

# How integrated solutions can enable next-generation customer experiences

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## Abstract

- *The demographics of the U.S. consumer are changing. The new generation of consumers will be the largest in history, and marked by their strong preference for interacting digitally with their favorite brands, and their affinity for positive experiences.*
- *Technology solutions play a critical role in customer experience by providing the right touch-points along the customer's journey to efficiently deliver personalized experiences.*
- *Companies can seize an opportunity for growth by taking ownership of their brands' end-to-end experience through direct-to-consumer channels. This opportunity enables companies to learn more about their customers and to build strong relationships with them by providing consistently positive shopping experiences and gaining invaluable customer insights.*

**As companies obtain more direct access to buyers, they have the opportunity to own the end-to-end retail process. They will have complete influence throughout the entire customer journey.**

## The New Consumer

Over the past decade, society has been profoundly changed by technology. The ways in which we socialize, consume information, and purchase goods have shifted and will continue to rapidly evolve. In addition, the U.S. is in the early stages of a massive demographic consumer shift. According to 2019 data from Morgan Stanley, Millennials and Generation Z (those under

the age of 39) are set to take over as the majority spenders, surpassing Generation X and Baby Boomers. Data from the U.S. Department of Health and Human Services and the U.S. Census show that, based on birth rates and immigration patterns, Millennials and Gen Z will be the two largest generations in U.S. history. This is significant because the younger generations were raised with technology and have very different spending habits, ideals, and values than their predecessors. When all this is added up, the U.S. is not only about to have more consumers than ever before, but also those with radically different shopping patterns.

## How Consumers are Changing

Data from various research organizations help us paint a detailed picture of the new consumer, enabling us to identify current trends and predict where we're headed. The primary recurring insights are:

- Strong preference for digital engagement- The majority of purchases are made online rather than in person and are fairly evenly spread out across the main digital channels such as laptop/desktop, mobile devices, and tablets. The reasons for this tendency boil down to its convenience and low cost. This generation grew up with access to technology and have grown accustomed to the convenience it provides. Online platforms allow consumers to easily research, review, and compare costs of products and services, which in turn helps the buyer feel like they are getting the best bang for their buck.
- "Experience" is important - Customer experiences and user experiences play large roles in the consumers' purchasing decisions. Most say they would switch to a different brand over a negative customer service experience. When online, they expect their digital experience to be seamless regardless of the device.

## Key Technology Considerations to Enable Next Generation Experiences

As companies shift to keep up with the changing customer landscape, they will need to consider and perhaps operationalize the following five technological trends.

### 1. Personalized Customer Experiences

- To achieve personalized customer experiences, marketers need to understand customer interactions and content insights, and apply the data effectively: the right content displayed at the right time in the right channel to the right customer. Integrating digital media content systems with the best-of-breed marketing technology platforms and marketing automation tools facilitates these goals affording the ability to make real-time decisions to tailor the customer experience.

- The majority of traditional digital media content systems provide foundational capabilities to integrate with marketing technology platforms in order to deliver the content to all consumer touch points including web, mobile, and social channels. These features allow marketers to find the digital assets, publish them and exploit those assets repeatedly maximizing cost of ownership, while increasing connection with the customer.
- Research shows that 40% of returns from online purchases are due to incorrect product data. To offer the best possible customer experience, the best-in-class digital media content systems provide seamless integration with Product Information Management (PIM) systems, so that the customer is always presented with accurate product information along with localized contextual content.

## 2. Artificial Intelligence & Machine Learning

Marketers are producing terabytes of content to keep up with the rapidly growing amount of digital content required to support today's digital experiences, and managing these volumes of content is a time consuming and cumbersome activity. Thankfully, Artificial Intelligence (AI) and Machine Learning (ML) capabilities enable marketers to upload, tag, and search assets in a more efficient manner. Many companies are using AI/ML tools on their content for metadata enrichment:

Image/Object Recognition

Optical Character Recognition (OCR)

Natural Language Processing

AI/ML can be leveraged to analyze and automate the often arduous process of tagging, grouping and resizing assets directly as soon as they're loaded into the system making it so team members don't have to spend countless hours manually organizing metadata and formatting assets. For example, through AI connected to your Digital Asset Management (DAM) system, you could add a photo of a product—say, a phone—and the AI engine can identify which brand and product it is, location, contextual metadata associated with background imagery and various other useful metadata values.

