
How Technology Is Changing the Consumer Experience

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► **Vildan Altuglu, vice president of Cornerstone Research, interviews Donna Hoffman, professor of marketing and Louis Rosenfeld Distinguished Scholar of the GW School of Business at George Washington University, to gain her insights into the revolutionary impact of technology on consumer behavior, as well as potential issues related to data collection and privacy practices.**

Vildan Altuglu: You've been studying online consumer behavior for nearly 30 years. Most recently, you have researched how the internet of things, machine learning and artificial intelligence influence consumer behavior. Can you explain how the online consumer purchase decision-making process differs from what happens in traditional brick-and-mortar stores?

Donna Hoffman: The consumer decision-making process has been described as a purchase funnel, a concept that originated from the study of consumers' brick-and-mortar experiences. In its simplest terms, the purchase funnel is a series of increasingly narrow stages through which consumers pass when they are looking to buy products or services. At the wide end of the funnel, consumers identify a need for a product and then seek to fill that need. In the middle, they gather information about potential products and evaluate. Finally, at the end of the process, they make a choice and buy a particular product. Inside a store, consumers might have some idea of what brands they are interested in, examine the alternatives on the shelf, consider their options, and then choose one. This, of course, is a highly simplified view of what can be a relatively complex process. Regardless, according to the purchase funnel concept, the process is considered to be relatively inflexible and very linear.

In recent years, we have come to recognize that the traditional purchase funnel way of thinking has evolved

dramatically, as consumers have incorporated the digital landscape into the physical experience of shopping. We now recognize that the consumer decision-making process is much more complex than a linear funnel; indeed, it is now most often described as a cyclical "decision journey." With online purchasing, consumers can get on and off at different points in the journey, expand or contract their choice set based on other consumers' reviews, compare prices across different vendors, and eventually make a purchase decision. They can even skip some steps entirely. The internet and personal digital devices have made the online consumer experience more convenient, accessible and seamless. And, more than ever before, this experience is much more in the control of consumers than marketers.

At the same time, consumers continue to value the social and experiential elements of shopping in a physical store. Online shopping does not completely replace its in-person counterpart; they can coexist and enhance each other.

Altuglu: What are some of the key takeaways from academic research into the online consumer purchase decision-making process?

Hoffman: Today's digital consumer is engaged, empowered and mobile. With the explosion of smartphone and tablet use, critical interactions can occur anywhere, anytime. The majority of consumer interactions now happen over multiple visits, across a number of channels.

One of the most critical recognitions that has emerged is that marketers have less control over the purchasing decision-making process, and consumers have more. Social media, in particular, has played a significant role in that shift. In my research, I have examined how social media influences consumers' attitudes toward brands, advertising and related market-response measures.

In the past, marketing messages were largely driven by

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marketers to consumers. Literally, marketers broadcast their uniform messages to the consumer mass market, and consumers were passive receptacles for marketing content. In the world of social media, both consumers and marketers generate these messages, and consumers can be very highly segmented or even microtargeted. Consumers now rely heavily on other consumers, through online reviews, electronic word of mouth, and online searches. Before making a purchase, they may adjust their decisions based on the attitudes and situational factors of others. This puts the consumer in the driver's seat and takes much of the power away from marketers.

Altuglu: Do consumers react differently to traditional marketing versus online marketing and through social media? If so, how?

Hoffman: Yes, consumers do have different reactions to traditional versus digital marketing. First, it is important to understand what these terms mean. Traditional marketing refers to broadcast platforms such as print media, TV commercials and radio. Digital marketing includes electronic media delivered over the internet (mobile, desktop, tablets) and through specific platforms like social media, apps and email.

When presented with traditional marketing such as television commercials or magazine ads, consumers interested in the marketed products respond with increased awareness of and potential demand for these products. The consumers may gain familiarity with the marketed products, but they are still many steps away from purchasing. Traditional marketing is best at stimulating awareness and interest in a product; we refer to this consumer reaction as demand generation.

When consumers are exposed to online and social media marketing, the advertising message can be targeted specifically to them, based on information they provide when using computers and mobile or smart devices.



Because of this targeting, consumers are exposed to products that they may already be familiar with or have a need for, and they may react by making a purchase. Consequently, digital marketing tools can more directly convert needs and wants into sales. This consumer response is referred to as demand fulfillment.

Altuglu: How do you define the internet of things (IoT) and artificial intelligence (AI)? How do you think consumers' interactions with these technologies will affect their buying habits and experiences?

Hoffman: This question reminds me of one I used to get when the internet was beginning to take off. People would ask me: "What is the internet? How different is it to market on the internet than any other channel?" The assumption was that it was just another channel – one more way to communicate with and market products to customers. It turns out that the internet is not just another channel but instead a revolutionary medium. It permanently changed how we communicate and live our lives.

The same can be said about AI and IoT. Together, AI and IoT bring intelligence to physical products. Because of IoT, physical objects can be connected to the internet, and by extension, to other physical objects. Most of the time, these objects have varying degrees of AI embedded within them, which enables them to "learn" in a way that seeks to augment human decision-making.

For example, common household objects, such as exercise bikes or vacuum cleaners, can become active partners, interacting with us to enhance our lives. Over time, consumers are likely to develop deep relationships with these physical objects, which have some level of autonomy, authority and agency to act on their users' behalf. In turn, these relationships will transform how we consume, whom we trust, how we trust, what kinds of data are collected about us, and the purposes for which that data is used.

Altuglu: What is the biggest issue you foresee related to AI and IoT technology?

Hoffman: Smart devices are inherently more involved in our lives, and as a result, they will have access to a wider variety of information about who we are and how we live our lives. In my view, one of the biggest issues that researchers still need to understand is the value consumers may attach to the privacy of their information, how this varies across consumers, and the extent to which context matters. Consumers will need to weigh the benefits of sharing their data via smart devices (including personalization and convenience) with any privacy concerns. So, while we have already seen substantial litigation related to data privacy, I think we can expect future litigation to more closely examine the potential benefits and costs that consumers face when they use these emerging technologies. ■

Cornerstone Research's webcast, hosted by CCBJ, can be viewed [here](#).

To learn more about the effects of online advertising and purchasing on litigation trends, see Cornerstone Research's article series on [Online Marketing](#).

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