FROST & SULLIVAN

Market Insight

Ensuring Profitable Customer Web Experiences

Sharp Mobile-Friendly Design, Content, Data Analysis, Testing Key to Successful Web Experiences

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FROST & SULLIVAN

Contents

Introduction

Most customer relationships now begin on the web. Many of these engagements are for increasingly complex sales, service, and support opportunities and issues. Many of these interactions occur over customers' mobile devices. Web experience personalization, bolstered by web site testing, increases sales, raises order values, and generates greater customer satisfaction and loyalty.

But web personalization (coupled with attractive, customer-intuitive sites), is not a simple or inexpensive strategy to execute. In order to be successful, there are institutional as well as technology hurdles to overcome. Customers are fickle and trends change quickly. Companies must be savvy in how they implement their programs.

Web Personalization Trends

- **Increased consumer expectations.** Consumers are empowered. They research before they buy. They also influence others' buying decisions through social media. They are acutely aware of their worth to companies in today's slow growth and highly competitive economy. But consumers also are time-pressed (often multitasking) and commonly mobile. They also are technology and web savvy. They expect fresh, high-quality, personalized, and consistent web and omnichannel experiences, based on companies' knowledge of them as customers.

- **Sharpened and mobile-focused design.** Increasingly, customers use mobile devices to access the web and that is setting the tone for personalization. Companies are responding by incorporating clean, highly functional, and intuitive site designs. They are taking cues from tablet form factors as they begin to approximate those on laptops, while remaining mobile- and touch- rather than type-interactive. Companies are refining what content is the most important to show on any one page to avoid overloading customers. They are employing user-device responsive design, infinite scrolling, and also shorter fill-out forms to compensate for poor mobile typing experiences.

- **Web interaction growth.** Web personalization strategies incorporate customer-intuitive and device-agnostic engagement portals. Frost & Sullivan forecasts that digital (web, mobile, chat, video, and social media) customer interactions, will increase considerably over the next five years. Moreover, customer use of digital channels, for the first time, is expected to exceed that of the traditional channels (voice, IVR, and email).

Exhibit 1 illustrates the shift of customer service channel use in North America from 2014 to 2016.

Exhibit 1: Shift of Customer Service Channel Use, North America, 2014-2016

Customer Service Channel Usage (Percent of Total)

■ Digital channels (Web self-service, Mobile apps, Chat, Social media, Video)

■ Traditional Channels (Voice-live agent, IVR, Email)

In 2014	Expected in 2016
47% / 53%	54% / 46%
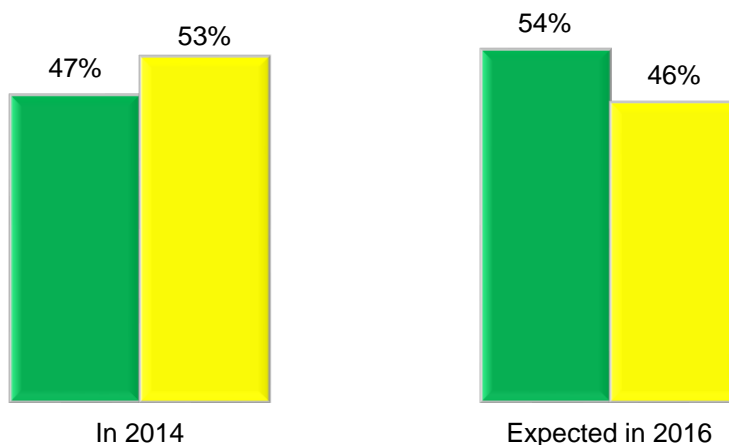
N = 305

Source: Frost & Sullivan

Customer web experiences increasingly include ready access to contact agents, principally through chat solutions. Frost & Sullivan research forecasts that the North American hosted chat market will nearly double from $335.5 million in 2014 to $621.9 million in 2019. Voice and video web real-time communications (WebRTC) is slowly gaining popularity even as its usage is restrained by the lack of adoption to date by Apple and Microsoft browsers. But the direction is there as demonstrated by Microsoft's recent release of a preview version of its object RTC (ORTC) application programming interface implementation. ORTC may be the next iteration of WebRTC as it opens the door to new signaling protocols that promise to increase security and reduce bandwidth consumption.
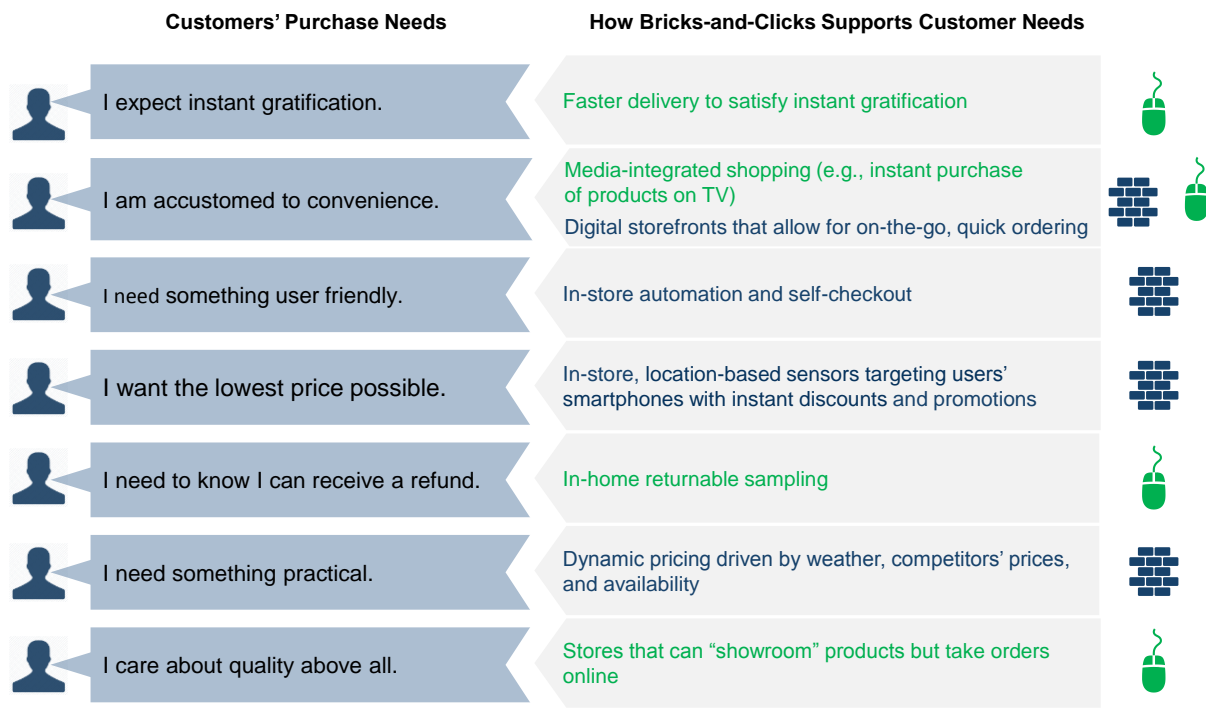
- **More online demand and usage.** Web sites will increase their roles as monitoring, service, and support portals. More products are becoming products as a service (PRaaS), which includes the Internet of Things (IoT), with the incorporation of warranties, and remote monitoring and control. That will require highly personalized and secure access, but also tracking and at the same time enabling usage-targeted offers.

