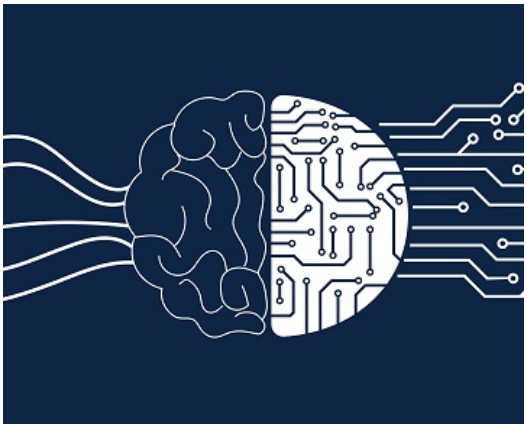
AI and machine learning: What you do and don’t need to know for SEO



Artificial intelligence (AI) is a field of technology that is surrounded by both hype and misconceptions.

It is predicted that $60 billion will be spent by brands on AI technology by 2025, so this hype is having a direct impact on where companies allocate their budgets.

A significant difficulty in defining the size of the AI market is in defining exactly where its boundaries lie. Although we tend to imagine eerily human robots that mimic our mannerisms, AI is actually a very broad field that encompasses a range of disciplines – some more relevant to search marketing than others.

More often than not, it is embedded in software that can process vast amounts of data to make or inform more intelligent decisions.

The headlines are typically reserved for AI applications like driverless cars and delivery drones, but this overlooks the fact that AI has the potential to improve every aspect of our lives.

Machine learning, which is a subset of artificial

intelligence, is built on algorithms that take in data from their surroundings and take actions without being specifically programmed to do so. In other words, they learn from ‘experience’.

A brief look at the technology giants will show just how essential machine learning is to their respective growth strategies.

Google

- Google’s RankBrain uses machine learning technology to analyze the context of content and serve more accurate organic search results. Increasingly, this applies to image and video results as well as text.
- AdWords and Google Analytics both make use of machine learning to derive performance insights and improve ad targeting.
- Google has publicly stated that the company has taken an “AI-first” approach, demonstrated in its software such as the Google Assistant but also in hardware, including Google Home and the Pixel smartphone range.
- Google also purchased AI specialist company DeepMind for over $500 million to fuel their AI-first strategy.

Amazon

- Amazon’s Echo devices, powered by an AI assistant, were the retailer’s biggest seller during the 2017 holiday season.
- Amazon was an early adopter of machine learning for product recommendations. These algorithms assess our behavior – and that of similar customers – to proactively suggest new products to us.
- The ecommerce giant has also made the news on numerous occasions for its experiments with AI-powered delivery drones.

- Amazon Web Services encourages developers of all skill levels to engage with its machine learning tools.

Facebook

- Facebook uses AI to interpret images, both to identify individuals and to understand the context of the visuals.
- The Facebook News Feed tailors each user's content using machine learning algorithms. Personalization is one of the most common and powerful applications of AI for social networks.
- Facebook's prediction engine makes more than 6 million predictions every second.

Apple

- Apple uses AI to recognize the fingerprint and face of device owners, improving security and making it easier for users to unlock hardware.
- Recently, Apple has partnered with IBM to create a mobile application for the latter's Watson AI program.
- Apple purchased unstructured data specialists Lattice Data for $200 million in 2017, which will help provide the reliable data that machine learning algorithms require to function effectively.

Clearly, AI is more of a new reality than a passing trend.

Machine learning is built into so many products and services, such as Spotify and Uber, that we sometimes see its benefits without understanding its processes.

It is therefore not so surprising that consumers aren't fully aware of just how pervasive AI and machine learning actually are.

In a recent survey, just 33% of consumers reported that they

currently use an AI-driven technology, when in fact 77% of them did so without even realizing.

What marketers require within so much noise is some clarity on how AI is actually going to affect – and potentially improve – their company's strategy.

AI applications that apply to SEO and content

Query understanding

Google can use machine learning algorithms to get to the heart of a searcher's intent. Based on someone's past behavior and current location, their search for something like [pizza] can be understood at a deeper level.

