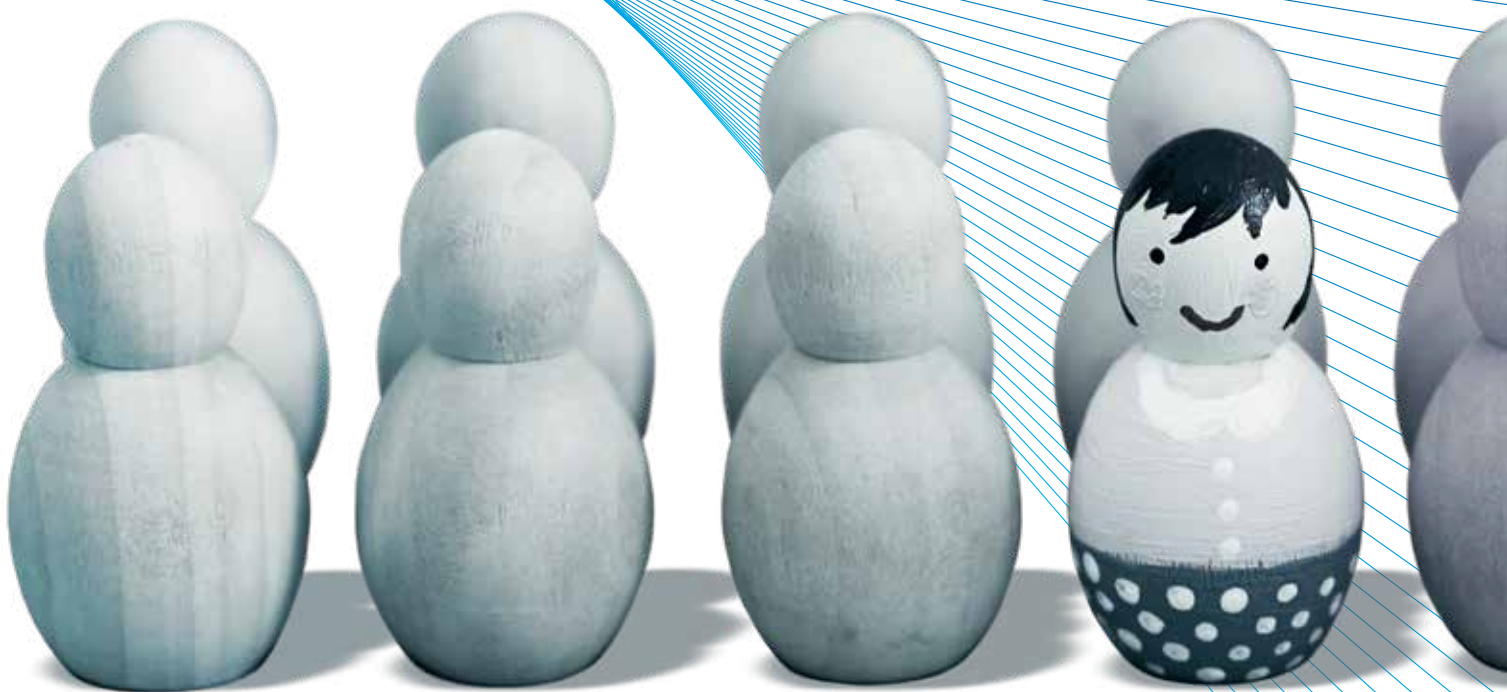


Marketing & Sales

Perspectives on Personalization @ Scale

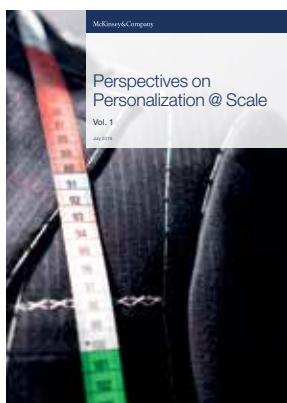
Volume 2: The next frontier



For further information specifically covering Personalization @ Scale topics and trends, please refer to Volume 1 of our compendium: www.mckinsey.com/Personalization-at-Scale-2018

Perspectives on Personalization @ Scale

Vol. 1, July 2018



Section 1: Talking through essential questions surrounding Personalization @ Scale

Interview with Julien Boudet and Kai Vollhardt:
Personalization @ Scale: First steps in a profitable journey to growth

Section 2: How to achieve and leverage Personalization @ Scale

- I. Laying the foundation: The heartbeat of modern marketing – data activation and personalization
- II. Defining the strategy: What shoppers really want from personalized marketing
- III. Gearing up operations: Making your marketing organization agile for Personalization @ Scale – a step-by-step guide
- IV. No customer left behind: How to put personalization at the center of your marketing to drive growth

Section 3: What practitioners think about Personalization @ Scale

Interview with Liad Agmon, CEO Dynamic Yield, and Kelsey Robinson: What's happening with personalization on the front lines

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Preface

“Real” personalization is here. What we mean by that is that personalization has moved beyond the buzzword stage and is becoming a core capability for marketers looking to be more efficient and drive growth. We’re seeing marketing leaders graduate from a stage of perception of what personalization is, to increasingly comprehending how personalization not only fundamentally changes the customer experience but also completely reshapes the modern marketing engine itself.

Evolving to the next level, marketers face questions regarding the very essence of what marketing’s future is supposed to be. Technology, security, privacy, omnichannel delivery, and data are all thorny topics that have the potential to make or break a company’s Personalization @ Scale program.

For this reason, we have dug into a few of these topics to help break down what really matters – and what doesn’t. We hope that the collection of articles, interviews, and practical examples on the future of personalization will help you set a successful growth course for your company.



Kelsey Robinson



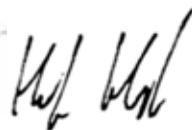
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Section 1: Introduction



Making personalization personal – an introductory interview

This compendium features the marketing, analytics, and customer experience insights of several McKinsey experts. This brief interview with Kelsey Robinson and Kai Vollhardt is meant – one year after the first compendium was published – to frame the current conversation on personalization and provide a preview of what’s to come.

How has the conversation evolved since you published the first Personalization @ Scale compendium last year?

Kai Vollhardt:

Well, first off, Personalization @ Scale remains one of the top priorities for many CMOs across industries, regions, and company sizes. It is quite remarkable how the conversation has expanded in general. It has become fairly elaborate in some areas, and emerged in adjacent industries and segments since we last spoke.

The energy sector pushed an impressive Personalization @ Scale agenda. No surprise, retail and hospitality players have advanced their efforts even further. For example, the new Nike store on Melrose Avenue in Los Angeles builds fully on the concept of Personalization @ Scale with a range of products based on the e-commerce shopping preferences of local customers and shop assistants receiving critical information on shoppers via a customer app. And the automotive industry has started to explore opportunities for personalization that goes beyond traditional car configuration.

I'm certainly excited, and it appears as if more and more people feel the same. How about you, Kelsey?

Kelsey Robinson:

I fully agree. The initial buzz from a couple of years ago has become a resounding and uplifting conversation about embedding Personalization @ Scale into the DNA of the organization. Looking back on the past year, we wanted our compendium to reflect that evolution. We selected a range of articles, interviews, and cases to further orient and excite C-level executives, marketing and IT experts, and sales enthusiasts and help them take their work to the next level.

We have also noticed an increased focus on omnichannel and conversations about the proliferation of MarTech solutions. Consequently, we address these topics in this compendium.

Personalization @ Scale may be hailed as a marketing miracle, but surely it is not without its challenges?

Kelsey Robinson:

Fair point. In order to have an honest conversation about the topic, we also needed to address concerns and obstacles that executives and practitioners must handle daily. Data protection comes to mind, of course. But even simpler than that, many clients struggle to refine their existing efforts while others find it challenging even to start the transformation and see the difficulty in moving an organization beyond the old ways of doing things. Personalization @ Scale is really a transformation and as such, requires time and dedication.

Kai Vollhardt:

Dozens of examples in just the past year show that it is definitely possible for companies to tackle these challenges and reap the benefits of Personalization @ Scale. Those that quickly turn their ideas into pilots and partner with the right tech companies can get early feedback and generate critical buzz.



Kelsey Robinson
Partner, San Francisco



Kai Vollhardt
Partner, Munich

For example, Carnival Cruises received a lot of attention in the media when it unveiled its plan to further roll out its Ocean Medallion. The tiny wearable device gives ship staff rich information on their passengers so that they can deliver an extremely personalized experience.

Have developments in the topic led to new challenges or changed the recommended approach to Personalization @ Scale?

Kai Vollhardt:

It's true that the technology behind Personalization @ Scale is always advancing, but in terms of how an organization adopts the practice, the fundamentals remain the same. The approach that prioritizes data, decisioning, design, and distribution – what we call our 4D framework¹ – and the development of the corresponding capabilities needed to deliver in these areas are as relevant and robust today as they were a year ago. And, as indicated earlier, boldness is important.

Kelsey Robinson:

Of course, developing a vision and moving quickly into a first pilot can unleash a lot of energy. We did notice that some C-level executives are delegating the topic too deeply down within their organizations, often assuming that Personalization @ Scale is only an IT project that produces a “feature” or a set of new campaigns run by the marketing department. Successful cases begin with top management taking and keeping the ownership of the topic, imprinting Personalization @ Scale as a mindset, and driving it as a transformative effort throughout the entire company.

Can you talk about some of the technology developments that have taken place over the past year?

Kelsey Robinson:

Absolutely. Over the past year or so, customer-data platforms (CDPs) – the place where all the data flows together in one place – have become even more important for unlocking the power of Personalization @ Scale. Many organizations realized that working with 15 or so different tech players is not sustainable, or practical for that matter. Instead, the reduction of the number of tools, on the one hand, and the full integration of the remaining ones, on the other hand, are on top of the agenda for many professionals.

Despite the proliferation of CDPs, there is not a single all-in-one solution leading the pack. Still, many have become delightfully user-friendly, more integrated, and more intelligent. These developments make CDPs accessible to a broader audience, easier to deploy and plug in to existing environments, and ready for a vast set of use cases right out of the box.

Kai Vollhardt:

I couldn't agree more. We can certainly see that large industry players have started to double down on their efforts of building, complementing, and advancing their MarTech stacks. Two recent related

¹ For further information on the 4D framework, please refer to Volume 1 of our compendium at www.mckinsey.com/Personalization-at-Scale-2018

examples are Nike and McDonald's. Nike acquired Zodiac, strengthening their direct-to-consumer business. Even more recently, McDonald's acquired Dynamic Yield, an omnichannel personalization technology platform, in order to create a personalized point-of-sale experience.

Looking ahead towards the beginning of a new decade, we should acknowledge that technology is not a limiting factor, but instead an enabling one when it comes to true Personalization @ Scale. Working across functions to define the use cases, then leveraging the technology, and finally getting started is what it takes to win.

How are consumers thinking about increasing personalization in their everyday life?

Kelsey Robinson:

For consumers, there are two sides to the personalization coin. Research that we authored with colleagues at MIT (which was recently published in the MIT Sloan Management Review)² revealed that there is clear excitement about personalization's benefits. However, there is also concern regarding data privacy. The research showed that concern increases with the level of personal data captured. So, for example, consumers were far less worried about companies tracking their online searches than they were about facial recognition being used in stores. That said, the more excited a consumer is about the benefits of personalization, the less worried they are about the security of their private data. Discounts on a desired item, for example, were the most popular benefit among survey participants, with 57 percent expressing excitement at the idea.

Still, the security of the data that drives the personalization engine is something that all marketing professionals need to have as a top agenda item, especially given the current scandals around data security and usage. Great benefits are not enough to make consumers ignore egregious violations of their privacy.

Is Personalization @ Scale relevant for all companies?

Kai Vollhardt:

It does seem that almost everyone is focusing on personalization, but we do see differences, based on industry, in how intense the focus is and how far along a company is on its journey. For example, 12 months ago, the retail industry was among the leaders of the pack. Today, we see contract-based businesses in energy, banking, and insurance quickly catching up and showcasing their success cases.

But of course, retail and consumer goods companies are not standing still. They're not just thinking about personalization online, they are investing in a truly connected, customized omnichannel experience – extending personalization across digital platforms and into stores and support channels in the physical world.

Kelsey Robinson:

We've also observed some differences by region, with companies in Europe taking a more measured strategy to personalization compared to the "all in" approach of many US companies.

