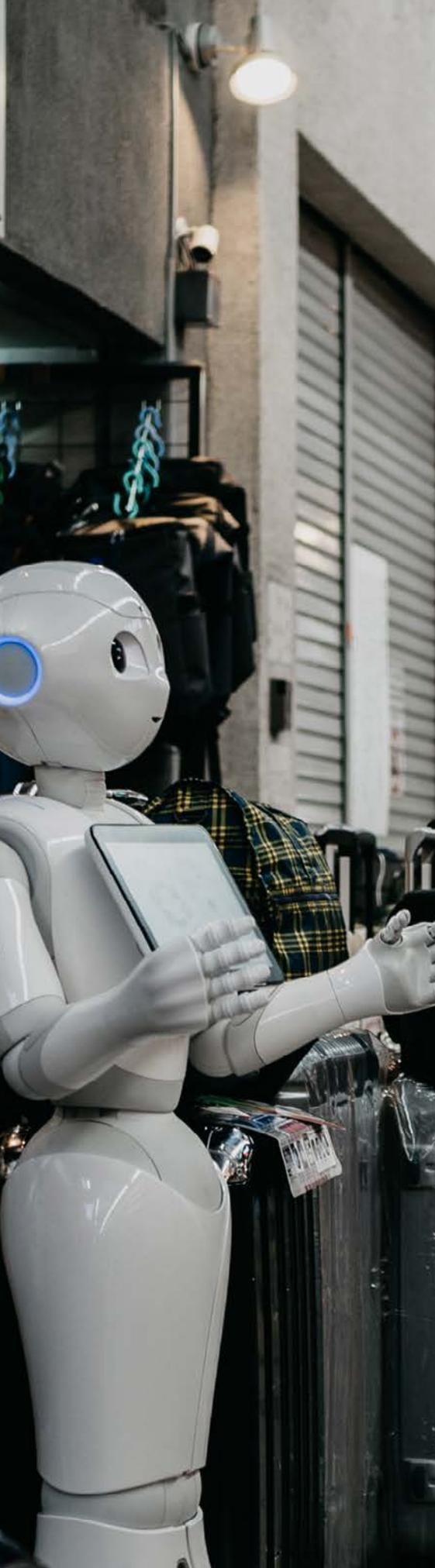


How Is
AI
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In 2016, Gartner predicted that by 2020, 85% of customer interactions would be managed without human involvement. As we move forward, AI adoption is gaining importance in the CIO's charter to increase efficiency and reduce the cost of operation. The prominent AI themes across the retail industry are RPA (Robotic Process Automation) and ChatBOTS.

Already we see a greater adoption of RPA methods in increasing efficiency across the value-chain and improving operational cost structures. On the other hand, ChatBOTS are slowly gaining prominence in terms of customer retention and increasing omni-present sales support across online and physical stores. Retailers are deploying ChatBOTS to respond to client queries during virtual online interactions and suggested products to close sales faster. AI is put into use for client data ingestion and creating a personalized offering/experience. AI will have a multi-faced application across the entire retail product and service cycle, from manufacturing to post-sale customer service interactions.

To achieve the desired result, eco-system players need to collaborate across technology partners to implement the right industry use-cases.

AI is Gaining Traction

Artificial intelligence is likely one of the most used buzzwords of our time. If you are in the automotive industry, healthcare, retail or something else, everyone is talking about AI. The retail industry is no exception, from Europe to the US, this phrase is resonating on every industry event's floor.

The retail industry landscape is undergoing seismic transition with significant penetration of digital shopping levers and highly informed buyers. This is leading towards adoption of accelerated analytics, robotics, and deep learning. AI is going to be the backbone of this transformation.



According to Global Market Insights, Inc, penetration of AI technologies in the retail market will exceed 8 billion USD by 2024. The immediate areas of focus will be around personalization, search and chatbots.

Most retail industry players already boast some kind of AI-based solution implementation in their business workflows. Amazon is a pioneer because of its intelligent cast compilation and viewer data, the sophisticated deep learning and computer vision algorithm that is applied to its recommendation engine, which is far beyond the industry standard and is still evolving.