- **Increased social sharing.** Customers no longer only use web sites. They also share downloads and links to other customers through emails, texts, and social media. This practice amplifies the reach of branded web content, resulting in additional leads and sales. But it also heightens the criticality of having attractive, engaging, targeted, and user-friendly sites.

- **Stepped up omnichannel personalization.** Personalization has moved from cutting-edge media-rich sites to mainstream sites. Companies are applying predictive intelligence, targeting, and segmentation to cookies, tracking codes, online and omnichannel offline customer data, including profiles, interactions, sales, and if available their social media activities. These tools can infer customers' preferences and sentiment from the data. Companies then use these insights and information to generate personalized recommendations and offers. They are tapping into data science and machine learning to learn behavior patterns over time, with which to predict the best set of interactions for each customer journey. Companies also are creating personas that represent key customer segments to help predict customer behavior and target messaging.

- **Integrated omnichannel "bricks and clicks" retail engagement.** Retailers are becoming aware of the value of personalized web and in-store customer experiences. Retailers are experimenting with geofencing, beacons, and interactive displays. They are connecting processes and data between in-store and online to shape web delivered recommendations, content, and offers. They are integrating their online search tools with behavioral analysis to connect consumers with more relevant search results. This encompasses type-ahead keywords, alternative search suggestions, and re-ranking of results based on individual preferences. Meanwhile, drop down search menus may integrate visual search results or recommend navigation to certain areas of their eCommerce sites.

Exhibit 2 illustrates how bricks-and-clicks retailing influences shoppers.

Exhibit 2: Bricks-and-Clicks Retailing Influences Shoppers, North America, 2015–2025

North American shoppers will increasingly purchase products anywhere and anytime due to omnichannel retailing, which will require retailers to create a consistent experience across traditional and online stores.

Customers' Purchase Needs	How Bricks-and-Clicks Supports Customer Needs
I expect instant gratification.	Faster delivery to satisfy instant gratification
I am accustomed to convenience.	Media-integrated shopping (e.g., instant purchase of products on TV) Digital storefronts that allow for on-the-go, quick ordering
I need something user friendly.	In-store automation and self-checkout
I want the lowest price possible.	In-store, location-based sensors targeting users' smartphones with instant discounts and promotions
I need to know I can receive a refund.	In-home returnable sampling
I need something practical.	Dynamic pricing driven by weather, competitors' prices, and availability
I care about quality above all.	Stores that can "showroom" products but take orders online

Source: Frost & Sullivan

Retailers also have been using online filtering and guided selling on eCommerce sites. They are now tapping analytics-driven guided discovery. These applications present product suggestions based on customers' style preferences, or what other customers with similar likes have purchased. They closely track customers' browsing and shopping to capture sales and avoid shopping cart abandonments, and employ software that sends out automated inquiry or reminder messages.

- **B2B and B2C experience convergence.** Influenced by their consumer experiences, B2B buyers expect clear, easy to navigate, mobile-optimized, and personalized B2B sites. B2B customer engagements have historically been more personal than B2C relationships through assigning dedicated inside and outside account/sales representatives to customers. But the shift of B2B commerce to the web, and rapid corporate and staff changes, has de-personalized and added obstacles to these relationships. Savvy companies have responded by building employee profiles, tracking their careers and activities, and tailoring their interactions to accompany and enable site personalization.

- **Content development and management.** Companies are curating content, including demonstrations, how-tos, and videos, to drive deeper customer engagements in their personalization programs. Video also continues to grow in popularity, driven by customers' increasingly service expectations. In turn companies also are pursuing optimization and personalization by using content management systems that track and analyze how customers consume and interact with content.

- **More productive metrics.** Companies are moving away from click-based measurements such as number of visitors, unique visitors, and number of page views; these point to, but do not accurately gauge customer sentiment or needs. Instead, they are turning to performance-based metrics such as tracking file downloads and link clicks, time on pages, and revenue associated with those pages. They also are looking at what actions each customer takes online. They want to know what pages customers click on, what content they download, how much time they spend on blog posts, what forms they fill out, and purchases made. Companies then see which content is unique, useful, and relevant to each customer.