An interesting example is the automotive industry where you see several players detailing approaches to dynamically personalize the in-car experience based on drivers preferences. This also shows how Personalization @ Scale dovetails nicely with customer journey design. As Kai mentioned, it's really a mindset and transformative approach towards customer centricity – from beginning to end.

What would you say to marketing professionals interested in Personalization @ Scale who are about to peruse your second compendium on the topic?

Kai Vollhardt:

We would say that getting started is easier than most might think. More advanced technology and higher quality data may certainly be necessary at some point, but for the most part, companies can get started with the data and the analytics capabilities they already have. The pilots that come out of this can build the case for and generate lots of excitement about the Personalization @ Scale effort and demonstrate the positive impact for consumers and companies alike.

² "Why Personalization Matters for Consumer Privacy", MIT Sloan Management Review. June 6, 2019. <https://sloanreview.mit.edu/article/why-personalization-matters-for-consumer-privacy/>

The future of personalization – and how to get ready for it

Personalization will be the prime driver of marketing success within five years. Here are the capabilities companies need to develop to stay ahead of the curve.

By Julien Boudet, Brian Gregg, Kathryn Rathje, Eli Stein, and Kai Vollhardt

The exciting promise of personalization may not be here yet (at least not at scale), but it's not far off. Advances in technology, data, and analytics will soon allow marketers to create much more personal and “human” experiences across moments, channels, and buying stages. Physical spaces will be re-conceived, and customer journeys will be supported far beyond a brand's front door.

While these opportunities are exciting, most marketers feel under-equipped to deliver. A recent McKinsey survey of senior marketing leaders found that only 15 percent of CMOs believe their company is on the right track with personalization. But there's a big incentive to figure it out. Today's personalization leaders have found proven ways to drive 5 to 15 percent increases in revenue and 10 to 30 percent increases in marketing-spend efficiency – predominantly by deploying product recommendations and triggered communications within singular channels.

Positioning businesses to win requires understanding the three main shifts in personalization and building up the necessary skills and capabilities to respond to them.

Read on to learn what it will take to win tomorrow's personalization game.

Three major shifts will make personalization more personal

Over the next five years, we will see three major shifts in personalization:

Physical spaces will be “digitized”

Fewer than 10 percent of the companies we surveyed currently deploy personalization beyond digital channels in a systematic way. That presents a big zone of opportunity. One area where the implications could be significant is in-store visits. Our survey data suggest that “offline” person-to-person experiences will be the next horizon for personalization. Some 44 percent of CMOs say that frontline employees will rely on insights from advanced analytics to provide a personalized offering; 40 percent say that personal shoppers will use AI-enabled tools to improve service; and 37 percent say that facial recognition, location recognition, and biometric sensors will become more widely used.

Some retailers have already started down this path to move beyond established, though still rudimentary, personalization practices. At Covergirl's new flagship store, an AI-powered program, enabled by Google's conversational Dialogflow platform, directs customers, while augmented-reality glam stations let customers “virtually try” products – by altering the customer's image as if the product has been applied. But this doesn't mean the end for the salesperson or stylist. These virtual experiences still need the human touch. Covergirl's glam stations still need customers to tell stylists what products they'd like to try. As AI evolves, systems can generate recommendations based on analyzing a customer's skin tone, facial features, and emotions in real time to tailor what to recommend or avoid offering.

Macy's, Starbucks, and Sephora are using GPS technology and company apps to trigger relevant in-app offers when customers near a store. Other

retailers have begun to provide sales associates with apps that generate personalized product recommendations for specific customers automatically. One retailer found an app like this generated a 10 percent lift in incremental sales and a 5 percent increase in transaction-size growth.

The next level of in-store personalization is likely to include providing these kinds of experiences to all customers as well as pulling in more advanced AR features to help customers experience products and services in different environments, such as trying hiking boots on a “virtual mountain.”

Empathy will scale

Empathy – the ability to relate to and understand another person’s emotions – is the basis of strong relationships. Understanding social cues and adapting to them is how people build trust. That’s not easy to do digitally or at scale.

Machine learning is changing that, or at least getting much better at reading and reacting to emotional cues. More sophisticated algorithms are allowing

programs to interpret new kinds of data (visual, auditory) and extrapolate emotions much more effectively than in the past. Amazon has patented new features that will enable its Echo device to detect when someone is ill – such as nasal tones that indicate a stuffy nose. It will then offer a suitable recommendation, such as a chicken soup recipe or cough drops, some of which could then be purchased over the device for at-home delivery. Other companies are getting into the game too.

Affectiva, which was spun off from work scientists were doing at the MIT Media Lab, is using machine learning to develop emotion-recognition algorithms to classify and map facial expressions, such as anger, contempt, disgust, fear, and joy. To date, the company has raised USD 26 million from investors, including Kleiner Perkins, CAC Holdings, and the National Science Foundation.¹

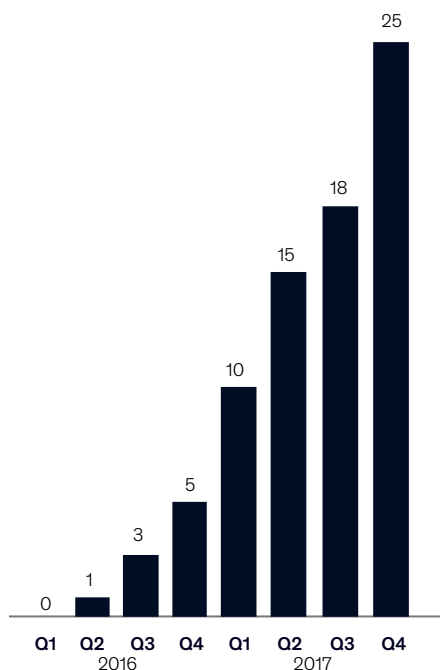
¹ Julien Boudet, Brian Gregg, Jason Heller, and Caroline Tufft, “The heartbeat of modern marketing: Data activation and personalization,” March 2017, McKinsey.com.

Exhibit 1

Assistants like Alexa are getting smarter over time as more “skills” are introduced, driving platform stickiness

Alexa learns quickly

No. of 3rd party skills, 000s



Examples of Alexa’s skills

Shopping	Information and entertainment
“Add oranges to the grocery list” OurGroceries	“What’s the weather?”
“Ask Dominos to track my order” Dominos	“What’s the news?”
“Tell Seamless I’m hungry” Seamless	“Play Ed Sheeran”
“Tell Starbucks to start my order” Starbucks	“Set a timer”
Driving	Home control
“Activate climate control” BMW	“Turn down the temperature” Nest
“Where is the nearest gas station?” Car navigation	“Preheat the oven to 350°” GE
“Play the book I was just listening to at home” Audible	“Start my coffee” Mr. Coffee
“Start my car” Ford Sync	“Lock my doors” Vivint

In time, these advances could help marketers communicate with customers in a way that's tied to specific moods, offering specifically curated promotions for music or movies, for example, that match that mood.

Brands will use ecosystems to personalize journeys end to end

Different providers jointly own the customer experience. A mall operator, retail store, and brand product, for instance, all contribute to a shopper's buying experience. But each sees and affects only a portion of the total buying experience. Creating connections between those points represents a big opportunity in the next level of personalization, as expanding partner ecosystems allow brands to provide more seamless and consistent consumer experiences across all stages of their decision journeys. As AI gets better at predicting consumer needs – turning on the lights or turning up the heat shortly before someone comes home – personalization programs can navigate the transition from one system (car) to the next (home lights or home furnace).

While the share of global sales that moves through the ecosystems is still less than 10 percent, we predict it will grow to nearly 30 percent by 2025. Perhaps the biggest frontier for consumer-ecosystem development is the home. As devices proliferate, they will need to work with each other and use platform standards. Consumer goods, home mechanics systems, automobiles, and a vast array of digitized devices will need to be part of a seamless experience for the consumer or risk being completely shut out.

Industries as diverse as banking, healthcare, and retail are also forging ecosystems comprising a variety of businesses from different sectors to improve customer service and expand the quality and array of solutions offered.

How to turn the future into reality

Personalization tends to be thought of as an important capability for marketing, but we believe it must become the core driver of how companies do marketing. Here's where successful brands need to focus now:

Invest in customer data and analytics foundations

Personalization is impossible if marketers don't have the means to understand the needs of high-value customers on an ongoing basis. So top marketers are developing systems that can pool and analyze structured and unstructured data, algorithms that can identify behavioral patterns and customer propensity, and analysis capabilities to feed that information into easy-to-use dashboards.

Setting up a centralized customer-data platform (CDP) to unify paid and owned data from across channels is essential to these efforts. Unlike traditional CRM solutions, CDPs provide built-in machine-learning automation that can cleanse internal and external data, connect a single customer across devices, cookies, and ad networks, and enable real-time campaign execution across touch points and channels. The best ones are also easy to use.

Individualizing outreach across channels also requires companies to develop and interact with new sorts of data, from voice to visual. The best are already actively experimenting with these technologies by developing use cases to understand how to best use them.

Making this technological leap forward requires marketing and IT to join forces. A product-management team, with representation from both IT and marketing, should be established to build and refresh the organization's MarTech road map, develop use cases, track pilot performance, and compile a robust library of standards and lessons learned. MarTech engineering should deliver needed capabilities to the team, including cybersecurity systems able to keep pace with the expansion of personalized experiences.

Find and train translators and advanced tech talent

Personalizing spaces, moments, and ecosystems will require very different skill sets from those of the traditional marketing operation today. In addition to data scientists and engineers, marketing organizations will need analytics translators who can communicate business goals to tech stakeholders and data-driven outcomes to the business. As data become more complex and personalization use cases more advanced, the need for these translators will intensify. We predict a significant shortage of analytics translators. Today, only 10 percent of US graduates in business and STEM fields (science, technology, engineering, and mathematics) go into business-translator roles. By 2025, we estimate that figure will rise to 20 to 40 percent to meet the expected demand. Needless to say, the ability to recruit and develop translator talent will provide a significant competitive advantage in developing cutting-edge personalization capabilities.²

2 "The age of analytics: Competing in a data-driven world," McKinsey Global Institute, December 2016.

Scenario: Profile sharing benefits



Dr. Mia books a flight and hotel for her upcoming conference. The airline provides the hotel with her flight information, and will automatically let the hotel know if she is delayed.



On landing, the hotel texts her with the fastest routes and options for ride-sharing, taxi, and public transportation. Meanwhile, her credit card company assembles a suggested itinerary based on past purchasing behavior.



In her hotel room the doctor finds a printed copy of the itinerary, along with slippers and fruit similar to the hotel chain's Asian properties that she frequents.

Not surprisingly, the battle for AI talent will escalate. While organizations will need to figure out which talent to hire (those with core capabilities to drive creative problem solving) and which to access through an ecosystem of external talent, leading companies are moving aggressively to acquire relevant talent. Some 52 percent of the most-digitized companies build AI capabilities in house, compared with just 38 percent of other companies, according to a recent McKinsey survey.³

The buildup of relevant tech talent will need to be matched by improved training so that people throughout the organization understand not just how to use new personalization tools but also how they can help them make better decisions. That means training call-center agents, sales teams, and marketers, for example, in how to use emotion and sentiment-analysis systems to better support customers. Rotation programs, in which people train in a variety of teams, will be particularly important to help spread knowledge and deepen organizational proficiency in key areas.

Build up agile capabilities

Given the iterative, cross-disciplinary nature of personalization efforts, traditional siloed marketing teams won't work.

Instead, personalization requires a commitment to agile management, including cross-functional teams dedicated to specific customer segments or journeys with the ability to execute rapidly. Performance measurement must evolve similarly and become more focused on testing velocity, success rates, and creative boldness.

In addition to demonstrating needed expertise, the ability to collaborate and integrate information will be key to professional advancement. Equally important will be the ability to collaborate and solve problems with colleagues from across the organization, in IT, analytics, product development, and legal.

Annual budgeting and strategy processes must also become more flexible with frequent reviews to assess current initiatives, chart new ones, and realign funding and resources in support of key priorities.

³ Ibid.

Protect customer privacy

The nature of data privacy has rightly become a source of concern for consumers and brands alike. In the wake of repeated data-privacy scandals, 46 percent of customers want increased governmental regulation to protect data privacy.⁴ Companies at the cutting edge of personalization innovation are more likely to – rightfully or not – trigger privacy concerns among the customer base. As such, proactively managing customer privacy will be especially important.