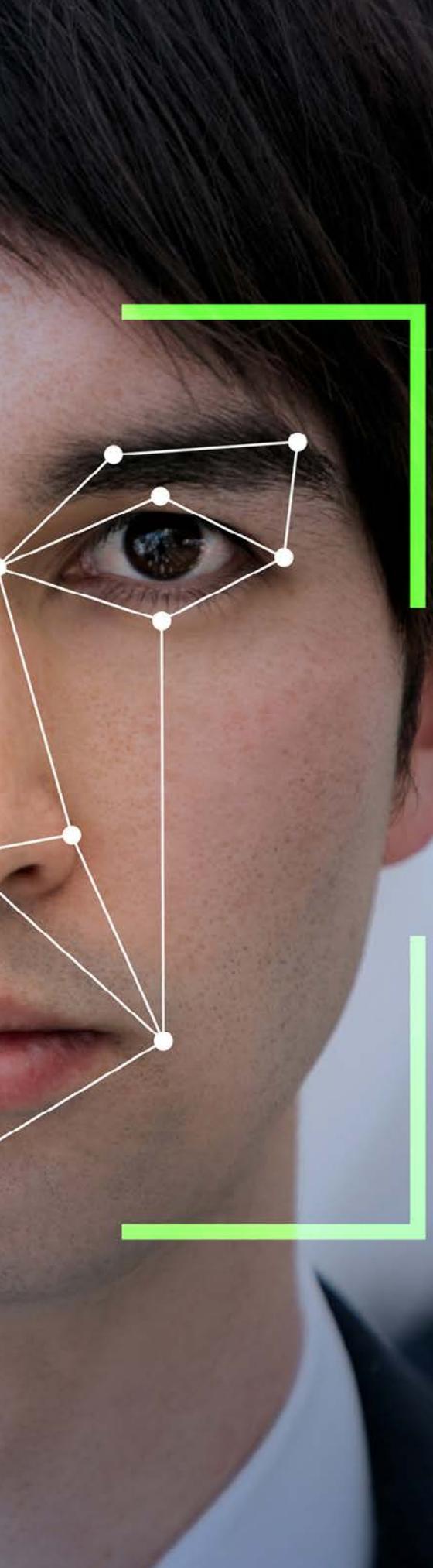
The same is true for other retail giants. Major tech vendors like Amazon, Microsoft, IBM, and of course Google are also working hard in this direction. Let's take for example, Microsoft and its Azure AI platform. From pre-built AI, to customizable ML and deep learning services and tools, you can find all you need to upgrade your solutions and services with cognitive capabilities, natural language processing, etc.

Areas Where AI is Disrupting the Retail Industry

Even without thorough scientific research activities — and just by observing industry itself — it would be quite easy to spot the key areas where artificial intelligence is changing the retail business.

AI trends which are shaping the industry are in areas like digital experience to create relevant product suggestions based on past interaction, personalized marketing feeds, conversational online support, in-store product display and offers, shopper identification through facial/biometric recognition and optimizing overall operational costs through demand forecasting, inventory management and delivery.

The prominent use-cases include chatBOT for responding on FAQs for an online customer, humanoid like Pepper Robot to boost store interest and sales, logistic and delivery methods use-case demonstrated by Domino's Robotic Unit, Amazon drones and payment services like Amazon Go, using check out free technology. GlobalLogic has experience across AI, ML in areas like ChatBOTS, Neural Indoor positioning system and facial recognition etc.



It's Not as Complicated as We Might Think

There's one other factor that may bother you about AI: the cost of implementation. Depending on your goals, available basis, interactions with third-party tools, the complexity of specific workflows, etc., the cost of your project could in theory skyrocket. But in reality, purpose-built AI is inexpensive. The market is full of various tools, frameworks, libraries, and datasets that are ready to be leveraged. For example, Tensorflow, Keras, Microsoft Cognitive Toolkit, MXNet, Torch, Chainer are only some of the available open source frameworks for deep learning. Training datasets is not an obstacle for machine learning any more, either, through facial recognition, object detection and recognition, sound data (e.g., speech and music), text data, etc. Just take what you need!

In a nutshell, if you have specific, well-defined tasks that consist of repetitive and not creative work, then it might be a good case to consider the power of AI. The same is true if you have tons of data and use more than a few people to "play" with it.

About GlobalLogic

This paper was authored by the CTO / Practices team at GlobalLogic.

GlobalLogic is a leader in digital product engineering services. We help our clients design and build innovative products, platforms, and digital experiences for the modern world. By integrating strategic design, complex engineering, and vertical industry expertise -- we help our clients imagine what's possible, and accelerate their transition into tomorrow's digital businesses. Headquartered in Silicon Valley, GlobalLogic operates design studios and engineering centers around the world, extending our deep expertise to customers in the communications, automotive, healthcare, technology, media and entertainment, manufacturing, and semiconductor industries.

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