Most organizations have robust processes in place to manage their data. With content, however, it's a different story. IT has an excellent opportunity to leverage its expertise in enterprise information management and artificial intelligence to advance the organization's digital transformation and customer experience agendas.

Why IT Should Care About Data and Content Equally

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Questions posed by: Adobe
Answers by: Melissa Webster, Vice President, Content and Digital Media Technologies

Q How is IT's role evolving vis-à-vis the customer experience technology stack?

A We see IT taking on an increasingly strategic role as organizations evolve their technology stacks to support the end-to-end customer life cycle and move to true omni-channel experience delivery.

The rapid growth of mobile, social, and other online channels over the past several years has sent marketing organizations scrambling to build and equip their digital teams, and we've seen a veritable explosion in digital marketing tools, not to mention innovations in customer data platforms, content management systems, and advanced analytics.

In some organizations, IT has played a supporting role in technology selection and implementation. In other organizations — particularly those where marketing has its own technology budget — marketing has acquired software-as-a-service (SaaS) solutions and turned to vendors or digital agencies for implementation, often leaving IT out of the loop. The result is a long list of applications tailored to specific marketing roles but with little or no integration between them or to enterprise databases and content management systems. Today, the average enterprise marketing team runs a few dozen applications. It's no wonder we see signs that marketing organizations are tiring of managing technology stacks.

This tactical, siloed approach leaves organizations at a significant disadvantage when orchestrating the customer journey from awareness to advocacy. The bar for great customer experience is continually rising, and organizations need an enterprise platform that makes them agile. Customers want a consistent, connected experience across the different channels and devices they use, which in turn requires a consistent approach to information management. Organizations must also safeguard personal information and ensure regulatory compliance. What's needed is an enterprisewide platform for experience management, and organizations that lack this platform will find it increasingly difficult to compete.

Consistent, trustworthy data and content are the foundations of such platforms. Other critical capabilities include the ability to define and automate user interactions, business rules, and workflows that involve repeatable tasks. This requires expertise in architecture, information management, systems integration, and systems analysis — all high-value skill sets that IT possesses.

Q Are content and data equal components of a digital experience platform? What is the relationship between content and data?

A Yes, we believe content and data are equal components. Transactional or "utility" experiences tend to be data centric, while experiences that educate, persuade, or entertain tend to be more content centric. Every experience combines content and data in some proportion.

Arguably, content is becoming more important than data — or at least plays a bigger role in differentiating the brand. Content forges the emotional connection with the customer. The old saying "content is king" still rings true. Great content is even more important today given our short attention spans and the channel fragmentation that has made it more difficult to build awareness and brand equity.

It's often said that data and content are the "art and science" of digital experience. The magic of a great experience lies in how the two are combined. They are symbiotic.

For example, organizations leverage customer profile data together with content metadata to serve exactly the right piece of content to a customer based on the device, location, time of day, and weather as well as the customer's transaction and interaction history and other factors. Well-tagged content is easy to find, repurpose, and transform, and organizations can put it to use in automated ways to personalize the experience, boosting engagement and revenue.

Customer behavioral data should be leveraged to inform next-best offer/action and other predictive engines. The customer's interactions with content are an important part of that interaction history. Knowing what content resonates — and what content doesn't — is key to understanding individual customer goals and preferences and the overall effectiveness of the experience.

Q How should IT be thinking about content?

A IT should think about content as it thinks about data: Content is an information asset. Like data, content must be well managed, trustworthy, and secure. Overall, most organizations are doing a better job managing their data than their content, so improving content management offers an upside opportunity. IT has decades of experience managing data and can bring its formidable skill set around enterprise information management to bear.

Content that is difficult to find negatively impacts staff productivity. Content is relatively expensive to create, so organizations incur a tangible cost whenever it is lost and must be recreated. Noncompliant use of licensed content and inadvertent publication of confidential content can result in significant financial and/or legal costs. Organizations also put themselves at risk for noncompliance when out-of-date or incomplete content is published or distributed.

Content management as a discipline has its own set of best practices. IT can bring leadership to metadata management and taxonomy development.