Having stated the potential for increased efficiencies leveraging AI/ML, current AI/ML algorithms are not able to recognize business-specific images or objects without model-specific training, which in turn requires operationalization behind content curation through model training.

## 3. 3D Models, Virtual Reality (VR), and Augmented Reality (AR)

Recent technology innovations have enhanced the digital experience to levels never seen before. New high-resolution content types, such as 3D and Augmented Reality (AR), allow customers to preview a product, view corresponding information, and simulate how products

would look in different placements, angles, or environments. Savvy retailers are utilizing the practicality of these features to add even more value to the online shopping experience.

Most leading DAM vendors have foundational capabilities to store these new content types along with the supporting formats such as H5P, HDR10, and Dolby HDR. Supporting these content types requires the ability to process large file sizes in a timely manner and the means to transform and serve the content at different touch points (i.e. mobile).

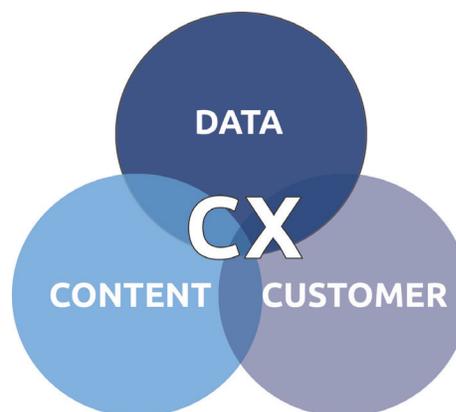
## 4. Digital Storefronts and Feeds

Businesses with digital storefronts have the opportunity to share their marketing assets via self-service portals and automated content feeds, thereby engaging their customers and partners (e.g. agencies, distributors) in a unique manner. For instance, this capability allows CPG companies the opportunity to share their product and marketing collateral with their retail partners while also enabling automated workflows for asset requests and distribution, thus providing consistent messaging and reducing costs through asset reuse.

Additionally, these portals equip marketers with a secure way to source assets created from their agency partners by presenting the option to upload new assets. Marketers can leverage the usage reports from the portals to gain deeper insights on how the assets are performing and, therefore, plan appropriately for future marketing campaigns.

## 5. Customer Experience Technology Ecosystem

It's important to have the right technology enabled to facilitate personalized, interactive experiences. To be successful in today's competitive marketplace and the wide range of digital content required to enable them the technologies need to work in a harmonized fashion to support the goal of a painless customer experience. A great way to look at the problem statement is to focus on the intersection of the three key pillars of the customer Experience ecosystem - Data, Content and Customer.



The key to being successful is to present the optimal experience and content to the user at the right time and on the right device. To enable this, you have to have a good understanding of your content and customer while ensuring that your data across technologies is consistent and harmonized. Many systems have to work together to create, organize, secure, and distribute content to the required consumption points, while receiving interaction information back into the data layer to ensure those experiences adapt and evolve effectively. Data and content need to interact seamlessly across CMS platforms, CRM tools, digital storefronts, analytics applications, and more in order to provide the requisite synergy across the digital media ecosystem. The beating heart at the core of that infrastructure is the data that drives the digital experience with digital asset management, personalization and marketing technology working together towards an elevated consumer experience.

At the macro level, there are six core capabilities that need to work together to facilitate optimal customer experiences. They are: User Interface, Customer Data, Customer Relationship Management, Product Data, Digital Media Content Management and Marketing Technologies.

**User Interface:**

With the advent of connected mobile devices and proliferation of broadband it is imperative that a unified experience be achieved across devices to ensure consistency of experience. In the world of streaming, media companies have enabled the ability for users to switch devices mid stream of watching content to enable a more seamless experience. This same philosophy is important to achieve across industry applications to ensure consistent experience. In addition, the focus on decluttering applications and simplification is vital to achieving broad adoption with a focus on device specific capabilities and user interface design.

**Customer Data:**

By creating a flexible and holistic customer data model, companies are able to collect data associated with their customers behavior that when designed correctly transcends digital and physical interactions. This enables the ability to glean valuable insights into how to interact with the customer and when to interact with them. Where possible this includes data such as usage patterns, purchases, click stream data, user profile and preference data. By mining this data, it is possible to glean valuable insights in order to facilitate the concept of “customer next best action”.

