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Retail 4.0:
The Future of Retail Grocery in a Digital World

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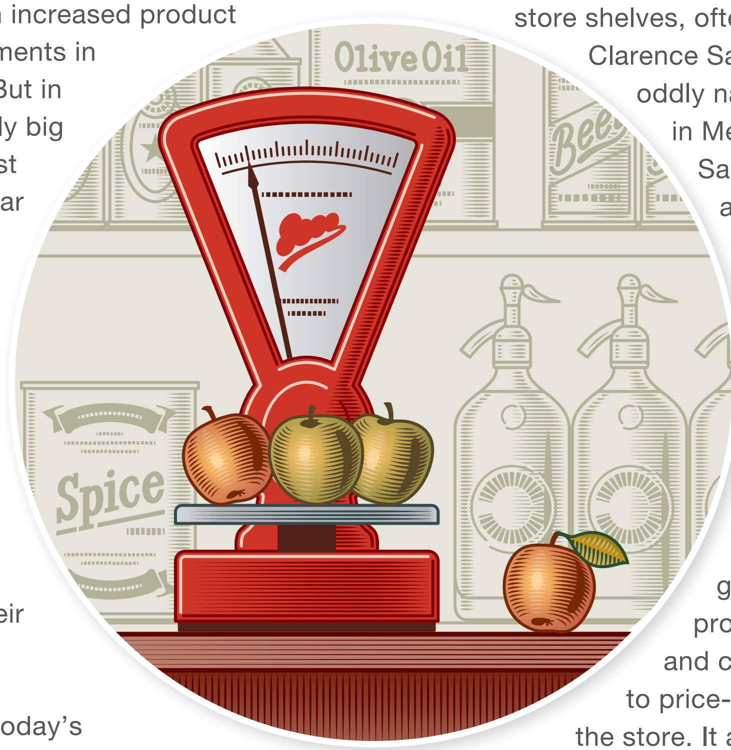
Introduction

If there's one thing that always stays the same in retail, it's change. New stores open, others go out of business. Market leaders experiment with larger or smaller store formats. They change the layout in their stores and launch new private brands on their shelves. Loyalty programs are tweaked, new offers and affinity programs designed. Supply chains become more automated and efficient, resulting in increased product availability and improvements in inventory management.But in reality there are few really big innovations in retail. Most of the change we see year after year is relatively incremental. True transformation in this sector comes along only once every few decades. And when these transformational events occur, they nearly always create new winners and leave a trail of casualties in their wake.



To understand whether today's innovations represent seismic industry shifts, it's useful to recognize the three preceding "ages of modern retail". This report focuses on the grocery sector, but we also draw on the best practices and experiences of leading retailers in different categories from around the world. For the purposes of this article, we'll peg the birth of modern retailing to the 20th century and begin with what we call "Retail 1.0."

Retail 1.0: Birth of the modern supermarket

Retail 1.0 had its start at the beginning of the 20th century. In the grocery business, Piggly Wiggly was arguably the earliest and most influential innovator, offering the first true self-service grocery store—at least in America. In 1916, at a time when grocery shoppers presented their orders to clerks at a desk who then gathered the goods from the store shelves, often hidden from view, Clarence Saunders founded the oddly named Piggly Wiggly in Memphis, Tennessee. Saunders had developed a way for shoppers to serve themselves, suddenly making packaging and brand recognition crucial for manufacturers. According to its corporate history, Piggly Wiggly was the first modern grocery retailer to provide open shelves and checkout stands, and to price-mark every item in the store. It also put employees in uniforms, franchised independent grocers to also operate under the self-service method, and designed standardized layouts, fixtures and equipment. Piggly Wiggly Corporation patented the self-service format in 1917 and its franchising model effectively propagated these ideas at high speed. By 1932, there were over 2,500 Piggly Wiggly stores nationwide and other regional grocery chains had started adopting the concept.

Once the self-service concept was firmly enshrined in the retail sector in the United States, incremental change took over. Lower prices, larger stores, parking lots, category management, gondolas, in-store promotions, shelf facings and planograms followed. Dozens of similar self-service supermarket mega-chains followed, both in the United States (King Kullen, Kroger, Safeway) and in Europe.

Retail 2.0: Hyper-size me

Fast-forward fifty years to 1963, and the birth of the modern hypermarket. Carrefour opened its doors in the Paris suburbs around the same time the first Walmart appeared in Arkansas in the U.S., (although it would still be a number of years before the company offered fresh food). The key idea here was "everything under one roof," with that roof being a pretty big one. The modern hypermarket was a radical step ahead in terms of space utilization, productivity, efficiency, and cost management. The value for customers increased dramatically through lower prices and greater choice. The format more or less took over the grocery sector in France and Spain within 15 years, and has subsequently spread across the world, including to emerging markets such as China, Brazil and Thailand. In the U.S., Walmart generated most of its growth during the 1990s and 2000s from supersizing the hypermarket into the Supercenter. Once again, a transformational event in modern retail led to countless incremental innovations – from private label products, multi-format offerings, category killers and ever more complex retail supply chains.

Retail 3.0: The rise of e-commerce

Leap ahead another few decades, to a time when big box hypermarkets and category killers were firmly entrenched as the kings of the retail world. The year is 1995, and the first modern e-commerce transaction is only a couple of years old. A young man named Jeff Bezos decides that the Internet is a perfect channel to sell bulky items like books. Yet Bezos' innovation was no ordinary bookstore. He had the foresight to create a much broader e-commerce universe. In order to get repeat traffic and differentiate his online bookseller from brick and mortar competitors, he added the option for buyers to write their own book reviews, and he built the now-famous recommendation engine, which has been as important to Amazon.com's success as anything. At the same time, Bezos took a big risk by tackling the biggest hurdle to online shopping – delivery costs – by essentially eliminating them and treating them more as a marketing expense. By 1997, Amazon.com had generated $15 million in revenue and e-commerce had become a buzzword that ushered in a new era of retail – an era where creations like e-auctions (eBay), online category killers (Zappos) and big data analytics continued to add to the evolution of Retail 3.0. Today, Amazon.com is very much part of the retail establishment – no longer a nimble attacker, and it may have to face off against new threats of its own.

E-grocery, however, has had mixed fortunes. The first e-grocery players emerged in 1997, hot on the heels of Amazon. Webvan, named as the largest dot-com flop in history, serves as a cautionary tale. The company went public in 1999 with a customer satisfaction model that included 30-minute delivery windows. It grew too quickly and never managed to reconcile its high operating expenses with the low customer adoption of the idea of buying groceries online.

Overall, the e-grocery model has taken much longer to get right than other areas of retail, and successful companies in this space are a mix of traditional brick and mortar players like Tesco and start-ups like Peapod and Ocado. Amazon.com has been piloting its AmazonFresh service in the Seattle area since 2007. Only a decade after e-commerce went mainstream, we are beginning to see sustainable business models in e-grocery – companies that carefully manage their logistics, pricing and customer loyalty. How many of these players will ultimately be able to build sustainable (i.e. profitable) business models remains be seen, but we know that for the e-grocery pureplays, there is a scale that will allow the very best to survive and thrive. As these business models begin to stabilize, key players are implementing strategies that lead us to believe we are entering the next transformational change in retail – the dawn of Retail 4.0.

Retail 4.0: Multi-channel, or Omni-channel retailing

With searching and buying on PC, tablet and mobile phones becoming near ubiquitous, brick and mortar retailers are experimenting with virtual stores. Some are even converting their stores, or parts of them, to fully-functioning warehouses or "dark stores". The role of the box, whether big, small or online, is suddenly changing. Although it is not immediately apparent what shape Retail 4.0 will take, or which company will get assigned credit for heralding this new age, we have selected seven trends to watch in this space with a focus on retail grocery. These trends bring into sharp relief the future role technology will assume in the business of retail, even for the most traditional brick and mortar players.