IT should also champion the use of artificial intelligence (AI) and machine learning (ML) to automate tagging and enhance metadata in useful ways, and it can extend existing solutions with "content intelligence."

IT can also provide significant value in helping streamline and automate the many workflows associated with content creation, approval, publishing, and distribution to improve "content velocity."

It must be easy to leverage all enterprise content across the wide array of digital experiences, including websites and web applications, custom applications for mobile and Internet of Things (IoT) devices, commerce storefronts, and email campaigns. The need to publish content into a variety of applications coupled with the tremendous popularity of JavaScript frameworks such as React, Vue, and Angular has increased demand for developer-friendly content services. Customer experience technology stacks must support "headless" use cases.

> *IT should also champion the use of artificial intelligence (AI) and machine learning (ML) to automate tagging and enhance metadata in useful ways. IT can be the hero here.*

Q What shared goals do marketing and IT have around content and its place in the customer experience? How should IT be approaching the technology infrastructure in terms of supporting content?

A At a high level, marketing and IT are key stakeholders in every digital transformation or customer experience initiative. They have a shared interest in ensuring the organization can create, manage, and deliver engaging digital experiences at scale, with the agility to innovate and respond to competitive threats. They should also care about "operationalizing" digital experience delivery by putting in place the processes, best practices, and supporting infrastructure to achieve this goal.

In organizations where marketing and IT have a strong partnership, this process won't be particularly controversial. In organizations where marketing has assembled a tech stack piecemeal and is reluctant to cede control, it will be more challenging. Regardless, marketing and IT should start the conversation, assess current capabilities, and perform a gap analysis to guide the technology road map. Content management is a core component of the experience management platform, and the road map must give equal importance to content and data.

We believe most organizations can realize immediate benefits from improving content management and implementing an omni-channel publishing solution. Marketing and IT both need access to current assets, groups of related assets, and responsive experience fragments; they need the content management system to ensure the content they use is managed in accordance with compliance and license restrictions. Both groups must be able to

retrieve the content they need using their customary user interface, whether a WYSIWYG interface for a website author or a JavaScript integrated development environment (IDE) using JSON.

As marketing and IT evaluate content management solutions, they should pay particular attention to:

» Role-specific interfaces designed to make individual stakeholders, including editors, designers, developers, and IT support staff, maximally productive

» Collaborative capabilities that automate repetitive tasks and foster teamwork (Robust approval workflows are an example of automation. For applications written in JavaScript, a single-page application (SPA) editor helps marketing and IT with co-development.)

» AI/ML capabilities that automate metadata tagging and optimize and transform content, improving relevancy

Q What benefits would organizations realize if they could scale the delivery of content?

A There are many benefits.

Marketers are challenged to accelerate the time to launch new products and services and/or increase the number of campaigns they launch each year. Creating all the content required is a huge challenge. Removing that constraint enables organizations to move to global launches, shorten time to market, and increase revenue.

Scaling content delivery also helps organizations increase relevance and customer engagement. They can personalize the digital experiences they deliver, further increasing revenue in addition to fostering customer loyalty and advocacy and building brand.

Organizations can also support more channels without incurring significant additional costs. Brands need to "speak" to customers in the channel vernacular. However, brands tell us supporting a new channel is expensive because the content must be adapted for each channel. Engaging customers through the channels they want to use is another key to building revenue, loyalty, and brand.

Scaling content delivery also helps improve the consistency of the customer journey to similar effect.

The ability to scale saves on content creation costs. Every organization we speak with tells us they need more content today to market effectively. None say their content creation budgets are keeping pace.

In the future, new technologies will emerge that analyze, manipulate, and even generate content. That will help somewhat with the scaling issue. But the foundation will be the same: strong content management capabilities that are built into the modern digital experience platform.

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Melissa Webster leads IDC's research on digital experience management software and cloud services. Her coverage area encompasses solutions for web content management, digital asset management, content marketing, user-generated content (UGC) harvesting and curation, mobile content apps, online video solutions, and rich media analytics to support the digital experience.

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