- **Increased and intensive web testing.** Companies are realizing the value of understanding how customers engage on web sites. Companies are turning to testing in order to optimize and personalize page design, buttons, colors, content, and customer journeys. They also seek insights into where websites or apps are failing so that they can find and correct flaws. The importance of customers' mobile web experiences, and companies' employment of responsive design, has prompted companies to increase testing for site navigation and find-ability.

  Companies are using third party company- or vendor-selected focus groups to track and record their site interactions, including their unscripted comments and reactions in their testing programs. They also tap site heatmaps that show where customers visit, click, where their scrolls reach, and where they abandon.

- **Vendor consolidation.** The Web experience personalization and testing market is served by a mix of multichannel digital marketing experience suppliers with CRM, data management, or document management backgrounds, and by best-of-breed point solutions vendors. But the first supplier category has begun to acquire personalization and testing vendors in order to provide complete modular end-to-end Customer Experience solutions. For example, in August, 2015, Oracle acquired Maxymiser to strengthen its Marketing Cloud product.

Web Personalization Challenges

There are significant issues associated with personalizing customers' web experiences. Consider the following:

- **Shortening time to market and refresh rates.** More exacting customer demands and changing marketing programs are pressuring companies to keep content and sites fresh, relevant, and useful. Companies have had to create and test new content and produce new web pages and sites in ever shorter periods of time, from a few days to as short as several hours. Companies also have had to employ analytics and tracking systems to detect and understand which content is no longer performing in real-time.

- **Improving, but still clunky mobile customer experiences.** This challenge has at its core three complicating and limiting factors: less wireless device "real estate" on which to show content; a widening range of devices and form factors (from small smartphones to large phablets and tablets); and customer impatience from multitasking consumers.

  Consider too that mobile-only sites too often demand costly duplication with "regular" sites. They also are not as functional as typical sites, resulting in less satisfactory customer experiences. While companies are turning to responsive design, some customers still experience cumbersome navigation on their wireless devices and therefore often prefer to access "real" desktop sites.

- **Reluctance on social-included single sign-ons (SSOs).** Customers will often sign on to web sites with their email addresses to obtain more personalized and targeted offers and service. But many of them continue to draw the line on including their social media identifiers. While they are willing to share information on social sites, they may not want to give companies complete access to all of it, thereby providing them with a degree of anonymity.

  But this issue will become less important as consumers become comfortable with revealing their names online. Social sites like LinkedIn contain in-depth profiles of named individuals. Customers who are concerned about how much information is available are learning to be more selective in what they post, and who they share it with. And as companies demonstrate increased personalization value from social SSOs, more consumers will make their social IDs available to marketers.

- **Risk of restricting audience sizes.** Companies can over-analyze and granularize web experiences and their overall marketing programs by focusing their offerings and offers too closely on existing customers and prospects with similar characteristics. As a result, companies can find themselves with no room to grow.

- **Customer anonymity.** Some customers may not want personalization while browsing. They prefer to decide if and when they want to be approached by sellers. They often have good reason (like shopping for Valentine's Day gifts on computers seen and shared by others). They also may become annoyed with personalized pop-up offers. Customers are now tuning out of social and web banner advertisements as a result of oversaturation. They may soon react the same way to personalization.

- **Data accuracy privacy and security.** Increased use of exponentially growing volumes of data for personalization has made ensuring that data's accuracy and relevance critical to ensure excellent and successful customer experiences. Frost & Sullivan Stratecast research[1] also reports that most consumers are still concerned about how companies will use their personal information. But traditional methods such as data scrubbing, masking, and encryption have delivered unwelcome outcomes. Those methods can sometimes distort or eliminate critical information and leave even aggregated and anonymized data vulnerable to privacy breaches. Meanwhile, legislation and industry self-regulation, while certainly part of the solution, are limited in their effect in that they are documents about what should be done, rather than providing tangible solutions.

- **Content issues and obstacles.** The typical consumer's short attention span when using a mobile device has required the creation of content that is punchier, shorter, and mobile device-optimized. At the same time, market demand for more video content has forced marketers to face the issue of fragmentation in mobile ad viewability formats and standards. This makes it difficult for marketers to develop optimized content that will play well on several platforms and devices.

- **Web ads and ad blocking.** Web ads are a two-edged sword for companies. They generate added revenues, which help them recoup their marketing (including web presence) costs. More to the point, web ads are lifelines for publishers. These companies have struggled with the displacement of print media by the web for news and content sources. While print issue buyers and subscribers accept paying for content, online readers are accustomed to obtaining it for free, and have resisted paywalls and other similar monetization programs.

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[1] Jeff Cotrupe, "Shhhh…Big Things Are Quietly Happening in Data Privacy - Are They (Part of) the Solution?", Frost & Sullivan Stratecast SPIE 2 October, 2015

But web ads tend to degrade the Customer Experience, notably on wireless devices that have limited "real estate". They pop up, are often untargeted, and can pose security risks (i.e., "malvertising"), block much or all of the pages that customers are viewing, and – critically for mobile users – they slow down page loading and consume data.

As a result, there are now a plethora of ad blockers aimed at consumers which have proven to be highly popular. A study by Adobe and PageFair[2] reported that ad blocking grew by 41% globally between June, 2014, and June, 2015, resulting in 198 million ad block users worldwide. In the U.S. alone the report said ad blocking grew by 48% over the same period, resulting in 45 million active ad block users by June, 2015. Ad blocking is set to increase dramatically with Apple's announcement that it will support mobile ad blockers on its iOS9 software for its iPhones and iPads. Currently ad blocking technology does not work with mobile apps. But that may change if marketers create strong demand by overusing and abusing these platforms.

