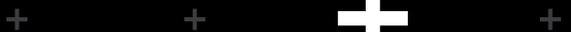
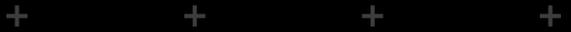
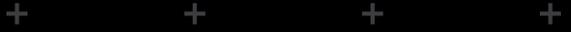
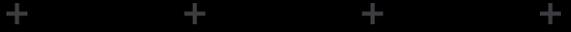


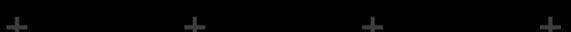
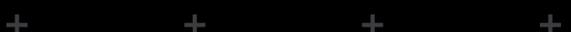
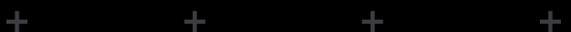
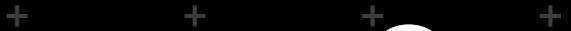
Quantcast



AI Fact Pack



**So what is
AI anyway?**



About Quantcast



Quantcast's mission is to build the audience platform to radically simplify advertising on the open internet. Since 2006, we've been building "Q" the world's largest AI driven audience behaviour platform for the open Internet that today directly quantifies over 100 million mobile and web destinations. We apply machine learning to help marketers, publishers, and agencies grow their brands by better understanding and predicting consumer interactions in real-time.

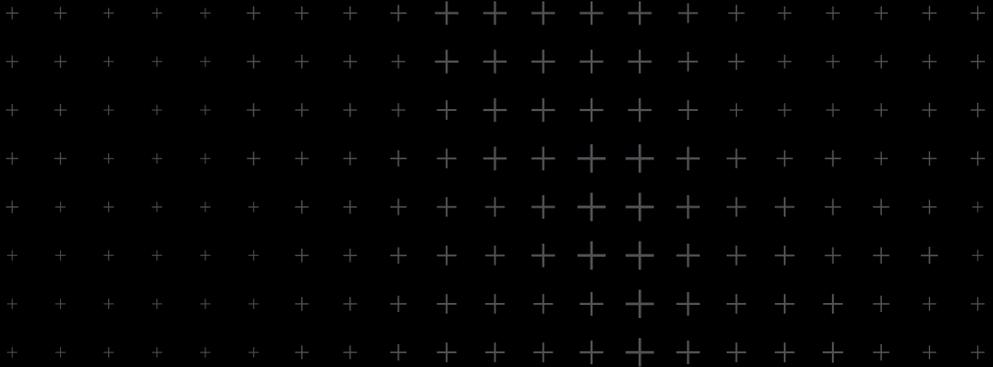
@quantcast

www.quantcast.com

Comprised of Internet scale 1st party data, self adapting predictive models and integrated AI optimisation, Q's collection of machine learning technologies continually interprets consumer behaviour giving brands real-time insight of their audiences. Q powers the Quantcast Intelligence Cloud, our suite of audience insights, targeting and measurement solutions designed to understand, influence, convert and measure the consumer journey. Marketers, agencies, consultancies and publishers use the Quantcast Intelligence Cloud to discover new customers, drive incremental growth and deliver business outcomes.

AI is a buzzword.

AI will also disrupt your brand.



How will your brand grow in the AI era?

It's 2018 and already folks are rolling their eyes at the mere mention of Artificial Intelligence (AI).

But look closer.

Large technology companies are now "AI-first". Anything that can be automated, will be. And it's only a matter of time before your CEO asks "what's our AI strategy?".

