

# Digital Marketing:

## How the AWS Cloud Enables Dynamic Product Differentiation



**A**gility is vital to modern biopharma marketing teams. To raise brand awareness in a competitive industry, teams need to quickly roll out websites, mobile applications and sales tools. The cloud is ideally suited to these tasks. Adopters of the cloud are now realizing it is also the foundation of a more dynamic, interactive form of marketing that uses real-time information and feedback loops to tailor messaging and ultimately improve health outcomes.

The first wave of biopharma digital marketers to adopt the cloud did so to realize its core benefits over on-premise infrastructure. Procuring servers takes weeks, at best. Accessing cloud capacity is instantaneous. Digital marketers saw the cloud as a better way to distribute static content because it enabled the fast build out and simple scaling of websites. Handling spikes in traffic when new products were introduced became a trivial task for these early adopters.

These benefits are still relevant and remain an important part of the cloud's value proposition over

on-premise infrastructure. But digital marketing has changed a lot since companies began moving to the cloud in significant numbers about five years ago. Now, every major drug is accompanied by an ever-evolving, multifront digital campaign. These campaigns do more than just put information out. They also capture signals on how a product is used and adapt in response to the feedback.

Companies no longer have to wait for dated sales data to gauge the effectiveness of a campaign. They have access to data on how people are responding to their websites and offers, what online communities are saying about individual treatments and the compliance of individual patients to treatment regimens.

Combining the data with the analytical capabilities of the cloud gives digital marketers the means to quickly understand how a campaign is faring with targeted groups of patients and adapt to this information.

The story of the cloud's evolution from foundation of static content to enabler of a new form of marketing is mirrored by the experiences of early adopters of



the approach. Allergan is among the companies to benefit from — and drive forward — the evolution of marketing in the cloud era.

### WHY ALLERGAN EMBRACED THE CLOUD

Allergan's experience of applying the cloud to digital marketing spans from the first wave of static content, through the rise of mobile and into the more dynamic, interactive model now emerging.

In 2014, Allergan was growing unusually quickly for a company of its size. The marketing team needed digital materials to drive expansion into new markets and new indications while staying ahead of the competition in its existing strongholds. The speed the team wanted to move these projects forward clashed with the timelines inherent to its on-premise computing infrastructure.

“Launching new websites was very challenging, because we had an on-premises data center. The server-procurement process usually took several weeks, and that was not fast enough for us to keep up with the business growth,” Cathy Brown, senior manager of IT digital marketing services for Allergan, said. “Our marketing group requires us to be nimble.



They are constantly pushing us to help create new websites and features, sometimes at the last minute. But with our long server-procurement process, we could not be as responsive as we needed to be.”

Allergan responded to these pressures by moving to the cloud. The decision followed a review of the readiness of cloud providers to meet the unique needs of large biopharma companies such as Allergan, most importantly those tied to compliance. Allergan needed a provider that could handle the fact all its marketing materials must meet FDA product claim guidelines and all the patient data it captures must be handled in a way that is HIPAA compliant. This was a red line for Allergan.

An evaluation conducted by Allergan concluded Amazon Web Services (AWS) was “more than ready” to meet these compliance requirements, Brown said. Allergan's confidence in AWS' compliance freed it to start migrating its website portfolio to the cloud. The drugmaker has moved more than 400 websites from its previous, traditional hosting provider to the AWS cloud.

### HOW THE AWS CLOUD HAS BENEFITED ALLERGAN

In moving to the cloud, Allergan used AWS services that enable strong website performance and near-zero latency connections to on-premise corporate applications. By using Amazon CloudFront, a global content delivery network (CDN) service, Allergan saves \$140,000 a year, over its previous provider while supporting the company's growing need to reach customers in Asia, Latin America and other emerging markets.

Allergan could foresee emerging markets would become more and more important to its business when it made the decision to move to the cloud in 2014. What was less obvious is that Allergan's



growth strategy would evolve and make the decision to move to the cloud even more prescient.

In 2015, Allergan merged with Actavis to create a company with sales of \$23 billion in more than 100 countries. Since then, the combined company has made a series of acquisitions to maintain its targeted 10%-a-year growth rate.

Such fast, acquisition-driven growth magnifies the shortcomings of on-premise infrastructure and the benefits of switching to the cloud. The buyer must quickly and smoothly integrate the acquired assets into their existing systems. The cloud simplifies this process.

Further down the line, the fast-growing list of pipeline programs and portfolio products need promoting through an array of websites, mobile applications and sales tools. The lead times associated with setting up these materials using on-premise infrastructure throttles growth.

Allergan, as an early adopter of the cloud, is free from this concern. However quickly Allergan's business grows and its marketing team deploys new promotional initiatives, the cloud will always be able to keep pace. This has made it easier for Allergan to manage its growth.

“When the business says ‘go,’ we can do that now. We can stand up virtual servers instantly—instead of taking several weeks—whenever we need more compute and storage capacity to support new websites or online marketing campaigns,” Tomasz Kozlowski, associate director of enterprise architecture for Allergan, said.

The reverse is also true. When Allergan stops using a system, it can spin it down instantly. This cuts costs compared to on-premise infrastructure, which Allergan previously paid to run regardless of whether it was in use. If Allergan later wants to restart a system, it spins it back up.



## ENTERING THE ERA OF DYNAMIC MARKETING

The cloud also opens up new marketing concepts to Allergan and other adopters of the model. The days of static content being the only digital marketing material are over. Today, drugs come in digital wrappers made up of mobile apps, connected devices and other tools that provide value to the patient, physician and provider, while also delivering data to drugmakers.

Forward-thinking drugmakers have seen these wrappers—often referred to as “beyond the pill” initiatives—as a way to improve patient outcomes and differentiate their products for years. What has changed more recently is how quick and easy it is to prototype these experiences and make sense of the resulting data. The cloud underpins this change.

Tasks that previously took considerable time and in-house expertise to complete are simple and fast to perform using cloud services. The barriers to creating digital wrappers have fallen.

One consequence of the proliferation of digital wrappers is marketers now have real-time data on the patient experience. Whenever a patient interacts with a website, app or connected device they give digital marketers a data point. The more points

of interaction a company has with patients and prescribers, the more data it gets. These new data feeds enable marketers to pinpoint the audience, message and interaction so they are deeply personal and accentuate their brand.

Marketers can tweak campaigns and digital services on the fly in response to data. Even more significantly, with the right data they can see if patients are taking and responding to products. Before, what happened after a drug was prescribed was a black box. Now, companies are starting to visualize patterns of drug use and adapt product positioning strategies in response to these insights.

This is the next frontier in digital marketing. The amount of data available to marketers is only going to increase. With cloud computing capacity growing all the time and machine learning tools coming online, marketers’ ability to quickly and easily ask questions of the data will also increase. High-level assessments of historic prescribing patterns will give way to real-time reviews of signals coming from patients and providers every minute.

These are the tools now available to marketers. Equipped with them, companies will innovate to continually refine how they engage with patients and providers and, ultimately, improve health outcomes. ●

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