1. CONTINUED RISE OF E-GROCERY "ATTACKERS"

There is a false comfort in believing that grocery e-commerce will always stay niche, that no one makes money on delivery, or that the last mile is expensive. There is a need to radically rethink and segment the online grocery store into its component parts, identifying aspects of the purchase that can be "peeled off" in order to make money through things such as home-delivery, click-and-collect, drive-through and centralized lockers. Quidsi, the New Jersey-based e-commerce company that was acquired by Amazon, for example, has profitably carved up the grocery basket to create online category killers like Diapers.com and Soap.com, sectors that were once the preserve of the supermarket. Of course, the success of the e-grocery relies heavily on overall warehouse utilization; customer penetration in densely populated areas; and order frequency/basket size. In other words, we don't expect to see the model succeed in all countries or geographies. But as e-grocery players become adept at their game, with virtual stores, low prices and effective delivery models, bricks and mortar grocery stores who don't adapt may be left to play in the convenience store/food service game, selling products at the lowest-margin end of the spectrum.

2. THINKING DIFFERENTLY ABOUT THE BOX

Smart brick and mortar grocery retailers are redefining themselves in response to the threat of e-grocery attackers. Seeking new ways to engage customers, they are creating purchasing occasions beyond the physical store, blurring the lines between online and offline. Some are even going beyond individual purchases and establishing on-going subscriptions for customers. All this may mark the death of the big box retailer as we know it. At a minimum, we believe that all successful physical supermarkets or hypermarkets will have to offer a compelling customer experience. Price, assortment and convenience will simply no longer be enough. Shoppers will expect to be entertained. We see the continued rise of innovative delivery models, like drive-thru pick-up or drop boxes, where customers can order items online and then pick them up without having to leave their car. We see virtual stores embedded in physical ones (the "endless aisle"), or micro-stores popping up on street corners. In Korea, Home Plus, the discount chain co-owned by Tesco and Samsung, offers a virtual grocery store on the walls of subway stations. To access the "store," subway riders can scan product codes with their smartphone. In the U.S., Walmart is experimenting with transforming its stores from potential brick and mortar albatrosses to quasi-product distribution centers that provide new value for online shoppers. Through a service called Walmart To Go, the company offers same-day delivery from Walmart stores for a limited universe of items purchased online, such as grocery, electronics, home goods, toys and video games. This type of convergence between shopping on the web and in-store experience helps create a seamless relationship between the retailer and the customer.

Yet not all integration of online and offline necessarily represents a boost to the bottom line. In France, where the concept of drive-thru grocery stores is becoming immensely popular, accounting for 2.6 percent of the country's food retail market, the model is less profitable than conventional stores, primarily because of the limited number items offered and the labor required for order preparation. Thus this innovation, which is no doubt appealing to many consumers, has the potential to take business away from existing stores and replace it with lower-margin sales.

3. INCREASING IMPORTANCE OF DIGITAL MARKETING, SOCIAL MEDIA, AND LOCATION-BASED SERVICES

Digital is about much more than e-commerce. No longer talking down to their customers, the best grocery retailers are engaging in two-way communication, perhaps best exemplified by Whole Foods' use of Twitter for customer service. In Japan, Seiyu, which is owned by Walmart, launched a Twitter campaign allowing customers to vote on and suggest items for which they think prices should be lowered. The company ended up reducing prices for four weeks on 100 of the most voted items across stores nationwide. Social media can also be utilized as a source of consumer-generated product ideas. New product development can be "crowd-sourced" on Facebook, Twitter and the blogosphere. Brands are no longer hermetically sealed concepts defined by fixed principles – they evolve and develop personalities online.

4. SOPHISTICATION OF PERSONALIZATION AND CRM

Coupons and promotions have evolved from static notices published in flyers to targeted personal communications using a variety of channels, from print-outs to smart phone apps. This trend has accelerated in response to three developments. First, retailers are learning more and more about their customers and are developing the ability to analyze large amounts of data. Second, customers are increasingly willing to engage with retailers through innovative loyalty programs, location-based services and smart phone applications. REAL hypermarkets in Germany, for instance, allows its loyalty customers to browse online coupons on their mobile phones while they walk the aisles. Third, the emergence of "social shopping" experiences on platforms like Groupon, LivingSocial and Facebook have forever changed how consumers engage with coupons. All these developments will continue to redefine the way both retailers and manufacturers promote and advertise.

5. ADVANCES IN SELF-CHECK OUT AND DIGITAL WALLET

Retailers are developing more efficient ways to complete customer checkout, simultaneously reducing time for customers and cutting their own operating expenses. Mobile-based payment systems are approaching critical scale through NFC technology, or mobile wallets. NFC, which stands for near field communications, allows two wireless devices in close proximity to beam data to each other. When customers have this technology enabled on their smartphones, they only need a phone, instead of a credit card, to make a purchase. Such use of mobile technology in the retail environment has the potential to completely alter the shopping experience in stores. Sainsbury's, for instance, is testing its Mobile Scan & Go service with 800 customers in the UK. These customers can download an app to their smartphone to scan items as they shop, allowing them to pay at the check-out area without unloading their cart, or trolley. Walmart, Target and Starbucks are also testing various innovative self-check out systems.

In a similar vein, some retailers are rendering the cash register, and its inevitable customer checkout lines, obsolete. Fashion retailer Urban Outfitters has announced that it will ditch the stalwart cash register in favor of iPads on a swivel and sales associates with iPod touches, helping to both save capital expenditures (iPads cost about one-fifth as much as a cash register) and increase customer service. The change will allow sales associates to be mobile, with a point-of-purchase available throughout the store. It may also allow the retailer to capture more consumer data, since the flexibility of the iPad design allows customers to see the screen and input their own information.

6. DIGITAL DASHBOARDS: SHOP FLOOR CUSTOMER SERVICE

There are other important benefits to equipping sales associates with mobile technology like iPads and iPod touches. In addition to improving the customer checkout experience, it can put real-time and highly granular product information into the hands of any shop floor worker. The head office can connect with stores by beaming data into every single handheld in the network, allowing instant reaction to market trends, details on market pressure, info on product recalls, and even specifics on price point pressures from competitors. With product descriptions, consumer reviews and brochures at their fingertips, workers can quickly answer a wide range of customer questions. Mobile devices can also give managers increased access to performance data – from inventory metrics to personnel performance – and can increase the amount of time they can spend on the store floor versus tied to a computer in the backroom. Earlier this year, Woolworths gave all their store managers in Australia iPads outfitted with custom applications (built on the Google App Engine) for doing administration tasks such as back-end reporting and stock management. One app, called "Tap for Support," allows managers, with one click (or tap), to file a support request with Woolworth headquarters for various types of maintenance help. In general, we see more and more retailers putting tablets inside the store for the use of both customers and staff, from lifestyle apparel player Guess (which allows customers to browse "look books" in the stores) to Puma (customers can design their own shoes online) to J.C. Penney (a sales associates can show a wider jewelry offering).

Finally, with mobile devices, employee training can now happen through the viewing of short videos and real-time coaching. Such videos could include information about product features and benefits, sales techniques, planogram resets, and market differentiators. The training session ends with survey questions that both make sure the information was understood and gather real-time feedback from employees.

7. DYNAMIC PRICING

The so-called phenomenon of "showrooming" refers to the practice of customers showing up at brick and mortar stores to see and feel a product, only to go online and buy the item for a lower price. This trend made a grand entrance on the world retail stage when Amazon offered a discount for anyone who checked a price in-store then bought at Amazon. Retailers are now responding to this by altering their own brick and mortar prices to match online deals. They are stretching their analytical capabilities to change prices within the same day in order to better match supply and demand, and to create time-limited flash sales. In the future, as electronic shelf labeling (ESL) platforms become more affordable for retailers, this technology could further enable real-time pricing. At the moment though, dynamic pricing is also extending to delivery prices, with Ocado, the U.K. online grocery retailer, varying its delivery charges based on a customer's profile and desired delivery time.

Why do we believe these 7 trends point to a more systemic shift in retail?

Near universal adoption of mobile technologies. There are fewer and fewer people in the world without cell phones. At the end of 2011, there were 6 billion mobile subscriptions, equivalent to 87 percent of the world's population. This represents a major increase from 4.7 billion mobile subscriptions in 2009. And consumers are eager to use their phones for a range of functions, beyond just calls and texts. Today, some 8 percent of all phones are smart phones, a proportion that will dramatically increase in the near future. Current forecasts project that 2013 will be a watershed year – the first year smartphones will account for more than 50 percent of all new mobile phone shipments globally. More smartphones mean more information, more choice, more transparent pricing and more ways to shop.

