

Trend shifts in E - COMMERCE



Product of APU Commercial Information Services LLC

APU is a knowledge-based consultancy company providing research and analysis, data, technical and business advice and services, sought by business leaders and strategists, to help them capture tomorrow's opportunities, today.

APU delivers market research reports covering markets, industries, countries, companies and technologies.

By continuously updating our desk research, and leveraging market research publications from leading institutes and consultancies worldwide, we provide relevant, current and credible research, critical to the success of your business.

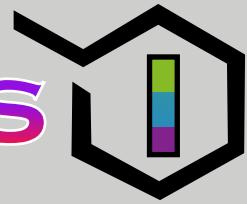
Our clients use our insights, critical analysis, statistics and forecasts to help make strategic business decisions and grow their organizations. Our approach combines deep insight into the dynamics of industries and markets to help clients build more capable organizations and sustain lasting results.

Global Business Intelligence

Trends and forecasts for 18 global industries and over 1200 industry subsectors in up to 60 economies.

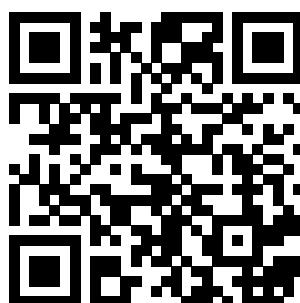
Our subscription services for data, news, analysis and forecasts, help clients understand how the world is changing and how that creates opportunities to be seized and risks to be mitigated and managed.

DIGITAL FUTURES



DIGITAL FUTURES is an online content publication platform catering for technology business leaders, decision makers and users, by sourcing and sharing valuable information and best practices in connection to the latest emerging technologies trends and market developments that leverage capabilities and contribute towards enhanced enterprise-wide performance.

DIGITAL FUTURE



WATCH
DIGITAL FUTURES VIDEO



WATCH VIDEO

LEARN MORE

TREND SHIFTS IN E - COMMERCE

If we look at 2024, it is almost impossible to interpret information flows more effectively than they are now. Artificial Intelligence (AI) is increasingly advanced and accessible each year¹. For many years, every customer with a smartphone has been a source of data. However, in personalization, the new frontier will analyze emotional data, eye motions, and DNA as well as searches, transactions, and opinions to identify precisely what consumers need in real-time. AI, image recognition, and analysis of mood provide a profound and comprehensive understanding of customer attitudes, reactions, and patterns. The excitement around AI is running high and its impact is growing. Humans are more comfortable communicating with robots and, in many cases, robots simply get the job done faster and more efficiently².

Advances in AI techniques enable retailers to accomplish new and exciting features in personalized customer experiences that boost revenues. Indeed, the customer experiences already enabled through AI, including suggestions that accurately predict customer preferences and searches that result in items the consumer will actually have interest in and more, will soon become something consumers not only demand, but expect. In addition to using artificial intelligence to customize consumer experiences efficiently, distributors can use AI as a technique to eliminate expenses and time-consuming content testing. Testing at the hands of marketing and sales professionals involves a number of touch points (messaging, text positioning, call-to-action, etc.) that make it difficult to implement the exact array of changes needed to achieve the best possible communication, especially if you're targeting a variety of consumer types. Additionally, Evolutionary Algorithms (EAs) are a subset of AI that can also be embraced by distributors to assist enhance customer experience and increase sales. They can also test messaging, images, and layout variants, generating constantly better alternatives in order to find the best solution³.

AI technology has changed eCommerce and the way we shop online. It affects all areas of eCommerce brand development; including payments, security, logistics, purchasing, inventory management, and fulfilment. More specifically, it has improved eCommerce in every area including: **(1)** Streamlining the Supply Chain (by overcoming language barriers between buyer and foreign suppliers using NLP- Natural Language Processing- technology), **(2)** Identifying Counterfeit Goods (by analyzing the trustworthiness of suspicious accounts and products), **(3)** Automatic Product Descriptions (by analyzing keywords and benefits to create optimized product descriptions without human intervention), **(4)** Automated Campaign Management (by taking over most of the daily marketing campaign tasks from scheduling to analytics), **(5)** Abandoned Cart Recovery (by sending e-mail and directly remind users of the items that are still in their shopping cart) and **(6)** Total Analytics (by taking big data and convert into real-time analytics)⁴.

Today, we see AI's impact on retail growing substantially in two key areas: voice assistants/smart speakers and chatbots². Gartner projects that more than 85% of customer interactions will be managed without human interaction by 2020 while chatbots are also expected to be the No. 1 consumer applications of AI over the next five years, according to TechEmergence⁵. These specially programmed robots, through AI, simulate human conversation (Figure 1). They give the chance for companies to provide personalized internet customer experience. Customers, unlike traditional customer service representatives who may leave them waiting on hold for long, prefer chatbots that can answer common requests and questions quickly and effectively.

