Knowledge Generation Initiative
Understanding Digitized Customers in Digitized Environments:
Introducing Six Research Priorities for Academic-Industry Collaboration

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Introduction

In some sense, it has become redundant to refer to customers as “digitized,” as virtually every product purchase, brand interaction, or service experience has the potential to be at least partially delivered using technology or to involve some “digital” aspect. That is, it could be argued that all but the most off-the-grid customers are “digitized” in one way or another. This should mean that digital and technology-related aspects of marketing are integrated with the broader marketing function within companies, and that the technology-related aspects of marketing are well understood. This is not the case, largely because of the rapid pace of technology change, which impacts both customers and marketers. Advances in technology mean that our understandings of the digitized market environments of the past, even the recent past, are potentially obsolete.

As a result, our understanding of digitized customers—those whose interactions with companies, brands, products, services, and other customers involve some use of technology—in the physical and virtual worlds—is quite limited. That is not to say that little has been done on both sides of the academic-practice bridge on this broad topic, as it certainly has over the last decade. However, the technology-driven world in which we now live, and the fact that “digital marketing” is now, really, just marketing, are key points of distinction from the past. As such, it is time for the marketing community to think about new and important emerging issues within the realm of digitized (as opposed to digital) marketing.

Hopefully, this will move us to a position where we are proactively leading innovations in marketing thinking and practice.

With these issues in mind, the Marketing Science Institute formed a taskforce of academics and practitioners, co-chaired by us (Cait Lamberton and Andrew Stephen), and charged the group with developing a set of priorities for new research on the topic of understanding digitized customers in digitized market environments. The ultimate goal is to stimulate and guide academic-practitioner collaborative research in this area. This report is the summary of the taskforce’s first meeting, which was a two-day brainstorming meeting held in May 2016. The meeting’s objective was twofold. First, to share current practitioner and academic thinking around the digitization of customers and marketing, focusing on the challenges and opportunities brought by rapidly advancing technologies and changes in the ways that customers use technology. Second, from these discussions, to generate a set of priorities to inspire new relevant research and academic-practitioner collaborations.

This report discusses six major themes that we identified as priorities for future research. Under each theme, we provide sample research questions intended to trigger ideas. These sample questions are far from exhaustive, but offer concrete ideas of the directions that researchers might pursue. We encourage researchers from all backgrounds—quantitative, behavioral, and qualitative—to consider these research priorities.
Priority Research Themes

1. How should marketing and IT work together, from the C-suite down?

Polls from the last few years suggest that, despite our clear attachment to social and digital technologies as an *integrated* part of everyday life, people managing digital marketing and social media marketing within organizations tend to be anything but integrated, often sitting inside a silo. This is problematic for many reasons, including that marketing is increasingly technology-enabled and therefore marketers should ideally be working hand-in-hand with technology specialists and IT personnel. Further, in the C-suite, there is often debate over who “owns” many aspects related to digitization of marketing—does this fall within the remit of the Chief Marketing Officer or the Chief Technology Officer? Or, should this be the responsibility of newer C-level roles such as Chief Digital Officer or Chief Customer Officer? And who is in charge of selecting, procuring, integrating, and maintaining enterprise-level marketing technology services and software platforms?

These are all pressing issues that need to be addressed. Is the “silod” approach as inefficient and ineffective as we think? How do team structures at the interface of marketing and technology functions influence performance, innovation, and collaboration? Who should be responsible for marketing technology and why? These types of questions must be addressed by the C-suite. Instead of CMOs and CTOs having fractured relationships marred by turf wars that can create confusion and inefficiencies, are there better models? What should the goals be when rethinking how marketing, related technologies and other parts of the organization (as relevant) should work together? Are there companies with track records of breaking down these silos who have benefitted?

Sample research questions:

- What are the impacts of CMO and CTO collaboration on firm performance?
- What firm models/structures promote (versus stifle) customer-centric innovation?
- What is the ROI of cross-functional projects combining marketing and technology?
- How can marketing and technology functions work well together?
- How should marketing technology (marketing-related IT services and software) be integrated effectively and efficiently into organizations?
- How will integrated data management platforms change working relationships among external agencies and internal stakeholders?
2. How “frictionless” should technology-enabled customer experiences be and how “personalized” should technology-enabled marketing actions become?