- **Gaps in understanding personas.** Customers do not always neatly fit defined personas. As a result, companies risk making inaccurate predictions about customer behavior. Moreover, customers' personas vary by their specific roles when they interact with different companies. Companies then risk missing out on opportunities by following personas too closely instead of looking at customers as individuals. Making inaccurate assumptions about customers will likely annoy them and may cause them to think twice about doing business with or recommending companies through poorly targeted online marketing.

- **Testing tradeoffs.** Using vendor supplied testers ensures quick turnaround on testing. Vendors are also easy to recruit given the large pools of testers available to suppliers. In contrast, companies will have to devote resources to attract testers, including incentivizing them. Moreover, they may not be able to attract sufficient volumes of testers to obtain valid results. But company-recruited testers often provide deeper inputs into how sites can be optimized, as compared to vendor supplied testers that largely employ role-playing scenarios in tests.

- **Abnormal and dangerous web traffic.** Companies should monitor the web for signs of unusual site volumes, patterns, and sources as they can hinder successful web experiences. Unexpected spikes in Web traffic that make it impossible to deliver personalized recommendations can suggest trouble, for instance. Criminal bot-driven traffic may weaken the integrity of data used to inform the Customer Experience. Criminals also may launch denial of service attacks against or hack into sites.

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[2] "The cost of ad blocking: PageFair and Adobe 2015 Ad Blocking Report" August, 2015

- **Globalization concerns.** Companies are cognizant that their North American web sites attract customers in other countries. But those customers often have different privacy and security expectations. While many U.S. and Canadian consumers accept or tolerate being "cookied" and trading privacy in return for value, other regions' consumers are not so accepting, with some countries requiring opt-ins for turning on cookies. At the same time sharing customers' data across borders is subject to legal and regulatory changes. For example, in October, 2015, the European Court of Justice tossed out the European Union-U.S. Safe Harbor data transfer agreement.

- **Channel silos.** Many customers still have inconsistent web and omnichannel experiences (most obviously from companies not knowing their behaviors, including purchase and service histories on other channels). Companies then run the risk of higher dissatisfaction, loyalty, negative social comments, lower future sales, and higher customer care costs.

These silos exist because there is not yet a solid business case at many companies for making this a C-suite driven corporate strategy. It is not axiomatic that excellent web experiences will lead to higher point and lifetime sales. Customers prefer to buy on product and service features, price, and convenience, and secondarily on web and omnichannel customer service. As a result, many vendor solutions also are still "channel-siloed" to reflect market reality.

But silos will be penetrated or torn down over the medium or longer term for several reasons. First, as younger generations become the consumer mainstream, they will demand increasingly excellent customer experiences. Second, as products and services become ever more commoditized, service will become the prime competitive differentiator. Finally, with companies' adoption of Big Data methods, flat, non-hierarchical data lakes will help to break down the levees of remaining silos.

Summary and Recommendations

Companies are understanding the criticality of providing knowledge-based and channel and device-agnostic one-to-one customer engagements to their businesses.

Exhibit 3 outlines current and long-term impacts of key web personalization trends and challenges.

Exhibit 3: Current and Long-Term Impacts of Key Web Personalization Trends and Challenges, North America, 2015–2025

Key Takeaway: Trend 5 is the most important factor in formulating future strategies.
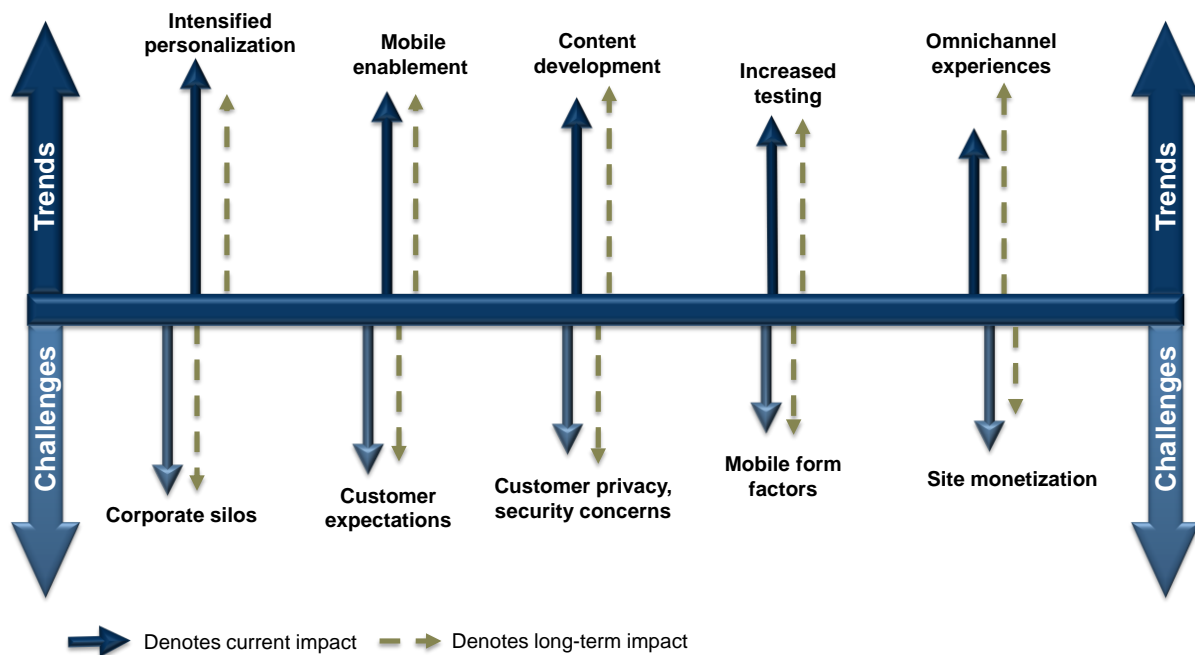
Source: Frost & Sullivan

The web, as the prime customer portal, has become the linchpin in their strategies. As a result companies are taking steps to feature attractive and intuitive sites that offer personalized customer experiences. Frost & Sullivan offers several recommendations to enable successful customer web experiences:

- **Know the customer.** Companies should tap and aggregate customers' online and offline interaction histories and also their profiles, while respecting their privacy preferences. They should determine their value also from their social influence and for B2B positions, responsibilities, and career paths. Companies also should take the time to understand how customers are interacting with them. They should determine whether customers are using sites for information and for purchases and transactions including service and support.

