



# The mobile shopping revolution: Redefining the consumer decision process

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## KEYWORDS

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Digital marketing;  
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Consumer decision  
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**Abstract** The use of mobile devices by consumers and the accompanying response by retailers is rapidly revolutionizing the retail environment. In the past, retailers have focused primarily on the outcome (to purchase or not to purchase) of the consumer decision process, but now mobile technologies give retailers the opportunity to more actively influence the entire consumer decision-making processes. The increasing use of mobile devices by consumers makes shopping a continuous rather than discrete activity that requires retailers to engage with their customers at critical touch points of the decision process in order to provide a more customer-centric experience. This change in focus from the decision outcome to the decision process signifies an important paradigm shift for the retailing industry. After an extensive review of the literature, we identify four pillars that form the foundation for the mobile shopping revolution and represent the essential ways and means through which retailers can engage with consumers during the decision process. We also discuss the different areas in which the pillars can enable retailers to achieve a sustainable competitive advantage in the mobile shopping era.

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## 1. Dr. Gonzales: The new connected consumer

Dr. Kailey Gonzales, a busy practicing physician, enters the parking lot of Woodman's Supermarket

in Madison, Wisconsin for her weekly shopping trip. She plans to purchase the items that routinely appear on her shopping list, stored on her smartphone, in addition to several other items for her party on Saturday night. While exiting her SUV, she receives a digital prompt from Woodman's welcoming her to the store and informing her of that week's set of customized coupons for items she regularly purchases as well as a few items she seldom buys.

Entering the store's produce department, she checks her shopping list on the store's app and notes that kale appears first. She selects a bunch,

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places it on the digital scale, scans the weight and Universal Product Code (UPC) into her phone, taps the purchase button to record the transaction, and then places the kale in her environmentally friendly, reusable shopping bag inside her cart. As she is leaving the produce section, she hears an alert message from her smartphone indicating that the store's app has detected that she is leaving the produce section without buying bananas, an item that she purchased on her previous four shopping trips, and she quickly returns to purchase this forgotten item. Pressed for time, she uses her smartphone to locate the next two items on her list: sockeye salmon and salad-seasoning powder. The in-store app immediately displays a map of the store's layout, including her location within the store and the location of the salmon on aisle 5 and seasoning powder on aisle 9.

A store associate who is monitoring Dr. Gonzales's shopping activities using his mobile device, which interfaces with the store's beacon technology, approaches her and offers further assistance in locating the sought-after items.<sup>1</sup> He also notices on her shopping calendar that she is seeking to purchase cookware items that Woodman's does not stock, so he locates these items for her at a nearby cooking specialty retailer and informs her of their availability.

Checking her phone, she notices that she received a 2-for-1 coupon for organic gluten-free pizza, made with locally sourced ingredients, and then proceeds to aisle 3 to make the purchase, thus completing her grocery shopping. As she bypasses the line of shoppers at the checkout counter, she taps the Pay Now button on her phone screen, which securely charges her credit card and displays an itemized receipt.

Dr. Gonzales's hypothetical shopping experience is not set in the distant future, but is occurring now in selected test markets located in Stamford, Connecticut; Madison, Wisconsin; Palo Alto, California; and Seattle, Washington. This industry-driven phenomenon, known as queueless shopping (QLS), has been described as a high-tech checkout makeover in which consumers utilize mobile devices (smartphones and tablets) to record their grocery items as they shop, receive and respond to in-store

promotional features (coupons), and instantaneously record their purchases to their credit card account, thus bypassing the time-consuming checkout queue. Amazon recently announced that it is test marketing QLS in Seattle, Washington (Weise, 2016), and industry experts are anticipating that, in the near future, Walmart will roll out a version of QLS.

After loading her groceries into her SUV, Dr. Gonzales proceeds to the cooking specialty retailer that the Woodman's store associate located for her in the nearby mall. Entering the store, she spots the cookware section and views the selection of steamers available. The 5-quart, 3-piece All-Clad Stainless Steel Steamer set, with a list price of \$149, catches her eye, and she quickly scans in the UPC using her smartphone to locate nearby retailers and online suppliers who carry the same item. Within seconds, she is able to compare the price charged for the steamer and notices that Amazon carries this exact item for \$99.

The retail store manager approaches the doctor and offers assistance. She informs the manager that she has been well satisfied with the store's merchandise in the past and is now interested in purchasing a 5-quart steamer. However, when she shows the manager the \$99 offer at Amazon displayed on her phone screen and asks her to match it, the manager, obviously taken aback, explains that the store has long enjoyed its standing as a premium cookware retailer and, as such, does not engage in on-floor price negotiations. Before the manager could complete her explanation, Dr. Gonzales, using her smartphone, places the order with Amazon.

Thanking the bewildered store manager, she departs the store and receives a prompt on her smartphone from the Starbucks next door reminding her of the \$5 coupon she received from a friend who participated in the retailer's Tweet-a-Coffee campaign last week. While savoring a Café Espresso Frappuccino, Dr. Gonzales happily congratulates herself on the decision to save \$50 on the steamer purchase and notices a message from the nearby wine shop advertising a \$30 bottle of California Chardonnay in a buy-one-get-one-half-off sale. Using her phone, she texts her social wine community to gather opinions about this wine. She receives an immediate response back from 'Wineman' in San Francisco, recommending this selection. She quickly checks consumer wine reviews on her smartphone and then texts a close friend who is knowledgeable about wine, and immediately receives a response endorsing her choice. She makes the purchase, efficiently and successfully completing all her dinner party shopping. Dr. Gonzales's shopping behavior illustrates her status as an innovator in

<sup>1</sup> Beacons are "low-powered radio transmitters that can send signals to smartphones that enter their immediate vicinity, via Bluetooth Low Energy technology" (Martin, 2014). Beacons allow more precise identification and targeting of individual consumers than other location technologies. With this powerful new technology, "marketers can lead and direct customers to specific areas and products within a store or mall" (Martin, 2014), thus resetting the consumers' path to purchase.

the mobile shopping revolution. She employed mobile technology effectively at several points to make her shopping more efficient.

## 2. Impact of connected consumers on the retailing community

In this article, we identify and discuss three major areas in which consumer use of mobile technologies impacts the retailing community. The first area entails a paradigm shift that requires retailers to change focus from influencing the consumer’s decision outcome to proactively influencing the consumer’s decision-making process. In the second area, we identify the pillars that form the foundation of this revolution and represent the essential ways and means through which retailers can employ mobile technologies to interconnect, empower, and engage mobile consumers. Finally, we discuss three strategic areas that retailers should emphasize in order to better influence the mobile shoppers’ decision-making process and achieve a sustainable competitive advantage in the mobile shopping era.