Organizations need to go out of their way to make clear that they take data privacy seriously, by being transparent about how data will be used, limiting processing of personal data to what is necessary, protecting data against theft, and granting customers the right to be forgotten. Data governance and privacy policy considerations must become part of a marketing organization's standard operating model rather than an incidental management issue. Ongoing training on legitimate first-party data-collection methods and uses of data, including sharing data with partner platforms, is required to make this happen. Privacy issues lie at the heart of the trust between customer and brand. Companies need to get it right.

Get started

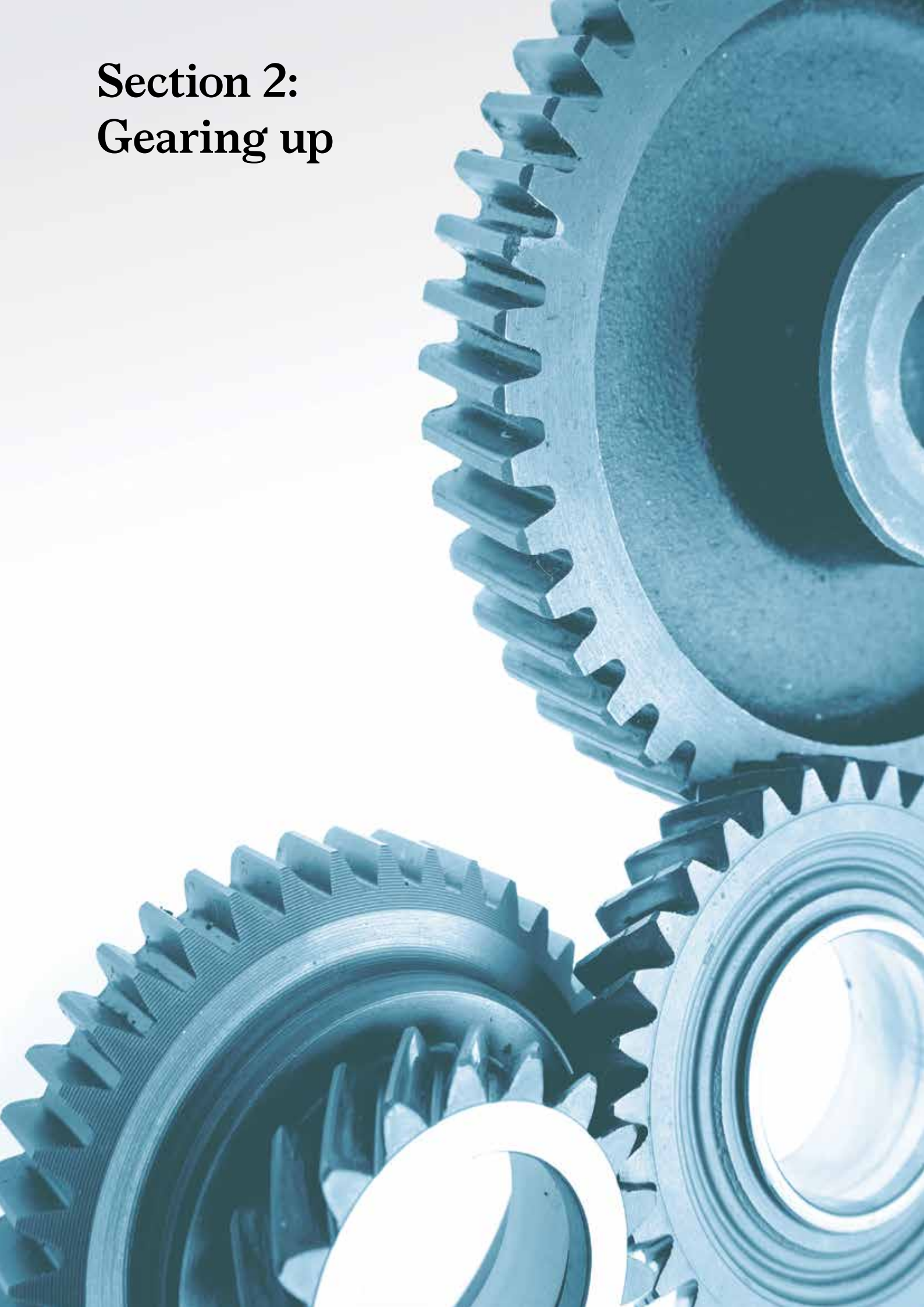
Developing a personalization capability is a journey to get to the full suite of capabilities needed for true dynamic personalization: always-on, real-time, one-to-one communication across the consumer ecosystem. Often, the hardest part is just getting started. But in our experience, most companies have more than enough data and people to get value right away. The first step is to determine which use cases to focus on (converting new customers, increasing spend of loyal customers, etc.) and put an agile team on each of them to rapidly test and learn which offers and interactions deliver best. This hands-on approach quickly helps people develop real experience and expertise. Even as teams move quickly, however, it's important to keep one eye on the end state so that you can effectively plan in order to make better decisions about people, technology, and investment.

★ ★ ★

Personalization is becoming more pervasive. Only by acting today, however, can companies hope to be in a position to deliver value to both their customers and their brands.

⁴ April 2018 Reuters/Ipsos poll of 2,237 people in the US; Gallup poll of 1,509 people in the US between April 2-8.

Section 2: Gearing up



Reality check – an interview with Philipp Westermeyer

Philipp Westermeyer, founder of Online Marketing Rockstars (OMR), tells the naked truth about personalization: few brands get truly personal! Because of their lack of entrepreneurial drive, massive fear of data security, and use of too many meaningless buzzwords, he calls out to brands to strip down overblown marketing engines and get more creative when designing truly personal customer experiences.

By Jesko Perrey, Jan Middelhoff, and Boris Toma

Hi Philipp. Let's start with an easy question. What is personalization?

Philipp Westermeyer:

I really like it! As the word personalization itself indicates, I believe personalization is about focusing on the person, for example, putting yourself in the shoes of the customer and truly understanding his needs, thoughts, and concerns. In doing so, you ensure that you create a tailored message that is transmitted to the customer through the right channel and at the right time. However, when thinking about the current marketing landscape, I still see many advertisers having a strict sender-based mentality. This results in irrelevant mass messages that are neither tailored to customer segments nor to individual customers. Switching from a sender- to a recipient-based mentality is therefore key to truly personalizing marketing measures.

So it's only a question of mindset, not technology?

Philipp Westermeyer:

Not quite. When it comes to technology, I see that companies often lack the simplest form of personalization means, such as effectively using their CRM database. Best practices in interacting with the customer in terms of frequency, content, or personalized recommendations are nowadays still hard to find.

Even for large e-commerce players where CRM contributes to a significant part of their revenue, I hardly see any truly personalized messages. Instead, it feels like they are focusing more on persistence than on personalization. Pushing the 10th reminder about booking a rental car for the vacation trip into the mailbox has nothing to do with personalization. Instead, being able to identify and suggest the right car model and offer the right price point based on historical customer data would really make a difference.

What do you consider to be the main challenges in personalization?

Philipp Westermeyer:

Besides the challenge of providing the technical foundation to perform effective personalization measures, I believe that companies need to work on a cross-functional approach to align their marketing initiatives. For example, I still see many companies in which the sales and branding departments do not communicate with each other. In fact, they fight against each other for a bigger portion of the budget. Thus, overcoming the functional battles and establishing real cross-functional collaboration will be an important step towards multichannel personalization.

Additionally, I have experienced that many European marketers are discouraged by the success of the global American players. They believe that they cannot keep up with those impressive growth stories. But when I think about these well-known American corporations, for example, Uber, Airbnb, or Nike, I notice that their main driver of growth is not marketing excellence but rather product excellence and a high capital commitment that enables significant growth. Thus, marketers need to stop believing that these global players are particularly smart in terms of personalization or marketing. Instead, I advise them to focus on their own marketing strategy to set the ground for disruptive personalization initiatives.

Disruption is a smooth segue. What are the key trends in personalization?

Philipp Westermeyer:

Today, personalization has evolved into a priority topic for CEOs, regardless of their company's size. However, to meet the ambitious aspirations of CEOs, companies must deal with a major obstacle when it comes to personalization: technical feasibility. I observe a clear push from large corporations to acquire ad-tech

players who provide the skills and resources required to personalize marketing measures. Although this strategic move may work for individual cases, I believe that acquiring ad-tech players is not the right answer for most of the cases, as seen in recently failed acquisitions in the retail industry.

Instead, focusing on available marketing tools and tailoring them to the current needs of the company is a much more efficient and effective approach to unlocking personalization potential. Especially in cases where personalization represents an additional marketing measure that substantiates classical marketing initiatives, I believe that building on existing marketing tools is the right step towards personalization enablement.

In addition, I also see a trend of more online players offering personalized offline experiences to make the whole customer experience more tangible. For example, eyeglass e-commerce players such as Mister Spex allow customers to book their in-store eye diagnostic appointment online. This allows them to collect relevant customer data to prepare for the appointment and offer the best customer service in-store, for example, by greeting the customer by name or finding the right eyeglass model.

Harmonizing personalization measures in online and offline channels is a key trend in personalizing the entire customer journey.

You talk about trends and successful cases. What's the holdback?

Philipp Westermeyer:

In the last couple of years, we have experienced many data scandals that have been exploited in the media. Since the introduction of the GDPR, society is even more sensitized towards data protection topics. I believe that these incidents deter managers from taking the next steps towards data-based personalization. On the other side, stricter data regulation has also influenced consumers who are now more cautious when sharing their personal data. In fact, most remarketing initiatives are perceived negatively by society.

I personally see this trend in our OMR events as well. Workshops and speeches on data security and GDPR-compliant marketing are always fully booked. When thinking in broader terms, there might also be a cultural dimension to this observation; for example, Germans tend to be more rule compliant and risk averse compared to Americans.

In addition, I also observe that most companies are no longer owner-led. This might have led to a lack of drive and initiative in areas of high uncertainty and risk. Finding a manager who is willing to take on such a role is very challenging.

... but worth the effort, right?

Philipp Westermeyer:

Let me answer like this: I can currently think of three industries that would benefit from true personalization measures. First and foremost, I believe that there is still a lot of potential in the e-commerce industry. Besides common CRM initiatives that focus on very simple personalization methods, for example, using first names in newsletters, I do not see impressive personalization measures in this industry across the board. In my opinion, e-commerce players mainly lack authenticity in their messages. Providing tailored, authentic, and automated marketing messages at scale is key to disrupting this industry. The whole dimension of creating authentic and empathic one-to-one relationships with consumers is a widely discussed but only selectively implemented topic.

Second, I believe that the travel sector can highly benefit from personalization. The nature of this industry provides a lot of personalization potential that can be unlocked by using customer data in a meaningful way. Interestingly, I feel like small, family-owned hotels personalize their messages in a more relevant and authentic way than large hotel chains. There is a lot of untapped potential in this industry and I anticipate a lot of movement in the coming years.

Lastly, I am convinced that the insurance and banking industry can unlock a huge potential by personalizing its service. When we think about the last huge financing rounds in the start-up scene, we clearly see that most of the rounds were closed by fintech start-ups. Exciting digital and mobile-first brands are emerging. Some of them already pursue some sort of personalization strategy. However, there is way more to come. I see a lot of innovative personalization strategies in the following years that will truly disrupt the industry.

That explains why companies are declaring personalization a top priority now.

Philipp Westermeyer:

Right, I believe that the times of simply investing in the classical online marketing channels to reach new customers and unlock untapped growth potential are over. Costs per click are rising, margins are under constant pressure, and the marketing landscape is more competitive than ever before. Today's world is simply more demanding and proven marketing strategies no longer work.

Companies must master various marketing challenges to truly stand out by, for example, setting up a holistic attribution model or creating truly innovative content to inspire customers. To remain competitive, companies need to ask themselves how to become



Philipp Westermeyer

Founder, OMR

less dependent on the GAFAs tech giants (Google, Amazon, Facebook, Apple) and escape the vicious cycle of raising customer acquisition costs. From my point of view, I see personalization as the main lever to address this challenge.