Increasing cost-pressure resulting from increased competition. Real estate and utility costs, followed by personnel, are the two largest drivers of operating expenses for retailers. Many of the trends described above can sustainably reduce these expenses in a way that allows more value to be passed on to customers. In order to compete with online pure plays, retailers will have no choice but to leverage technology to reduce operating costs if they want to offer competitive pricing to their consumers.

Global urbanization and rise of the middle class. Over the next 15 years, consumers in emerging markets are expected to migrate from the periphery of the global economy to its center, representing what McKinsey believes is the biggest growth opportunity in the history of capitalism. By 2025, consumption in emerging markets will more than double from 2010 levels, jumping from $12 trillion to $30 trillion. These two related trends (urbanization and rise of the middle class) will further drive the growth of modern retail. And these emerging, middle class urbanites, armed with their mobile smart phones, are likely to embrace the digital space even more quickly than some developed markets, as we are currently witnessing in China. At the same time, the higher density will allow for home delivery at a lower cost.

Power of Big Data. McKinsey believes that a retailer thoroughly utilizing big data – defined as large pools of information that can be captured, communicated, aggregated, stored and analyzed – has the potential to increase its operating margins significantly. This can be done through a wide range of initiatives, including improving inventory forecasting by combining sales histories, weather predictions and seasonal sales cycles databases; analyzing customer preferences and buying patterns to inform negotiations with suppliers; deciding which products to carry in which stores based local demographics, buyer perception and other data; and developing customer loyalty and couponing programs to increase the lifetime value of each of their customers. Successful use of big data requires a company-wide perception shift from IT as a back-office function and cost center, to an engine for business growth.

There is no doubt that both the physical store and the online store have a role to play going forward. Yet it's also clear that the one-size-fits-all brick and mortar store, which is designed primarily to facilitate low-touch transactions, will change. For example: Luxury retailer Burberry recently opened its latest global flagship store on London's Regent Street. This "walk-in-website," which blends physical and digital worlds to create a true multichannel experience, is part store, part event space, and part digital sales channel. At the same time, Microsoft has more aggressively launched its own stores, and even Amazon is talking about building its own stores.

What Are The Implications For Retailers?

It is becoming increasingly difficult to shrug off the changes described above as something "niche" or limited to a subset of product categories or geographies. On the contrary, Retail 4.0 is likely to have an impact on retailers everywhere, regardless of format or geography. What does it all mean? In short:

- Customers will come to expect a different type of shopping experience – one that stretches seamlessly across various channels and that can be accessed whenever and however the customer chooses. Retailers that do not meet these expectations will lose traffic.
- Technology will continue to be a double-edged sword, creating greater transparency demands from consumers, while simultaneously allowing for further increases in productivity. Ultimately, these productivity increases will have the effect of ratcheting up price competition even further.
- Retailers will need to keep a careful watch-out for non-traditional competitors, including attackers (e.g. Peapod, Quidsi), consumer goods companies, and new home-delivery channels (e.g., "straight from the farm" business models emerging globally like Aussie Farmers Direct)
- New platforms and business models are emerging that can influence where consumers shop. For instance, Amazon has implemented the strategy of selling the Kindle Fire at a breakeven price and bundling it with a free month of Amazon Prime – an attempt to get Kindle users shopping more on Amazon. New offers like this reflect the on-going convergence of mobile devices and retail. How long before we see grocers that already sell mobile services and operate MVNOs (mobile virtual network operator) offer branded tablets that direct consumers to their respective online sites?
- Tracking, analyzing and monetizing customer data will become increasingly important.
- Logistics will become more nimble, and likely shareable, as the ability to control the quality and cost-to-serve in the so-called "last mile" rises in importance.
- The capabilities required to win in this new era of retail will continue to evolve rapidly. The innovations of retail's previous era (e.g., new loyalty schemes, more efficient supply chains) will quickly become antes to play, and new expertise that combines technology-, marketing- and merchandising-savvy will become paramount.

In the pages that follow, we selected a few illustrative examples to showcase some of these trends. So buckle your seat-belts and enjoy a quick tour through the early days of Retail 4.0.

All company-related information in this report is from company websites, press articles and/or other publicly available information, including store visits. Companies referenced in this report are not necessarily clients of McKinsey & Company.

Acknowledgements

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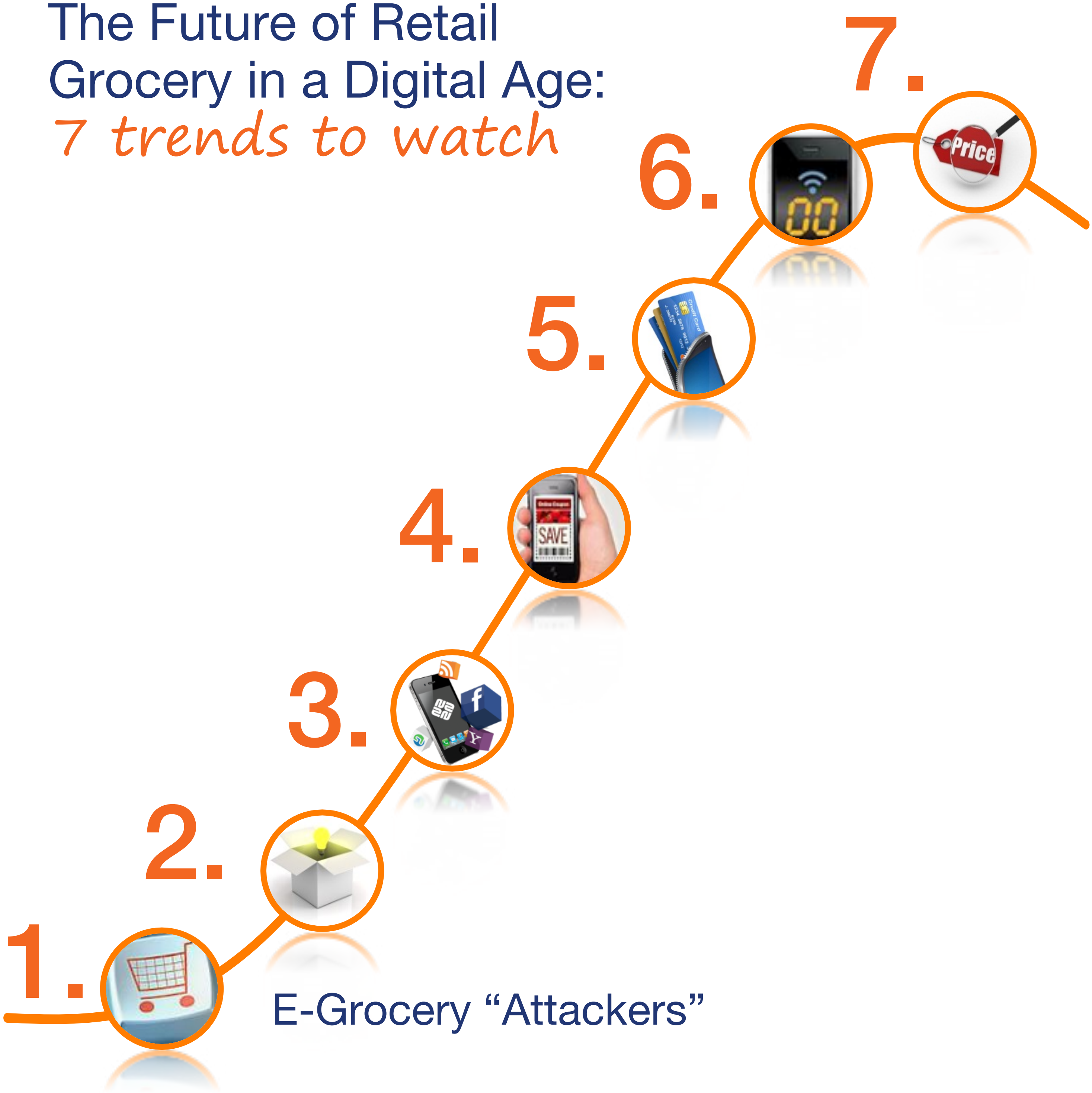
The Future of Retail Grocery in a Digital Age:

7 trends to watch



E-Grocery “Attackers”

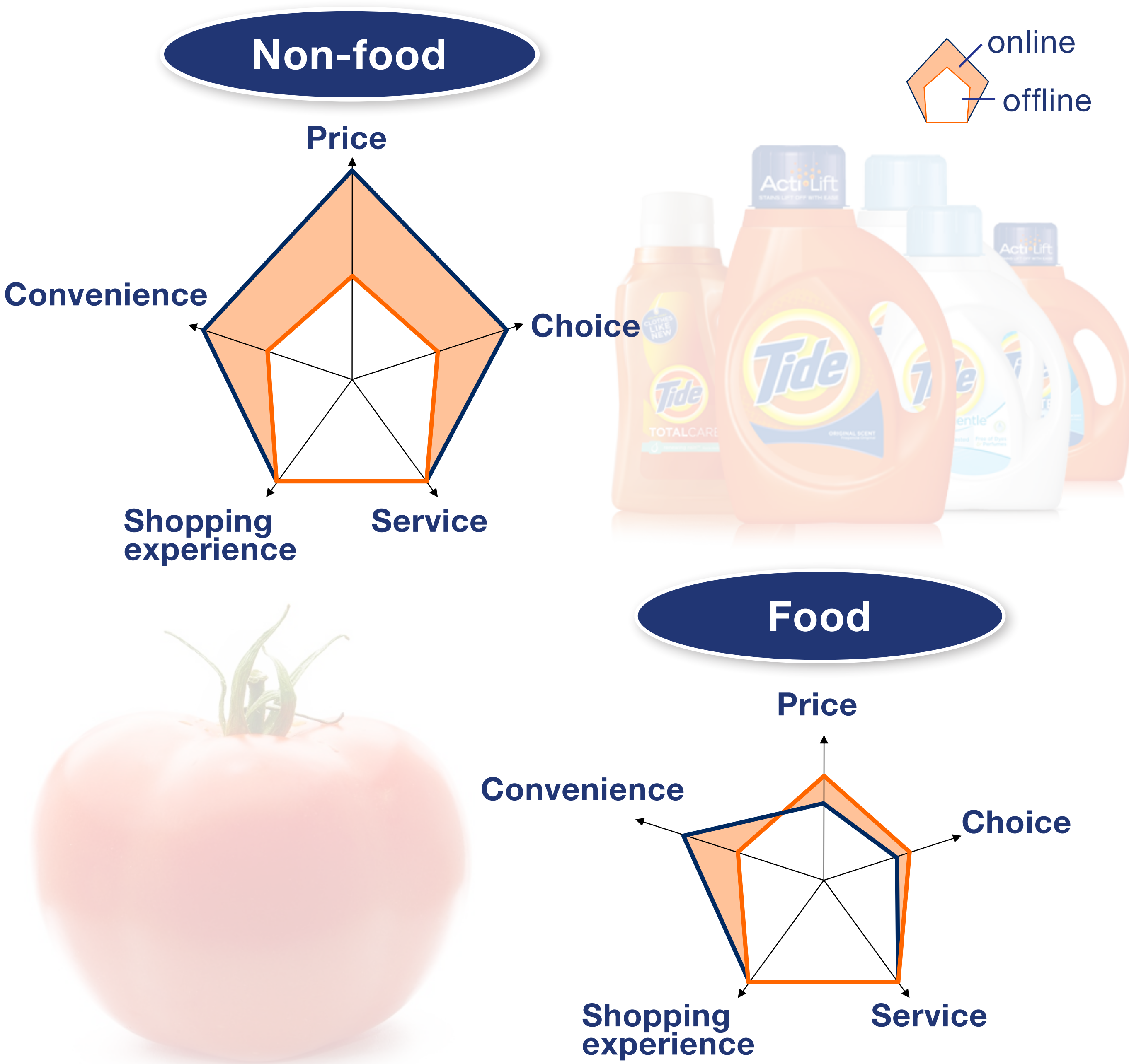
1 E-Grocery "Attackers"

Alternative store formats and new shopping behaviors are aggressively challenging traditional modes of grocery shopping in ways that could fundamentally change the game. Online retailers represent a formidable threat because they do not have the constraints of store space, floor size or location. Nor do they have the same elevated rent, utilities and staff costs as brick and mortar players. Consequently, they can offer a nearly unlimited product selection and operate "at scale," affording them a structural advantage over brick and mortar competitors. Nimble e-grocery attackers even have the capacity to capture commodity product sales that were once the dependable preserve of supermarkets, items such as diapers and soap. Overall, the digital channel offers more than mere convenience. It provides greater information, enhanced customization, and a more convenient means of paying for goods.

Source: McKinsey Analysis

1. E-Grocery "Attackers"

Initially, growth in online grocery adoption was slow because the value proposition did not "beat the store"



Source: McKinsey

Example US consumer segment

Today, consumers are ready for online food shopping

Customer type ▶	*Parents with* **YOUNG KIDS**	*Young* **URBANITES**	*Tech-savy* **ONLINE SHOPPER**	*Budget-driven* **SHOPPER**
				
Key characteristics	Multiple young kids, with one stay-at-home parent	Young couples and singles living and working in the city	Shop for most things online (e.g., beauty, electronics)	Lower income with similar shop each week
Why buy online	Want a hassle-free way to shop	Convenience driven, most have no car	Don't like shopping in stores	Want to control spend tightly
How they shop online	Once or twice monthly non-perishable stock-ups (e.g., diapers, soap)	Once or twice monthly larger stock-up shops to avoid delivery fees	Frequent buys for fill-in and stock-up across fresh and non-fresh	Weekly fill-in for similar basket, in fresh and non-fresh
Keys to winning	Great customer services with accurate delivery times	Easy-to-use, intuitive website and fee-free incentives	Quick delivery, wide online assortment	Easy reordering of past baskets and fee-free incentives
Online shopping preference	Delivery or pick-up	Delivery only	Delivery only	Delivery or pick-up

1. E-Grocery "Attackers"

Peapod to roll out 100 more "virtual stores" throughout the US

Peapod

Peapod, the US's leading online retailer placed **virtual grocery stores** in Chicago's highly traveled subway.

Smart phone users scan a **QR code** to download a free Peapod Mobile app on the spot and start shopping by scanning product bar codes.

Due to the successful pilots, Peapod has plans to open more than 100 virtual stores in buses and train stations going forward.

Source: Company Web site; press search

1. E-Grocery "Attackers"

Grocery Run introduced daily deals, social networking an interactive 'fun' element to online grocery shopping

Australia's Grocery Run emerged from a daily deals website that sold overstock designer goods and took that concept to supermarket essentials, with 48-hour 'runs' a couple of times a week.

The site sells **400-500 SKUs in every run** and has over **1.5 million subscribers.**

In one year of operations, the site has become Australia's largest online grocery and has forced brick and mortar competitors to slash prices on staples like milk and toilet paper.

Source: Company Web site; press search

1. E-Grocery "Attackers"

Samsung launches "E-commerce enabled refrigerator" for virtual grocery shopping

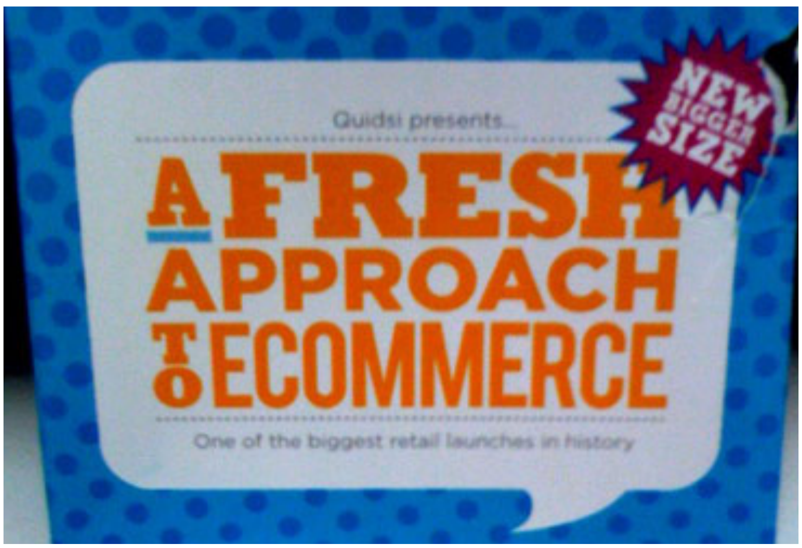
E·MART

Samsung recently launched an **E-commerce enabled refrigerator** allowing consumers to order groceries directly through inbuilt **LCD display.**