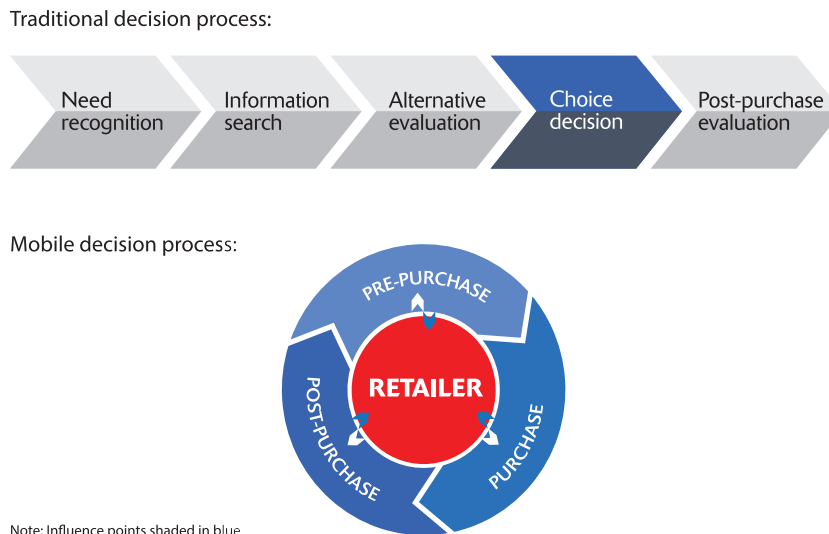
## 3. Decision outcome to decision process: A paradigm shift

The four distinct situations described in Dr. Gonzales’s weekly shopping excursion demonstrate how a paradigm shift is occurring in today’s retail environment. This environment is increasingly impacted by consumers’ use of mobile technologies

that are, in turn, facilitating a dramatic alteration in the decision-making process (Zmags, 2012). In the past, this process was well known to retailers and consisted of several sequential steps: beginning with problem recognition followed by information search, alternative evaluation, choice decision, and culminating with post-purchase evaluation (see Figure 1). Retailers influenced the process through well-crafted marketing mix strategies, derived from the 4-Ps framework (product, price, place, and promotion), with the retailer’s primary goal being to impact the choice-decision stage (see Figure 1).

Because of mobile technologies, the m-powered (Martin, 2013a) consumer’s decision process is now more accurately depicted as a seamless and iterative activity that results in a more personalized interaction between retailer and consumer. As illustrated by Dr. Gonzales’s shopping adventures, “consumers no longer go shopping; they always *are* [emphasis added] shopping” (Martin, 2013b). The established five-stage sequential model fails to capture this dynamic decision-making process, which often entails simultaneously intermingling decision activities in both time and place. The emerging mobile shopping decision process is now a continuous rather than discrete activity that requires retailers to adopt a more holistic mindset that focuses on influencing the process rather than focusing exclusively on the consumer decision outcome. The new model, depicted in the lower portion of Figure 1, consists of three stages that often occur together in real time and potentially offer retailers opportunities to more directly influence the decision-making process through the

Figure 1. Traditional versus mobile decision shopping process



use of communications targeted to consumers at key decision points in their shopping journeys.<sup>2</sup>

Retailers have been slow to embrace this new perspective, which requires them to shift “toward a concierge model geared toward helping consumers, rather than focusing only on transactions and deliveries” (Brynjolfsson, Hu, & Rahman, 2013, p. 24) and alter their approach from the traditional push marketing strategy to one that acknowledges the existence of a consumer-controlled pull process that more accurately captures the reality of the contemporary shopping environment (Accenture Consulting, 2016; Berman, 2016; Deloitte, 2014; Wallace, 2016). Martin (2014) notes that although many retailers have acknowledged the importance of mobile technologies and their influence on the consumer shopping process, the retailing community has yet to fully understand or leverage the potential of this technology to influence consumer purchase behavior or to implement a sustainable customer-centric strategy that would improve long-term financial performance.

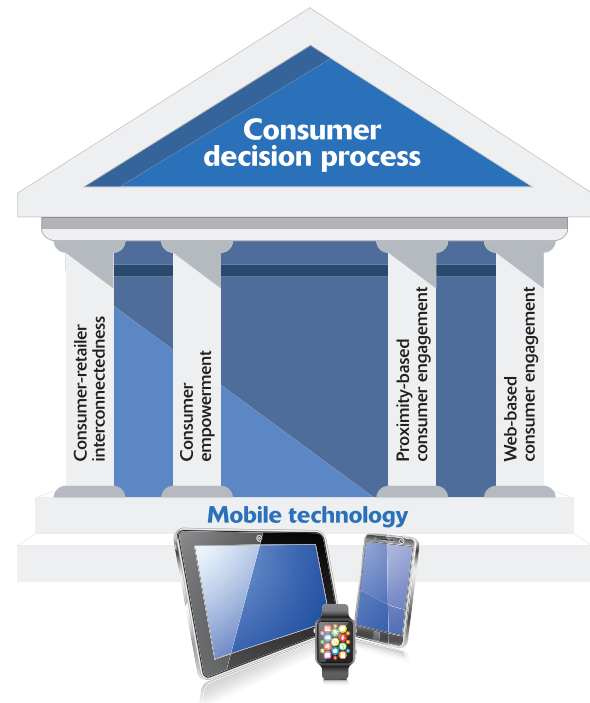
The consumer use of these technologies is also challenging many long-standing retailing heuristics that shaped successful strategies in the past (e.g., ‘location, location, location,’ ‘well-bought is well-sold,’ and ‘a satisfied customer is a loyal customer’). As Dr. Gonzales’s example aptly illustrates, the specialty cooking store’s strategy of selecting prime malls and store locations within those malls, offering high-quality merchandise, and emphasizing customer satisfaction were all simultaneously marginalized when she utilized her smartphone to purchase the 5-quart steamer set from Amazon.

These technologies will continue to present the retailing community with opportunities and unanticipated challenges that will require the development of creative strategies and a new mindset focusing on resetting and more actively influencing the consumer’s path to purchase.

#### 4. Four pillars of mobile shopping

The mobile shopping environment is characterized by four interrelated pillars that impact every stage of the new consumer decision process and define the framework of the emerging retail shopping landscape. As shown in Figure 2, the

Figure 2. The four pillars of mobile shopping



four pillars—consumer-retailer interconnectedness, consumer empowerment, proximity-based consumer engagement, and web-based consumer engagement—are often at play individually in reshaping the decision-making process, but they are also highly interconnected and simultaneously influence the shopping experience for both the consumer and the retailer in new and distinct ways. Although previous research has yet to identify these pillars as the mobile shopping revolution’s conceptual foundation, they clearly represent the essential ways and means through which retailers can employ mobile technologies to interconnect, empower, and engage with consumers. To be successful in this new era, retailers must thoroughly understand the implications of these pillars on consumer behavior and integrate them into their retail strategies.