In fact, I believe that personalization consists of two aspects: first, it is about margin optimization. Leveraging the existing customer base and directly reaching out to the customer instead of going through an intermediary who claims a major part of the margin is a promising approach to optimizing margins. Second, I believe that personalization is also about customer experience. Developing seamless and tailored customer journeys to increase customer satisfaction, loyalty, and, ultimately, value is another crucial pillar of personalization.

But let's think about brands that are truly personal. Although there are a few players who stand out with impressive creatives and innovative content, I honestly cannot think of a brand where I say, "Wow, their offer is truly tailored to my needs." Many companies are still at the beginning of their personalization journey.

Speaking of beginnings, what would you tell executives on how to get started?

Philipp Westermeyer:

This is a very interesting question. From my perspective, there are several areas that executives should focus on.

Executives need to step back and try to navigate through the omnipresent marketing buzzwords and empty phrases. Practically speaking, this means they need to add Personalization @ Scale to the list of priority topics and remain in the driver's seat of customer-focused change.

Personalization @ Scale has proven to be a transformative and innovative approach towards customer centricity, encompassing all parts of the organization from IT to sales to legal to marketing. It really is a mindset shift rather than merely a functional upgrade.

In the end, I am convinced that companies will only succeed if they manage to truly differentiate their products or services. The times of incredible growth through performance marketing for a random product are over. In fact, we are back at the most essential form of marketing: if you have nothing to offer at your core that is a true value-add to the customer, you won't succeed. So let's get to it.

Thank you for your time, Philipp.

Background

Hosting one of the world's largest events for digital marketing and tech with over 50,000 visitors in Hamburg, Online Marketing Rockstars (OMR) has become the knowledge and inspiration platform for the digital and marketing scene in

Europe. Philipp Westermeyer, founder of OMR and successful entrepreneur, brings people together to inform and entertain them through events, websites, magazines, and podcasts about digital marketing and tech.

A technology blueprint for Personalization @ Scale

Personalization @ Scale requires companies to take on the challenges of technology and business in tandem, starting in the C-suite.

By Sean Flavin, Jason Heller, and Christian Fielitz

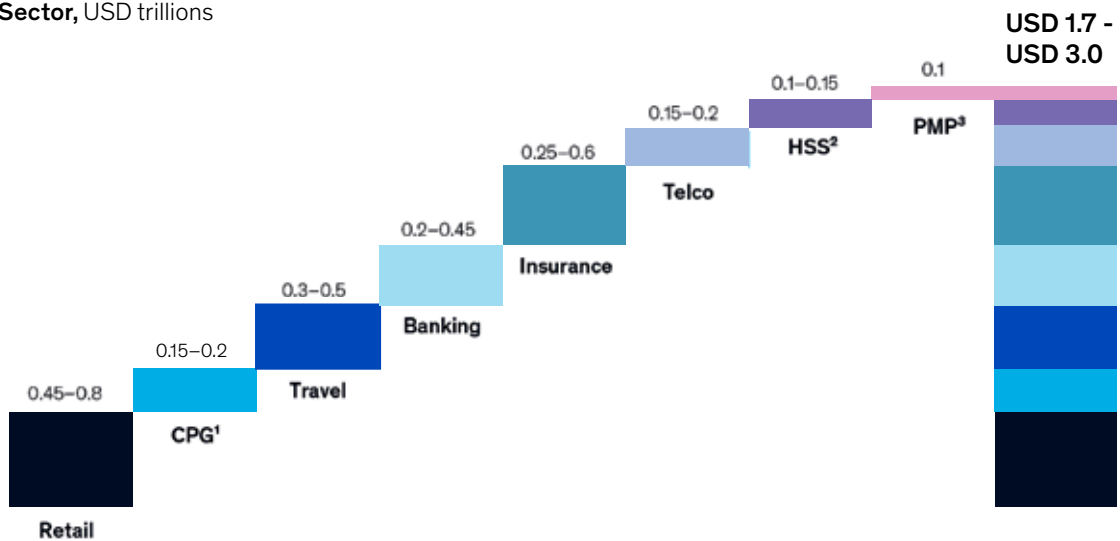
The true prize of modern marketing is delivering experiences that are both world class to the consumer and deliver value to the business. Personalization is a crucial weapon in the marketer's arsenal to achieve that goal. That's how businesses can deliver tailored recommendations, content, offers, and experiences, across all channels and devices, along the entire customer journey. Personalization @ Scale has the potential to create USD 1.7 trillion to USD 3 trillion in new value (Exhibit 1). Capturing

this value will require mastering the technologies and addressing the organizational disconnects – all while forging trust with customers and protecting their data. But implementing and integrating the right technologies create significant complexity and call for a lot of coordination. The companies that overcome the barriers to Personalization @ Scale are those that tackle both technology and business challenges in tandem, starting with the CMO and CTO/CIO working together closely.

Exhibit 1

The value of personalization is in the trillions of dollars

Sector, USD trillions



¹ Consumer packaged goods

² Healthcare systems and services

³ Pharmaceuticals and medical products

Source: Based on projections in McKinsey Global Institute, "Notes from the AI frontier: Insights from hundreds of use cases," April 2018. The study notes that this new value "will be captured in a variety of ways, for example, more valued products and services, revenue growth, cost savings, or, indeed, consumer surplus."

The 4Ds that drive Personalization @ Scale

Personalization @ Scale relies on an organization's ability to orchestrate the 4Ds – data, decisioning, design, and distribution.¹ Addressing the technology in each of these Ds is the key to unlocking the full power of personalization (Exhibit 2).

Data

Challenge:

The data required for effective personalization is trapped in silos.

Solution:

Integrate a customer-data platform and data-management platform, augmented with identity-resolution platforms to unify data and make it available across channels for activation.

Data must be centralized and made available so that activity in one channel can immediately support engagement in another in real time or near-real time. For this to happen, three critical data-management systems are needed:

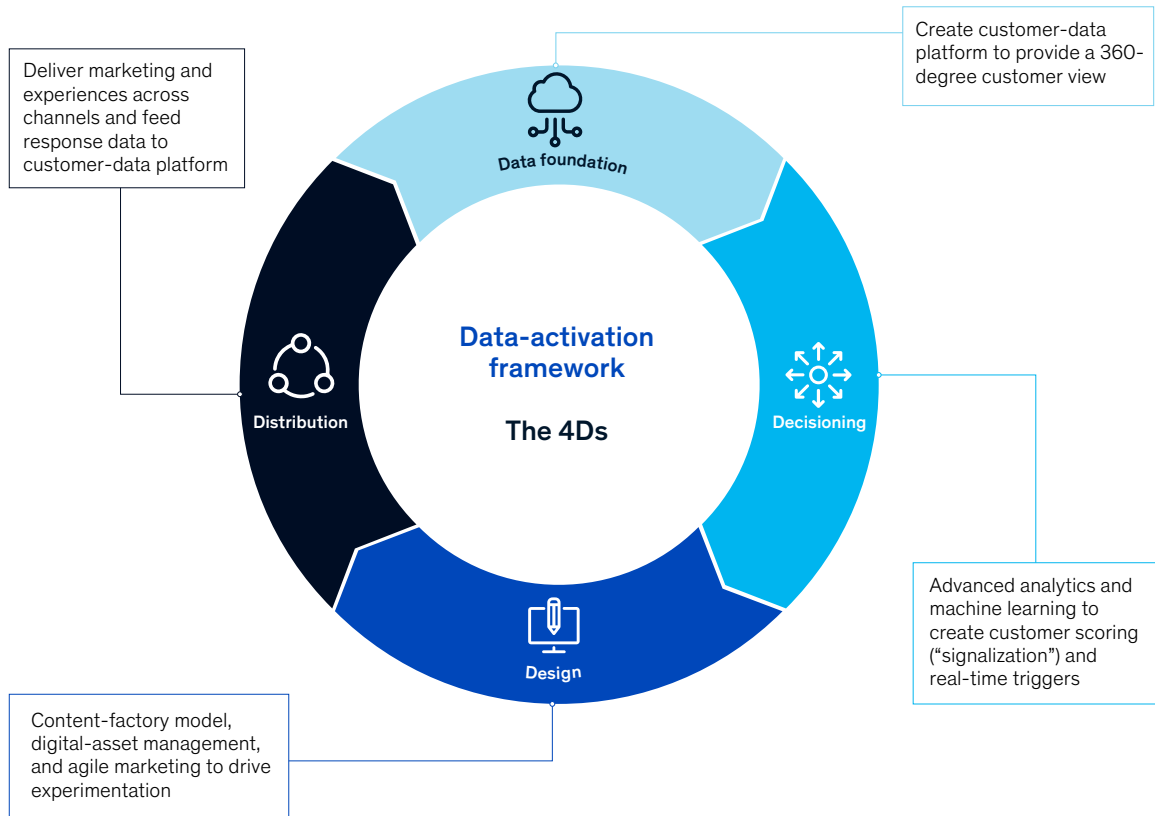
– Customer-data platform (CDP)

In most companies, customer data is distributed across separate, disconnected systems, typically managed by different stakeholders. A CDP solves this problem by centrally connecting the most valuable data in a flexible, unified model to develop an addressable customer identity that can be used consistently across channels. A CDP typically sits in a public or private cloud (though it can be deployed on-premises when needed) in order to handle terabytes – sometimes even

¹ Julien Boudet, Brian Gregg, Jason Heller, and Caroline Tufft, "The heartbeat of modern marketing: Data activation and personalization," March 2017, McKinsey.com.

Exhibit 2

The solutions architecture and operating model should be guided by a simple and effective organizing framework



petabytes – of data and make it available with low latency. A modern CDP should provide a user-friendly interface so that nontechnical marketers can use the data, plus an analytics workbench where data scientists can deploy machine learning and AI models to “signalize” the data – creating one-to-one signals and microsegments that can be used for targeting and personalization. Although the CDP must also connect with enterprise data systems throughout the organization, it should be developed as an independent, stand-alone asset, with the marketing organization defining requirements and serving as its primary user. CDP solutions range from turnkey off-the-shelf software, to fully custom builds, to hybrid models. We have found that a hybrid approach is often the most effective: managing an in-house data lake with an external SaaS-based CDP platform sitting on top, so to speak.

— **Identity-resolution platform**

The CDP relies on first-party data. But in many cases, it will be impossible to resolve a customer identity using first-party data alone. Identity-resolution platforms increase the match rate of known customers with otherwise anonymous digital IDs, expanding the pool of addressable customers and prospects. Some of the techniques used include data onboarding – matching email addresses to web-browser cookies and to the unique IDs of mobile devices, as well as matching the IDs of multiple devices owned by the same individual. Identity-resolution platforms manage large-scale data partnerships that create customer, device, and location graphs across a broad ecosystem of digital and nondigital channels. Identity match rates are highly variable, depending on the vendor, types of customer segment, and geography, which is why it’s often useful to work with multiple vendors. Worth noting is that this is a space that will continue to evolve with privacy regulations. It is crucial to comply with data-privacy regulations, such as GDPR in Europe, the forthcoming California Data Privacy Act, and LGPD in Brazil.

— **Data-management platform (DMP)**

A DMP receives signalized data from the CDP and makes it available to activate in digital channels. A DMP also makes third-party data available to create additional microsegments and rich “look-alike” segments. For example, the CDP may include a sizable segment of customers who are migrating upward in value, have made two or more purchases in the past six months, and recently visited the website. The DMP can sync this segment against third-party data to identify subsegments within the larger group, such as mil-

lennial fashion mavens or hip, boomer grandparents. The DMP makes these microsegments available via its data marketplace, creating a much larger pool of prospects who share the same characteristics. These look-alike segments can then be targeted with tightly tailored messages and offers in owned and paid digital channels.

All these tools have been around for a while, but in most organizations, IT has traditionally taken the lead in data management. As a result, data that could be valuable for modern marketing has often been left trapped in a silo and unavailable to marketers. To break the bottleneck, marketing and IT leaders must develop a shared vision around how data can be made available across channels. It starts with the CMO and CTO/CIO working closely on a business case and road map and then rallying the needed support from across the organization. Key steps in the execution plan include detailing use cases, determining the data needed to enable them, defining how and where data will be combined, identifying the marketing technology systems that will use the data, and developing data governance and a cross-functional data-governance council.

Decisioning

Challenge:

Decisioning logic resides in individual, channel-based, black-box systems – or it does not exist at all, resulting in a disjointed experience for customers.

Solution:

Create an integrated decisioning engine that uses machine learning and AI models to score various propensities for each customer.