Source: Company Web site; press search

1. E-Grocery "Attackers"

Quidsi's innovative e-commerce offering has created "category killers" online



Quidsi (recently acquired by rival Amazon.com) operates category specific websites that provide a new shopping experience focused on:

- **Repeat buy,** commodity products
- **Low prices**
- Easy-to-remember URLs that lead to narrow niches
- **Quick delivery** in 1-2 days
- World class **customer service**

Source: Company Web site; press search

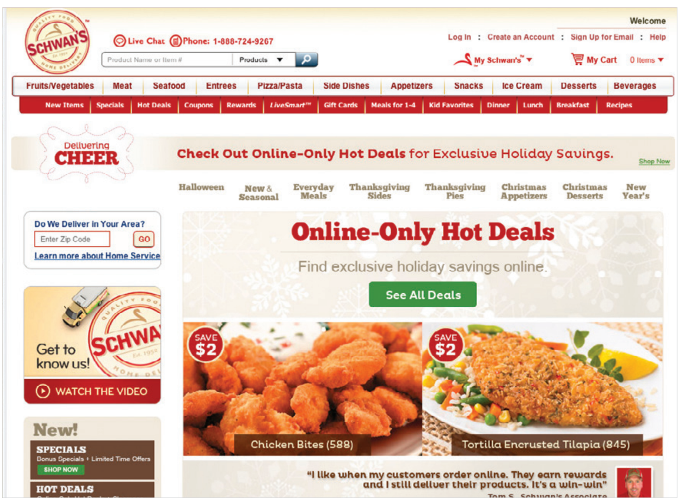
1. E-Grocery "Attackers"

Online grocer, Ocado, using multiple "intelligent" mechanisms to boost basket size and increase profitability

Source: Ocado.com

1. E-Grocery "Attackers"

Schwan's is disintermediating traditional grocery retail to go direct to consumer



Schwan's HOME DELIVERY
Prepared to serve.℠

In addition to its consumer division of retail grocery brands, Schwan's, a 50 year old ice cream delivery company, has transformed itself into a full-service frozen food, meat and produce home delivery company.

Schwan's delivered a user-friendly e-commerce site and a direct sales channel for frozen foods that includes 6,000 delivery trucks and Route Sales Representatives for frozen food delivery.

Source: Company Web site; press search

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Thinking Differently About the Box

2 Thinking Differently About the Box

Traditional brick and mortar retailers are using new channels and innovative approaches to engage customers and create purchasing options beyond the store. New strategies include online stores embedded within physical ones, creation of an "endless aisle," and either stand-alone or attached drive-thrus where customers can buy online and then conveniently pick up their order without leaving the car. These potentially game-changing innovations allow retailers to expand their product offerings beyond the parameters of the physical store, thus creating greater value for their customers. On the other hand, these changes require retailers to have new sets of capabilities, including additional skills in information technology, fulfillment and CRM. New outlets beyond the store also mean that retailers will need to entice their multichannel shoppers to spend even more, since the increased costs of picking items and sometimes delivering them means online sales will be margin dilutive to the business. While it's too early to say whether all major grocery retailers must establish an Internet grocery channel, what we can say is this: They all need to embrace a broad range of technological solutions that will help them stay relevant to today's digital shopper. All retailers need to adapt to the so-called "consumer decision journey" that is increasingly taking place both inside and outside the physical store.

2. Thinking Differently About the Box

We see a fundamental shift in retailers' approach to the role of the physical store

ASDA

"Andy Clarke, the chief executive of Asda, has become the latest grocery boss to signal **the days of building huge out-of-town hypermarkets packed with non-food could be drawing to a close.**"

Feb 2012

TESCO

We can go on growing space but **we probably will not be growing the very big hypermarket space anymore.** There are more to come. [But it is here] that we will see an amelioration or a modification."

Philip Clarke, CEO, Tesco, Jan 2012

BEST BUY

"Death of the Big Box? Best Buy will shift toward mobile-phone sales and smaller stores in an effort to boost sagging revenue. Best Buy's signature big box stores will be dialed back, and 50 will close in 2012, the company said this morning."

Mar 2012

Géant Casino

"Casino is to reduce the non-food sales area of its largest Géant hypermarkets in France following a pilot test in its largest hypermarket located near Marseille in which the sales area was reduced from 182,990 sq ft to 150,700 sq ft. **Casino will cut the non-food sales area of half of its hypermarket network by 20%.**"

Dec 2011

Praktiker

"Praktiker **will close 30 of its 235 stores in Germany** in the coming year in an attempt to rescue the company from potential bankruptcy."

Feb 2012

SOURCE: CBRE Econometric Advisors; Internet Retailer, Retail info systems news, The Wall Street Journal, The Financial Times, Retail Week

2. Thinking Differently About the Box

France's Auchan introduced drive-through format in China, connecting online ordering with offline pick up

Pioneered in France, Auchan China has recently launched its **first drive-through format prototype store** in Suzhou, China.

Shoppers **order online and pick up purchases** at any Auchan Drive location during pre-selected time slot.

5,000 SKUs available on Auchan Drive's dedicated e-commerce site.

Source: Company Web site; press search

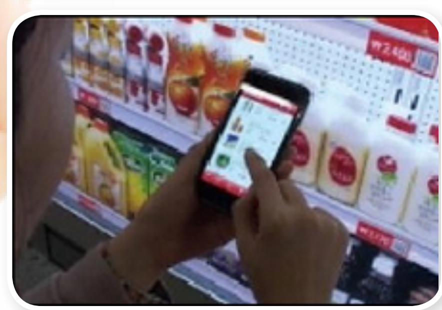
2. Thinking Differently About the Box

Homeplus in Korea launches its own virtual store

Home plus

Virtual stores contain **QR codes** of 35,000 merchandise on the walls of subway stations, which passengers can scan to purchase using **smart phones.**

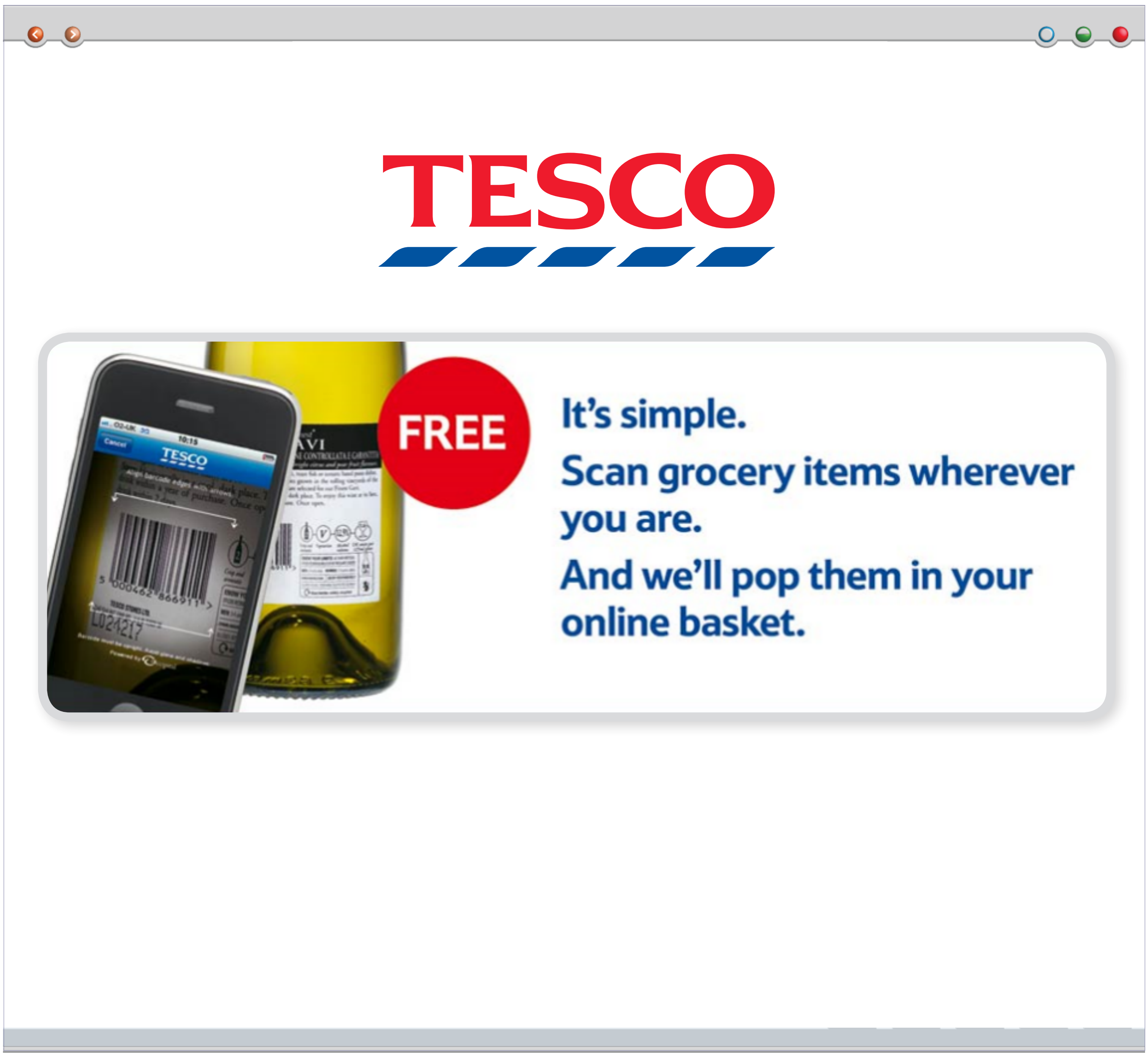
Groceries are delivered to customers' homes/offices