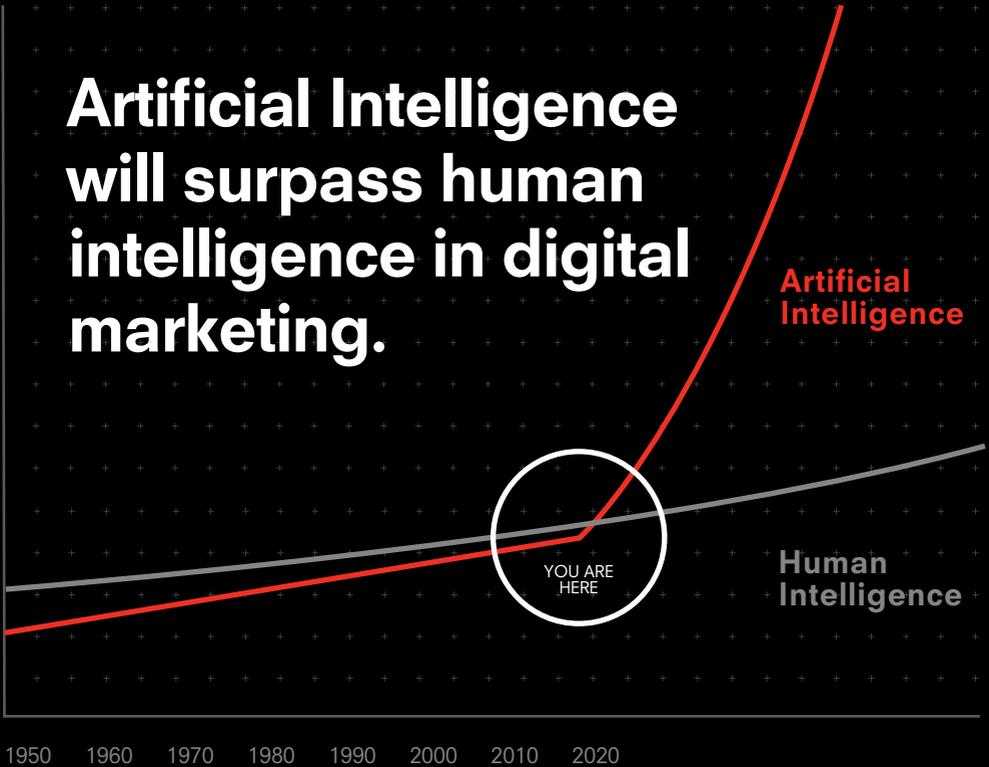
The reality is AI will be the most important technology of the 21st century. It will transform every customer experience, every company and every industry.

Look past the hype.

Focus on how you can use machine learning to inspire human learning.

Leverage the power of Quantcast and harness the real-time pulse of the Internet with AI-driven insights, targeting and measurement.

Artificial Intelligence will surpass human intelligence in digital marketing.



AI isn't new

In fact, it's been around since the 1950s.

However, we're about to hit a major inflection point. We now have all three key ingredients for exponential growth in AI.

The Cloud: We finally have massive amounts of computing power that is affordable, scalable and available on demand anytime, anywhere. Hardware limits are no more!

The Software: Machine learning is an iterative process that is computationally expensive. It also requires deep expertise in computer science and mathematical areas such as neural networks and advanced statistics. The cloud has enabled AI software to run quicker and easier, allowing for faster testing, experimentation and results.

The Data: This is the fuel that powers the software that runs on the cloud. And machine learning needs data. Not just "a lot" of data but rather massive amounts of data. Real-time data. Internet-scale data. Multi-dimensional data. Always-on data. Without this continuous stream of data, machine learning won't be able to learn.

Having one or two of these ingredients isn't enough. It took having all three—the cloud, the software and the data—becoming widespread and readily available to truly create the flywheel we are just starting to see set in motion. This is the dawn of the AI era.

So, what is AI anyway?

Artificial Intelligence

AI is an umbrella term that covers a large area of computer science. The pinnacle of AI is to achieve Artificial General Intelligence—which is also known as “full AI.” This is the kind of AI in science fiction. It’s when the intelligence of a machine can successfully perform any intellectual task that a human being can. Although we’re a long way from there, AI is already very real and around us. Sometimes referred to as “Narrow AI,” this is the use of software to study or perform specific problem-solving or reasoning tasks.

A common way to achieve intelligence in machines is related to the same way humans achieve intelligence—through learning. Machine Learning (ML) is the field of getting machines to solve problems without explicitly telling them how. While marketers may talk about AI, computer scientists talk about ML. This field overlaps with computational statistics, neuro and computer science and has been the subject of academic research for decades. Some of the most promising techniques in this field are inspired by nature (see below).

Machine Learning Approaches — How They Learn

Supervised Machine Learning

Learning by example. For example: here are millions of pictures that have been labeled (cat, dog, person); learn to tell me what is in a picture you haven’t seen before.

Unsupervised Machine Learning

Finding patterns in an unlabeled dataset. For example: here are all my customers and everything I know about them; segment them into interesting sets.

Reinforcement Machine Learning

Learning by trial and error. For example: learn to play Pac-Man—the goal is to get the score as high as possible.

Machine Learning Techniques — Just to Name a Few



Regression

A simple method of drawing lines to fit real world data, simple—but sometimes really useful!



Neural Networks

Inspired by the brain, probably the most “general” AI today.



Genetic Algorithms

Inspired by natural evolution.



Cluster Analysis

Unsupervised statistical analysis of datasets.

Applications of Machine Learning — Where it Can Be Used

General Technology

Prediction →

Recommendation →

Classification →

Pattern Recognition →

Marketing Specific Use Cases

Prospecting

Personalisation

Fraud Prevention & Brand Appropriateness

Insights



How can you find customers you haven't met yet?