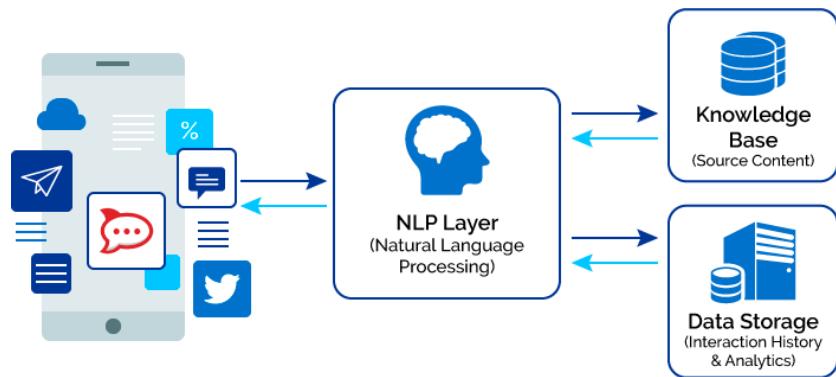
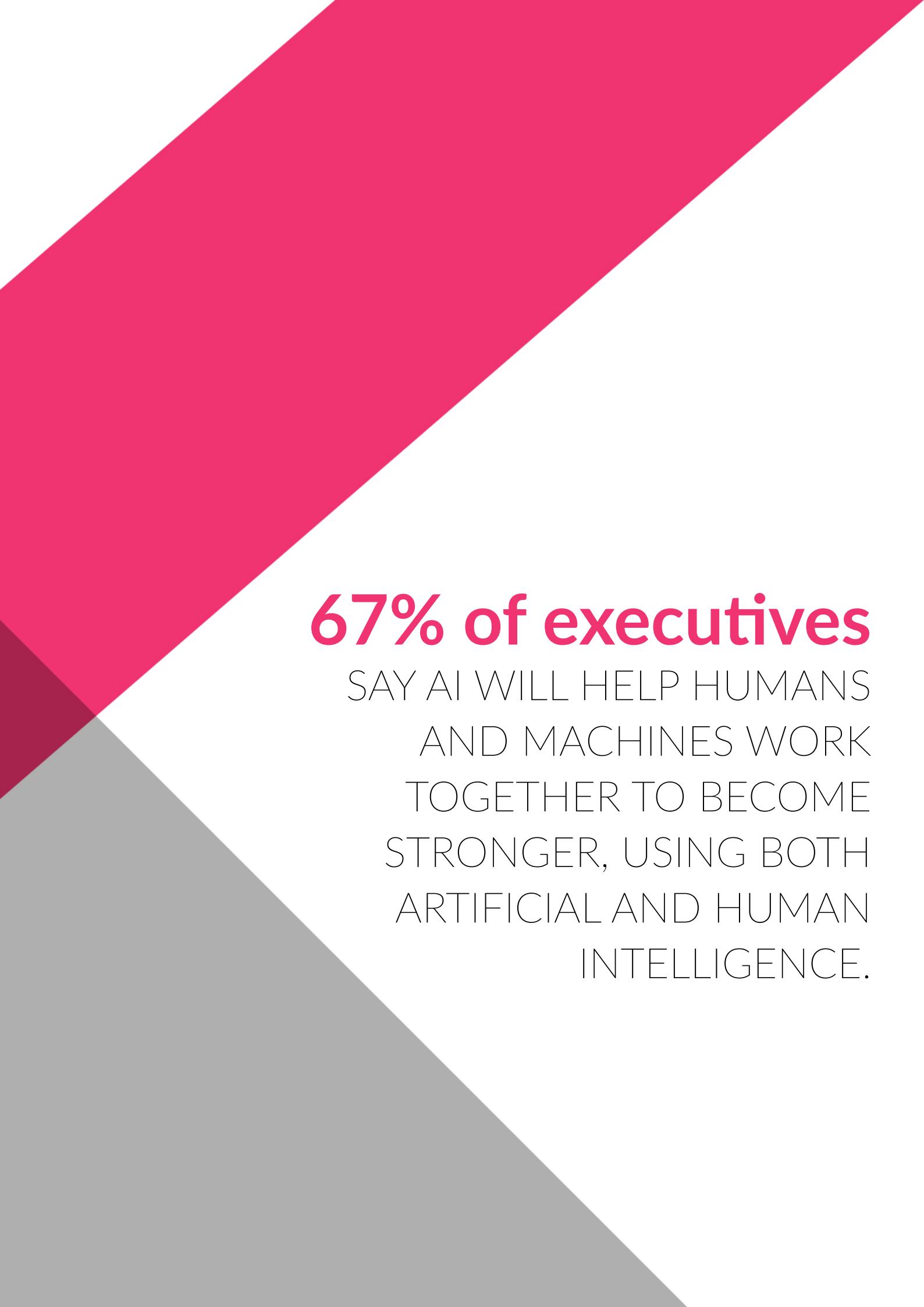


Fig 1 How do chatbots work. Elupula, V. (2019). How do chatbots work? An overview of the architecture of a chatbot.

Businesses, on the other hand, like chatbots because they don't need to pay a bot an hourly wage⁶. Chatbots are AI systems that interact either through text or voice interface. With voice commerce, consumers can speak to a device rather than typing on a keyboard.

