Delight Customers and Drive Innovation with Artificial Intelligence

Streamline operations, optimize customer experiences, and transform your business

57% of enterprises surveyed believe improved customer experience and support will be the biggest strategic growth/benefit they gain from AI.[1]

– Forrester, Artificial Intelligence: What's Possible For Enterprises In 2017, November 2016

Industry Strategic Challenges

In today's competitive market, a growing number of retailers are turning to artificial intelligence (AI) to help transform their businesses. Merchants worldwide are relying on the rapidly evolving capabilities of AI and machine learning to make better use of big data, which allows them to streamline their operations, manage their inventory and supply chain with greater efficiency, and create innovative new business models to help run their businesses more strategically. With the insights AI provides, retailers are delivering the kind of personalized experiences and precision marketing that attract and retain customers, and building omnichannel environments to serve customers anytime and anywhere – in stores, online, and on the go.

Retailers today have access to an overwhelming amount of customer data from multiple sources – and the volume of data continues to grow exponentially. According to IDC, the amount of data worldwide doubles every two years.[2] For retailers, winning means harnessing this treasure trove of data to gain valuable insights that can help them compete more effectively by increasing productivity, reducing costs and inefficiencies, boosting revenues, and improving customer satisfaction. Yet by the end of 2016, U.S. and European retailers had managed to capture only 30 to 40 percent of the potential business value that big data and analytics represent, leaving 60 to 70 percent of that potential untapped.[3] Clearly, retail businesses need a better way to use the massive amount of data they collect to improve and personalize customer experiences across all channels, segment and target customers more effectively, and drive efficiency and innovation throughout their organizations.

AI is a powerful transformative technology for retail. The paradigm shift to machine learning – where compute models "learn" and adapt as they analyze more data – is delivering insights to retailers that would be impossible for humans to discover at all, much less in a timeframe where they could be useful.

Evolution of Analytics in Retail
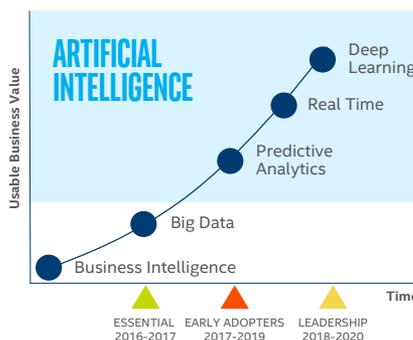
Automatic visual and speech recognition powered by AI is now on par with human performance, making it realistic for people to interact naturally with computers. This allows retailers to provide faster response times by powering customer service with AI, as well as making it more efficient for customers to shop using voice or visual prompts. Consumers can shop three times faster using voice search than by navigating menus in mobile apps.[4] It's no wonder that the number of retailers adopting artificial intelligence solutions to help them achieve their business goals is increasing at such a rapid rate.

Business Drivers and Desired Outcomes

- Improve customer satisfaction through lifelike machine-to-person interactions to provide efficient shopping, ordering and customer support

- Increase sales by more precisely marketing to consumers, recommending and promoting products and services where and how they want to hear about them

- Improve merchandising with better planning through accelerated and expanded insight into consumer buying patterns

- Enable 4th-channel marketing – a channel that relies on connected, voice-activated personal assistant devices – through voice recognition and voice processing to speed retail ordering

- Maintain customer trust with improved security measures to protect customer privacy and retailers' digital assets and transactions

Digital Transformation and Business Innovation

Only Intel has the portfolio required for end-to-end AI solutions—our processors power everything from the data center to the Internet of Things, as well as vision IP, memory, storage, networking, and software. We provide the technology that allows you to orchestrate a complete solution. In addition, Intel alone has the experience to take AI mainstream,

experience we gained by successfully leading previous computing transformations – from mainframe and client/server computing to virtualization and the cloud – and through our long history of building AI into our products. With Intel-powered solutions, retailers can transform how they use data and interact with customers by using artificial intelligence to:

- Learn and make predictions based on all available data,

- Achieve accurate forecasting and enable more strategic business decisions

- Apply insights to improve customer experiences, engagement and offerings

- Take advantage of machine and deep learning to streamline and optimize operations

- Enable machines to sense, learn, reason, act and adapt to the real world

Enabling Transformation

By using an AI platform based on Intel architecture, businesses can get more value from their data through scalability, greater efficiency and effectiveness, and lower total cost of ownership while reducing time to market for intelligent solutions that can give them a competitive market advantage.

Solution Summary

Intel has a complete portfolio designed to unleash the full potential of artificial intelligence. Through ongoing innovation and the acquisition of industry-leading technology from companies such as Nervana Systems*, Saffron*, and Movidius*, Intel is accelerating AI development and delivering scalable solutions to help organizations tackle their biggest AI challenges at their own pace.

Where to Get More Information

Please visit intel.com/ai.

[1] Forrester, Artificial Intelligence: What's Possible For Enterprises In 2017, November 2016

[2] IDC Big Data and Business Analytics Forum 2013. http://idc-cema.com/eng/events/50534-idc-big-data-and-business-analytics-forum-2013

[3] The Age of Analytics: Competing in a Data-driven World, McKinsey Global Institute, December 2016. http://www.mckinsey.com/~/media/McKinsey/Business%20Functions/McKinsey%20Analytics/Our%20Insights/The%20age%20of%20analytics%20Competing%20in%20a%20data%20driven%20world/MGI-The-Age-of-Analytics-Full-report.ashx

[4] 2016 Internet Trends Report, Mary Meeker, Code Conference, 2016