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Digital



# Better together.
## Improving human experience with AI.

We mortal marketers can only process so much data about so many customers at one time. That's why we have traditionally lumped groups of people into a few composite segments.

But your customers aren't segments. They are humans. And increasingly they expect to be treated like people with unique preferences, personalities, histories and knowledge. They now demand that brands understand their needs and act toward them no differently than they are treated by their favorite barista at the corner coffee shop or by their go-to stylist at the salon.

It is impossible for human marketers alone to deliver that level of personalized experience at enterprise scale. But today, artificial intelligence can help deliver those experiences to millions of customers—and drive rapid growth as a result.

# It's time to let AI be all it can be.

Shifting from a customer segment model to an individualized model of marketing demands fast, complex decision-making at a scale that's impossible for humans alone to achieve. Artificial intelligence and machine learning can make decisions in the moment based on hundreds or thousands of data points—far more than we humans can consider—and do so at enterprise scale. That's why marketers should focus on what they do best—shaping the strategy and messaging, purpose and context that comprise a great human experience; and let

artificial intelligence take a more prominent role in enabling, informing and delivering those experiences.

The capabilities of AI and machine learning are no longer an inhibiting factor. Indeed, much of what was only theoretical in AI and machine learning five years ago is *now achievable for organizations of virtually any size and level of sophistication*. A number of factors have converged to bring AI to the mainstream.

**Mass datafication** is increasingly creating what Wired's founding editor Kevin

Kelly calls a "mirrorworld"[1]—a digital twin of our analog world—providing increasingly vast and ever-more complete datasets that reflect what people are doing and how they're reacting in the real world, in real time.

At the same time, **faster processors and sophisticated technologies** such as graphics processing units continue to expand the capabilities of processing architecture, allowing systems to manage and make sense of those bigger datasets much more quickly and affordably than was previously possible. This new and more

sophisticated infrastructure has enabled **significant leaps in the science** of AI and machine learning that are bringing faster training, greater abstraction power, and more complex capabilities out of the realm of theory and into application.

Because of these and other advances, organizations that wish to weave AI into their marketing, offerings or operations no longer need to undertake a mass rebuild of IT infrastructure.

The horizons of possibility are especially wide when you consider the proliferation of **enterprise software-as-a-service platforms** that include built-in AI. By 2020, Deloitte

Global predicts that 87 percent of companies will get at least some of their AI capabilities this way.[2] And practically every marketing automation tool out there now claims to incorporate some form of artificial intelligence.

Meantime, **cloud-based machine learning capabilities** are now available via Amazon's SageMaker, Google's Cloud AutoML, Microsoft's Azure Machine Learning Studio and numerous other tools and platforms. Google even made its TensorFlow artificial intelligence engine available via open source.[3]

As a result of these rapid parallel developments, you can now

achieve the vast majority of what the most sophisticated data-driven companies are doing today. The only limit, frankly, is vision and ambition.

**Companies need to start giving machines bigger challenges to solve.** Doing so can enable more dynamic decisions in the moment, at scale. And by connecting those decisions across touch points and applying additional layers of machine learning, you can begin to **orchestrate personalized journeys for each customer**.

# AI is transforming the customer experience.

Customers are experiencing the benefits of AI-enhanced personalization from the brands they interact with every day. **More than half of companies are now using some form of AI in marketing initiatives.**

Content personalization

Predictive ordering

Conversational AI for customer service & sales

Real-time product feedback loops

Customized pricing & shipping

Preemptive service calls

Source: Deloitte CMO Survey — Spring 2019

## As a result, customers now expect more from brands.

**62%**
of surveyed consumers feel they are **in a relationship** with their favorite brand.[4]

**67%**
expect their favorite brands to send them **personalized offers** based on their loyalty.[4]

**47%**
would **abandon a brand** that delivers poor, impersonal or frustrating experiences.[5]

# Power AI to empower your people.

Human touch will always remain indispensable to effective marketing. Artificial intelligence may be great at helping to *detect*, *decode* and *act* upon complex patterns; but in the foreseeable future only humans have the ability to *see*, *understand* and *guide* the big picture. It is important to constantly assess the areas where machine learning and artificial intelligence is best applied—and balance those with the vast areas where people still have a vital edge in efficiency, synthesis, creativity, empathy and other intellectual and emotional skills.