The technologies used in mobile shopping form the foundation for the four pillars. This revolution is built upon the use of consumer-based devices such as smartphones, tablets, and other emerging technologies. In 2015, Pew Research reported that 68% of American adults age 18 and over owned smartphones and 45% owned tablets (Anderson, 2015). The use of both types of devices is expected to grow over the next few years (Statista, 2015). Recent studies indicate that mobile consumers are already highly dependent on these technologies (Anderson, 2015; Bank of America, 2014) and this dependency is “expected to grow as people use their phones for

<sup>2</sup> Martin (2013a) defines the mobile consumer shopping process as consisting of six stages: the pre-buy, in transit, on location, selection process, point of purchase, and post-purchase. We postulate that Martin’s six stages can be condensed into three stages: pre-purchase, purchase, and post-purchase.

things like shopping” (Gibson, 2011). As consumers become more dependent on these devices, retailers will feel more pressure to be more innovative in their use of these technologies to satisfy consumer demands (Kibo Inc., 2016).

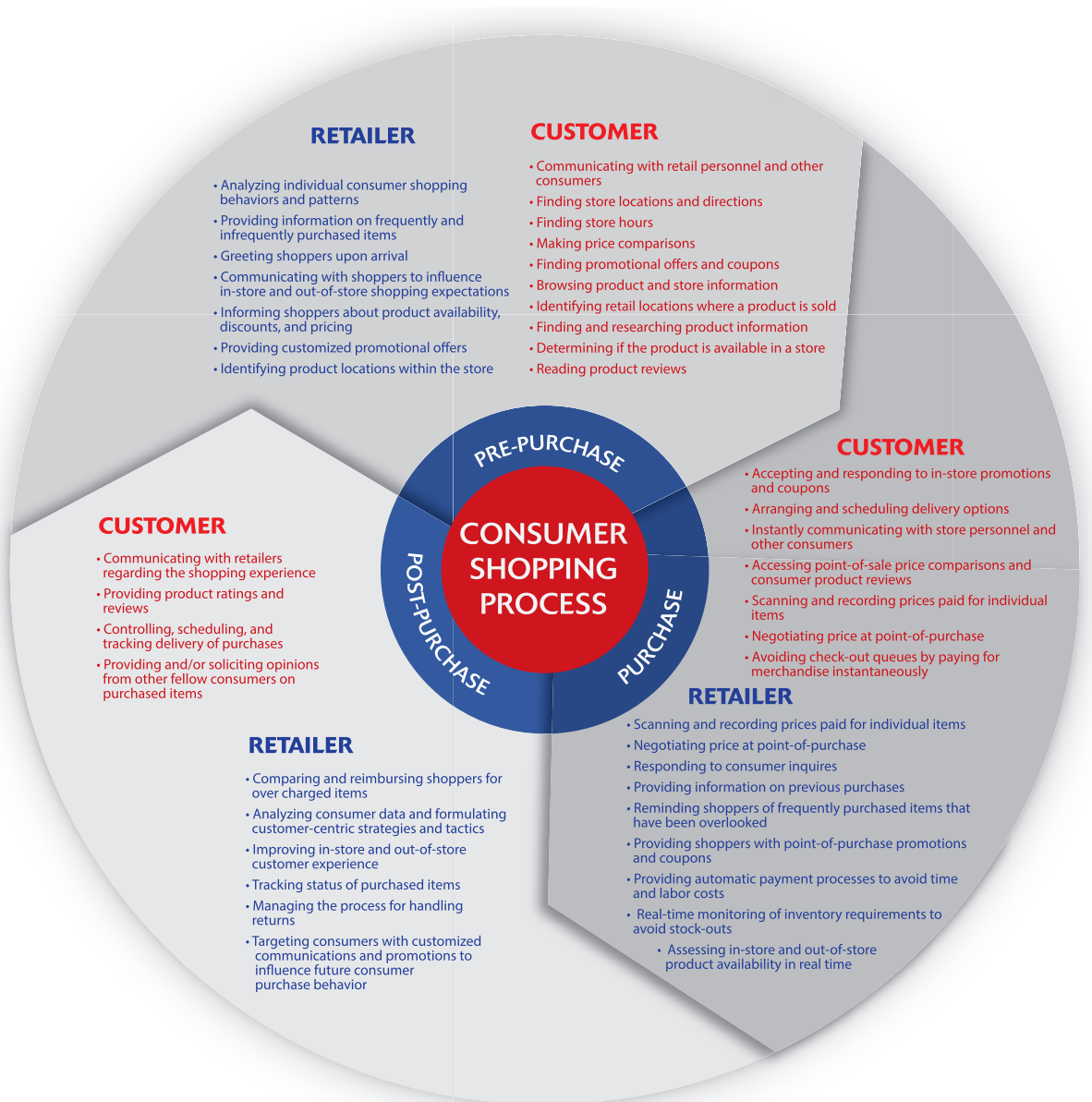
Figure 3 lists significant in-store and out-of-store activities facilitated by mobile devices during each stage of the shopping process and suggest that they have changed shopper mindsets, behaviors, and expectations for the shopping experience (Motorola Solutions, 2012). Figure 3 also confirms Martin’s (2014) observations about the continuous nature of the shopping process as undertaken by the mobile consumer as well as the need for retailers to constantly monitor the consumers’ adoption and use of

these technologies and rapidly adjust their merchandising strategies and tactics accordingly.

### 4.1. Pillar 1: Consumer-retailer interconnectedness

In the mobile era, retailers and consumers can interconnect anytime, from anywhere in order to individualize the shopping journey for both participants across all stages of the purchase process. Successful retailers have adopted the concierge approach (Brynjolfsson et al., 2013) to craft a more hyper-relevant experience that consumers like Dr. Gonzales now demand. This orientation is built on data collected from the

Figure 3. Partial list of retailer and consumer activities in the mobile shopping process



two-way flow of information between the parties and extends beyond traditional in-store activities to include out-of-store dimensions of shopping, delivering better value, efficiency, savings, and engagement directed at fulfilling personal shopping needs.

Merchandisers can now individualize, influence, and reset a consumer's path to purchase by anticipating purchase habits and providing relevant communications at key location points in the shopping journey. In the case of Dr. Gonzales, Woodman's tailored a personalized message to greet her as she entered the parking lot, provided her with targeted coupons and promotions based on her previous purchases, reminded her in real time of forgotten items, and directed her to the location of sought-after products within the store. However, the engagement went far beyond these activities when the store associate used his mobile device to assist the doctor by locating a nearby specialty cookware retailer that stocked the steamer set she had included on her shared shopping calendar.