Modern chatbots can adapt to any language including dialects for local service. Other uses of chatbots are: **(1)** Virtual Assistants, where bots that use NLP are now far more advanced and do more through their ability to understand natural language. **(2)** Responding to Queries and **(3)** Send Shipping Information, where shoppers can receive accurate package tracking directly, **(4)** Upselling & Cross-Selling by retargeting, chatbots can display what shoppers have previously purchased and then suggest new or related items and **(5)** Send Mass Messages and Continuous A/B Testing by utilizing message bots to A/B test messages. Like other chat platforms, past conversations will remain visible for future reference.



67% of executives
SAY AI WILL HELP HUMANS
AND MACHINES WORK
TOGETHER TO BECOME
STRONGER, USING BOTH
ARTIFICIAL AND HUMAN
INTELLIGENCE.

Voice Commerce and assistants, on the other hand, are changing eCommerce in their way by texting less and talking more. According to an estimation, voice-activated assistants will rise to 1.8 billion by 2021 from 500 million current users. Ordering and shopping using natural speech is faster, easier, and more convenient while enabling individuals to engage in other activities rather than focusing on text⁴. Some popular voice assistants that are smartphone based and smart speakers are Apple's Siri, Google Assistant, Amazon's Alexa, Google Home and Apple HomePod. Some of their common tasks include sending messages, setting reminders, dialling calls, making calendar entries, providing weather forecasts, playing music, opening apps, answering questions, controlling smart devices using home automation, reading the news, creating lists etc, as it is shown in Figure 2.

Some statistics derived from a PWC research in executives can also prove that these AI technological advancements will play huge role in the eCommerce future⁷:

- 67% of executives say AI will help humans and machines work together to become stronger, using both artificial and human intelligence.
- 54% of business executives say AI solutions implemented in their businesses have already increased productivity.
- 59% of executives say big data at their company would be improved through the use of AI.
- 27% of the responders say their organization aims to invest this year in AI and machine learning cybersecurity safeguards.

Popular Voice Assistants and Features

Smartphone-Based Voice Assistants

Apple Siri

First mainstream voice assistant

Default wake word
Hey Siri

Common tasks
Send messages, set reminders, create calendar entries, dial calls, answer questions, set timers, show weather forecast, take photos, set alarms, play music, send texts, open apps



Google Assistant

Debuted May 2012 as Google Now in Android 4.1 aka Jelly Bean, Google Assistant debuted in 2016

Default wake word

OK Google

Common tasks

Send messages, set reminders, create calendar entries, dial calls, answer questions, set timers, show weather forecast, open apps, set alarms, play music, send texts

Smart Speaker-Based Voice Assistants

Amazon Alexa

Debuted in November 2014 in Amazon Echo and Amazon Echo Dot smart speakers

Default wake word

Alexa

Common tasks

Makes calls, music playback, sets alarms, answers questions, provides real-time information, controls smart devices using home automation systems, uses Skills apps to do more advanced features



Google Home

Debuted in November 2016

Default wake word

Hey Google

Common tasks

Answers questions, plays music, controls smart devices using home automation, makes calls, sets reminders, reads news, works with Chromecast to stream entertainment

Apple HomePod

Debuted February 2018

Default wake word

Hey Siri

Common tasks

Plays music, controls devices using smart home automation, sets timers, reads news and information, creates lists, sends messages, makes calls on an iPhone.

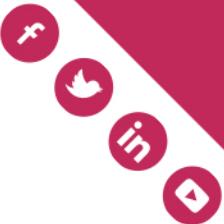
Fig 2 Most popular Voice Assistants and their features. Diana Ramos. (2018). *Voice Assistants: How Artificial Intelligence Assistants Are Changing Our Lives Every Day*. Smartsheet.

The eCommerce sector has influenced people's way of shopping and living, and blockchain is on its way to disrupting eCommerce. The worldwide blockchain market is projected to grow by more than 400% by 2021, according to a latest Statista Report. Faster transactions and freedom of Transactions, identity protection, ease of use, cost reduction, inventory management, transparency in marketplaces, security, and fake reviews are some of the advantages of this technology and some of the features that make blockchain so popular among e-businesses⁸.

REFERENCES

1. Orderchamp. (2019, April 2). 2024: what will the retail landscape look like?
2. KPMG. (2019). Retail trends 2019. Global consumer & retail.
3. Personali. (2017). How AI is the Future of E-Commerce.
4. Eventige Media Group. (n.d.). How AI, Chatbots and Voice Commerce are Affecting Ecommerce.
5. Business Insider. (2016, September 8). Why it's time your business went all in on chatbots.
6. Speer, M. (2018). Marketing for 2028: Chatbots and Voice Assistants.
7. PWC. (2018). 2018 AI predictions: 8 insights to shape business strategy.
8. Pratap, M. (2019). 5 Ways Blockchain is Transforming eCommerce.





Designed and produced by APU Insights Creative Studio

2020 © APU Commercial Information Services
All Rights Reserved