



AI

The marketer's AI glossary

Introduction

Artificial intelligence (AI) — with its complexity and reach — can conjure scary thoughts. But AI is nothing for marketers to fear. In fact, marketers who harness its full potential stand much to gain. It's just a matter of knowing when and where to do so for greatest effect.

This handy guide was designed to take the guesswork out of AI, and how it can be applied within your marketing organisation — today and tomorrow.

AI defined

In the simplest terms, “artificial intelligence” means adding intelligence to machines. It's an umbrella term that includes multiple technologies, including machine learning and deep learning, which can work individually or in combination. Machine learning is how computers are taught to learn and interpret information like we do — without being programmed. In other cases, machines teach themselves by recognising patterns; that's called deep learning.

Microsoft CEO Satya Nadella puts AI into even simpler, more personal terms, defining it as “human ingenuity amplified by intelligent technology”. In other words, it empowers people to make sense of and act upon colossal volumes of data in meaningful ways. For marketers, AI enables novel engagement, unprecedented personalisation and newfound levels of marketing efficiency.



Examples of AI in use

- ✓ **Natural-language processing and speech recognition:** Computers understanding human language
- ✓ **Object recognition:** Computers recognising objects in a digital image, video or surrounding environment
- ✓ **Prediction:** Computers calculating the likelihood of a future occurrence
- ✓ **Sentiment analysis:** Computers determining the emotional tone behind words
- ✓ **Translation:** Computers translating text or speech from one language into another

What AI is not

- ✗ Standard ad targeting
- ✗ Segmentation
- ✗ Human consciousness

Consumers and AI: New ways of engaging

Consumer experiences have been shaped by AI for years. Think of how the recommendation engines provided by Netflix and Amazon (to name a few) have altered your expectations. Here are other examples of how intelligent technology is already being applied to help enable more meaningful engagement.

Connect

Bots | *bots*

Using natural-language processing and machine learning, an AI-infused bot can help you discover information and answers — often more efficiently than when you interact with a person, such as a customer service rep.

Digital assistants | *dig-i-tal as-sis-tants*

Much like bots, digital assistants can answer questions and deliver information. The difference is that you can get this information from your personal devices verbally and hands-free, using voice commands and queries.

Intelligent agent | *in-tell-i-gent a-gent*

Something — such as wearable technology — that perceives and acts upon its environment through sensors.

Internet of things (IoT) | *in-ter-net of things*

A network of physical objects that can share data with each other via the internet, and with other internet-enabled devices and systems.

Smart cars | *smart cars*

Smart cars incorporate a range of intelligent technologies — or connected components — making them part of the internet of things. AI-powered smart cars use deep learning and sensors to design a three-dimensional map of their surroundings. AI then analyses all the data gathered by these sensors to make the same decisions as human drivers, such as when to change lanes, how to park and when to brake.

Wearable technology | *wear-a-ble tech-nol-o-gy*

These smart electronic devices worn on the body are designed to enhance your everyday activities. By gathering data and transmitting it to your smartphone app, they provide real-time feedback on things like your athletic performance and personalised recommendations for improving it.



Marketing and AI: Smarter marketing, executed with ease

When it comes to applying AI to everyday marketing, think of it as a way to help make routine or simple processes into intelligent ones. Better yet, it continually enhances the way you can act on all the information processed by machines.

Personalise

Ad targeting | *ad tar·get·ing*

With AI and machine learning, you can more easily and quickly select the target audience for ads, such as in-market buyers or custom audiences, and then serve them the ads most likely to trigger a response.

Big data | *big da·ta*

Big data describes huge or complex data sets that can only be processed using advanced software, like predictive analytics.

Churn prediction modeling | *churn pre·dic·tion mo·del·ing*

AI-powered tools running machine-learning algorithms can identify disengaged customer segments. They can even build a model and test and validate the likelihood of churning. Based on this insight, marketers can proactively take measures to help keep these customers engaged.

Cognitive computing | *cog·ni·tive com·pu·ting*

Computers or software mimic the human brain when it comes to processing vision, language, speech or knowledge to help marketers improve decision-making.

Data analytics | *da·ta an·a·ly·tics*

Machine learning helps marketers to quickly digest and extract meaningful insights from all the marketing data we collect. AI-infused data analytics can even help pinpoint the cause of trends and outliers.

Graph | *graph*

A way to relate object pairs within a larger set of objects, so marketers have the context they need to help make meaningful decisions.

Image search | *im·age search*

No more scrolling through hundreds or thousands of photos to find the one you had in mind. Image search helps find the visual match to a text-based description (like "flower", "dog" or "beach"). The Microsoft Photos app is one such app that can spot, classify and sort images.

Predictive analytics | *pre·dic·tive an·a·ly·tics*

Predictive analytics helps marketers understand the likelihood of future events and the next action to take in response. For instance, it might identify that certain prospects buy a certain product and spend a certain amount after a specific sequence of activities. With this insight, the marketing team can invest in the right resources and tactics to help drive more sales from this segment.

Predictive search | *pre·dic·tive search*

Ever wonder how a search engine seems to anticipate what you're searching for? That's the power of predictive search, which calls upon your search context and behaviours to proactively serve up information.

Smart personalisation | *smart per-son-a-lis-a-tion*

Intelligent algorithms can personalise information, offers and experiences based on known information, such as location, demographics, device and past behaviours. A prime example is displaying relevant information and content on a website.

Visual search | *vis-u-al search*

As it sounds, this search finds the visual match to an image or other visual. Using computer vision and deep learning, eBay's visual search feature compares images uploaded by a shopper to find products for sale on its site. Advanced visual search can both identify what's in the photo — such as a restaurant — and supply additional information, such as the phone number, hours of operation and its rating.