This interconnectedness also influenced her shopping journey in other settings when she interacted with the specialty cookware store, Starbucks, and the wine shop. At the specialty cookware store, the instant pricing information she retrieved via her mobile phone regarding the steamer set altered her purchase decision at a key point. Starbucks was able to detect her proximity to the store and reminded her of a forgotten gift via a mobile phone message. The wine shop targeted her with a discount offer that resulted in her decision to round out her party menu with a previously unanticipated purchase of Chardonnay. All of these actions were the direct result of effective and timely communications made possible by mobile technologies that enhanced the shopping experience for the customer and improved the sales performance of the retailers she interacted with.

Recent research indicates that 90% of mobile shoppers use their mobile devices for many of the shopping activities listed in Figure 3, and almost half of these shoppers use these devices for 15 minutes or more per store visit (Google Shopper Marketing Council, 2013). This 15-minute window of engagement is expected to increase in the near future (Bank of America, 2014), and a growing body of research documents the impact mobile communications have on altering various aspects and outcomes of the consumers' in-store and out-of-store shopping journeys (Hui, Inman, Huang, & Suher, 2013; Sciandra & Inman, 2014). Use of these technologies to establish a sustainable interconnection between retailers and consumers is rapidly emerging as a key factor in differentiating

successful retailers from their less successful competitors. The timing, context, relevancy, and content of such communications are critical components in creating the hyper-relevant shopping experience that mobile consumers will demand from retailers.

## 4.2. Pillar 2: Consumer empowerment

Access to real-time information, which in the past was asymmetric, is rapidly tipping the scale of empowerment toward the m-powered consumer, and these technologies are enhancing both the consumer's sense of empowerment and the actual reality of empowerment (Deloitte, 2014). This was revealed in Woodman's test marketing, which indicated that mobile technologies gave consumers the sense that they were "more in control of the shopping process" (Angrisan, 2013, p. 28) than ever before. Nordstrom CEO Erik Nordstrom recently made the same observation about the effect mobile technologies have on Nordstrom shoppers (Nordstrom, 2016).

All of the activities, assistance, and information listed in Figure 3 promote this sense of empowerment, resulting in a more informed, independent, and demanding consumer. This newfound sense of control may be due to the instantaneous access consumers have to information made possible by mobile technologies and their ability to "shop wherever and whenever they want, often without stepping inside a store" (Cillium Corp, 2015). In fact, according to a recent Motorola Solutions (2012) survey, "61% of mobile shoppers believe they have access to more information about products than store associates." This independence is illustrated by the fact that "73% of these shoppers would prefer to use their smartphone rather than engage a store associate" (Motorola Solutions, 2012) during their in-store shopping experiences. Use of mobile devices by shoppers has also produced demanding consumers with a want-it-here-want-it-now mentality who are "less willing to compromise on how they want to shop" (Nordstrom, 2016). This, in turn, is resulting in a focus on the omnichannel strategy adopted by retailers to create the endless aisle shopping experiences that m-powered consumers now expect (see Section 4.3).

Mobile consumers like Dr. Gonzales are rapidly becoming more cognizant of their empowerment, particularly in the areas of pricing, product selection, and customer service. For example, the doctor was empowered to engage in price negotiations with the store manager when she used her mobile device to compare the price distribution of the steamer set between local brick-and-mortar

retailers and online providers. With this information in hand, she used the specialty cookware retailer in a showrooming context to make her product selection with Amazon based on price and availability (Quint, Rogers, & Ferguson, 2013).<sup>3</sup> Communications with members of her wine community and personal friends made via her mobile phone gave her confidence in selecting the wine for her dinner party, which was reinforced by wine reviews and consumer ratings she was able to retrieve on demand. A number of researchers (e.g., Mangold & Smith, 2012; Simonson & Rosen, 2014) have emphasized the importance of consumer-generated ratings and opinions on influencing the consumers' decision-making process because "retailer-sponsored content—advertisements, user guides, retailer blogs—are losing out to user-generated content and reviews as the predominant influencers of purchase decisions" (Deloitte, 2014). This user-generated content now can be retrieved at any point in the shopping journey, and retailers have yet to fully acknowledge how this information empowers consumers and adjust their strategies, tactics, communications, and promotions accordingly (Fiorletta, 2015).

Woodman's, like other sophisticated retailers, has responded to its empowered and demanding mobile customers by personalizing the shopping experience through the use of communications directed at these consumers during key points in their shopping journey. Welcoming messages, digital shopping lists, in-store navigation tools, individualized coupons and promotions, and convenient checkout procedures are all customer service activities made possible by the use of mobile technologies that enhance consumers' sense of empowerment. Consumer empowerment also extends to the purchase-from-anywhere-deliver-to-anywhere reality that mobile technologies create and has changed the role played by store associates, as described in Dr. Gonzales's scenario and elaborated on in this section. The empowerment afforded by these devices is resulting in the paradigm shift discussed in this article and is radically changing the customer-retailer relationship from transaction-based to more value-based, thus creating sustainable brand loyalty for the retailer

and delivering the hyper-relevant experience that mobile shoppers now demand.

### 4.3. Pillar 3: Proximity-based consumer engagement

The ability to instantaneously identify the geographical location of consumers and then target them with customized communications is the essence of the mobile shopping revolution (Costa, 2014; Martin, 2014). For the first time in the history of merchandising, retailers now have immediate access to information on the geographical location of consumers that can be used in conjunction with other data to influence the decision-making process through carefully crafted messages and marketing tactics. Location-based marketing "allows consumers to 'check in' at restaurants, coffee shops, stores, concerts, and other places or events" (Goodrich, 2013) and affords retailers the ability to identify the location of consumers and target them with communications at key geographical points during their shopping journey (Goodrich, 2013).

Dr. Gonzales's shopping activities illustrate proximity-based engagement as well as her fluid transition between a 'seeker' versus 'cruiser' type of mobile consumer (Martin, 2013a).<sup>4</sup> In the Woodman's phase of her shopping journey, the doctor was in the seeker mode given her specific shopping objectives, which she shared with Woodman's, allowing the store to initiate and capitalize on location-based marketing activities and communications when it sent her greeting messages as she entered the parking lot and reminded her of forgotten items, targeted her with promotions and coupons, and gave her in-store directions for finding sought-after products. By identifying the doctor as a regular and valued customer, a Woodman's store associate was able to immediately engage the doctor and assist her in fulfilling her other shopping needs. Research has shown that location-based marketing practices

<sup>3</sup> Showrooming occurs when a shopper visits a brick-and-mortar retailer to inspect a product but then purchases the item from an online retailer. This *consumer-driven* practice has increased with the use of mobile devices by shoppers and is requiring retailers to adopt a more customer-centric approach in servicing the m-powered consumer.

