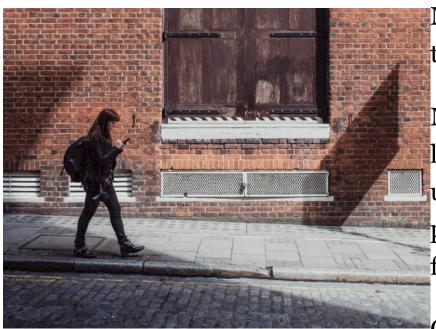# 4 Ways to Modernize Your Marketing with Machine Learning

Bringing machine learning into marketing speeds results, improves accuracy and benefits both the customer and the business1 PHOTO: Samuel Zeller

Machine learning is the marketing topic du jour.

Marketers are turning to machine learning to find patterns in data and use analytically derived insights to predict future actions at a more finite level.1

Organizations are putting machine learning to use in myriad ways, including powering personal voice assistants, enhancing recommendation engines, reducing fraud and guiding self-driving cars.

If you're exploring how to put machine learning to work in your marketing, here's how you can use it to minimize guesswork and bolster four key marketing actions immediately.

1. Refine Segmentation for Better Personalization

Use information from both external sources and customer interactions to provide more variant-rich customer views and enable personalization at micro levels not previously possible with traditional segmentation approaches.

Machine learning allows organizations to more rapidly analyze and learn from high-volume, varied and detailed data — whether structured, unstructured or semi-structured. These technologies can help organizations revise their strategy for web analytics.

Focus on realizing the concept of digital intelligence, that is, integrating

web analytics with other data and analytics to gain a comprehensive view of customers.

Brands can personalize which emails, mobile alerts, direct mailings or coupons a customer receives, and which offers or recommendations they see, all designed to lead the consumer more reliably toward a sale.

2. Enhance Customer Service and Support

Increase the value of every customer contact by enabling a timelier and relevant customer experience. By recognizing patterns in past engagement and customer response activity, machine learning can improve performance by recommending when to contact them, through what channel, with content that is most relevant to their lifecycle stage.

For example, brands can go beyond automated call routing to on-the-fly recommendations to a call center agent who answers the call — regarding what kind of offer to speak to a caller about in a relevant, contextual manner.

Machine learning can also analyze data from a company's contact center history to improve workflow and ROI in other parts of the organization.

3. Boost Revenue Through Next Best Actions and Recommendations

Machine learning can help spot patterns or changes in customer behavior more swiftly, enabling marketing to respond in real time by adjusting offers.

Finding patterns in past customer interactions, channel preference, market segmentation and customer journey phase can help to maximize revenue per customer. With this data, organizations can understand how small customer segments, microsegments or even single customers will respond to an offer.

Typically, a learning model is trained with historical behavior — how

customers with similar characteristics responded to an offer.

For instance, a salon might offer a client who just had a manicure a coupon for a discount on a pedicure. A media streaming service might suggest a show to watch based on the show a customer just watched. Similarly, next best action considers alternative actions during a customer interaction, such as with a call center agent or service representative.

4. Forecast Customer Profitability

Find patterns in past customer behavior to predict a customer's lifetime value at the beginning of their lifecycle, improving efficiency in resource allocation, campaign management and ROI forecasting.

Machine learning incorporates analytical optimization routine to determine how to best direct efforts given certain constraints, with the goal of reducing inefficiency and defining alternatives for improvement. Organizations can factor in multiple variables, use tools to run "what-if" scenarios and testing, and apply optimization formulas to balance goals and constraints.

They can also look at performance to determine whether their marketing optimization decisions were effective across channels and how they could be modified to better reach desired outcomes.

The Future Is Now

Machine learning may sound futuristic, but the four scenarios underpin intelligent and efficient customer interactions that benefit both customers and businesses. Marketing teams can adapt and evolve through exposure to new data quickly, and can accelerate a business's ability to intelligently update existing processes without being limited by the speed of humans.