Perhaps they want pizza recipes, the number of a local restaurant, or the location of a nearby pizza place. Machine learning can remove the guesswork and get straight to the right answer.

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Personalization

Machine learning helps search engines to tailor their results to each individual user. That means we need to know our audience and their moments of need if we are to win in this new landscape. AI helps us to find these insights in our customer data just as it allows search engines to match queries to the most relevant responses.

Voice search

Digital assistants like Amazon’s Alexa or the Google Assistant rely on AI to converse with consumers and pre-empt their requests. We must optimize for this new ecosystem by analyzing when and why people use these devices and also providing answers that can easily be pulled from our content. Structured data is one great way to achieve this.

Multimedia search

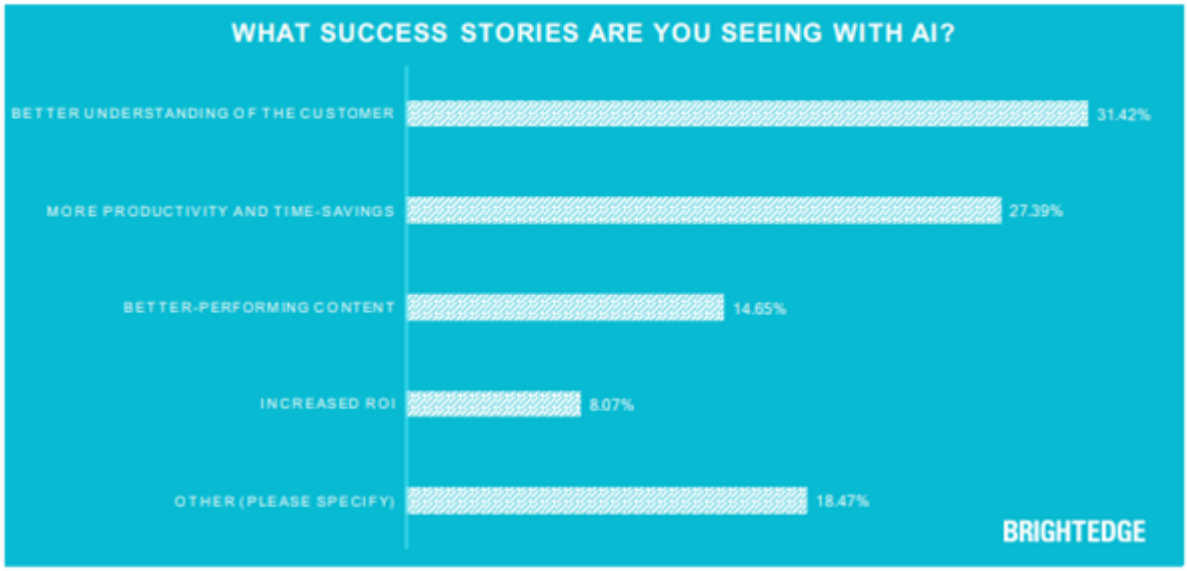
Brands need to optimize images, videos, and even audio clips for search. Through a process called deep learning, computer-based algorithms can interpret these assets

Analytics

AI can now unearth important statistics hidden within our analytics platforms. This saves time, of course, but also provides essential information to us automatically. If we use this knowledge to shape our content strategies, we can arrive at more creative and impactful results.

A new survey from BrightEdge corroborates this, too. Marketers report that better customer understanding is the most common success that AI brings to their campaigns.

What success stories are you seeing with AI?



This is followed by increased productivity, as machine learning can not only automate some of our daily tasks but also achieve them in a more efficient manner. The initial fear that AI would take over our jobs is increasingly replaced by a general sense of optimism of how AI can augment our abilities and extend what we can achieve.