Source: Company Web site; press search

2. Thinking Differently About the Box

Tesco’s iPhone app: Shop anywhere you want. Buy it from Tesco. Have it shipped to your home.



Source: Company Web site; press search

2. Thinking Differently About the Box

Retailers and CPG companies alike are thinking "outside the big box"

P&G and Wal-Mart recently partnered on a month long initiative to engage urban consumers in scanning QR Codes to purchase large consumable items and have them delivered to their homes.

The **@PGMobile trucks** are parked throughout New York allowing consumers to **scan the QR Codes** to purchase household items

"This is pretty smart, no one wants to carry a 10lbs bag of dog food or a 30 pack of toilet paper all the way back to their apartment."

Source: Company Web site; press search

The Future of Retail Grocery in a Digital Age:

7 trends to watch

Digital Marketing and Social Media (Or: Getting Up Close and Personal With Customers)

3 Digital Marketing and Social Media (Or: Getting Up Close and Personal With Customers)

People across the world are increasingly living online – and consequently changing the way they behave as consumers. Smartphone penetration is rising exponentially, and by 2017 is likely to hit anywhere from 20 to 50 percent, including in many emerging markets. At the same time, the gap in online shopping frequency between established markets and growth markets is narrowing rapidly in Asia/Pacific, due largely to enthusiasm for mobile shopping in markets such as Thailand and Malaysia, according to a 2011 MasterCard Worldwide Online Shopping Survey. The result is a fundamental shift in the interactions between retailers and customers. Instead of simply buying media, retailers now must engage in a much more delicate dance of building their brands across multiple channels, while earning – not acquiring – the loyalty and respect of consumers. This involves active, two-way communications, where retailers engage online with consumers for new ideas, suggestions, feedback and even customer service. For a long time, many grocery retailers essentially did not market their brand at all, relying instead on merchandising and promotions such as flyers and couponing. That linear era has long since passed. Marketing and brand building can no longer happen predominately within the four walls of the store.

Source: McKinsey Analysis

3. Digital Marketing and Social Media

Lawson humanized communication by creating a virtual sales promotional character

マチのほっとステーション
LAWSON

Lawson created **Akiko-chan** as a sales promotional character to generate traffic on sites such as Twitter.

The character's face and voice were chosen with the public's help, contributing to her popularity.

She has served as **a guide to Lawson's services** on 15 social media sites.

Visits to its website are said to have **increased 1.4 times** since the avatar was introduced.

Source: Company Web site; press search

3. Digital Marketing and Social Media

Whole Foods Market uses social media for human-scale customer service and to be relevant to consumers

Whole Foods market was one of the pioneers on Twitter, gaining **1 million followers in its first year** (and 3 million today).

Responses to consumer comments make up 85% of all tweets.

The company focuses on having a conversation with the entire customer base while promoting Whole Foods' culture and lifestyle.

Whole Foods is now one of the first companies to **leverage Pinterest as a marketing tool.**

Source: Company Web site; press search

3. Digital Marketing and Social Media

Walmart Japan (Seiyu) uses twitter to engage consumers to select products for discounted prices

Walmart Japan (Seiyu) launched a campaign that uses **Twitter** to engage customers, allowing them to **vote on and suggest prices to be lowered** from over 10,000 store items.

Seiyu lowered prices for 100 of the most voted items for 4 weeks across Seiyu stores nationwide.

Source: Company Web site; press search

3. Digital Marketing and Social Media

Family Mart engaged consumers to create new flavors for rice balls

FamilyMart

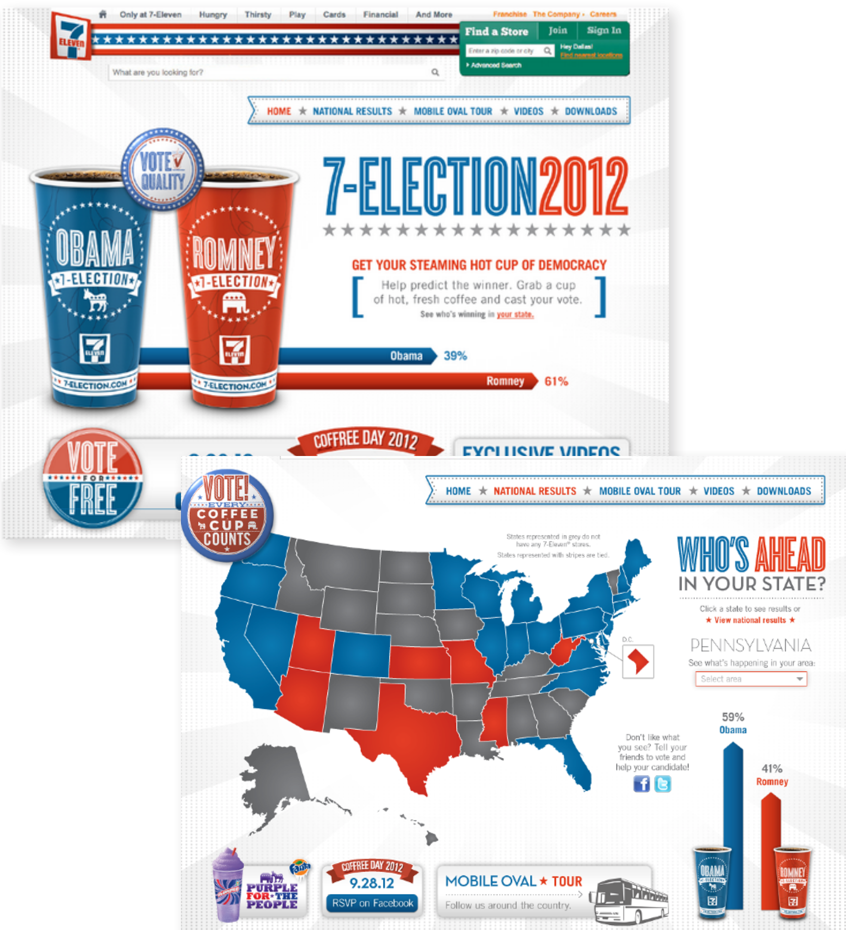
Family Mart makes and sells rice balls inspired by ideas collected from their **Twitter followers**, who were asked to **submit ideas** for unique rice ball flavors via Twitter and to **vote for their favorites** on the Family Mart website.