Guess your audience. Or know your audience?

Machine Learning Application: Prediction

Until machine learning started to inform prospecting, finding new customers was based upon a small set of characteristics with limited accuracy for real prediction. With new AI driven analytics, we now have the opportunity to locate and predict the real-time behaviour of new users, across the web, based on granular, live behavioural models of current users. The more massive and fresh the data, the deeper the behavioural analysis, the more precise the recognition and learning, and the more successful the targeting. Whereas past algorithms drew on panel measurement and a stale, generic past to guess the future, today's precise one-to-one reading of present behaviour can predict it.

Marketing Use Case: Prospecting

Say goodbye to the funnel and say hello to an always-on learning loop of audience information. The chance to reach ideal customers in real time throughout their purchasing journey—including at key, pre-market moments of influence that establish a brand's primacy in a customer's mind, BEFORE they ever visit a website. The opportunity to evaluate a potential customer's up-to-the second interest level, as well as their closeness to conversion. And the ability to serve fewer ads with greater relevancy, resonance and impact—cutting costs and delivering dramatically higher ROI.



How can you truly get the right message to the right audience?

Recommendations are easy. But can you make them personal?

Machine Learning Application: Recommendation

Recommendations come in the form of a customised 'next step' offered to a user. Their systems can be simple, based on 'if/then' models that take into account users' behaviour and stated preferences. For example, how much a user liked or disliked a previous purchase can lead to an offer like 'we know you loved x, so we suggest that you try y'. Recommendations can also be more robust, collaboratively optimising individuals' behavioural intel with that of users who share attributes, too.

Marketing Use Case: Personalisation

Marketers can now go a step beyond and not merely make it about the person, but begin to provide relevance to that magical moment of interaction. With machine learning, recommendation systems can dimensionalise and dig deep into behavioural DNA—so users get real-time value in the form of personalised pages, needed offers, tips and more. Messaging that connects this intelligently can be useful in e-commerce, music, dating profiles, events and other industries.



Do you have confidence in your campaigns?

How can you keep watch over your brand everywhere?

Machine Learning Application: Classification

As brands increase their digital presence across the internet, knowing where it's OK to message and understanding who sees it requires intelligence to keep it all in perspective. With machines doing more of this work, it's important that the systems behind their rules structures are empowered with next-generation learning. Simply making black-out lists requires painstaking work and can possibly involve human error. By classifying fraudulent actors and inappropriate placements, based upon intelligence gleaned from existing data, we know what to look out for before campaigns begin.

Marketing Use Case: Fraud Prevention & Brand Appropriateness

Being able to observe the real-time pulse of the internet, we can identify behaviours before campaigns ever get near something you shouldn't be associated with. Suddenly, campaigns become extremely intelligent at navigating the internet, avoiding waste, bots or unsafe territories—to become very efficient and effective. Using machine learning to classify these characteristics lets us get ahead, rather than addressing these problems only as they arise. The results are campaigns that succeed with greater intelligence and much improved results, despite the ever-increasing scale of the internet.

Are you still drowning in data?

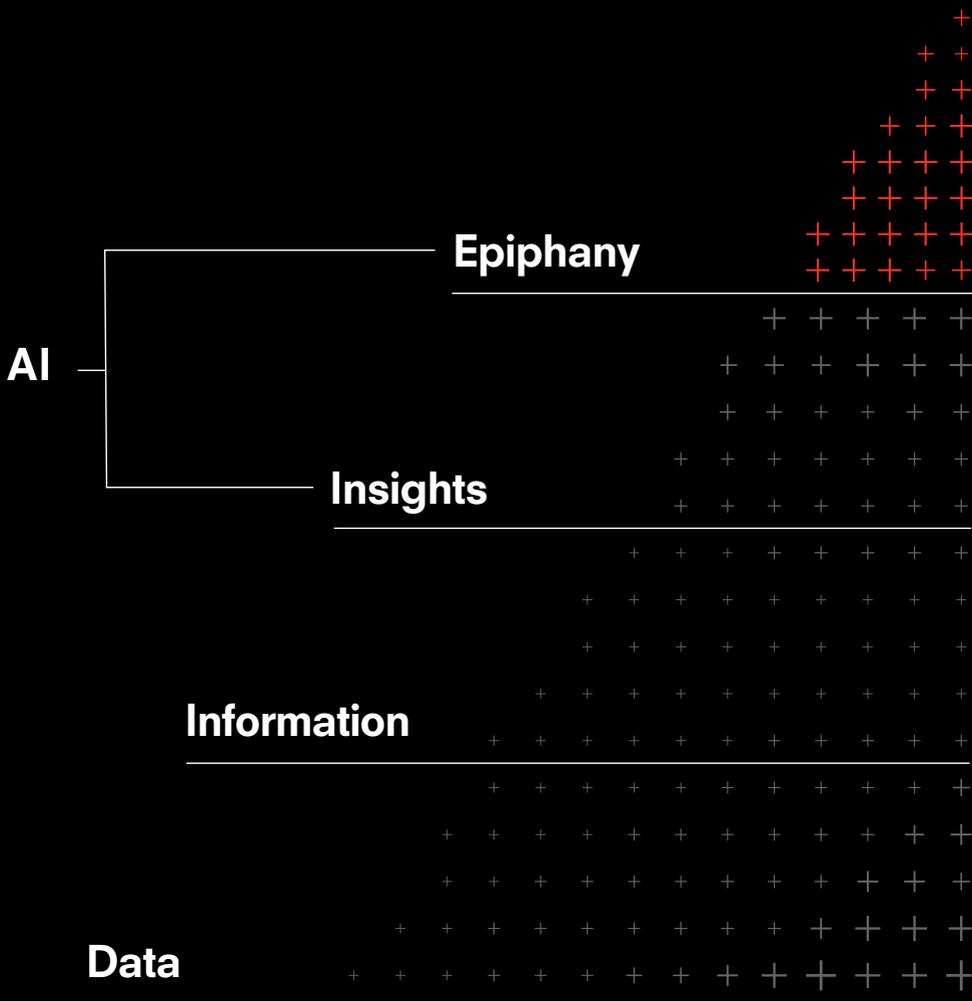
How are you climbing the Marketer's Hierarchy of Intelligence?

