predict late payments, to a supply-chain app that manages stock levels based on expected demand. Using the same data model, business logic, and experience layer that power the CRM - combined with the simple, point-and-click way of creating apps - both IT and business users can leverage a boost of intelligence to deliver AI-powered experiences to anyone.

Beyond product recommendations, other powerful capabilities that enhance CRM for both employee and customer experiences include the algorithms for speech recognition, sentiment analysis, intent, content summarization through natural language processing, and question answering based on tables of data.

But how can an IT organization within an enterprise possibly use all these capabilities without conducting extensive research and development? The key to the embedded intelligence layer within the Salesforce CRM is the visual programming capabilities for enabling AI for any app, without the need to have a team of data scientists on standby. Everyone in the organization - from programmers to business users - can collaborate to create the right customer experience using iterative, rapid prototyping. This is a huge advantage over having to hire in-house data scientists to unearth customer insights.

**AI for Everyone**

Because Salesforce Einstein is much less complicated to use than traditional, heavyweight AI tools, organizations can transform employee and customer experiences in dramatically less time than has been required previously. The phrase “artificial intelligence” may conjure up images of robots and self-driving cars, says Jim Sinai, VP of marketing, Salesforce Einstein. However, many advanced AI capabilities derive
from software aiding human decision making, as opposed to machines doing jobs previously accomplished by humans. “Software is going to get smarter,” says Sinai. “The net result is using software will be easier, allowing employees to focus on doing the things that they are really good at, which is connecting with customers both inside and outside the organization.”

Working in concert, Einstein’s AI features and the Salesforce platform enable greater process automation within sales, marketing, service, and commerce. They can reduce the friction of business processes in those areas as much as possible, says Sinai. This equates to everything from subtle nuances to improving customer happiness to game-changing capabilities.

E-commerce providers can elevate the buying experience by providing automated, personalized recommendations and special offers that draw in shoppers. The embedded intelligence can even learn from conversation history and previous interactions to coach sales reps in the next steps they must take to reach what is likely to be the best result for the customer.

To stay ahead, companies need to start with their customer data and leverage the workflows and logic already built around that data. Powered by additional AI and machine learning services, platforms that host customer data, such as Salesforce’s CRM, can help deliver personalized, smart experiences faster, with less effort and bigger impact.

For more information on Salesforce technology and digital transformation, visit www.salesforce.com.