Automate

Marketers can also tap into the power of AI to help achieve unprecedented levels of efficiency.

Algorithms | *al-go-ri-thms*

A set of rules defining a sequence of operations or a step-by-step procedure for solving a problem or accomplishing a task, usually executed by a computer.

Auto-bidding | *au-to bid-ding*

Humans usually manage pay-per-click ad campaigns, but AI can do the bidding for you on new advertising channels.

Content creation | *con-tent cre-a-tion*

AI-powered algorithms can analyse a website visitor's experience and how that person responds to your emails. Intelligent content tools take this data and write targeted copy for everything from emails and ads to tweets and onsite content.

Insights | *in-sights*

Instead of relying on a data analyst or scientist to surface insights from your data, AI can automate the process. Picture automatically creating optimal personas, identifying

segments to either include or exclude from your campaigns, and choosing the offer for your target audience. These are just the start of what you can do with real-time insights in hand.

Programmatic advertising | *pro-gram-mat-ic ad-ver-tis-ing*

Programmatic advertising is when computers take care of buying and selling digital ads on your behalf. Add AI to the mix, and you can optimise your bids and your creative. Imagine uploading all creative assets into a template that the software automatically assembles and displays to those it thinks will be most receptive at any given moment.

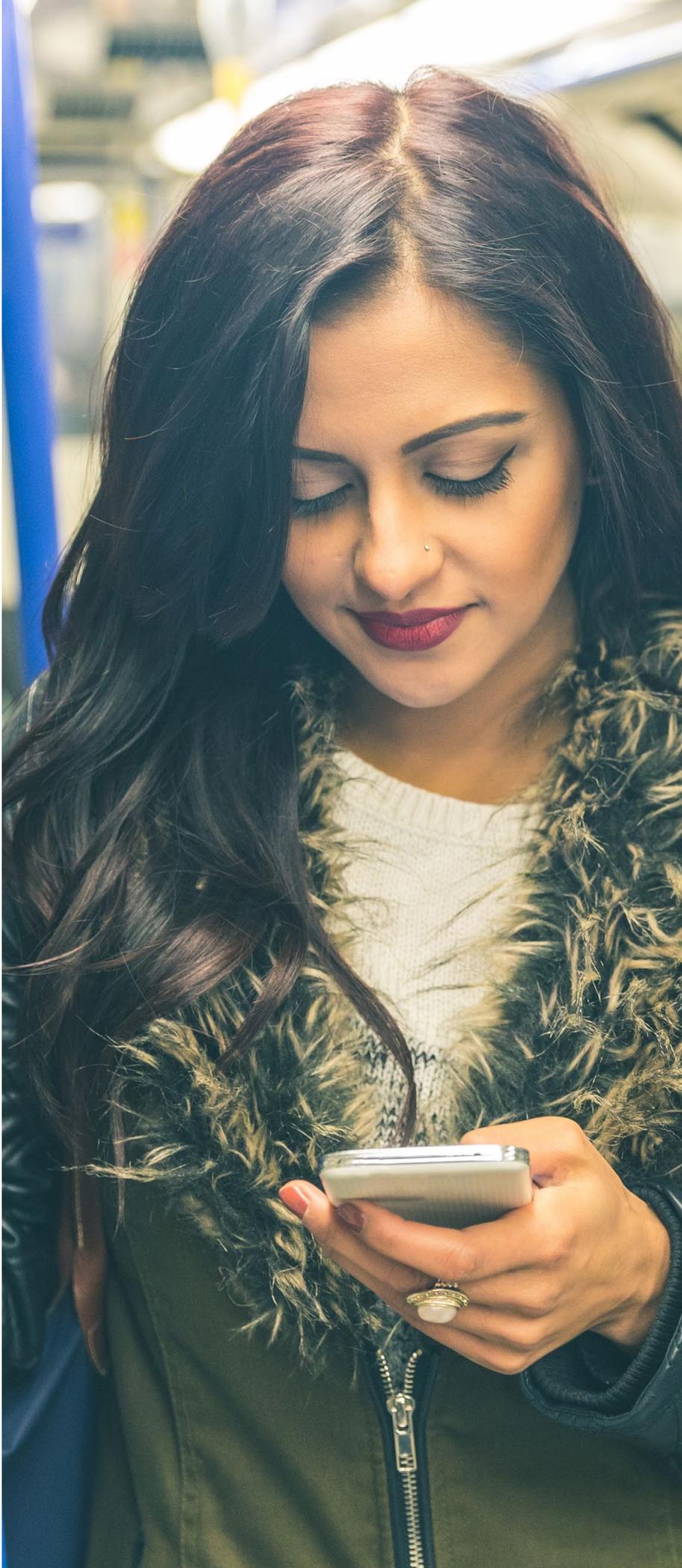
Translation | *trans-la-tion*

Computers can help you translate content on the fly and at scale by calling upon natural-language processing, machine learning and sentiment analysis.

The power of AI is in reach

Every day that you delay the use of AI-powered applications is another day you risk losing your competitive edge. The time of wait-and-see has come and gone. Now's the time to embrace the power of intelligent technology and supercharge your marketing.

[Learn more](#)





Bing Network. Intelligent search.

© 2018 Microsoft Corporation. All rights reserved. Microsoft, Windows, and other product names are or may be registered trademarks and/or trademarks in the U.S. and/or other countries. All trademarks are the property of their respective owners. The information herein is for informational purposes only and represents the current view of Microsoft Corporation as of the date of this publication. Because Microsoft must respond to changing market conditions, it should not be interpreted as a commitment on the part of Microsoft, and Microsoft cannot guarantee the accuracy of any information provided after the date of this publication. Microsoft makes no warranties — express, implied, or statutory — regarding the information in this presentation.