Technology can be used to streamline customer journeys to the point that they run so smoothly they are “frictionless” to the point that, for example, making a purchase feels so effortless it is virtually automatic. Similarly, technology allows marketers to create increasingly personalized customer experiences and target marketing actions so precisely that we are at the point of talking about the “segment of one.” By tracking customers’ behaviors in purely digital virtual environments (e.g., on websites, within mobile apps, and on platforms such as Facebook) and digitized physical environments (e.g., instore with cameras and face detection software), marketers have the potential to deliver customers exactly the products or services that match their idiosyncratic preferences, at the right time and the right place. This can reduce search costs to almost zero and ease purchase difficulties. But is this always a good thing? Technology can also be used to produce highly individualized—personalized—products, services, messages, and experiences. But is this always desirable?

We need to understand the boundaries of technology-enabled marketing that can make journeys frictionless and experiences highly personalized. Presumably there are some advantages to such approaches, including precision targeting within the context of programmatic advertising. But what are the limits? In a multi-dimensional and multi-stage customer journey, there may be stages where friction is good and other stages where friction is bad. Personalization may be important in certain stages but not in others. The nature of the product or service probably also matters, as would customer characteristics. We have much to learn about the potential consequences—intended and unintended—of these kinds of technology-enabled approaches.

Sample research questions:

- What are the impacts of using technology to make aspects of customer journeys “frictionless”? When are “speed bumps” needed to add some “friction” into the journey?
- What are the effects of technology-enabled personalization? When is “mass” or “one size fits all” better than “personal” or “segments of one”?
- When does personalization go too far? What are the privacy-related consequences of this? When could over-personalization lead to an erosion of consumer trust in a company or brand?
- What are some unintended consequences of frictionless customer journeys and/or personalized customer experiences (e.g., loss of serendipity, exploration, control, efficacy, ownership or engagement)? When is the longer-term customer experience degraded?
- Does personalization come with “hidden costs” and what might these be? For example, marketers could waste money micro-targeting customers who would have bought anyway.
• How can marketers balance the need to obtain information from customers to serve them better with the desire to streamline enrollment and other interactions? How can such information be obtained incrementally over time in ways that make sense to customers?
• How does “friction” in interactions relate to consumers’ habitual behavior—can this be a way of reinforcing desirable—and breaking undesirable—habits?

3. How do marketers steward their brands through social media conversations and find new, value-enhancing uses for social media?

As social media has grown and matured, and the ways in which we use social media have become more numerous yet also more diverse, it is time to move beyond thinking of what customers say about brands on social media simply as “online word of mouth.” The marketing literature has done a good job at studying online WOM and how it affects many different (and important) outcomes. But seeing customers’ and marketers’ social media activity purely as another form of WOM is now too narrow. There’s more to social media marketing than WOM. Social media “conversations” involving customers and company representatives can take on a life of their own, and people can express complex and dynamic emotions, tell stories to one another or to the brand, engage in dialogue with other customers and companies (perhaps even competitors), create content in many different forms, and interact with other content.

In this context where customers and marketers have diverse options for using social media channels, it is important to consider the many newer ways in which social media are being used in marketing contexts. This will help marketers steward their brands through social media “conversations” more effectively and efficiently. We also need to better understand which uses of social media enhance customer and firm value. These should extend beyond the conventional communications-related uses. For example, companies are using social media-based customer care channels to complement—or maybe eventually replace—customer care channels such as call centers, but is this valuable? We also see messaging (e.g., WhatsApp, WeChat) used as a way for marketers (or artificially intelligent “chatbots”) to interact with and sell to customers. Innovations in the social media world show no sign of slowing down, and with every new platform or use of a technology comes potential marketing uses worth examining.

Sample research questions:
• How should all of a brand’s social media touchpoints be managed and evaluated?
• What is the best way to engage in conversations that create a sense of authentic connection, promoting customer trust and advocacy?
• How can we appropriately measure the returns on investments in social media activities?
• How should marketers interact with their customers in social media? When and how should they intervene in customers’ conversations? How can the good conversations be started?
• How can marketers decide if and when to adopt new social media platforms for their companies? Are there strategic advantages to being an earlier versus later mover on this?
• Why do some social media activities (e.g., Pokemon Go) spread rapidly? What are the implications for companies that want to anticipate such developments and harness these social dynamics to engage with customers?
• Is social media-based customer care something all companies should consider as part of the customer experience? When can this enhance value, particularly customer lifetime value?
• How do B2B and B2C differ in the potential to leverage social media for marketing and customer service and support?