As AI is implemented and given more trust and responsibility for moment-to-moment marketing decisions, **leaders should focus themselves on three key intentions:**

## Trust

If you can't—or don't—trust your data, you're unlikely to get far with achieving truly personalized marketing at scale. AI algorithms, when properly designed and deployed, can be better predictors than humans are.[6] It's important to educate ourselves about the technology and set in place the right tools, processes and governance so that entrusting more to AI doesn't feel like a leap of faith, but merely a step in the right direction.

## Test

Testing is essential to ensure that the inputs, outputs and actions of AI are in line with your strategy, serving your business needs, complying with industry regulations and delighting your customers. Everything you do should be oriented toward iterating, evolving, prodding and experimenting. Along the way, new metrics may need to be put in place, new accountability established and new skills infused into your workforce.

## Tune

Your people's day-to-day focus should ultimately move toward fine-tuning your AI engine as it runs full-bore on its own. AI and machine learning tools and testing processes should be designed, built and implemented in ways that allow people to make adjustments on the fly—without unnecessarily getting in the way of the constant collection of data, the critical decisions that AI makes, and the delivery of right messages at the right moments and places.

# Oversight and insight require clear sight.

In order to achieve these intentions and allow humans and machines to work effectively together, artificial intelligence needs to have an appropriate level of transparency and interpretability baked in. After all, 64 percent of CMOs already say that "demonstrating the impact of marketing actions on financial outcomes" is the biggest challenge they face in the C-suite, according to Deloitte's Spring 2019 CMO Survey. **Without interpretability, you won't be able to explain how AI is contributing to your business.**

Some types of AI and machine learning algorithms such as decision trees and Bayesian classifiers are inherently more explainable than others. Being able to explain a convolutional neural network or the weightings structured into a piece of deep learning isn't easy; far from it. But it's necessary to have enough understanding of the workings of AI that you are able to ensure that machine-made decisions aren't based on biased algorithms or other inappropriate or unacceptable uses of consumer and business data.

A good place to start is by building traceability into systems, so that you can spot-check the logic behind AI decision loops. New metrics for monitoring AI can also help shine a light on outcomes that conflict with business strategy, brand standards, or human values. And establishing comprehensive AI standards and oversight early can help keep your people, rather than machines, accountable for the decisions that determine the future of your business.
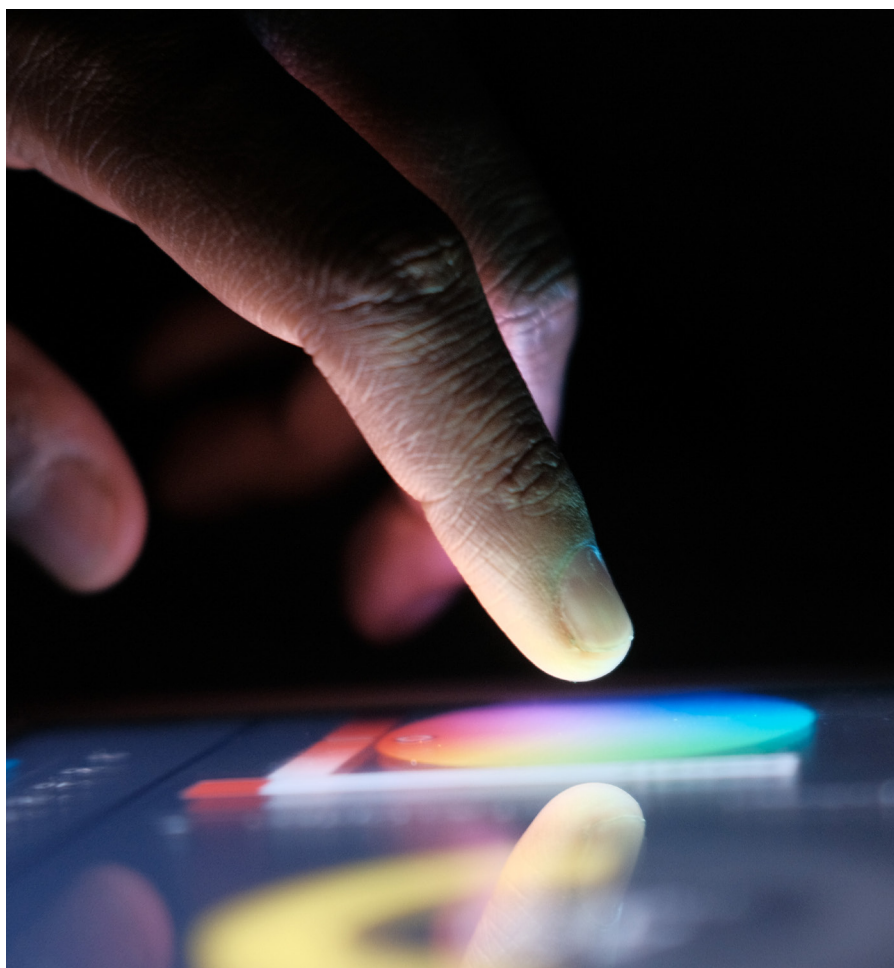
# Toward more autonomous marketing.