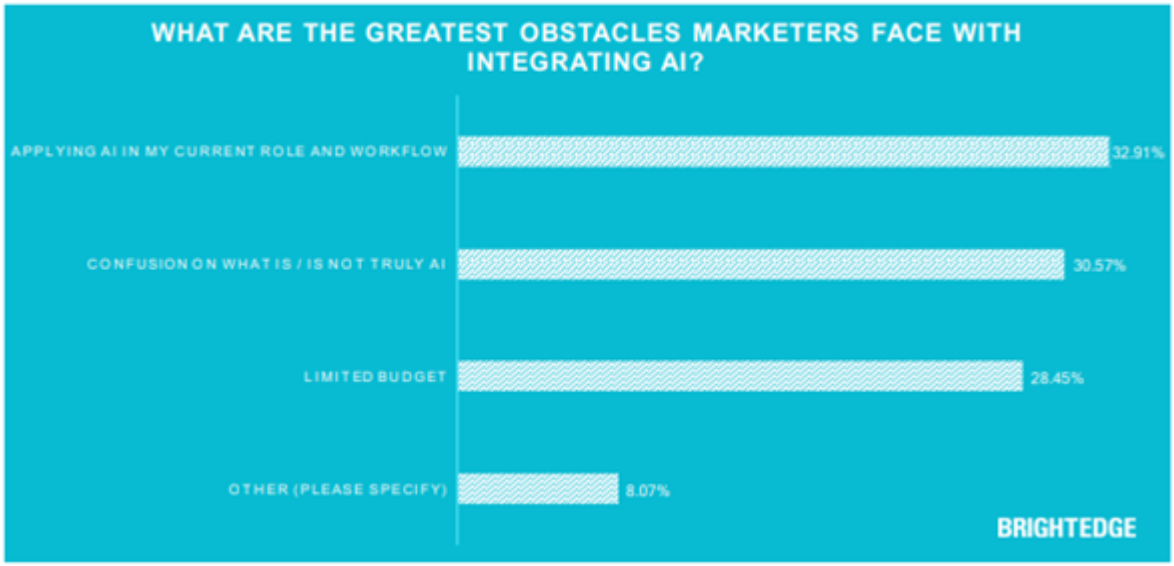
These AI applications for SEO and content can facilitate much better results through insights, speed, and accuracy at scale.

AI applications that don’t apply to SEO

It would be fair to say that AI has entered the SEO arena and looks very unlikely to exit any time soon. However, there are still some AI applications that we as search professionals do not need to focus on.

Interestingly, 33% of marketers report that integrating AI into their current workflow is the biggest obstacle to AI adoption:

What are the greatest obstacles marketers face with integrating AI?



This is closely followed by the confusion about what is and what is not truly AI.

As such, drawing some of these boundaries about where we see the important links between SEO and AI can be very beneficial.

Some examples of AI applications that do not directly impact the search and content industry would include:

- **Programmatic media buying:** Real-time bidding, for example, is powered by machine learning.
- **Recommendation engines**, such as the one behind Netflix's suggested titles for each viewer.
- **Chatbots**: Although these can improve engagement rates, their impact on SEO performance is indirect.
- **Market analysis:** Assessment of financial markets, for instance, relies on sophisticated machine learning algorithms.

Needless to say, many in the search industry will be interested in these fields, but knowledge of these topics is not a prerequisite for SEO success today.

Conclusion

SEO and AI are a very natural fit, so now is the time to start engaging with this technology.

Marketers do not need to be advanced programmers to understand the importance of AI in shaping the future of organic search and content marketing.

Undoubtedly, we have a lot of learning to do, which has always been a fundamental aspect of working in search marketing. It’s what makes this such an exciting industry to work in, after all.

There are fantastic resources to get started on this journey, such as Udacity, Coursera, and the Google-owned Kaggle data science community.

For marketers aiming to get started with AI today, I would recommend the following steps:

- Identify a current use case to understand how brands in your industry are benefiting from AI applications.
- Speak to technology providers that have integrated AI into their SEO products and workflows.
- Track the impact that this technology has on the metrics that matter most to your business.

From there, you will have a fantastic case study to demonstrate the positive impact AI can have to the rest of your organization.

Jim Yu is the founder and CEO of BrightEdge.

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generate traffic without Google. Google is big, but it is not good to concentrate

all your efforts into just one referrer.



Structured data is a core SEO tactic.

Not only does it remove a layer of ambiguity for search engines (they don’t have

to infer what a piece of data is; you’re telling them outright), it’s also the engi

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https://searchenginewatch.com/2018/04/03/ai-and-machine-learning-what-you-do-and-dont-need-to-know-for-seo/