4. How does the digitized customer experience and digitized market environment relate to basic models of consumer information processing and decision making?

Since the late 1960s, academics have developed and refined many different models of buyer behavior, as well as tested theories of psychological aspects of consumer behavior such as perception, attitude formation, persuasion, information processing, and decision making. This research, broadly speaking, continues to the present day. Similarly, practitioners have models for understanding things like the consumer decision journey, the classic marketing funnel, and various other frameworks. While all of these models, theories, and frameworks may have offered important insights about consumer behavior—particularly related to decision making and choice—how do they fit in today’s digitized market environment? Do digitized customers think and behave in the same ways as non-digitized customers did when “classic” studies were conducted? What is the same and what has changed?

There are likely to be many things that have changed, given that the notion of a digitized customer implies that technology use is integrated into their daily lives. When a customer is browsing products in a store, he or she is likely also looking at the same and comparable products on their smartphone. In these types of situations, how do instore marketing tools (e.g., signage, salespeople) interact with information being accessed on the smartphone? Of course, it is also often the case that when people are making decisions in a shopping environment they are multitasking on their mobile devices—but doing things completely unrelated to the shopping task (e.g., using social media, texting). Are these distractions detractors from sound customer decision making? Additionally, it may be that digitized market environments allow us to identify completely new aspects of consumer psychology and decision making that were not previously observable. With these issues in mind, it is time to update our understanding of the psychological aspects of consumer behavior for the digitized context.
Sample research questions:

- Do “classic” theories and models of customer/buyer behavior still apply? For example, how does the “digitized” path to purchase compare with models based on traditional TV advertising exposure?
- How do people navigate massive amounts of information in real time? How do they integrate information? When do they decide when to stop searching in a world where search costs are virtually zero?
- Does a reduction in search time and effort lead to greater reliance on heuristics (e.g., anchoring and adjustment, availability, consensus rules) or instead reserve cognitive resources for more thorough assessment of the information obtained?
- How is the potential ease of finding and evaluating information related to consumer perceptions of credibility and trust?
- Do digital tools and interfaces influence modes of information processing and attitude formation? Do modes of interaction with devices (e.g., typing vs. talking) influence behavior?
- What happens when customers multitask, for example when using smartphones while shopping in a store? When are they distractions? Could they enhance the experience?
- What are the implications of consumers’ shorter attention spans and being more distracted (e.g., because of smartphones)?

5. What is the optimal balance between human and non-human touchpoints in a customer journey?

Imagine a customer checking in at a hotel. Given the hotel chain’s technological capacity, it is possible for the consumer to experience virtually no human contact: they can check-in on the hotel’s mobile app, receive a virtual key on their phone, use the app or an in-room iPad or the TV to request services, and can check-out via the app. This lack of human interaction might be ideal for some customers, but for others it might be infuriating. And for some aspects of this customer journey they might prefer human interaction, whereas other touchpoints could be fully digital. What is the right balance between human and non-human—digital—touchpoints in this kind of customer journey? How can a firm know when to push customers toward digital touchpoints, which are presumably more cost-effective, and when to push them toward human touchpoints? Wherever possible, should non-human touchpoints be offered first, with customers given the option to “talk to a real person” or is there a more optimal way of doing things?

These types of questions are important from a service design standpoint and when marketers think about customer journeys with a desire to optimize the overall customer experience while balancing this against the resources required to deliver the appropriate level of service quality. There may also be broader implications from a consumer well-being standpoint. For example, is it “healthy” to only interact
with machines—and to actually like and prefer that? Research is needed to identify the right types of balance between human interaction and digital facilitation across all parts of a customer journey. In addition to establishing general principles, we should seek to identify in a given journey for a certain type of customer within a certain industry which touchpoints should always be digital, always be human or alternate depending on the situation.