Every company likely has low-hanging fruit that's ripe for AI to help address today. A few quick wins can help CMOs demonstrate value while building support for letting AI take on more responsibilities across marketing functions.

## Ask yourself:

Is my data being collected, cleaned and connected in ways that allow me to develop a more unified, cross-touch point view of the individual customer?

- Do I own or have access to all of my customer and marketing data, or is it controlled by my marketing service providers?

- Where can I find additional third-party data that will help fill in the gaps of what I need to know about my customers and markets?

- Do I have access to artificial intelligence tools through existing platforms or vendor relationships that I am not yet taking full advantage of?

What automated capabilities can I trust to take repetitive human tasks out of the decision process today?

- Do I have a clear road map for entrusting more decisions to AI?

- Are there cultural changes that need to be managed in order to help my teams feel more comfortable trusting AI to make more decisions?

- Do I have the governance in place to ensure that the choices made by AI comply with my business strategy, brand standards, industry regulations and ethical values?

Am I confident that my existing personalization capabilities are maximizing the ability to deliver the right messages to my customers at the right times and places?

- Am I optimizing offers and next-best messages at the individual customer level?

- Am I tracking performance against KPIs in ways that will alert me in real time to what's working and what's not?

- Do I have the comprehensive, unified view of the customer that I need to monitor performance and make fast adjustments without slowing delivery?

# Let go and lead.

AI can help personalize your brand better than human marketers can do on their own. This isn't about giving over your marketing entirely to AI; to the contrary, it's about imbuing your marketing organization with superpowers by augmenting your intelligence, giving you the ability to make lightning-quick decisions, and making it possible to nurture millions of unique, highly individual relationships, simultaneously.

Along the way you'll need to address the change-management issues that come up in your organization, as AI takes on roles that humans have previously performed. The good news is, by allowing AI to make more decisions autonomously, your human marketers will be empowered to be more human. They can quit spending time on repetitive, rote tasks, and focus instead on the strategic decisions and creativity that lie at the heart of all marketing success.

Regardless of how you go about this, the key is to recognize that it will have to happen— and perhaps sooner than you anticipate. Marketers' adoption of AI grew by 44 percent between 2017 and 2018 alone.[7] That pace likely will only quicken in coming years. And 73 percent of customers say that an extraordinary experience with one company raises their expectations of others.[8] If your customers aren't expecting more from you today, they certainly will tomorrow.

By proactively and strategically finding ways to expand human-machine collaboration across your marketing organization, you can **build stronger, more-human bonds with customers; and drive rapid, sustained growth for your brand**.

## Get in touch

**Alex Kelleher**

Managing Director, Deloitte Consulting LLP
CMO, Hux by Deloitte Digital
akelleher@deloitte.com

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