<sup>4</sup> Mobile consumers fall into one of two categories: seekers or cruisers. "A seeker is a customer who is destination bound with a specific purchase intent in mind. This is the shopper who has done all the research and is now headed to the store." A cruiser is a "consumer roaming with no specific purchase intent in mind" (Martin, 2013a, p. 64). The key difference between these two types of mobile consumers is the situation and mindset they bring to the shopping experience. This information can provide retailers with insights on the situational relevance of the consumers' shopping journey, which can be used to craft the hyper-relevant, customer-centric experience that m-powered consumers now demand.

delivered at key location points can increase basket size, unplanned purchases, and customer loyalty (Google Shopper Marketing Council, 2013; Sciandra & Inman, 2014), and mobile technologies allow retailers to engage more precisely and proactively in these types of marketing efforts.

Likewise, Starbucks and the wine shop could quickly react to her status as a cruiser—"a consumer roaming with no specific purchase intent in mind" (Martin, 2013a, p. 65)—and target her with communications that resulted in her unanticipated visit to Starbucks for coffee and her serendipitous purchase of the Chardonnay.

While at Starbucks, the doctor also engaged in consumer-to-consumer communications when she gathered opinions from her social media-based wine community, obtained information via text message from a personal friend, and retrieved wine reviews and consumer ratings from the internet, resulting in her visit to the wine shop. These synchronous and asynchronous communications from other consumers at key location points in the doctor's shopping journey altered her purchase decisions and enhanced her shopping experience. Knowledge of the consumer's location combined with demographic and socioeconomic data, past purchase behavior, and the consumer's immediate shared purchase intentions allows retailers to better understand the situational relevance of a particular shopping encounter and better influence and add value to the consumer's shopping journey. With information on customer location, shared purchase intentions, and situational relevance, retailers can now realize the full potential that mobile technologies offer in crafting a hyper-relevant, customer-centric experience.

#### 4.4. Pillar 4: Web-based consumer engagement

Web-based engagement played an important role in Dr. Gonzales's shopping journey and she utilized the two primary mediums available for retailers to engage with their m-powered consumers: apps and mobile websites. Woodman's app allowed the store to deliver an exceptional experience for the doctor by providing tools that made her shopping journey faster, more convenient, and personalized. Amazon's mobile app allowed her to instantly compare the price of the steamer set with the brick-and-mortar specialty retailer's price, and the wine shop's mobile website included consumer ratings and reviews for the Chardonnay.

These two mediums are the primary ways retailers can interact with the mobile shopper, and each is used by m-powered consumers for

different purposes and at different stages in the purchase process (Forrester Research, 2016; Millward Brown, 2015). Although 85% of consumers' mobile moments are spent on various types of apps, only 5% is spent on shopping apps. Recent research indicates that m-powered consumers "frequently choose to use a mobile website to perform the majority of their shopping-related activities" (Forrester Research, 2014) such as those identified in Figure 3. However, retail apps are often used when consumers frequently engage with a retailer or when they "crave the convenience of an app for an activity they do regularly" (Millward Brown, 2015, p. 5).

An early response from the retail community to the m-powered consumer was to develop and launch apps indiscriminately, which engendered an app-a-mania wave of deficient apps that did not incorporate the essential concepts embodied in the four pillars discussed in this article. These apps were temporarily adopted and then discarded by dissatisfied shoppers. Retailers have since become more aware of the challenges they confront in developing apps that will incorporate the concepts of the four pillars and better meet the mobile consumers' needs. Although 87% of retailers increased their expenditures in mobile technologies in 2016 (Bedgood, 2016), most retailers have realized that not all components of these technologies are strategically equal in the mobile shopping era, with 60% now reporting that "apps are not a key component of their mobile strategy" (Forrester Research, 2016). Research indicates that consumers who do use apps do so for the convenience, speed, efficiency, and the personalized shopping experience they can create.

The experience that apps potentially offer can contribute to producing the hyper-relevant, customer-centric focus envisioned in the mobile shopping revolution. This focus "drives more frequent app usage, but it also drives more effective marketing opportunities" (Forrester Research, 2014); therefore, the challenge retailers face is in gaining consumers' cooperation in providing the data necessary to deliver a personalized shopping experience. Many consumers are reluctant to provide retailers with their location information, receive excessive push notifications, or provide personal information. In the case of Dr. Gonzales, she provided all such information, which allowed her to leverage the full power of mobile technology and enabled various retailers to create a personalized, hyper-relevant shopping experience for her. For some retailers, a mobile app is essential for delivering the customer-centric focus that m-powered consumers now demand. For example,

Walgreen's prescription refill app, Starbucks' pre-loaded payment cards, and Amazon's showrooming features app all provide convenient services that enhance the shopping experience for their consumers.

Mobile websites are frequently used by shoppers in the early stages of the shopping journey to gather information on multiple brands and make price comparisons among them and may represent not only the first mobile exposure the consumer has with a retailer but also "one of the last online touchpoints before a consumer visits a retail location" (Millward Brown, 2015, p. 3). The main advantages mobile websites offer retailers and consumers include "broader accessibility, compatibility, and cost-effectiveness" (Summerfield, 2016). As Dr. Gonzales's shopping experiences illustrate, retailers frequently need both mobile websites and apps to meet the needs of the m-powered consumer. However, as Summerfield (2016) noted: "It rarely makes sense to build an app without already having a mobile website in place." Given the m-powered consumers' preferences for mobile website engagement, successful retailers are continuing to focus their mobile strategy on improving their websites to meet the needs of their mobile customers more effectively.

## 5. Strategic implications for retailers

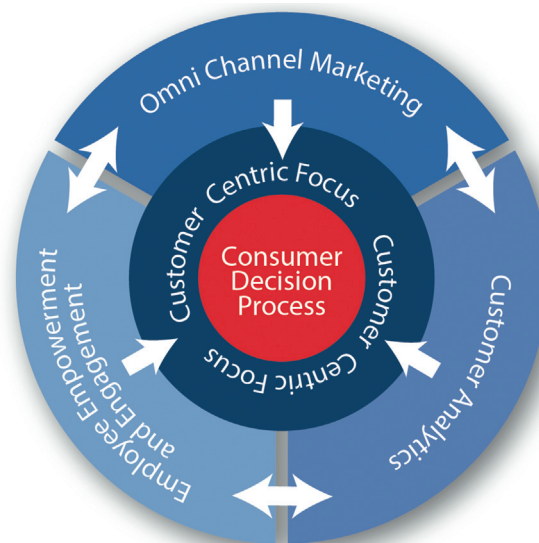
Based on our review of the trade literature, academic research, and discussions with industry

experts, we have identified three key strategic areas that retailers can use to achieve a sustainable competitive advantage in the mobile shopping era. These areas, shown in Figure 4 and described in the following sections, include customer analytics, employee empowerment and engagement, and omnichannel marketing. These key strategic areas are the primary vehicles that retailers can use to craft a customer-centric approach and shape the consumer decision process.