To deliver a consistent experience, savvy marketers build a set of centralized analytic models in the CDP that create propensity and uplift scores for customers at the individual level. These models allow companies to predict the next best marketing action to deliver to the customer, based on a complete set of both individual and microsegment behavior. The decisioning engine needs to balance a series of competing marketing rules to ensure that offers and experiences do not collide or create inconsistent experiences. Increasingly, machine learning and complex AI are used to optimize decisions and find patterns not previously detected by static models.

No single platform today can fully serve as a centralized decisioning engine, despite claims to the contrary. That leads some companies to build their own decisioning engine. Our experience is that this creates a lot of technical debt and potentially freezes a business out of a dynamic space. Innovative vendors are developing independent solutions, and the leading marketing cloud platforms are investing heavily to improve their AI-based decisioning capabilities.

Marketing and IT leaders must develop a shared vision around how data can be made available across channels.

Marketing leaders need to work with their technology colleagues to develop a solution architecture and decide how to balance what to build and what to buy. Keep in mind the trade-off between getting quick results and building long-term advantage. Key considerations include: How unique are your requirements, and can they be met with an off-the-shelf solution? How prepared and resourced is your company to build a distinctive AI-based decisioning engine and a user-friendly software interface? Are core decisioning capabilities a unique part of your value proposition and something that it is critical to own?

No matter the choice, it's always a good idea to maintain a program of active experimentation with the new decisioning tools that are constantly emerging and improving. New vendors that offer AI-based solutions usually offer low- or no-cost trials, which provide an easy way to test new solutions versus current capabilities. This is probably the space that will evolve most in the coming years.

Design

Challenge:

Marketers cannot match the volume of content and pace of experimentation demanded by personalization.

Solution:

Break content into small modules that can be dynamically mixed and matched for maximum flexibility.

With Personalization @ Scale, the number of different ways to address customers increases exponentially. This creates a need to design and create a lot more content.²

To do so, a company has to move away from traditional design processes, which develop mostly customized content, and instead look to operating a content factory. Content – art, photos, copy, videos, emails, banners, web and app components, and even components for addressable nondigital channels – must be broken into modular components. These can then be mixed and matched in dynamically populated templates to be delivered in various formats on the fly. All these elements need to be tagged for easy retrieval and tracking, and stored as a content library inside a digital-asset-management (DAM) repository and dynamic creative optimization platform.

The effective management of modular content and offers requires a thoughtful offer taxonomy, based on a wide range of factors, including customer segment, offer type, channel, placement, product category, and related campaigns. Without this taxonomy in place, offer selection cannot be automated. All content and offers must be stored and tagged using this taxonomy within a centralized offer repository, which is often a custom-developed database designed to store all offer metadata along with reference IDs that are commonly housed in the DAM. A user-friendly user interface is needed to allow nontechnical staff to create new assets and offers. Once content and offer modules have been tagged, the decisioning engine can continuously test content variations, doubling down on the versions that deliver the best results.

Distribution

Challenge:

There is a lack of real-time orchestration between channels.

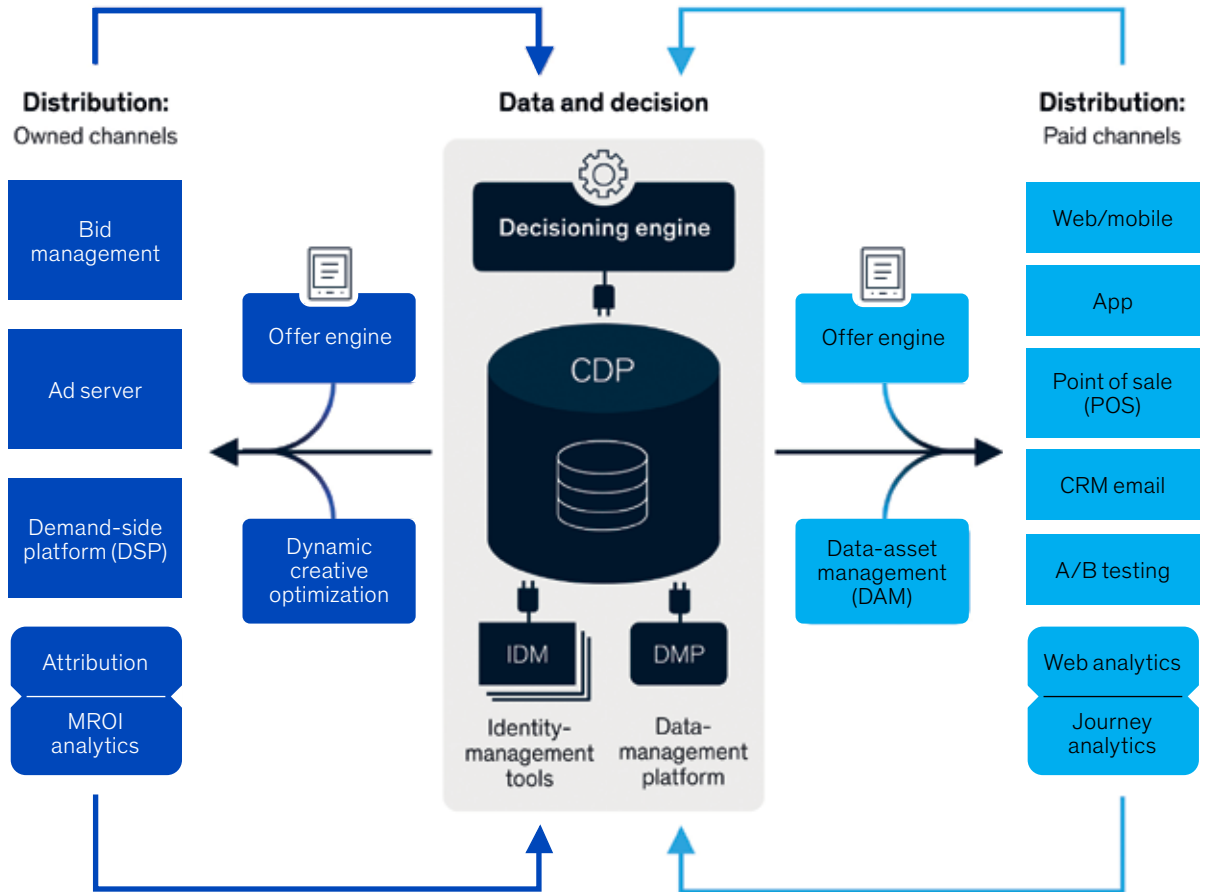
Solution:

Integrate channels to coordinate communications and react to customer actions.

The last mile in delivering Personalization @ Scale is connecting data, decisioning, and design elements to the marketing technology systems (such as A/B testing, content-management systems, email platforms) that deliver experiences to consumers. Having all these elements working together allows companies to react at moments of opportunity as opposed to solely relying on a series of predetermined campaigns to engage customers and prospects. For example, when a customer is shopping for a product, the data and decisioning systems identify which offer to serve based on that person's profile, which then triggers the content and offer repository to assemble the relevant content modules and serve them to the marketing technology platforms, which in turn deliver them to the customer in the relevant channel. The system tracks how the offer performs, sending the data back to the CDP in real time so it can "learn" what works and what doesn't (Exhibit 3).

² See David Edelman, Jason Heller, and Steven Spittaels, "Agile marketing: A step-by-step guide," November 2016, McKinsey.com, on the need for deploying cross-functional teams to meet the organizational challenges of Personalization @ Scale.

The data and MarTech stack to enable Personalization @ Scale



Bringing it all together

Most CDPs have application programming interfaces and other data connections that can link to the mix of channels and data systems of record (MarTech, adtech, CRM, content, e-commerce, and POS that most companies use to deliver offers to customers. This makes the integration and activation of data across the tech stack relatively easy and helps to resolve a basic historical issue: marketing technology platforms that have been deployed with little thought as to how these systems could effectively share data to drive more effective engagement at every interaction across all channels.

While new technology can help resolve this problem, the bigger problem tends to be organizational. “Channel owners,” who have responsibility for a single channel, tend to be rewarded based on the performance of only that one channel. So they understandably have little incentive to take the extra time to think about sharing data with other channels. Addressing this disconnect requires implementing an agile-marketing operating model. That means creating

cross-functional teams that include channel owners and are responsible for optimizing the entire cross-channel journey of customers within their segment.

The technology to unlock the value of Personalization @ Scale is readily available, and you may be surprised how much of it you already have in place. You don’t need to tackle everything at once. Develop a road map with regular stage gates to evaluate platform progress based on the trade-off between value at stake and ease of implementation. Identify and prioritize quick wins that make it easy for the organization to continue funding the transformation.

Implementing a personalized e-commerce experience

How an Asian home furniture retailer boosted online revenue by 23 percent

By Thierry Chesnais, Lars Fiedler, Jason Heller, and Anshul Goyal

When shoppers click on a link after a search, they will navigate away in a matter of seconds if they don't see what they want. While that reality has been true for a while, only recently has technology caught up to the point where it's possible to engage potential customers with the right content, at the right time, and in the right way quickly enough. What's more, that technology is not as complex to implement – and doesn't take as long to deliver big results – as expected.

The situation – fragmented solutions, slow processes

Growth at a global Asian home furniture retail client had been lower than expected. One of the reasons for that poor performance was that its website in one core market was not personalized for visitors and, therefore, did not suggest relevant products. Customer experience also varied across channels.

The retailer had attempted to create more personalized experiences, but progress was well below expectations. Existing solutions only addressed part of the overall puzzle, resulting in greater fragmentation. The retailer tried to make it work for years without much success and had no clarity on where to start. And outdated processes meant the business could launch just a single personalized campaign – from concept, to design, to approval, and then final execution – but it would take months to complete.

Four areas that drove impact

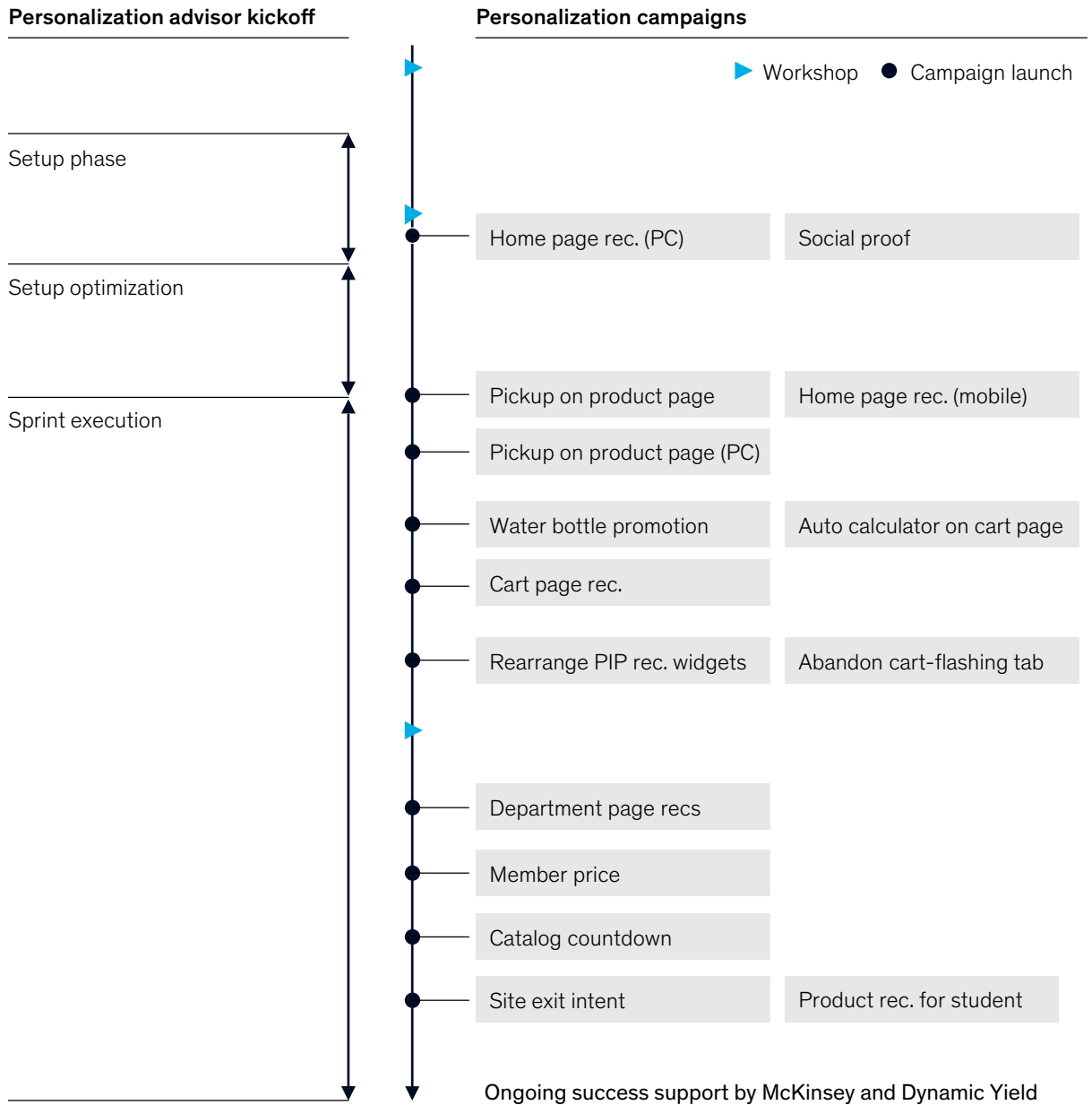
To improve customer engagement online and, ultimately, boost revenue, the team focused on implementing technology that addressed the complete issue, along with developing client capabilities, so they could sustain growth over time. Impact came from focusing on four areas:

1. Agile marketing to bring business and technology together

The project started with the setup of a cross-functional team made up of people from HQ, digital marketing experts, project managers, front-end developers, customer data analysts, e-commerce merchandisers, and sales channel managers. They generated 20+ campaign ideas to improve the customer journey. The team then prioritized them based on the expected impact and the effort required to implement them. The team also created 30+ focused customer segments based on a deep understanding of the visitors to the site. This level of insight provided clarity so that they could design more targeted campaigns. The team decided to focus on the first part of the customer journey, where the impact with key customer segments was largest. Working in an agile way – including sprint planning and daily huddles to ensure quick prioritization and execution of the most impactful elements – the team launched 15 campaigns in the first 4 months (Exhibit 1).

The team launched 15 campaigns in the first 4 months and expect to launch 2 - 3 more per month

We have tracked relevant business KPIs¹ since campaign² launch



¹ Including page views, click-through rate, add-to-cart rate, average order value, and e-commerce revenue

² Each campaign leaves 10 - 20% traffic as a control group

Source: McKinsey

2. Laying the data foundation

The team worked with the client to implement a tool called the Personalization Advisor, powered by Dynamic Yield. For the initial campaign, the Personalization Advisor captured and analyzed all possible user data points from the client's proprietary channels (e.g., web, mobile, apps, emails, ads). The tool, which also had the ability to capture external sources of data (e.g., third-party data marketplaces, policy-controlled data sharing), was able to integrate with the business' enterprise systems (e.g., CRM, ESP, tag-managers, POS, loyalty). With this foundation in place, the tool embedded a client script into web browsers and mobile apps to collect data without interrupting the user experience, and fed the data into the client's back-end processes.

3. A decisioning engine to personalize offers across channels

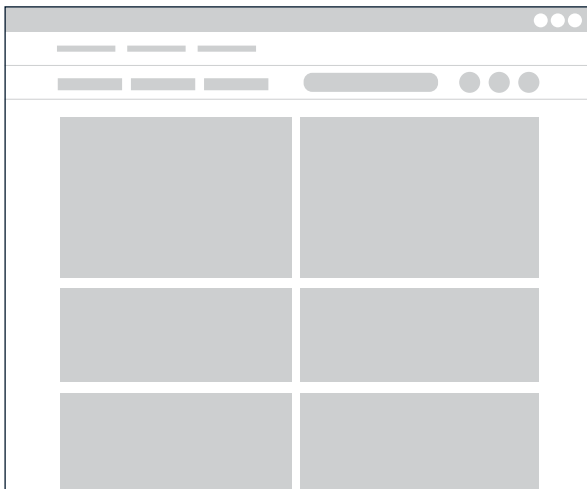
Personalization Advisor powered by Dynamic Yield optimized product recommendations at different touch points throughout the customer journey through a fast testing engine (e.g., by comparing recently viewed items vs. most popular, best-selling items vs. low price, "also purchased" vs. "also viewed"). The tool drew on predefined strategies and adjustable campaign templates to execute across channels. As a result, product recommendations on the home page (Exhibit 2) was launched as the first use case within three weeks of implementation.

Personalization Advisor also analyzed the campaign performance using machine learning and

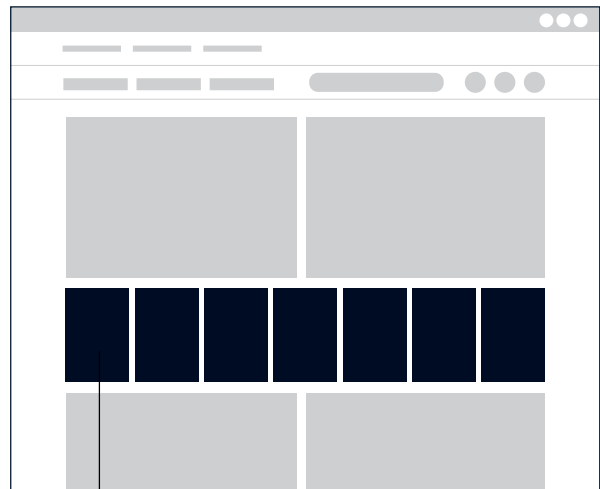
Exhibit 2

Customer experience – home page recommendations, desktop

From generic content to all users ...



... to targeted product recommendations



Product
recommendation
on home page

Objective: Increase visitors' add-to-cart rate by identifying key triggers

Test: Recently viewed vs. most popular items; best-selling vs. low-price items

Source: McKinsey

robust A/B testing to identify which campaign and which variation within it had the greatest impact on conversions and overall sales. It then adjusted offers automatically. There were multiple variations within each campaign to ensure

appropriate testing before letting campaigns run in autopilot mode. The first six statistically significant campaigns delivered 23 percent uplift in e-commerce sales (Exhibit 3).

Exhibit 3

6 significant campaigns generated an annualized impact of 23 percent revenue uplift

Revenue uplift through personalization

Type	Channel	Variation	Annualized impact, percent
1 Home page recommendation	Mobile	1. Most popular (w/wo buttons) 2. Mixed recently viewed and most popular (w/wo buttons)	2
2 Home page recommendation	Desktop		7
3 Cart recommendation	Desktop	1. Viewed together 2. Bought together	2
4 Pickup option	Mobile	1. With icon 2. Text only 3. Different colors 4. Different positions	1
5 Pickup option	Desktop		4
6 Department page recommendation	Desktop	1. Bedroom 2. Living room	7
Total			23

Overall impact

Annualized sales uplift from personalized campaigns, percent



Source: McKinsey

4. Capabilities to sustain the impact

During the engagement, we also trained a core team of five people from the client to both operate the tool on their own and work as an agile marketing team. Six months after the end of the engagement, the client was able to double the number of campaigns (Exhibit 4). With continuous coaching and technical support from McKinsey, the client team continued to evolve further, launching two to three new campaigns per month, while testing, improving, and maintaining the existing ones.

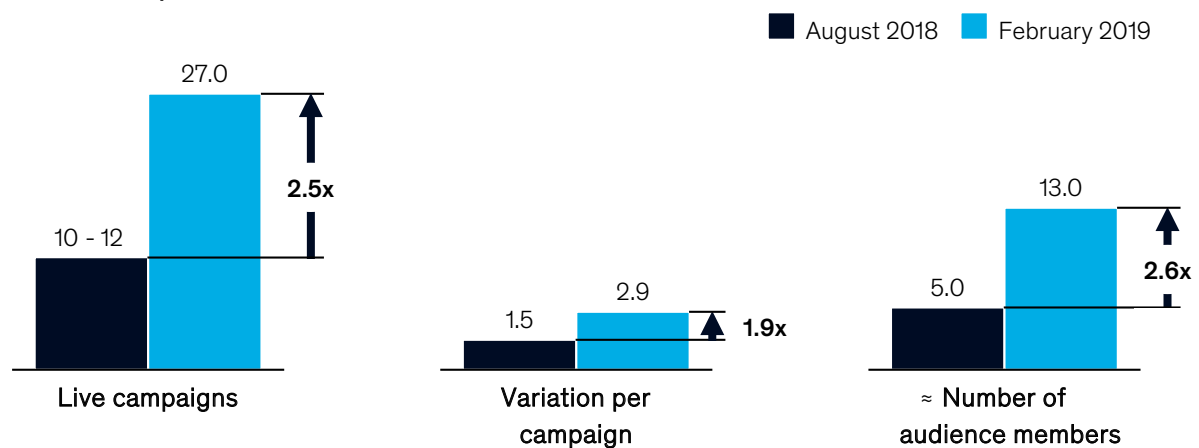
Results

- Increased sales by over 23 percent within four months with six successful campaigns
- Achieved payback time of about three to six months from implementation for the solution
- Trained five client team members in the process to ensure sustained impact and continued personalization through technology and agile implementation
- Reduced time to launch a campaign from over a month to a week

Exhibit 4

Personalization, campaigns, and impact continued to grow even 6 months after the engagement with continuous coaching and technical support from Dynamic Yield

Additional impact



Source: McKinsey

Section 3: Ascending in challenging terrain



From policeman to superman

How to turn security and privacy in personalization into a competitive advantage

By Julien Boudet, Jess Huang, Marc Sorel, Holger Hürtgen, and Kathryn Rathje

Personalization @ Scale is where retailers and consumer brands are competing to win. However, in the haste to “play offense” (using data, applications, and systems to capture value), executives are often overlooking their “defense,” i.e., how to preserve, protect, enable, and accelerate the hard-won gains of their digital efforts by ensuring Personalization @ Scale is secure and private.

Failing to adequately manage the risk of collecting, holding, and using consumer data to personalize offerings increases can have serious business consequences. Getting the security and privacy of personalization wrong can slow down time to market for new applications, constrain remarketing and consumer data collection, result in significant fines,

or worse, cause material harm to brand reputation through negative consumer experiences.

Nonetheless, most marketing leaders remain surprisingly unconcerned about how to manage the security and privacy of personalization. In a recent McKinsey survey of senior marketing leaders, 64 percent believed regulations would not limit current practices, and 51 percent of the same group believed consumers would not limit data access (Exhibit 1). Market leaders remain unconcerned although other recent surveys show that >90 percent of consumers are concerned about their privacy online and >70 percent have limited their online activity because of privacy concerns.¹

¹ Brian Byer, “Internet Users Worry About Online Privacy but Feel Powerless to do Much About It”. Entrepreneur. June 20, 2018. <https://www.entrepreneur.com/article/314524>. Last accessed June 2019. Citing Blue Fountain Media consumer survey results.

Exhibit 1

Marketers are confident that neither regulations nor consumer sentiment will limit data collection in the future

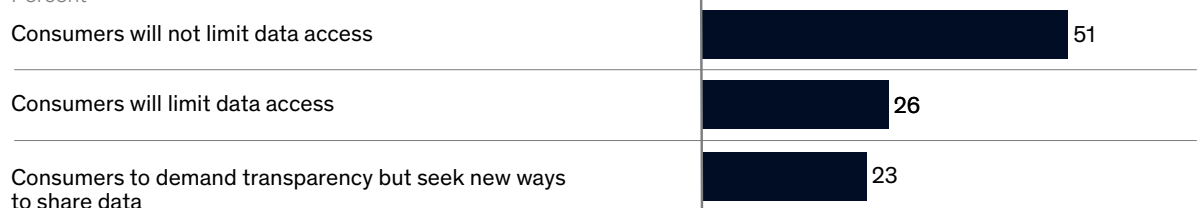
Marketers’ perspectives on regulations

Percent



Marketers’ perspectives on consumer attitudes

Percent



Based on question 27: How do you expect regulations to affect personalization practices in your industry? And question 28: How do you expect customer behavior regarding data collection to evolve over the next 5 years?

Source: 2018 Senior Management Personalization Survey

Getting this equation right can turn the security and privacy function from policeman to superman for personalization by reducing time to market, building trust with consumers, and materially reducing the likelihood of regulatory fines. Done well, integrating effective security and privacy approaches into a personalization program can also help eliminate tech debt, transform capabilities, address long-standing execution barriers, and break down siloes between the business and security/privacy functions on data and new operational needs.

