

The background of the top half of the page is a blurred image of a computer screen displaying code. The code is in a light blue color on a dark background. Some legible code includes 'return ret', 'functionArgs:fu', 'function', 'var l = fn.', 'if (!l) r', 'var args =', 'while (l--', 'arg l', 'ret', and '//ob'.

What Machine Learning Means for Search Ads in Australia

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Machine learning is advancing ad tech by leaps and bounds. At events in Melbourne and Sydney, Tris Southey, product manager for DoubleClick Search, explained how Google's Smart Bidding can help brands run more effective Search campaigns.

think with 

Great chefs will tell you that cooking is an art—but it's also a learning experience. When you're a beginner, you gather ingredients and follow the recipe, step by step. After you become an expert chef, you adjust elements of the dish as you go, substituting or adding ingredients until it tastes to your liking.

Machine learning is like an expert chef—it's able to not just follow instructions, but learn as it goes. Give a smart program enough data and, through pattern recognition and modeling, it'll learn and adjust until it reaches a good answer. From the image recognition system used to power [Google Photos](#) to the advanced technologies driving [Google Assistant](#), machine learning is already part of our daily lives. These systems are learning and adapting when exposed to new data—and they're getting smarter every day.

Machine learning is [making waves across industries](#), and advertising is no exception. More and more opportunities are presenting themselves to marketers as the technology advances. Google presently solves a lot of problems using machine learning, from its [translation services](#) to its speech recognition software, and now we have machine learning systems designed to help marketers run more effective Search ad campaigns. At two recent discussions in Melbourne and Sydney, I explained how Google's [Smart Bidding](#), a state-of-the-art machine learning platform, can help Australian marketers.

Suggesting better keyword investments with Google's enhanced prediction engine

If you've ever finished a YouTube video and then enjoyed watching another (and another) thanks to the related videos that appear at the end of the video or on the sidebar, you've already benefited from an enhanced prediction engine. In the same way that YouTube interprets multiple systems and patterns to recommend a video, Smart Bidding can now set the appropriate original bid values and future adjustments for keywords that go far beyond the more obvious head terms into the longer tail.

The end game from the analysis of millions of signals and features is to make a prediction on what conversion rates for keywords with no or little conversion history is likely to be.

By interpreting millions of signals and patterns, an enhanced prediction engine helps advertisers run more effective Search campaigns by suggesting and ranking the keywords likely to lead to conversions from the entire length of the long tail. It looks at a particular keyword or product group and predicts the conversion rate or the average revenue value per click based on how they're performing right now. So if keyword A has twice the conversion rate of keyword B, keyword A is twice as valuable as keyword B.

Ok, how about an example. Let's say a fictional company "Aussie Discount Shoes" wants to expand its keyword list, but it doesn't want to spend budget bidding up on every new keyword to try and figure out which ones will lead to sales. Using Smart Bidding, Aussie Discount Shoes can launch a new longtail keyword on a particular type of shoe and colour combination like "orange trucks sneakers," and the prediction engine will analyse hundreds of similar keyword variations like "orange shoes," "trucks," "orange trucks," and "sneakers."

Crucially—and this is where it gets really clever—Smart Bidding also goes one step further: It analyses a vast array of signals and features associated with the more popular head keywords and the longer tail keywords. This analysis of signals such as location, time, and device together with features such as landing page conversion rates, ad text, product information, and many more allows for the identification of relevant similarities and the application of learnings between different keywords. In this way Smart Bidding helps make intelligent, automatic choices for advertisers.

The end game from the analysis of millions of signals and features across head and long tail keywords is to make a prediction on likely conversion rates for keywords with no or little conversion history. This will help businesses like Aussie Discount Shoes bid on a keyword's real value, even if it hasn't accrued a lot of historical performance data yet. And the beauty of this all happening on the DoubleClick Search platform is that these learnings are applied across the different search engines for better overall returns.

What the future of machine learning means for marketers

The technology and advertising industries will always intersect, and revolutionary developments in one sector will continue to lead to advancements in the other. With Smart Bidding, DoubleClick Search can refine and enhance Search campaigns by including the best keywords for conversion, including those that would typically be overlooked without machine learning. And because machine learning platforms are always evolving and getting smarter, we really just are at the beginning.