Family Mart also uses the campaign as an opportunity to interact with consumers.

Source: Company Web site; press search

3. Digital Marketing and Social Media

7-Eleven interacts with Americans in election-themed campaigns



7-Eleven conducts annual interactive campaigns linked to **elections**, designing two types of coffee, and invites consumers to **'vote'**.

Website tracks cups sold and translates purchases into **polling data**, posted daily on **www.7-election.com**.

The campaign, started in 2000, has successfully predicted the winner in each presidential election (including in November 2012).

Source: Company Web site; press search

The Future of Retail Grocery in a Digital Age:

7 trends to watch

Goodbye, Scissors: Increasing Sophistication of CRM Programs, Digital Couponing and Location-Based Services (LBS)

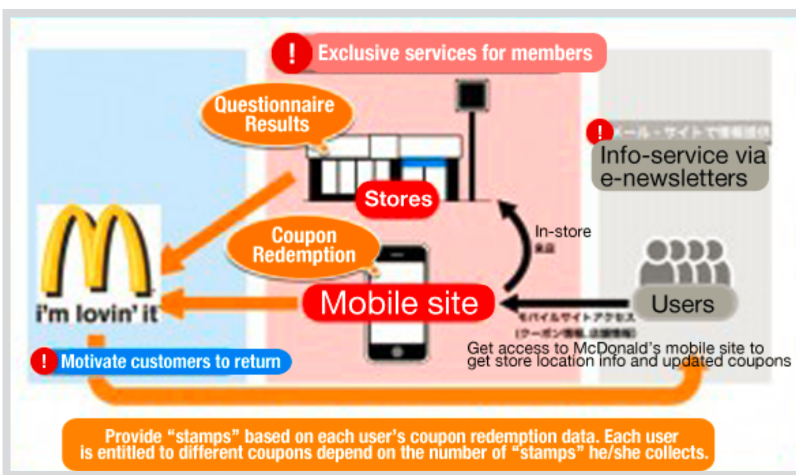
4 Goodbye, Scissors: Increasing Sophistication of CRM Programs, Digital Couponing and Location-Based Services (LBS)

Coupons are entering a new realm in the digital age. Through online and mobile delivery, retailers can now personalize these offers based on a customer's historical purchase data, establishing a greater one-on-one dialogue with the consumer. Digital coupons can also be targeted toward specific demographic groups, either offered in real time on smartphones as customers shop through the store, or delivered through location-based services like Groupon and LivingSocial. Mobile loyalty programs allow for points to be earned and simultaneously redeemed at the point of sale. And some retailers are experimenting with so-called "gamification," the practice of creating a game around the shopping experience. Yet when it comes to customer relationship management, online players have a clear advantage, since companies like Amazon are able to easily collect data on all their customers – their shopping patterns, behaviors, preferences and geographic location. Traditional retailers will need to replicate these capabilities in order to compete.

Source: McKinsey Analysis

4. Goodbye, Scissors: Increasing Sophistication of CRM Programs, Digital Couponing and Location-Based Services (LBS)

McDonald's Japan offers mobile digital coupons



McDonald's Japan has more than 20 million mobile users. McDonald's uses the program to **target coupons and campaigns and "gamification" (stamp collecting)** directly to customers' mobile phones according to their preferences and purchase history.

McDonald's Japan loyalty program enables users to **place their orders, redeem their coupons and pay** with wallet phones.

One added benefit: pre-ordering meals helps reduce processing and wait time at the register and every one second saved can boost annual sales by JPY 800 million.

Source: Company Web site; press search

4. Goodbye, Scissors: Increasing Sophistication of CRM Programs, Digital Couponing and Location-Based Services (LBS)

Germany's REAL Hypermarkets personalize online coupons for in-store shoppers

REAL hypermarkets conducts one of the largest **coupon programs** in Germany through the company's "Payback" program.

REAL's coupon program enables in-store Payback members to use their mobile phones to **browse online coupons** as they walk through the aisles, offering a more personalized view to customers.

Source: Company Web site; press search

4. Goodbye, Scissors: Increasing Sophistication of CRM Programs, Digital Couponing and Location-Based Services (LBS)

Marks & Spencer in China integrated LBS, GEO[1] and social media to promote new store opening

British style gift for posting picture on Weibo

Marks & Spencer partnered with China's largest **LBS provider Jiepang** and largest **social platform Weibo** to promote a new store on Huaihai road.

Embedded **GEO technology** pushes promotion messages to users nearby the store.

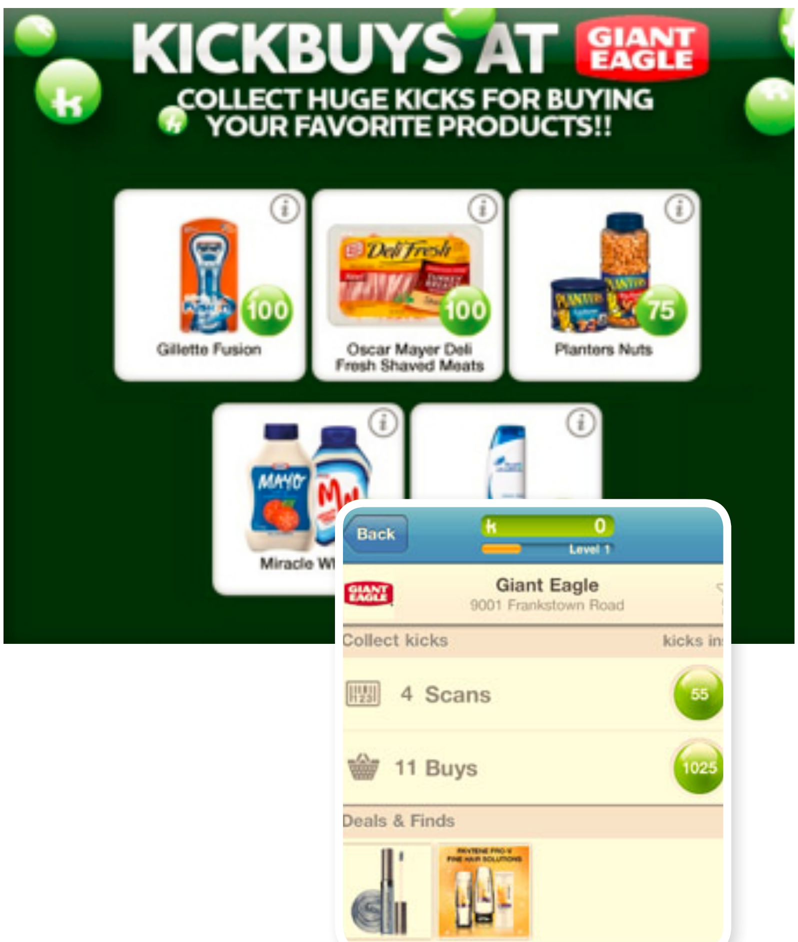
The initiative also encourages sharing on Weibo – China's largest social network, with gifts to shoppers posting pictures in store on Weibo.

[1] GEO is a technology that enables messages to be sent only to nearby shoppers around selected area

Source: Company Web site; press search

4. Goodbye, Scissors: Increasing Sophistication of CRM Programs, Digital Couponing and Location-Based Services (LBS)

Shopkick partnered with Giant Eagle and other power brands to promote specific products