Three key principles to get right as you start

For most companies, getting the security/privacy equation right is an effort to remediate and transform digital properties – the digital marketing applications and systems that generate, transmit, consume, store, or dispose of consumer data. Leading institutions typically adhere to three principles:

- 1. Make the transformation and remediation effort part of a broader security and privacy baseline assessment** across people, processes, and technology, tied to business use cases.
- 2. Put marketing at the center of the effort,** educating them on the value at stake. This can include, for example, establishing and enforcing security and privacy standards for creative agencies, using best practices for security and privacy behavior in their day-to-day work, tokenizing consumer data, ensuring consent compliance, sanitizing data before using it in outbound communications and remarketing, and being

accountable for incidents when they occur. The dialogue with marketing and other stakeholders in this context is iterative, matching the enterprise's evolving needs and use cases.

- 3. Align on core beliefs and a framework to enable digital property remediation and transformation** (Exhibit 2) to help the team quickly get the needed conviction and buy-in.

How to move quickly at scale

Prioritizing a few key actions across security and privacy areas will ensure outcomes that enable rather than disable the business:

Build a risk register for your digital properties to identify and prioritize control gaps

Taking a risk-back approach to security and privacy by using a fact base that non-technical executives can understand can help the executive team prioritize security and privacy spend. Clarifying how properties (i.e., information systems and assets) relate to each other, the threat landscape, and the business value chain clarifies where eliminating risks can enhance enterprise value.

Clarify data strategy, governances, and policies to meet global and local needs

Establish clear practices that balance business goals, customer needs, and regulations. Best-practice consumer and retail enterprises, for example, will often hold consumer data in the enterprise for no more than 13 months to track annual patterns of life through seasons/holidays, with gradings in hold times, depending on business focus (e.g., auto retailers often hold data longer to account for time between

Exhibit 2

Core beliefs about transforming digital properties to enable Personalization @ Scale

Digital property management is the next people management: knowing the identity, performance, and safety of applications is as important as knowing the same for your people

Anchor the approach in use cases: getting the transformation right requires understanding which business use cases the transformed digital properties will support and clarifying the architectural gaps to fill to support properties and use cases

Maintain a risk-based asset inventory: creating and maintaining a risk-based asset inventory to clarify the enterprise digital property landscape and relative compliance/business risk is essential to prioritize transformation initiatives

Align risk with enterprise appetite: taking a risk-back, minimum viable approach to building security and privacy by design into the transformation of digital properties is a commercial imperative to enable Personalization@ Scale

Clarifying roles, responsibilities, decision rights, and talent requirements across the organization will be key to ensure the organization can quickly embed the capabilities needed to bring new properties to market

Agile sprints mitigate execution risk: moving in agile sprints of cross-functional teams to demonstrate and capture the value at scale and mitigate execution risk is a requirement, not an option—demonstrating value by iterating on the answer

consumer purchases, which tend to be multiyear, not annual). They will also maintain a global privacy/security policy while tailoring locally to meet regulatory requirements (e.g., on privacy, GDPR, California Privacy Statute). Tokenization and sanitization of data before use in remarketing is another leading practice. Further, leading-practice institutions will clarify and align the enterprise on the minimal viable data and controls required to preserve a longitudinal view of the consumer and empathetically engage them at scale.

Train experts and develop documentation to ensure long-term compliance

Embed security and privacy by assigning business information security and privacy officers (BISPOs) and launch a security and privacy ambassador program that trains people on the enterprise's security and privacy practices. This helps ensure the integrity of digital properties continues long after they are transformed and remediated. Similarly, building security and privacy incident response plans that are "living documents" can help executive teams make better decisions faster on how to manage their digital properties and relationships with regulators in the event of a security or privacy incident.

Build security and privacy into enterprise analytics and application development to reduce rework and time to market for new capabilities

Consider the example of an enterprise seeking to transform itself into a platform company using consumer and customer data to cocreate APIs that transform how consumers engage with the brand. It missed at least one major market opportunity because of regulators' security concerns, frequently experienced application launch delays because of security-related rework requirements, and lacked the capacity to verify whether ~80 percent of applications developed annually to support the business complied with enterprise security and privacy requirements.

By building a set of security and privacy requirements into the back of its software development requirements engine, the enterprise flipped its security/privacy operating model and impact. It went from a model where a security/privacy core team monitored digital properties to a model where developer team members received security and privacy requirements during the design phase and became responsible for following them from the start. It would be an exception for the team to involve itself, for example, only if a development team declined to follow a specified security or privacy requirement generated by the testing engine. This approach ensured the security and privacy team covered >90 percent of applications developed, reduced downstream rework, accelerated

time to market, and allowed the enterprise to put security and privacy at the center of its value proposition to consumers.

This approach can be applied to digital property development and management and enables consumer brands and retailers to confidently uphold the promise of their Personalization @ Scale strategy.

Create and deliver role-based security and privacy training for all employees

Reducing phishing click-through rates and ensuring compliance in the front line begins with the mindset and behavior of the employee. Given that >80 percent of enterprise cybersecurity incidents begin with a person clicking on malware that they should not, regular training tailored to key roles (e.g., educating the marketing team on best practices for secure and private remarketing) is essential to reducing the security and privacy risk of personalization.

There are ~15 core behaviors of employees that can be addressed and transformed through a focused campaign of annual training, supported by regularly and nonlinearly delivered reminders (e.g., occasional emails and text message reminders, anti-phishing test campaigns). Similarly, building security and privacy requirements into performance management reviews (e.g., a threshold for volume of material security/privacy incidents in a line of business over a period of time) can ensure the business, not just the security and privacy experts, owns the problem and the solution.

Personalize security and privacy for the consumer

Leading financial institutions have already unlocked the value of increasing customer satisfaction on security and privacy in two ways: one, by taking the hassle out of consumer validation processes (e.g., reducing hold times, simplifying and tailoring multifactor authentication to meet consumer preferences), and two, by placing security and privacy controls on consumer-facing applications in the hands of the consumer.

Leading retailers and consumer brands can uncover these benefits by adopting a product management mindset to create security and privacy options that encourage consumer-facing applications and support functions. By partnering with cutting-edge security and privacy technology, innovators in global centers of excellence (e.g., Tel Aviv, Silicon Valley, Silicon Alley ([the Washington, DC, to Boston corridor in the US]), retailers, and leading consumer brands can ensure security and privacy processes are tailored to what is most convenient for the consumer using the latest capabilities. For example, multifactor authentication

by text, call, or random-generated code, or built-in strong-password-generating tools to simplify password recall for the consumer are good places to start. Measuring performance over time through NPS or other similar willingness-to-refer metrics with commonly available customer experience dashboards can ensure the technology and approach used to build security and privacy into consumer-facing applications are refined quickly and iteratively.

As consumer data proliferates, more devices connect, and consumers expect more from their trusted brands, the opportunity from Personalization @ Scale is massive. At the same time, the promise of personalization also carries with it the peril of treating consumer data in adherence to the security and privacy required to create a positive consumer experience while avoiding the downsides of reputational, operational, legal, and financial risk. Several core questions can help clarify where your enterprise stands and what to do about it:

- 1) What is your enterprise's anti-phishing test click-through rate?
- 2) What is your enterprise's security and privacy critical asset/system risk register?
- 3) What is the customer satisfaction score of the security/privacy features on your flagship consumer-facing application?
- 4) What is your data storage strategy?
- 5) What is the state of your secure-software-development lifecycle program?
- 6) When was your last security and privacy training for enterprise employees?
- 7) How complete is your security and privacy technology stack?
- 8) How do you manage consumer consent for consumer-facing sites and applications?

The answers to the questions above combined with the initiatives highlighted can help ensure that Personalization @ Scale is a benefit, not a bane, for any consumer brand or retailer.

Blurring shopping boundaries – omnichannel personalization

By Gal Gitter, Meg Raymond, Kelsey Robinson, and Jamie Wilkie

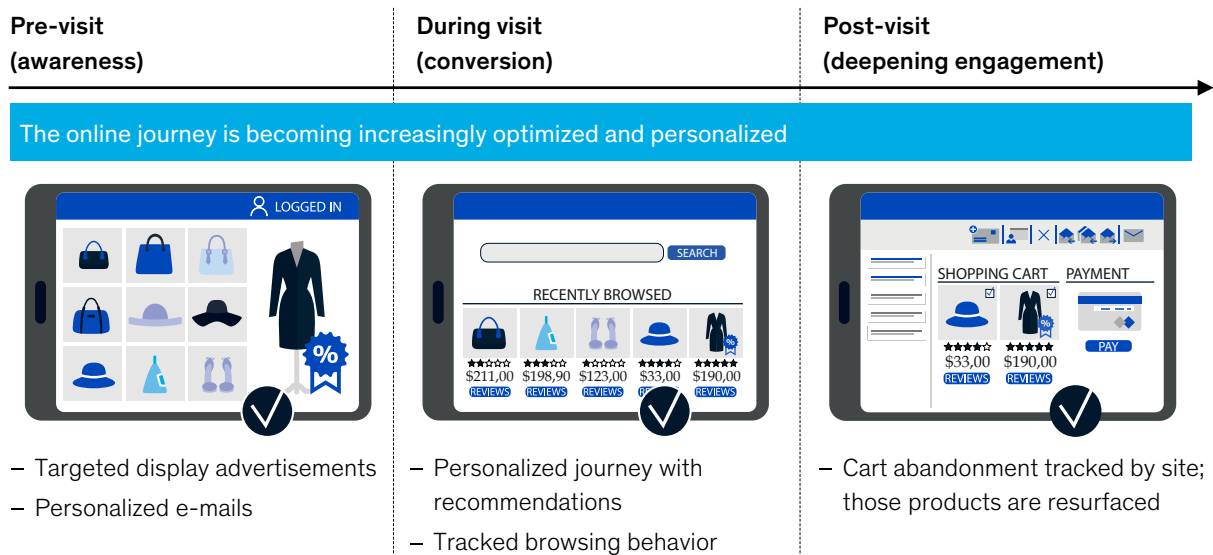
When it comes to personalization, the next digital frontier is in the physical world. As surprising as that may sound, companies that are able to personalize the customer experience across digital and physical channels – omnichannel personalization – can

achieve a 5 to 15 percent increase in revenue across the full customer base.¹

While the focus of personalization efforts has generally been on the customer’s online journey, in indus-

Exhibit 1

The online personalization is common; however, an in-person journey is not highly personalized



Source: McKinsey

¹ "Marketing's Holy Grail: Digital personalization at scale," Brian Gregg, Hussein Kalaoui, Joel Maynes, and Gustavo Schuler, November 2016, McKinsey

tries such as retail, convenience, grocery, and hospitality, more than 80 percent of sales occur in a physical location (Exhibit 1). Getting better at personalizing the offline journey is just part of the answer. The best companies are focused on improving how they personalize the online and offline journeys together.

Barriers to omnichannel personalization

We have found that many companies recognize the need for omnichannel personalization, but a number of reasons tend to stop them from following through on it:

Assumption of large technology investments with far-off ROI

Personalizing the in-person experience requires enabling digital touch points that often do not exist in physical locations, such as customer-facing digital screens, kiosks, or tablets used by store associates. Further, many companies are still working to strengthen the links across their marketing tech stack and on-site systems (e.g., inventory management), which together enable better omnichannel personalization features. Putting the tech to work – both hardware and software – can feel like a large investment of time and resources.

Difficulty of delivering seamless customer experiences and training employees

Personalizing the in-person experience often results in changes to the customer journey flow which, if not done thoughtfully, can hurt the customer experience. The bar is high in making the physical experience intuitive and simple for the customer – such as signing in at a kiosk, downloading and engaging with an app, or providing information to an associate in a live interaction. The front line needs training to understand and reinforce the customer benefit of these new journey steps.

Complex organizational and cultural shifts

Omnichannel personalization requires companies to rethink their organizational structure, capabilities, and incentives across the digital and physical parts of the business. This shift can only happen when incentives are aligned and measurement is done across online and in-store channels. Traditionally, however, companies operate their digital and physical channels independently, each with its own strategy, goals, and ownership of results. There is little incentive for one channel to support the others. Further, channel-specific teams lack visibility into what is happening elsewhere, which prohibits meaningful collaboration.