### 5.1. Customer analytics

A recent report by Cisco Systems Inc. (2015) emphasized that in the mobile shopping era, "insight is currency and context is king" for better identifying and meeting the high expectations of the demanding and sophisticated digitally equipped mobile shopper. Although retailers are becoming aware that the skillful collection and use of data on consumer shopping behaviors are key factors in establishing a sustainable competitive advantage, they are still "struggling to integrate online and offline data in order to understand and connect" (Forrester Research, 2016) with their consumers, particularly the in-store shopper. Connecting with this segment is critical given that brick-and-mortar retailers account for 92% of all sales and are still projected to account for 85% of these sales in 2025 (MacKenzie, Meyer, & Noble, 2013). As Reddy (2015) noted, brick-and-mortar retailers realize that to win and retain loyal customers they "need to focus more on the customer relationships than on the

Figure 4. Key areas for achieving a sustainable competitive advantage in the mobile shopping era



products, and access to big data and new marketing technologies” allows them to craft what the [Cisco Systems Inc. \(2015\)](#) report described as a more hyper-relevant, customer-centric shopping experience.

However, crafting this experience goes far beyond collecting and analyzing traditional socioeconomic and demographic data ([Snyder, 2014](#); [Trendwatching, 2014](#)). In the case of Dr. Gonzales, Woodman’s had extensive data on her past purchases and used it to supplement the traditional types of information she provided when downloading its app. The combination of these information sources allowed Woodman’s to craft real-time personalized messages they sent her during her shopping visit to their store.

Providing Dr. Gonzales with a hyper-relevant, customer-centric experience also requires collection and use of data that “reflects the context of the shopping journey” ([Cisco Systems Inc., 2015](#)), which represents the missing link for retailers to more fully understand shopping behaviors. This type of data can be gathered from such technological tools as GPS sensors, in-store beacons, and consumer-owned mobile devices and allows retailers to offer shoppers a more efficient, engaging, cost-effective, and relevant shopping experience ([Howe, 2014](#)).

With the real-time information Woodman’s had at its disposal, it went far beyond digitally greeting the doctor when she entered the parking lot to offering her conveniences and efficiencies in her shopping activities, such as providing her with customized promotional offers that appealed to her preferences for locally grown organic products, reminding her of forgotten items, directing her to the location of sought-after products, and facilitating a secure, convenient, and time-saving checkout process. A Woodman’s associate was also notified on his mobile device that the doctor had entered the store and was able to identify her location. With this information, along with access to her digital shopping list and calendar of that day’s shopping activities, he immediately engaged with her and offered valuable assistance in locating several items within the store and provided her with information on nearby retailers that carried the 5-quart steamer set she had included on her shopping list. Thus, the store associate was able to add unexpected value to the doctor’s shopping experience. All of these services created a hyper-relevant shopping encounter for her that would not have been possible without the effective use of information collected via mobile devices and other in-store technologies.

To be effective in creating a sustainable competitive advantage, omnichannel marketing

and supply-chain management must be guided by real-time information on consumers and other aspects of retail operations. As noted by [Forrester Research \(2016\)](#): “In-store technology focusing on driving digital operational excellence and digital customer experience . . . represent two sides of the same coin: what’s good for operations is good for shoppers.” Therefore, retailers must evolve and equip their facilities with digital technologies that connect them to all elements of the retail ecosystem, including store personnel. By excelling in the collection and creative use of relevant data on consumer shopping behaviors, retailers can create a sustainable competitive advantage over their less technologically sophisticated competitors and deliver the hyper-relevant experience that truly fulfills the customer-centric vision articulated by the four pillars (see [Figure 2](#)).

## 5.2. Employee empowerment and engagement

Several recent studies have documented the positive impact that empowered and engaged employees have on various measures of organizational performance ([Aon Hewitt, 2014](#); [Dale Carnegie & Associates, 2012](#); [Farrow, 2013](#); [Hay Group, 2014](#); [Mangold & Miles, 2007](#)). In retail, particularly in the brick-and-mortar segment, empowering and engaging store associates can enhance their roles as brand ambassadors and contribute to creating a sustainable competitive advantage. For example, mobile devices and beacon technology enabled the associate at Woodman’s to immediately identify and engage Dr. Gonzales in her shopping activities, thus greatly enhancing her in-store shopping experience while simultaneously contributing to the associate’s role as a brand ambassador.

The critical function that associates carry out is aptly described in a report from [Retail TouchPoints \(2015b\)](#): “Associates still play vital roles in streamlining and enhancing the shopping journey, particularly when they leverage technology that provides them with deep data about products, real-time inventory levels, and shoppers.” Employee engagement and empowerment were also acknowledged in another [Retail TouchPoints \(2015a\)](#) survey where 100 executives identified them as key components for developing associates as brand ambassadors. In the report, 49% of the respondents indicated that empowering their associates with mobile devices greatly enhanced employee-to-customer engagement, employee-to-management engagement, and employee self-engagement. The greatest benefit came in the area of employee-to-customer engagement, which materialized in

higher conversion rates, increased basket size, an uptick in customer loyalty membership, and improvements in on-floor, one-on-one interactions between associates and customers. The second greatest benefit reported in the survey involved employee-to-management interactions, which included improved overall communications between management and associates and, more specifically, improvements in real-time operational issues such as inventory availability and tracking, real-time information on pricing and promotions, and employee scheduling. Finally, the benefits resulting from employee self-engagement included increased retention rates, increased levels of job satisfaction, and a higher likelihood of employees becoming positive brand advocates.

The importance of empowering associates with mobile devices is further reinforced by a [Motorola Solutions \(2014\)](#) shopping study that found that 55% of mobile shoppers prefer retailers that have mobile capabilities and 67% prefer retailers that have associates who are well trained and knowledgeable in the use of these devices. These mobile shoppers also indicated that they are willing to drive farther, pay more, buy more per visit, and shop more frequently at retailers that equip their associates with smartphones or tablets. In the same survey, 65% of the associates believed that they could better serve customers if they were empowered with mobile technologies and 75% indicated that store management could be more effective in managing employees and operational processes if they were also empowered with similar technologies.