- **Provide room to grow.** Companies should create marketing, including web messaging and targeting, that allows them to expand their customer bases. Web sites, personalization, and user testing methods should be flexible to accommodate new methods and technologies, including PRaaS and IoT. Web sites should be written to be shared on social media and other sharing channels.

- **Ensure smart mobile site design.** Customers want to conduct interactions online swiftly and securely with minimal effort. They dislike cool, but annoying bells-and-whistles and complicated functions. Therefore companies must insist that designers create and write sites for customers rather than for their peers. Customers also must be given the option of viewing "normal" sites from their wireless devices, instead of being forced to accept designed sites.

- **Deploy key personalization features.** The foundation for effective personalization is customer recognition, contextual understanding, and "next best actions" based on advanced analytics. Personalization programs also should have offer orchestration in order to deliver content at the right time and place, along with dialog management. Personalization also must have measurement and optimization in order to apply insights from captured results.

- **Bolster customer privacy and security.** Companies have to improve their data security so as to give customers peace of mind so those customers are comfortable with opt-in and sharing personal information. Stratecast suggests companies look at using differential data privacy solutions. These solutions work by modifying the algorithms whereby the data is accessed, but not the data itself. It then provides virtually unlimited privacy without modifying the underlying data, unlike other methods.[3]

- **Employ excellent web Customer Experience feedback.** Using hard metrics such as response time for web interactions, combined with customer preference data, allows for better web experience feedback. Results from automated testing and monitoring solutions enable swifter Customer Experience improvements by saving time over manual survey analysis and usability testing. But "real person" user testing also should be employed to simulate customer behavior and provide benchmarking on company and competitor sites.

- **Avoid over messaging.** Customers now expect companies to know them when they identify themselves on web sites, and on other channels. In turn, companies must not bombard customers with the same or similar messages from multiple channels. They also have to ensure that customer profiles are updated with each channel interaction.

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[3] Cotrupe, "Shhh…Big Things"

- **Smarter web advertising.** With the growing use of ad blockers companies will need to re-think their online and digital advertising and marketing strategies. They will have to step-up their ad personalization and targeting, being visible but less obtrusive, and invite customers to interact with ads, or other calls to action, instead of shoving the ads in their faces. They should clearly provide opt-out from advertisements. Companies also should turn to tools such as sponsored and paid targeted web content creation, as many of them are now using on social media.

- **Careful personalization and SSO.** Companies should enable customers to easily opt-out or ideally opt-in of personalization and SSO. They should give customers opt-in or opt-out choices on which data categories they would like to share, and whether to allow businesses to share it with affiliates and third parties. Companies should investigate precisely how much and what types of customer information they need from their social media activities, before offering them personalized content. These steps not only establish and reinforce customer trust but they may help avoid potential legal issues when serving foreign customers.

- **Smart testing.** Companies should have set goals and clear hypotheses. They should closely time and integrate usability testing with new products and service releases. They then have to define scenarios and tasks for testers. Finally, companies should revisit the hypotheses that they started with and then refine, improve, and test to obtain accurate results, based on potential marketing, web personalization, and site changes.

- **Phase in personalization.** This strategy enables companies and customers to realize benefits. Companies can start by targeting content and offers. Then they can add content, such as videos and blogs, to deliver targeted material, based on individual interest. This method leverages contextual information to segment based on behaviors, and adds another layer to product recommendation personalization. Companies should also internally publicize personalization wins to motivate teams. They will become more dedicated to supporting the program and enhancing the Customer Experience if they see small steps paying off.

- **Engage leadership.** Customers interact with brands, with companies, not with sites, channels, or departments. But for personalization to happen requires C-suite buy-in and leadership. The enterprise must have a Customer Experience vision that spans all channels, and the willingness and the authority to implement the changes to make it a reality. They should flatten or at least connect the silos and have disparate product and channel teams working together.

Senior management should plan the implementation. They should devote adequate resources to enable and support personalization, including content creation and optimization. Leadership also should have consolidated data stores, systems, technologies, and partnerships with vendors to streamline operations. Finally, they should produce more consistent customer web and omnichannel experiences.

Vendors at a Glance

There are a wide variety of web experience, personalization, and testing solutions vendors. The following is a broad and representative sample:

Adobe

Adobe offers the Adobe Experience Manager (AEM). A module of the Adobe Marketing Cloud, AEM blends web and multichannel content optimization, targeting, and analytics.

AEM enables companies to provide personalized web pages with workflows and drag-and-drop navigations, using customer and product data from any source. It permits content: documents, files, images, links, and video to be created, uploaded, and shared between sites, apps, social communities, web forms, and on-site screens. Companies can add 360-degree spin, magazine-like views, videos, and zoom-and-pan product images. AEM enables content preview and testing with simulations that provide customer perspective to sites.

AEM also supports personalized mobile experiences. It has mobile content management and responsive design for sites, pages, and forms. It targets devices for content and offers based on their GPS positions or proximity to beacons. AEM also enables mobile app creation, management, and delivery.

Adobe allows companies to manage content for multiple sites: mobile, local, regional, and country-specific, for email campaigns, and social communities. The AEM multisite management application provides master templates, allows regional editing, and has language localization.