Machine Learning Application: Pattern Recognition

It's no secret that brands are drowning in data. Do we know the difference between data and an insight? Without the proper tools, it's hard to know for sure. (Here's a tip: if you can Google it, it's not an insight). With machine learning, we have new tools that open up a world of ideas locked up in data. With pattern recognition, we can now reach beyond the who, what and where surface level data, to see something truly unique. Producing smarter inputs at the outset of campaigns, and seeing better results throughout. And we're just scratching the surface of what's possible.

Marketing Use Case: Insights

With AI, your data can make the exponential leap from information to intelligence. Actionable insights that inform your business decisions, helping your brand grow. Dimensionalising the data in ways that were impossible just a decade ago, we're able to pick up patterns you never could conceive of before. There are no constraints to what's possible. This is where insights become epiphanies. So now, machine learning can influence human learning, bringing more creativity and problem solving back into brand building.



technology connecting you to customers? Why are you buying media, instead of building your audience? What's your AI strategy? How did conventional wisdom get us here? Where is my brand safe? How is brand safety impacting the growth of our brand? Are we getting value out of DSPs? Are the clicks we value coming from our target audience? Why are we looking at data instead of asking for insights? Why can't you have mass reach AND the right audience? What good are DMPs? Is it time to retire CTR? Can we see real-time patterns the consumer journey? Do you follow customers with the real time pulse of the internet? How can brands better understand their customers? Is our data delivering real insights? How can our messages get more personalized? What's the best way to raise our conversion rates? Are conversion rates even reflective of growth for brands? Why can't we measure how much customers love our brand? Why is it so hard to conquest our competition's audience? Is your focus on clicks costing your brand growth? When did creativity take a back seat to data? Is our brand safer when we buy site direct? How is brand safety impacting the growth of our brand? Why are walled gardens separating brands from customers? **It's time to question everything.** How do I increase the value of my content? How do I take back revenue from the duopoly? How do brands take control back from the duopoly? Whatever happened to reaching the right customer at the right time? If technology is so much smarter, why is it so much harder to reach the right customers? Can we audience plan with a view of the entire internet? How can we create growth using AI-powered tools? Where has following conventional wisdom got you? How can you grow forward, if you can't measure where you've been? Do all our customers look like our prospects? How can you evaluate success if you don't know if you reached your audience? Are we marketing to people or bots? If digital is so innovative, why is it so hard to reach the right customers? Can't our data make us more creative? Why is it the more technology you invest in, the less control you have? Why is it the more media you invest in, the less insights you receive? Do you know where your audience is, right now? Is data making brands more strategic? Is your brand challenging conventional wisdom? Are you growing? Or growing behind? Is it time for your brand to stop making compromises? How ready is your brand for disruption? How will you take back your brand in 2018? Where can we build better audience intelligence? Are you buying audiences or proxies? Is measuring clicks helping to grow your brand? How will AI disrupt our brand planning? Is the answer to growth more data? Is it possible to see the consumer journey in real time? Can we glean

How will your brand grow in the AI era?

Quantcast