As brand ambassadors, associates can use mobile technologies in at least three ways to reinvigorate the in-store customer experience: removing barriers to the completion of transactions at the point of sale (POS), facilitating endless-aisle customer experiences, and personalizing the relationship between customers and associates. For example, to reduce inefficiencies associated with customer purchases, Moosejaw now uses mobile POS to complete 70% of all in-store transactions, and other retail technology innovators—Urban Outfitters, Home Depot, Starbucks, and Nordstrom—have implemented such technologies to expedite customer transactions. However, “to make mobile POS a true partner in associates’ transformation to brand ambassadors, the technology needs to do more than simply ring up transactions” ([Retail TouchPoints, 2015a](#)) and instead provide associates with the ability to influence key elements of the customers’ shopping experience, including payment, scheduling delivery and pick-up options, and handling product returns and exchanges. When associates can use mobile

technologies to actively engage customers in fulfilling their shopping activities, they become indispensable and valuable to both the retailer and consumer.

Another opportunity that mobile technologies offer associates is the ability to provide customers with critical product information at POS. As stated in the [Retail TouchPoints \(2015a\)](#) survey: “When customers perceive associates less as salespeople and more as problem-solvers, staff become far more effective brand ambassadors.” Mobile technologies allow associates to function more effectively as problem solvers by accessing a retailer’s complete inventory at the POS, thus delivering an endless-aisle experience that makes the inventory immediately “visible and available to every shopper in every store” ([Retail TouchPoints, 2015a](#)).

Activities such as removing barriers at the POS and providing an endless-aisle experience to shoppers naturally lead to a closer bond between the customer and the associate, which can be extended via the use of the additional functional capabilities that mobile technologies offer. For instance, using beacon technology that interacts with mobile devices, store managers can now easily identify and locate high-value customers within the store and direct associates to these individuals. This proactive approach further personalizes the relationship between the shopper and the associate and can enhance the associate’s status as a brand ambassador ([Howland, 2016; Taylor, 2016](#)).

The role of associates is rapidly evolving from being simply a source of static information to being “facilitators of exceptional [shopping] experiences” ([Forrester Research, 2016](#)). However, only 29% of shoppers perceive associates to actually be knowledgeable and helpful in the shopping process ([Forrester Research, 2016](#)). By redefining the role of these valuable employees and fully empowering them with mobile technologies, retailers can achieve a sustainable competitive advantage over their less technologically sophisticated competitors.

### 5.3. Omnichannel marketing

Omnichannel marketing has emerged in retailing as a result of the widespread use of mobile technologies by shoppers, which in turn has dramatically altered the ways retailers engage, respond, and interconnect with their respective consumers ([Baird & Kilcourse, 2011](#)). Omnichannel marketing is “the ability to deliver a seamless shopping experience to customers across all channels by synchronizing technologies, services and processes

in a centralized, interoperable way” (Mindtree, 2014). From a consumer’s perspective, information can be gathered and transactions initiated in one retail channel while continuing the engagement in other channels. If done well, “the retailer improves consumer engagement, increases sales and conversions, and builds loyalty” (Schaeffer, 2015), truly achieving a complete customer-centric outcome.

Although many retail executives have identified omnichannel marketing as one of the major trends emerging in the retail sector, implementing such a strategy has been difficult and elusive for most retailers (Motorola Solutions, 2014; Pierre Audoin Consultants, 2015; RIS News, 2014; WBR Digital, 2015). Forrester Research (2014) concluded that “there is a significant disconnect between what consumers want from an omnichannel retailer and the omnichannel capabilities that retailers are providing.” With heightened expectations from m-powered consumers, 71% of these shoppers now expect to view in-store inventory online and 50% will purchase products online with the expectation of in-store pickup. Forrester Research (2014) also indicated that “only a third of retailers have operationalized even the basics [of omnichannel marketing] such as store pickup, cross-channel inventory visibility, and store based fulfillment.”

Helgeson and Mauerer (2015) have identified five of the most common obstacles to successfully implementing omnichannel marketing: insufficient investment, siloed technology, inventory intelligence, customer identification, and fragmented fulfillment. To overcome these obstacles, Krueger (2015) suggests focusing on measuring shopper behavior, providing relevant and local retail information, and creating an organizational structure that supports omnichannel marketing. Carefully monitoring and tracking shopper behavior can address the issues of customer identification and fragmented fulfillment, while gathering and disseminating relevant information on inventory, delivery schedules, and other key aspects of retail operations help overcome problems associated with siloed technology and inventory intelligence. Finally, creating an organizational structure that supports this form of marketing continues to be one of the most difficult aspects of implementing an omnichannel initiative (Furrow & Manas, 2014; Pierre Audoin Consultants, 2015).

Popovec (2014) observed that “although no retailer has completely mastered the art of omnichannel selling,” several have been effective in “seamlessly connecting with customers through all available means.” Nordstrom, Walgreens, Crate & Barrel, Oasis, Starbucks, and Sephora (Trout, 2017) implemented successful omnichannel

strategies by incorporating and synthesizing the essential concepts articulated in the four pillars (see Figure 2). These retailers have addressed operational procedures by revising their organizational structure to empower, engage, and connect with the mobile consumer more effectively.

Human resources also play a prominent role in implementing omnichannel marketing. Compensation programs must include metrics that reflect cross-channel sales success, and employee incentive plans must encourage store associates to maximize total sales regardless of the delivery channel (Retail TouchPoints, 2015b). Likewise, store associates must be equipped with technological skills that allow them to function digitally across multiple-channel environments to ensure consistency in cross-channel fulfillment (Furrow & Manas, 2014).

Effective supply-chain management (SCM) represents the operational mechanism that enables retailers to provide seamless integration of the consumer shopping experience across all channels and simultaneously ensure omnichannel fulfillment (Baird & Kilcourse, 2011; Deloitte, 2015). To respond to mobile shoppers’ want-it-here-want-it-now attitude, retailers are “revisiting the design of their supply chain much more dramatically than they have in the past” (Gibson, Defee, & Ishfaq, 2015) with the objective of creating an agile and responsive supply chain that aligns closely with their omnichannel strategy. The multitude of channel options entailed in omnichannel marketing has dramatically increased the complexity of SCM (Baird & Kilcourse, 2011); but mastering this complexity can become a major source for achieving a sustainable competitive advantage (EY Advisory, 2015) given that SCM “is positioned squarely at the crossroads of omnichannel retailing success” (Ishfaq, Gibson, & Defee, 2016). Retailers that have successfully aligned their supply chain with their omnichannel strategy realize that “consumers don’t care about channels, but they do care about finding solutions to their lifestyle needs” (Baird & Kilcourse, 2011), and these retailers have focused on providing a seamless experience across all channels that emphasizes direct fulfillment, inventory visibility, and operational efficiencies.