Certona

Certona delivers personalized customer experiences. It's cloud-based personalization platform increases engagement and conversions by leveraging one-to-one behavioral profiling, Big Data insights, and predictive analytics that serve up individualized content, promotional offers, and product recommendations across all customer touch points. Combined with a flexible decision engine and contextualization, marketers can harness the power of real-time behavioral profiling, while maintaining control over their personalization strategies.

ClickTale

ClickTale monitors and records browsing sessions. It identifies, analyzes, and visually presents where customers convert visiting to action and browsing abandons on the sites.

The ClickTale Core generates web activity and interest heat maps by tracking content viewing, mouse clicks, and scroll reaches. It provides customizable conversion funnels that visualize where customers convert and where they leave the conversion process on their page-to-page journeys.

The ClickTale Touch analyzes customers' web activity on mobile devices. It captures unique mobile gestures such as tap, double-tap, zoom, pinch, scroll, swipe, and tilts. The session playback simulates them and it also presents sessions on screens that imitate mobile devices.

The ClickTale Page Console Site Analytics and Dashboard shows bounce rates, errors, clicks, and engagement time inside pages, and scroll reach percentages. ClickTale also analyzes link activity including clicks, hovers, hover time, and order, hover to clicks, hesitation, and visitor order.

Concept Feedback

Concept Feedback is a community powered evaluation of websites to help improve the user experience and push toward greater conversion rates. There are 35,000 people in its community, which includes design, usability, and strategy professionals with work experience across multiple organizations and brands.

Concept Feedback consists of two models. There is a free version where website owners can post concepts, which is open to all community members to give feedback. There also is a paid version is a more directed and actionable feedback, where concept owners can hire industry experts from design, usability and strategy backgrounds to conduct detailed heuristic evaluations. The reviews highlight critical problems and barriers to website conversions while providing newer ideas for testing and optimization.

Cyara

Cyara offers the Cyara Platform, which enables omnichannel including web Customer Experience testing. The Cyara Platform performs automated load, connectivity, workflow, application integration, and production testing. The Cyara Platform also monitors systems, and it automatically alerts management when they fall out of compliance. The solution is vendor agnostic and scalable through its hosted platform.

The Cyara Platform uses modeled Customer Experience flows, which are used to generate interaction volumes, to mimic web site and mobile app real customer engagements. They allow the platform to navigate the web, request assistance, interact with live or virtual agents, including web callback, and report on whether systems responded within the design criteria. These flows automatically test the functional accuracy of solutions during the initial implementations and after later rework or enhancements, for regression testing.

HP

The HP Optimost hosted web optimization solution taps data from multiple channels and sources, then applies behavioral and segmentation analytics, to identify hidden patterns and emerging trends in customers' online activity. Companies can obtain customer brand sentiment and contextual understandings of what customers want and need. They can also feed in results from third party web usability solutions to uncover customer web engagement issues. Companies can use the insights from Optimost to improve personalization, raise the number of engagements, and site visit-to-sales conversions.

HP TeamSite enables authoring, targeting, testing, publishing, and managing web and multichannel-delivered content. TeamSite personalizes the Customer Experience by analyzing profile information, locations, clickstream data, referral URLs, and time of visits. When combined with HP Digital Marketing Hub it can leverage customer behavioral data, transaction histories, and previous responses to content and messages. TeamSite supports mobile with mobile-ready templates, responsive design, device detection support, and content optimization. TeamSite, with HP Optimost permits a deeper understanding of customer visit contexts. These enable richer web engagements and more precisely targeted offers, navigations, landing pages, and microsites.

iPerceptions

iPerceptions' solutions capture customer perceptions in the moment of truth using advanced intercept technologies and proven research frameworks. The iPerceptions Active Recognition engine discerns anonymous web site customers' intent and surveys a representative sample of site visitors to ascertain their purpose of visits, and combines it with behavioral cues. It then takes this enhanced visitor intent and fuses it with its intent benchmark of 20^+ million standardized data points.

The Active Recognition for Experience Optimization application uses analytics and behavioral patterns to determine when to launch web surveys to find out sites' usability. The iPerceptions Active Recognition for Retargeting solution recognizes which visitors are most likely to purchase. It will suggest displaying content to drive in conversions.

iPerceptions distinguishes between purchase intenders, researchers, and support seekers to align content. It also recognizes additional specific qualifiers including purchase horizon, in-store versus online shopping, business versus, leisure, seller versus buyer, and demographics. It also will launch right-timed chat invites. The model continuously learns and adapts to site changes.

Loop 11

Loop11 provides extensive in-depth testing on any web site, including through mobile devices, and in over 40 languages. Companies can use it to identify usability issues that impede service, support, and sales conversions on their web sites, and see where they stand in relation to their competitors' sites.

Loop11 supplies customizable testing, with single or multiple tests. Companies can use a built-in test template or create themes that match their sites. They can assign objectives and tasks to testers and ask usability questions and seek comments.

Loop11 offers several means to source testing participants, including companies' own lists, social media, site pop-up box invites, using Ethnio to recruit them from their sites, and inviting them from CintOpinionHub. They can choose their own survey groups, sorted by demographics and customer value. Loop11 offers results heatmaps, clickstream analysis, and reporting.

Loop11 also helps make web sites and apps accessible. Companies can source disabled testing participants from Knowbility. An online webinar helps them improve their web connections with disabled customers.

Monetate

Monetate offers multi-channel testing and personalization. It brings together data from multiple sources and combines them with behavioral and contextual observations.

Monetate for Personalization enables companies to tailor customers' web, mobile app, and also email experiences. Companies can customize web navigations, banners, and badges to draw in and engage customers. Monetate for Merchandising allows using past behaviors and purchases to shape suggestions and to filter them – such as by prioritizing top sellers, new arrivals, and sale items.

