5 Ways Marketers Can Gain an Edge With Machine Learning



Interpret and act on large amounts of information in a scalable way.

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It’s hard to escape the buzz around machine learning. Practically every industry is talking about it.

So, what is machine learning? According to Hewlett Packard, “Machine learning refers to the process by which computers develop pattern recognition, or the ability to continuously learn from and make predictions based on data, then make adjustments without being specifically programmed to do so.” In other words, it’s a way for machines to analyze and act on large volumes of information and continue to learn and improve

over time.

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For an example of machine learning algorithms in action, let’s consider facial recognition – an area we’re seeing improve by the day. Today, iPhone users unlock their phones with their faces. Law enforcement uses facial recognition to spot fraud activity and catch criminals. Google Photos allows users to sort photos by the people within them. These algorithms may not have been incredibly accurate in the past, but they have been trained over time with machine learning.

This isn’t human intelligence, it’s programmed learning, and its applications extend beyond facial recognition and across industries. Take marketing, for instance. Today’s marketers are striving to deliver a relevant message to their customers. And while humans can’t communicate with large volumes of customers individually at scale, machines can. Not sure what that looks like in practice? In this article, I’ll explain five of the key uses of machine learning for marketing.

1. Recommend the most relevant products or content.

Product and content recommendations have been used by digital marketers for many years. In the past – and occasionally today – these recommendations were manually curated by a human. For the past 10 years, they have often been driven by simple algorithms that display recommendations based on what other visitors have viewed or purchased.

Machine learning can deliver substantial improvements over these simple algorithms. Machine learning can synthesize all the information you have available about a person, such as his past purchases, current web behavior, email interactions, location, industry, demographics, etc., to determine his

interests and pick the best products or the most relevant content. Machine learning-driven recommendations learn which items or item attributes, styles, categories, price points, etc., are most relevant to each particular person based on his engagement with the recommendations – so the algorithms keep improving over time.

And machine learning-driven recommendations are not limited to products and content. You can recommend anything – categories, brands, topics, authors, reviews vs. tech specs etc. Using machine learning in this way allows you to create a relevant site or email experience that shows visitors that you truly understand them and helps them find the things they like.

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2. Automatically spot important customer segments.

Even though machine learning allows you to deliver more individually tailored experiences, segmentation remains a valuable tool for marketers. With segmentation, you create groups of prospects or customers based on meaningful differences to better understand those groups. Humans can spot the obvious differences that they may already know to look for – such as the differences between high lifetime value vs. low lifetime value customers or new customers vs. loyal returning customers. But with so much customer data available to sift through, there are many other patterns that aren't obvious to humans.

A machine can help you identify segments you didn't realize you had, and you can use that information to speak to those segments in a more meaningful way.

For example, a machine-learning algorithm may be able to

identify that millennials looking to refinance their home tend to exhibit certain types of behaviors. With that knowledge, you can come up with better-targeted messaging for that segment, speak differently to that segment while they're on your site or speaking with an agent on the phone, and identify other prospective customers that may fall into that segment when they exhibit similar behaviors.

3. Identify and act on potential problems.

Your marketing campaigns generate a lot of data. Think of all the emails your company sends each day, or the number of people who visit your website, use your mobile app or interact with your call center. All of those interactions generate immense volumes of data – so much data that a human can't look at it all in a timely manner. It may not always be immediately obvious to you when something is wrong – when a link is broken or a promotional code doesn't work. Algorithms can sift through all of that data, predict what *should* happen, and notify you if something doesn't seem right.

For example, suppose it's Black Friday and one of your emails contains an incorrect link. Machine learning algorithms can predict the click through rates and/or conversion rates that should be expected from that offer and alert you right away if the reality is much lower than it should be. With that knowledge, you can take corrective action before too much damage has been done on such an important day of the year.

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4. Move from A/B testing to

delivering individually relevant experiences and offers.

Testing is another area that can be improved with machine learning. Traditional A/B testing allows you to run a test between two or more digital experiences, find the option that produces the best result, and use that experience going forward. This is valuable, but it's one-size-fits-all, and it doesn't account for any differences in groups or individuals. Instead, it requires you to pick one experience to show everyone, which means many people will not see the experience that is best for them. Machine learning changes this game.

For example, rather than manually setting up a test between two homepage experiences, waiting until the test is complete and picking a winner, you can give those same experiences to a machine learning algorithm. The algorithm will pick the experience in the moment that it thinks will deliver the best results for each individual based on all the information it has available. It will learn from each of those interactions to inform the next decision it makes.

The same approach can be taken with promotions and offers. Instead of giving the same 20 percent discount or static promotion to all of your customers, machine learning can enable you to show the discount only to those who need the extra incentive to purchase. For those that don't need the extra incentive, machine learning can select another relevant experience, such as promoting new arrivals in their favorite categories.

5. Decide how to communicate with each person.

How do you decide where and when to communicate with a prospect or customer? Does she prefer email? Push

notifications? Texts? How often should you reach out to her, if at all? These are all questions that machine learning algorithms can answer for you.

For example, instead of a batch and blast approach to email where you simply send everyone the same email every day, you can use a predictive score generated by machine learning to determine if sending this next email to this particular person will cause them to open, ignore, click or unsubscribe. If so, you don't send it. Instead, you can wait until you have something more relevant to him or her.

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Wrap up.

Machine learning offers the potential for marketers to interpret and act on large amounts of information in a scalable way. In a world where we constantly accumulate more data than we know what to do with – and where we desire to build individual relationships with our customers at scale – this is an exciting development. Take the time to learn more about how your organization could benefit from machine learning in the near future. Start dipping your toes in the water with one of these five areas, and go from there.

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