In their benchmark analysis of successful omnichannel retailers, Baird and Kilcourse (2011) noted that these firms have structured their supply chain to be more flexible and allow the sharing of inventory across different channels and distribution centers to ensure cross-channel fulfillment and delivery. These retailers realize that the mobile consumer’s path to purchase is not restricted to any one channel and the supply chain must be

structured to allow m-powered consumers “to buy any available inventory from any selling channel, anywhere and at any time” (Baird & Kilcourse, 2011). These retailers have made substantial investments in inventory management systems, information technologies, and warehouse and distribution centers with the objective of integrating the entire retail ecosystem to better deliver a seamless shopping experience across all channels that encompass all activities present in the three phases of the consumer shopping process (see Figure 3).

Interacting with consumers across multiple channels is a daunting task that requires careful attention to issues related to the creative collection and use of data on individual consumers (Howe, 2014) and employee empowerment and engagement (Parker Avery Group, n.d.). Therefore, the success of an omnichannel marketing strategy ultimately depends on the retailer’s commitment to these areas as well as the acknowledgment of their close interrelationship.

#### 5.4. Strategic areas influencing the consumer decision process

As described in Section 2 and illustrated in the lower portion of Figure 1, the use of mobile technologies by shoppers has caused a paradigm shift in the emerging consumer decision process. This process is now better depicted as a seamless and iterative activity that often entails intermingling the various stages of the purchase cycle—pre-purchase, purchase, and post-purchase—in both time and place. We contend that this paradigm shift requires retailers to adopt a more holistic mindset that focuses on the process rather than the push strategy employed in the past that focused exclusively on the decision outcome. The four pillars discussed in Section 3 and shown in Figure 2 represent clearly the essential ways and means through which retailers can employ mobile technologies to interconnect, empower, and engage with shoppers to influence and shape the consumers’ shopping processes, behaviors, expectations, and demands. Figure 3 presents a partial list of activities retailers are currently using to influence and respond to the m-powered consumer. As shoppers’ expectations and demands increase and mobile technologies evolve, the list in Figure 3 will undoubtedly continue to grow in unforeseen ways.

From the retailers’ perspective, success in the mobile shopping era will be greatly determined by their ability to leverage the power and concepts embodied in the four pillars in order to offer shoppers a more efficient, engaging, cost-effective,

and hyper-relevant shopping experience (Howe, 2014). Retailers will deliver this experience in large part by skillfully integrating and emphasizing three strategic areas—customer analytics, employee empowerment and engagement, and omnichannel marketing—to achieve and maintain a sustainable competitive advantage in the mobile shopping marketplace. These areas are also instrumental in determining the extent to which retailers can successfully implement a customer-centric strategy that allows them to, directly and indirectly, influence the consumer decision-making process (see Figure 4).

Customer analytics involves the skillful collection and use of data drawn from various sources and provides the knowledge and insight required for retailers to better manage the retail ecosystem, customize the shopping experience, and thus influence the consumers’ decision-making process. The information gleaned from such data can comprehensively address the universe of issues related to the five Ws—who, what, when, where, and why—of consumer shopping activities. In the mobile shopping revolution, the old adage “information is power” takes on new relevance. Marketing strategies, tactics, and communications must be formulated based on accurate data that allows retailers to understand, predict, and influence shopping behavior. The example of Target sending coupons for maternity items to a teenage girl based on its knowledge of her purchase history of other non-maternity products that frequently indicate maternity status is well known (Hill, 2012). This textbook example illustrates the power of customer analytics in answering the questions implied by the five Ws and the newfound ability of retailers to anticipate and influence the consumer decision process.

In the case of Dr. Gonzales, four of the five retailers that she interacted with—Woodman’s, Amazon, Starbucks, and the wine shop—employed some form of customer analytics to directly or indirectly influence her decision making. However, no amount of data could have predicted Dr. Gonzales’s behavior in the specialty cookware store when she informed the store associate of her decision to purchase the cookware set from Amazon. Employee empowerment (or the absence of such empowerment) was key to this interaction in that the store’s policy on price negotiations was inflexible and did not allow the associate to meet Amazon’s price. Employee empowerment extends far beyond the confines of the brick-and-mortar store to scenarios where customers now interact digitally with associates during the various phases of the purchase cycle. This interaction, whether occurring within

the store or digitally from a distance, provides retailers opportunities to utilize the vast bank of information already collected on consumers to respond to the individual needs of their respective shoppers and influence the decision process in real time.

Omnichannel marketing, the third strategic area, has evolved as a direct result of consumers' use of mobile technology. This technology allowed Dr. Gonzales to inspect the 5-quart steamer set in a brick-and-mortar environment and yet place her online order in real time with Amazon. As retailers are becoming aware, "consumers don't look at online and in-store as different channels" (Kibo Inc., 2017); instead, they focus on solutions to their individual shopping needs, which often entail using various channels at different stages in the purchase cycle. To leverage the full power of omnichannel marketing, retailers can use information collected on consumers to equip and empower their store associates in order to better influence the consumers' in-store decision process and their out-of-store shopping behaviors.

## 6. The new role of the retailer

Based on our extensive review of the literature and discussions with industry experts and practitioners, the consensus is that the mobile shopping revolution is still in its infancy. With the newfound power of mobile technologies, consumers can now range freely over both the real and virtual retail environments simultaneously while accumulating vast amounts of information pertaining to their immediate shopping needs.

Although retailers are increasingly recognizing the influence these technologies exert on consumer shopping behaviors, the retailing sector continues to struggle and adjust to the needs of the mobile shopper.

In this article, we have identified three areas that have not been addressed in the extant literature but will greatly influence the success of retailers as the mobile shopping era unfolds. First, we argue that retailers must adopt a new mindset that focuses on influencing the consumer decision process rather than the decision outcome. This new mindset redefines the role of the retailer to include a more customer-centric focus that seeks to provide consumers with a hyper-relevant shopping experience. The new approach also encompasses all aspects of the retail-ecosystem and challenges many longstanding practices and heuristics that have defined retailing success in the past.

Second, retailers must embrace the concepts embodied in the four pillars discussed in this article. These pillars represent a new conceptual framework that retailers can employ to more effectively interconnect, empower, and engage with consumers. Finally, the use of mobile technologies by consumers has greatly magnified the importance of three areas: customer analytics, employee empowerment and engagement, and omnichannel marketing. These three areas offer retailers the ability to directly and indirectly influence the consumer decision-making process and form the basis for achieving and maintaining a sustainable competitive advantage in the mobile shopping era.

The ongoing changes and developments in mobile technologies, both hardware and software, preclude an in-depth discussion in this article of the likely trajectory and impact they will have on the future of retailing. However, if current trends persist, major changes in retailing practices will most likely define the future landscape of merchandising.

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