Monetate for Optimization tests, iterates, personalizes, and improves customer experiences. It uses advanced A/B/n testing and it simultaneously tests multiple incremental changes. The application generates accurate results by limiting false positives and reducing variances. The Monetate for Mobile Apps tests checkout flows and button sizes without waiting for app store approvals. Companies can integrate personalized web experiences to their mobile apps.

Oracle

The Oracle Marketing Cloud orchestrates marketing interactions for customers and manages and delivers customer targeted content on the web. The software optimizes and provides unique web experiences for each customer, adapted to their interests and behaviors. It enables companies to present personalized recommendations and targeted offers. Oracle Marketing Cloud taps customers' real-term and historical profiles and then applies A/B and multivariate testing, segmentation, predictive personalization, and analytics.

The Oracle Marketing Cloud can personalize every experience to increase engagement, advocacy, and revenue using cross-channel, multiplatform, content, and social marketing solutions with integrated data management and activation for B2B and B2C businesses. Oracle Marketing Cloud connects the web to other customer engagement channels and focused applications including Oracle Commerce Cloud, Oracle Service Cloud, Oracle Social Cloud, Oracle Data Cloud, and Oracle CRM. Along with Oracle Marketing Cloud companies can conduct coordinated campaigns, thereby enabling a consistent yet targeted customer messaging and experience on all channels.

RichRelevance

RichRelevance provides web, and email, in-store, and mobile-device-optimized personalization solutions connected with a common data set. Its technology personalizes responses in 65 milliseconds.

The RichRelevance Discover application personalizes browsing and searching by presenting tailored brand, category, and product suggestions and recommendations within search bars. The RichRelevance Engage applications maps individual customer behavior against advanced targeting and audience segmentation tools.

The RichRelevance solutions reside on the Relevance Cloud platform. The solution aggregates customer behavior, content, context, and product information with the aim of delivering the most relevant experience for each customer. Its personalization engine automatically chooses from over 125 algorithms, seeking the one that best fits each customer interaction and then fine tunes it for the greatest customer interaction and potential revenue.

The RichRelevance engine automatically identifies sub-populations with different types of behavior in order to take advantage of those differences. It uses look-a-like matching of customers to overcome data sparsity. Each algorithm adapts to changing customer behavior and to seasonal buying patterns. It auto-optimizes content personalization that avoids undertaking lengthy manual A/B testing.

Salesforce

Salesforce Marketing Cloud supports web and also multichannel personalization and integrates these features with email, mobile, social, and advertising applications. It also collects feedback and interaction data. The Salesforce Marketing Cloud uses its native predictive intelligence decision engine to perform many of those tasks. It combines complex algorithms that incorporate clustering and wisdom of a crowd's techniques with client-specific business rules, data, and real-time customer preferences. It then aims to generate the most relevant content, products, and services to each customer across their entire journey.

Marketing Cloud also includes CloudPages, which allows companies to easily create, edit, and publish device optimized and cross-channel content inside a single application. This content can be broadcast across the web in microsites and landing pages, and in other channels, keeping messages and brands consistent.

The Marketing Cloud has a Collect Tracking Code that can be applied to any web-based application to observe and collect contact behavior and preferences. It also collects real-time feedback and interaction data. Marketing Cloud's conversion reporting shows conversion data with and without personalization.

TechSmith

TechSmith offers the Morae multimedia user experience solution. Morae covers web testing, but also software, market research and focus groups, and mobile device and hardware testing.

The Morae Recorder captures on-screen, keyboard and mouse, audio, and video inputs and places the data into a single repository. All data is indexed to a master timeline.

The Morae Observer application enables viewing and listening to customers' experiences, making notes, and flagging tasks. The solution automatically calculates and graphs effectiveness, efficiency, and satisfaction.

The Morae mobile device testing application also covers how customers interact with sites and apps. Observers can watch customers manipulate physical buttons and navigate on-screen menus while Morae captures their body language, verbal comments, and success rates.

UsabiliTest

UsabiliTest offers several tools for usability testing and information architecture. The most popular tools are its card sorting and prioritization matrix.

Card sorting helps companies build structures for their web sites, decide what to place on home pages, and what to label the home pages' categories. It also helps ensure that they organize information on their sites in a way that is logical to customers, partners, and staff.

Prioritization Matrix enables companies to achieve consensus on issues with current or potential customers or with their team members. The Matrix helps rank tasks by frequency and importance. Companies can then clearly see which issues they must work on solving first.

UsabiliTest offers other apps including the Heuristic Evaluation Tool, the SUS Plus Tool, and the Design Iterator Tool. All tools are customizable, support co-branding, have password protection, and offer seamless integration with third-party participant panel providers.

UserTesting

UserTesting offers a research platform which videos site users while they perform specified tasks on any device. Companies can then hear and see where users, representing customers, become confused and frustrated on their sites and their competitors' sites.

The UserTesting videos capture users' thoughts as they use sites or mobile apps. Videos also record app and site gestures. It uses metrics and analytics to pinpoint the exact moments where users struggle. It also tracks time on task and Net Promoter Scores. Companies can benchmark their user experiences over time, with major site changes, and against competitors.

UserTesting permits companies to select user testers by numbers and demographics. Users also can select their own customers as testers. UserTesting also offers on-demand or custom panels.

Frost & Sullivan's Web Personalization Top Picks

Adobe. The Adobe Experience Manager has an impressive depth of personalization features, covering multiple channels and with integration and support for customer experiences on mobile devices. Adobe also has a solid track record with leading companies.

Concept Feedback. Concept Feedback addresses web experience including design and functionality issues with industry experts. It not only identifies sticking points but also recommends solutions.

Loop11. Loop11 squares both functionality and usability in its testing solution. It is also noteworthy for its attention to disabled individuals, which the company points out represent 1 of every 7 people, not including those who are temporarily disabled.