**Product Data:**

In order to ensure that customer experiences are optimal, it is imperative that product data in the ecosystem be kept accurate and timely. This can be challenging in the world of distributed consumer channels due to data integration requirements often being limited by technologies. As an example, often e-commerce channels have the incorrect product metadata and imagery associated with products they are selling. This can result in possible returns and even worse,

legal action being taken by customers in extreme cases. By implementing a robust Product Information Management (PIM) or Master Data Management (MDM) solution into the ecosystem, this helps to ensure that the correct metadata is tied to the content on all consumption channels.

**Digital Media Content Management:**

To better manage your digital media content a mature DAM and content management system (CMS) are needed to empower companies in creating, managing, and delivering massive amounts of diverse content across multiple channels. These serve as a centralized storage repository that enables internal departments and external partners the ability to seamlessly search and find relevant content, allowing them to deliver personalized experiences to customers. These solutions enable marketers to create multiple renditions of assets, so that they can deliver the right asset at the right time for the right channel creating a richer consumer experience.

**Analytics:**

By leveraging an advanced analytics engine, data across the entire ecosystem can be analyzed to glean valuable content and customer insights. This facilitates informed decision making by the business to help achieve the company strategy. These insights feed into the marketing technologies to facilitate interactions with the customer.

**Customer Relationship Management:**

Implementing a Customer Relationship Management (CRM) solution into the customer experience ecosystem facilitates the tracking and tracing of all interactions and communications with the customer. CRM tools are vital to facilitating not only the purchasing process but also the post purchase and support processes to ensure a higher level of customer satisfaction. Advanced CRM tools span not only the digital world, but also the physical world by helping to automate and route customer support calls.

If we take for example a customer who is about to purchase a computer online, but has questions. They could either go to the chat window on their device or call a customer support number. By ensuring the CRM is fully integrated into the customer experience ecosystem, the customer could be automatically routed to the computer sales support department to answer questions about computers rather than forcing the customer to traverse various input options along the way that could result in customer abandonment.

**Marketing Technologies:**

Marketing technologies provide the capability to proactively reach out to customers in an automated fashion. By connecting them to the customer experience ecosystem, users can be segmented using important segmentation data to more accurately target and influence the behavior of the customer.

It is important that the marketing automation technologies are refined and add value to the customer experience. An example of how marketing technologies can prove to be a hindrance to the customer experience is when a customer has recently purchased an item, and the marketing system that is not correctly integrated to the ecosystem is still sending out campaigns for the same product to the customer trying to encourage them to buy the same item or service. This can help highlight the disconnect between the company and its customers. How technology can improve customer experience is to send a post purchase email with tips and tricks on how to use the recently acquired product or service to help educate and add value to the customer. This approach leads to less product returns or user abandonment of services.

## Conclusion

The growth of online shopping and availability of creative technological solutions have made it possible for companies to cultivate stronger relationships with their customers than ever before. Integrated systems play a critical role in customer experience, offering solutions for efficiently storing, formatting and distributing all digital assets to the user channels that need them. Combined with cutting edge technology such as artificial intelligence, machine learning, and marketing analytics tools, companies can successfully deliver unforgettable customer experiences.

The same is true of media companies. With the surge of streaming services that have been launched over the last twelve months, media companies are quickly evolving their strategies to create new and exciting customer experiences connecting with their customers directly. As they mature their platforms, the push to create user specific content and hyper personalization will become a key enabler of success as it is a critical step to enabling contextual advertising.

Companies that take ownership of the entire customer journey for their top brands effectively position themselves as leaders in the industries of tomorrow.

### About OnPrem Solution Partners

*We're in the business of making businesses better—people, processes, and systems. We're an end-to-end solution provider focused on connecting disparate parts within organizations.*

*Experts in Digital Media Supply Chain, IP Management, CRM, AI, and Data & Analytics, we strategize, advise, design, develop, and integrate digital solutions.*

*Danny and Seshu are experienced technologists specializing in Digital Media Supply Chain and Digital Marketing across a variety of industries with a combined over 18 years of experience in the field.*

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