Getting omnichannel personalization right

To overcome these barriers and drive growth, companies should take these five steps:

1. Define the omnichannel personalization strategy and learning agenda

The best companies have a crystal-clear understanding of the key influence moments in the customer journey, from generating awareness pre-visit to converting during the visit to deepening engagement post-visit. They then identify the desired business outcomes at each step of the journey: incremental trips, basket size, and/or customer satisfaction. Finally, they prioritize the use cases to start testing based on their ability to deliver business benefit and their value to the customer. Here are a few ways companies have done this effectively:

Driving traffic and awareness pre-visit

Whole Foods wanted to build brand awareness and drive traffic to new locations and, especially, attract new customers, a key element of its strategy. The company deployed geofenced notifications to drive visits to the store when customers were either near a Whole Foods or a competitor store. About 5 percent of those who engaged with the notification visited a store, which is three times more than the industry average for post-click conversion rates.² Driving traffic to stores via retailer apps is still a relatively untapped opportunity – per a recent analysis conducted in a large US city, less than 25 percent of retailers attempted to draw their engaged app users into the store when they were nearby. Of course, companies need to exercise extreme care when utilizing pop-up notifications to avoid message dilution and customer dissatisfaction; nevertheless, contextualized messages will drive traffic to stores when deployed correctly and selectively.

Converting during the visit

McDonald's wanted to improve and modernize how customers experience McDonald's. To do so, they integrated the physical and digital world in the drive-through. They implemented decisioning engine technology in the drive-through menu boards to tailor the menu based on time of day, trending items, location, and weather.³ These efforts have made the ordering experience easier, driven stronger conversion, and increased basket size as customers more easily find the products they want and purchase additional recommended products.

Deepening engagement post-visit

Sephora's strategy to increase its customer base led it to efforts to increase store visits. The company

² <https://www.thinknear.com/case-study-whole-foods>

³ <https://news.mcdonalds.com/news-releases/news-release-details/dynamic-yield-acquisition-release>

turned to sending location-based notifications to mobile app users, reminding customers of reasons to visit local stores.⁴ These notifications could be tailored based on customers' communication preferences or length of time since their last visit to keep the retailer top of mind.

2. Address five digital touch points to help activate personalized experiences in the physical environment

To achieve omnichannel personalization based on identified use cases, companies need to connect digital and physical footprints. They should focus on five touch points where this convergence happens: mobile apps, digital displays, interactive screens, tech-enabled associates, and point-of-sale systems (Exhibit 2).

By systematically evaluating the impact of these touch points on consumers, organizations can understand customer behaviors and develop more effective two-way communication strategies. For these interactions to be effective, however, companies need a way to accurately identify customers, typically through self-identification or digital identification. Customers can either be identified automatically –

via location tracking on their app or a wearable device, or by means of visual recognition (this varies by market due to legalities) – or self-identify with a digital screen or by talking to an associate. When a customer is prompted to self-identify, this should be done as openly as possible, such as by asking for an e-mail address or phone number, with a tangible benefit to the customer in return, such as a personalized offer, free services (like Wi-Fi or phone charging), or a promotion. The point of sale also provides a natural opportunity to encourage customers to identify themselves in return for incentives like tying purchases to a loyalty account or getting an e-receipt.

To get the most out of these five touch points, companies should consider how the digital and physical channels can best reinforce each other to deliver a great customer journey. For example, in hospitality, most bookings occur online – but the in-person experience is the primary part of the customer journey. Hotels use “tap” apps and interactive screens to provide a personalized omnichannel experience before, during, and after the customer's visit, and there are opportunities to use their apps to expand to more personalization use cases (Exhibit 3).

4 <https://www.retaildive.com/ex/mobilecommercedaily/sephora-redefines-shopping-for-loyalists-with-unique-mobile-app>

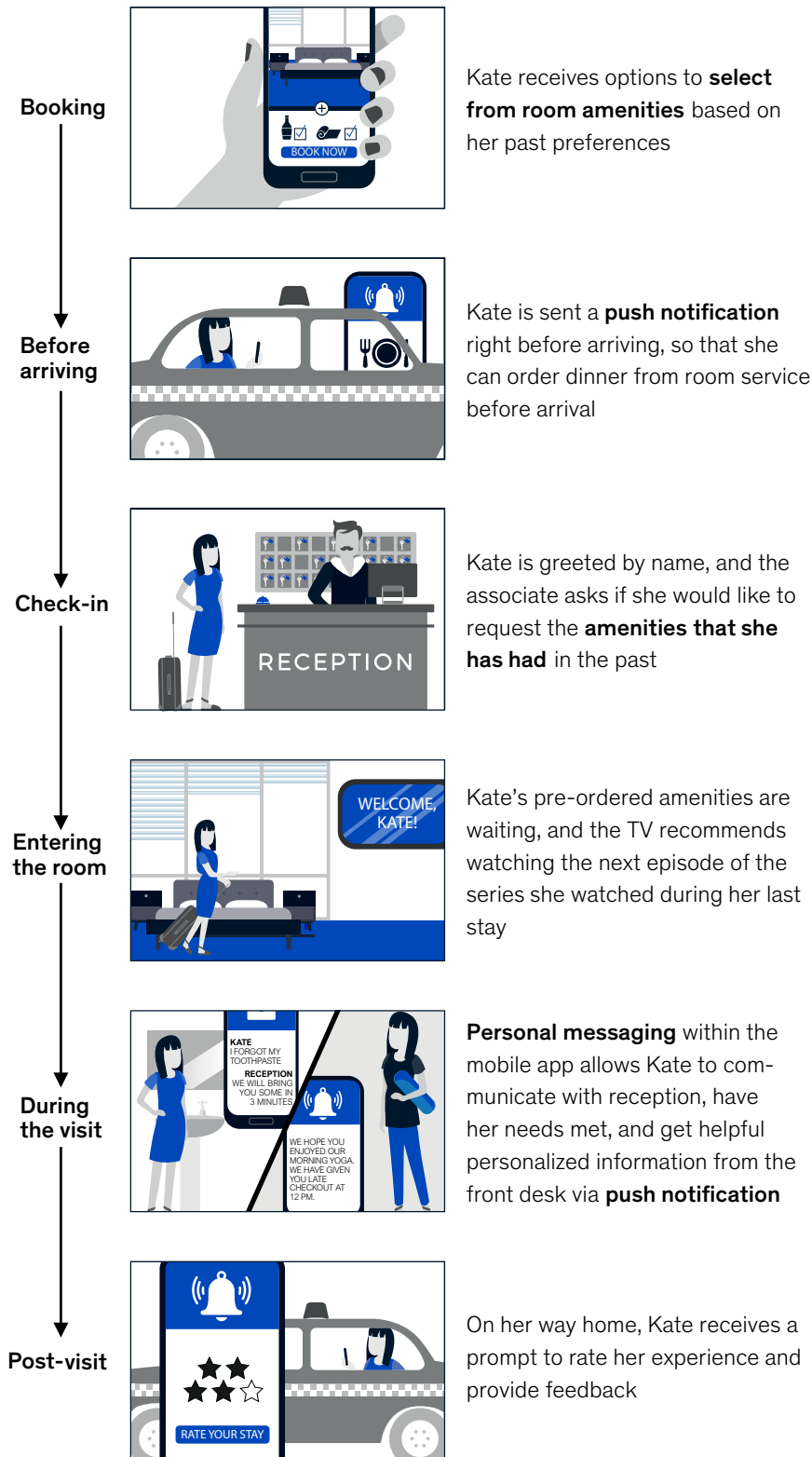
Exhibit 2

Digital touch points can play different roles to personalize the in-person journey

A	Journey		Mobile app	Digital displays	Interactive screens	Tech-enabled associates ¹	Point of sale
B	Pre-visit (awareness)	Drive traffic	Personalized location-based notifications	Personalized context-specific ads			
	During visit (conversion)	Increase conversion	In-store guidance and augmented reality experiences	Smart shelves and dynamic displays	Browsing, product comparison, and recommendations Virtual try-on/augmented reality	Guided browsing and product recommendations	
		Increase basket size	In-store recommendations Complimentary products at checkout	Smart shelves and dynamic displays	Add-on options based on behavior and purchases; suggestions for bundles of items	Complementary products recommended based on purchase history	Re-stock of past purchases Add-on options based on products purchased
C	Post-visit (deepening engagement)	Increase retention/repeat purchases	Reminders about in-store events and relevant notifications				Follow-up content about purchase sent to customer and future orders personalized

1 May also include call center associates

Hotels – the customer journey can be enhanced through app-based communication and tech-enabled associates, with a detailed customer profile and digital displays



Source: McKinsey

Increased speed of pre-arrival amenity offers

Personalized room set-up and targeted event offerings

Increased efficiency through mobile check-in, check-out, and front-desk interactions

Data collection from mobile requests and interactions

3. Use an omnichannel decisioning engine to deliver experiences and measure performance

A decisioning engine using AI or machine learning is needed to help companies accurately and quickly identify the next best action to take with each customer. Over time, as the decisioning engine ingests more data – customer data, store offers, inventory, and web publishing – and adapts based on customer behavior and sales metrics, its business logic improves, and the engine becomes more successful in providing what customers want. Many organizations have already laid the foundation for a decisioning engine by investing in marketing platforms and embedding analytics and data into their decision making.

For example, if a customer has opted in to be identified through an app or facial recognition, the decisioning engine can automatically push specific offers or messages to them once they enter a store or physical location. Even when a customer has not been identified, a decisioning engine can make real-time decisions based on contextual, location, or basket-level data. Weather conditions, time of day, trending purchases in a specific location, or complementary basket items (“customers who purchased this item also purchased . . .”) are all automated via the engine. As the engine becomes more sophisticated, even more test opportunities become possible. The key is designing thoughtful tests that allow the measurement of both online and offline impact – for example, capturing the journey of a customer who interacts with a tech-enabled associate in person but actually purchases when they are sent a follow-up e-mail with personalized recommendations.

4. Implement agile operating practices

Moving to personalized marketing requires more than better tech – it requires a fundamentally new way of working.

Agile marketing teams, or pods, bring together different functions to work collaboratively to achieve omnichannel personalization goals. They generally include data scientists to measure performance, marketing teams to build test hypotheses, marketing technology experts to help execute, and team members who represent the offline channels, e.g., touch-point-specific product leaders (for mobile apps, kiosks, interactive screens, etc.), on-site operations managers who take the lead on training frontline personnel, and hardware and software technologists to address technology solutions. The best agile teams focus on specific consumer segments or journeys (e.g., new shoppers, shoppers returning products), iterating with customers on new services, offers, and experiences in a process of rapid learning and adapting.

Assembling this cross-functional team promotes joint ownership of the customer journey, rather than one department being responsible for an isolated touch point. The team then works quickly to brainstorm ideas and hypotheses with the existing data, design and prioritize omnichannel personalization tests, execute, and measure the results across channels to gain insights, all with the support of leadership.

5. Activate omnichannel personalization in the field

Bringing all these steps together and capturing the full value of omnichannel personalization requires an aligned and trained sales force. In-person teams can make (or break) the experience, so it is critical that frontline personnel actively support personalization efforts, understand the value, and learn how to use digital to deliver the complete omnichannel experience. For example, one retailer gave in-store associates a sales-assist tool on a tablet and conducted targeted training that helped them use the tool to better support customers and upsell products and services. The reward was clear – average basket size increased by 5 percent in the test stores.

Training cannot just be done once. The best companies provide training – online and offline – at least quarterly and supplement it with a culture of continual feedback to constantly build skills and ensure that changes stick. Further, top omnichannel performers ensure that incentives are aligned with key performance indicators, e.g., the number of customers contacted, percent of customers sold to, and additional products sold.

★ ★ ★

Omnichannel personalization is challenging, but it need not be overwhelming. Instead of waiting to develop a complete answer, companies should start small with the highest-value use cases and existing touch points to prove their merit. This is a proven model for success and one that companies will need to develop as the lines between the digital and physical worlds continue to blend.

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Special thanks to Jan Middelhoff, Associate Partner in McKinsey's Düsseldorf office, Barr Seitz, Senior Manager in McKinsey's New York office, and Christian Fielitz, Engagement Manager in McKinsey's Hamburg office, for their valuable contributions to this compendium.





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