RichRelevance. RichRelevance focuses on providing omnichannel retail-focused personalization. Its Relevance Cloud supplies a middleware layer that uses APIs and point solutions to connect siloed systems. With this heft it helps North American and global retailers drive up sales.

Web Personalization Use Cases

Ford (Lincoln)

The Lincoln Motor Company is the luxury vehicle line of its parent, Ford Motor Company. Lincoln introduced the MK series in 2006 for the 2007 model year. Lincoln also offers the Navigator line of SUVs. Lincoln has its own product development and sales teams, but the carmaker uses an outside agency, Hudson Rouge, for its digital and web marketing. Hudson Rouge was founded in 2012 by its WPP parent, to execute and manage Lincoln's brand reinvention and marketing communications strategy.

The Situation

Lincoln planned a marketing strategy to reveal the 2016 Lincoln MKX luxury crossover SUV in time for the prestigious North American International Auto Show in Detroit, Michigan, which ran from January 12 to January 25, 2015. Actual MKX vehicle production started May, 2015.

Key to the MKX marketing campaign was Lincoln's model reveal site. Lincoln sought to provide visitors with a more engaging, relevant, and seamless car buying experience. Customers would be drawn to it from advertisements and social media. But Hudson Rouge's teams had been given less than fourteen weeks to execute the program.

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The Response

Hudson Rouge knew soon realized that the Lincoln site required personalization to deliver relevant content across audiences. Target customer segments had to be defined and customized content had to be carefully presented to customers.

Ford procured a global license for Adobe Marketing Cloud. Team Detroit, Hudson Rouge's parent company, also owned by WPP, reached out to a sister company, Cognifide, a leading Adobe solutions integrator. Cognifide and Hudson Rouge migrated Lincoln's digital marketing activities from another vendor's platform to Adobe Marketing Cloud. They created a personalized experience for priority customer segments. They also developed and maintained a new platform on which Lincoln marketers could update content on demand and in real time to match changing customer preferences.

Hudson Rouge and Cognifide worked with Lincoln stakeholders to develop home page components. They also implemented segmentation, personalization, analytics, reporting, and live copy, and in multiple languages. The team created a powerful, yet streamlined Customer Experience-focused site design with content targeted to site users based on location and previous site activity.

Cognifide employed the Adobe Marketing Cloud to collect and classify web site visitor data. It implemented Adobe Experience Manager to track predefined customer traits such as brand familiarity and location based on referring URLs and reported zip codes, respectively.

Experience Manager feeds the information to the Adobe Target and Adobe Analytics solutions to determine whether the visitors are urban or rural, or existing or prospective customers. It then delivers personalized web content to targeted car buyers based on research into their preferences. Custom content can include unique car images, tailored site navigation, specific features geared toward different types of customers, and calls-to-action to engage with new or existing customers.

Lincoln can then automatically tweak content to better fit dynamic user behavior. It could push the personalized content in real-time based on analytics in the Adobe Marketing Cloud.

The Results

The Adobe Marketing Cloud-based platform was delivered in ten weeks using agile software development processes. This gave the team time to roll out and tweak the reveal site in advance of the North American International Auto Show.

Within weeks of the 2016 MKX model reveal site launch, Cognifide and Hudson Rouge saw significantly increased visitor engagement and stickiness, compared to previous reveal sites not built on the Adobe Marketing Cloud. The new Adobe-powered site had section engagements of 99% compared with 37% on the 2015 MKC and 24% on the 2015 Navigator non-Adobe sites. The MKX site had much higher photo gallery interactions, at 27%, as compared to MKC at 9.5% and the Navigator at 11%. The MKX site also had more email sign-ups, with 5.4% of visitors signing up, as opposed to 2.1% for the MKC, and 1% for the Navigator.

Lincoln MKX reveal site also resulted in a set of best practices that can be used when other websites are rolled out, including the Lincoln.com redesign. Lincoln also plans to combine the customer data, including login profile information, from Experience Manager and feed it to Adobe Audience Manager for advanced targeting.

"There are great synergies between our digital strategy for Lincoln and the relevance and personalization enabled by Adobe Marketing Cloud solutions," said Jim Peters, Digital & CRM Marketing Manager, Lincoln Motor Company. "We are very encouraged by the results we've seen through early testing, such as with our MKX Reveal site. Our partnership with Adobe should definitely help us continue to deliver a warmer and more personal digital experience to our luxury clients that delivers on the notion of just In time, not just in case."

Tank Prints

Tank Prints creates and sells business cards to network marketing, multilevel marketing, and direct sales companies and branded storefronts in the U.S. and Canada. Its customers are individuals looking to start their network marketing businesses, and network marketing companies sell and serve their independent distributors.

The Situation

Tank Prints sought to increase growth by raising its lead to sales conversions, impulse purchases, and corporate signups. However, it faced stiff competition from other market participants. Tank Prints has a marginally higher price point than its competitors that it justifies with better quality and faster shipping. But its messaging was lost on its web site.

The Response

Tank Prints realized that improved web site design and usability were how it was going it's achieve its goals. The company turned to Concept Feedback on June, 2015. It signed up with five experts who covered design, usability, and strategy. They began work in July, 2015.

The Results

The Concept Feedback team recommended incorporating images and video content on the Tank Prints web site as they are proven to increase conversions. Concept Feedback suggested having less content on the landing page, and instead have it deliver one or two clear messages. The team also advised creating a dedicated section for the company online store offer, instead of in the main body of the site, in order to minimize visitor confusion. Finally, Concept Feedback wanted Tank Prints to shift its site language from process (how it works) to sales (namely how its products will make customer businesses more profitable). Tank Prints followed all of the Concept Feedback recommendations.

"It was money well spent, "said Mike Fernandez, E-Commerce Manager, Tank Prints. "I feel much better having industry professionals critiquing my site and making excellent recommendations as opposed to other usability websites where anyone can tell me what's wrong."

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