Sample research questions:

- When in the course of a customer’s journey and experience with a product, service, or brand is human interaction most important to customers? Why? How does this differ for B2B vs. B2C sales and service encounters?
- What can we learn (and extrapolate) from companies and industries (e.g., airlines) that have already integrated DIY into their service delivery?
- What measurable “signals” (e.g., in data) can be used to identify when customers prefer human versus digital interactions? Are there triggers that can alert marketers to this?
- What are the returns to optimizing the balance between human and digital touchpoints? Are their online or other early behavioral “signals” of which customers will pay back investments in enhanced service in terms of CLV?
- Are “blended” touchpoints that combine human interaction with digital channels a good compromise? When are they better or worse than purely digital or purely human touchpoints?
- Can customers necessarily tell the difference between human and non-human agents (e.g., real customer service agents in an online chat versus chatbots)? Is it possible (desirable) to “mimic” human interaction in service encounters? Does this make a difference?
6. What are the best approaches for gathering and using data from digitized customers, and for ensuring that customers understand how their data are being used?

An ongoing challenge for marketers is how they can collect and use customer data in appropriate ways. For instance, a 2014 study suggested that while 80% of consumers are willing to give personal information to “trusted brands,” 62% expressed concerns about how that information might be used. This distrust of companies and how they use personal data is a challenge that all marketers currently face. With digitization have come more data sources, such as geo-location data and, increasingly, personal data such as biometrics sensors on wearable devices. As marketers become more sophisticated in their uses of such data, many concerns arise on the customer side. For example, customers wonder how their data will be used and whether it will be secure and safe from hackers. However, do such concerns—legitimate or not—actually stop people from giving personal data to companies? When do customers pay more or less attention to privacy policies and does this influence their behaviors and willingness to provide data? If consumers are given greater control and there is more transparency, will this change things for the better? These are critical questions that are yet to be addressed but are at the heart of digitized customers in digitized market environments.

At the same time, related concerns also arise on the marketer side, not only because of the ethical and privacy-related considerations, but also because marketers do not necessarily know what to do with all the data they can now collect. Marketers speak of data overload as a serious problem, particularly given the convention that more data is usually a good thing. Understanding which variables actually matter and therefore should be collected and used in analytics is more important than ever. Extracting meaningful insights from the plethora of customer data sources is a challenge that needs addressing.

Sample research questions:

- What risks do marketers face when they request data or permission to gather data from customers? At what point in a customer’s journey are these risks lower or higher? What reasons for requesting data or tracking permission are compelling, and how should these requests be sequenced over time as relationships develop?
- How do consumers (and companies) differentiate types of risks involved in the collection and use of behavioral and other personal data—e.g., data breaches and security failures vs. unfavorable exposure of data collection activities? Are consumer and company perspectives aligned?
- What kind of data is easiest for customers to provide, psychologically and practically?
- To what extent do customers understand privacy policies relating to personal data? How much transparency, by means of explanation, should be provided and is this appreciated? Who owns the resulting data, and how do opt-out, review and other provisions affect
customers’ willingness to share and the resulting trust and satisfaction with the use of this data?

- How do consumers view the value of their personal data and what they may receive in return for providing it? Do they (will they come to) see such data as currency? Should companies compensate customers for the data they provide? What types of compensation are appropriate and would be effective?
- How can marketers manage—strategically, operationally, and technically—the onslaught of customer data from new sources (e.g., wearables) and combine that with existing sources?

**Next Steps: A Call for Partnership Proposals**

During the process that identified these themes, it became clear to us that they reflect big, messy problems in contemporary marketing. Addressing problems of this scope and scale will be critical to the future of marketing. However, researchers should not go it alone. The scope and complexity of these themes will require not just cooperation among academics and practitioners, but a unique level of direct collaboration.

In early Fall 2016, the Marketing Science Institute will solicit Early Stage Proposals from academics and companies. Proposals should target at least one of the six major themes introduced above, and provide clear details on the following:

- The specific question(s) that will be addressed. These can be sample research questions listed above or novel questions that fit under one or more of the six themes.
- Academics should identify the approach(es) they would like to take for this research, the MSI member companies they would ideally like to collaborate with, and the nature of the intended collaboration (e.g., run field studies, company provides data).
- MSI member companies should identify the approach(es) they would like to take for this research, the nature of the intended collaboration (e.g., run field studies, company provides data) and the resources they are prepared to commit. MSI will identify appropriate academic collaborators for approval by the MSI member company.
- The expected outcomes of the research, including intended contributions to both marketing theory and practice. Specific focus should be on benefits to the participating MSI member company.

Proposals will be evaluated by MSI to identify appropriate corporate and academic partners for further discussions to develop concrete research plans.