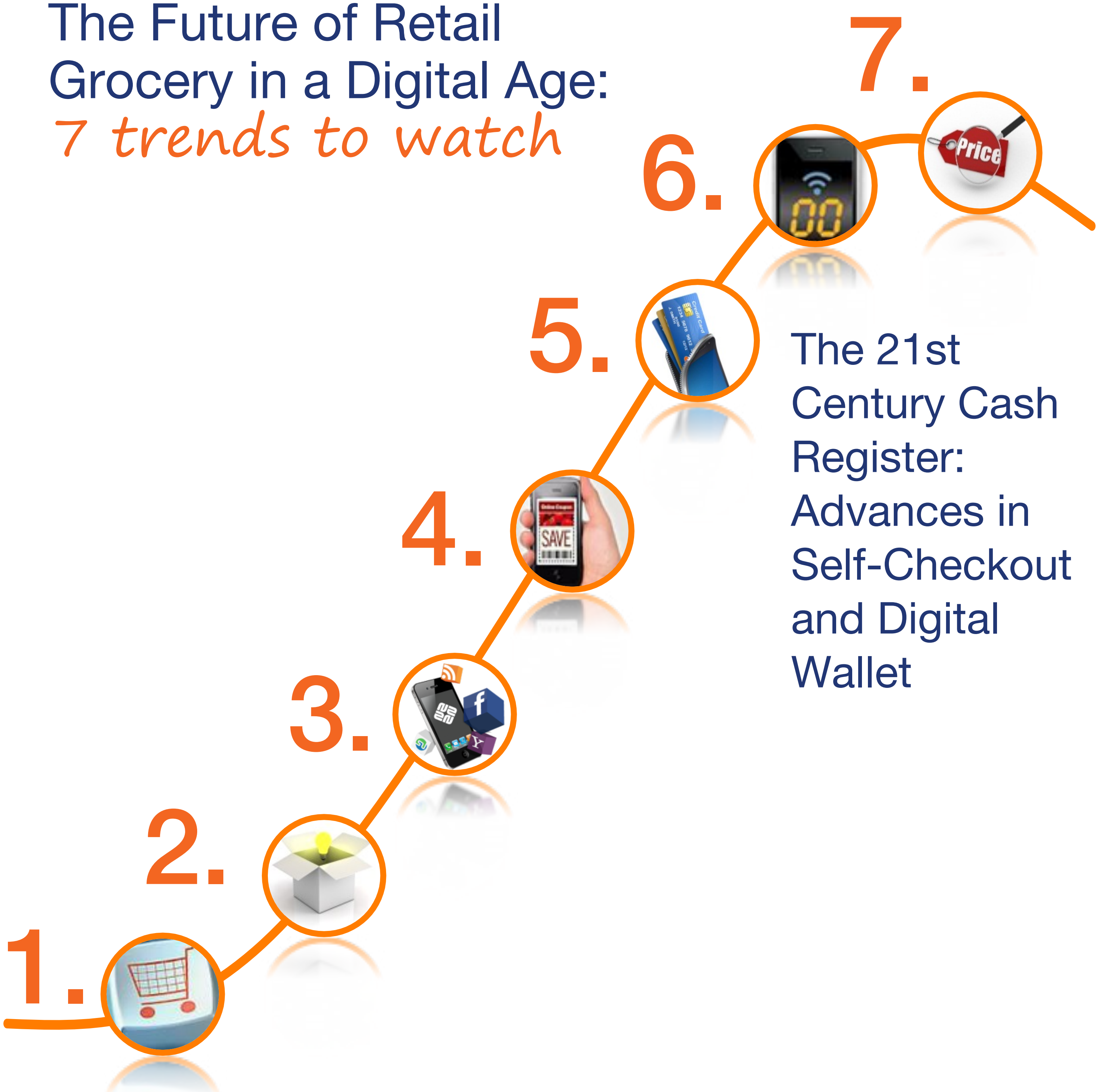
Shopkick partnered with **P&G, Unilever, and Kraft** to promote products in **Giant Eagle** by awarding reward currency to consumers who bought featured items.

Viewed as a major breakthrough for consumer brands as they can confirm purchase of specific products in real time and thereby measure promotional effectiveness.

Source: Company Web site; press search

The Future of Retail Grocery in a Digital Age:

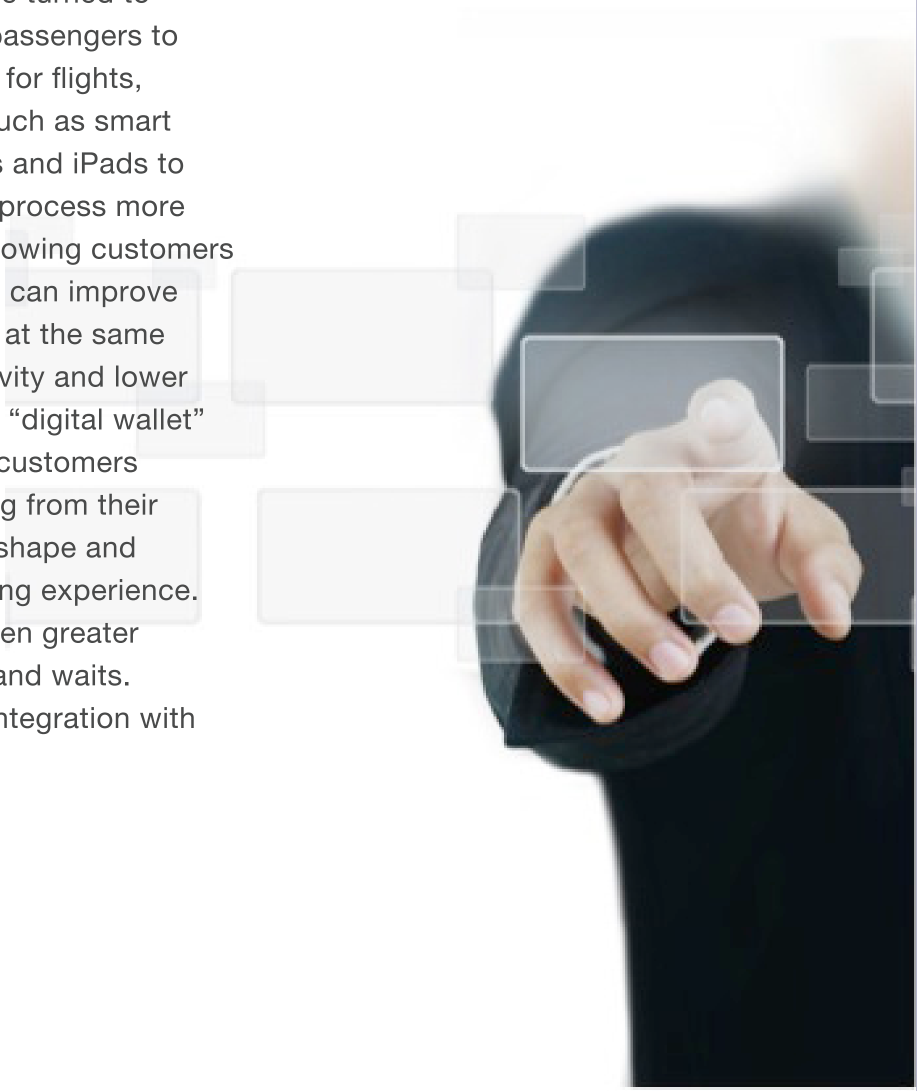
7 trends to watch



The 21st Century Cash Register: Advances in Self-Checkout and Digital Wallet

5 The 21st Century Cash Register: Advances in Self-Checkout and Digital Wallet

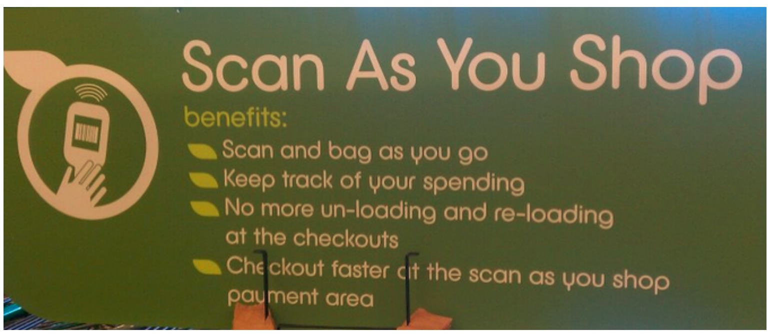
Much in the way airlines have turned to computer screens to allow passengers to quickly check themselves in for flights, retailers are using devices such as smart phones, hand-held scanners and iPads to make the in-store checkout process more expeditious and efficient. Allowing customers to scan their own purchases can improve customer satisfaction, while at the same time increase store productivity and lower costs for retailers. Emerging "digital wallet" technologies, which enable customers to pay by tapping or beaming from their smartphones, can further reshape and enhance the in-store shopping experience. Digital wallets will lead to even greater reduction in checkout lines and waits. They also allow for greater integration with couponing programs.



Source: McKinsey Analysis

5. The 21st Century Cash Register: Advances in Self-Checkout and Digital Wallet

Fresh & Easy supermarket testing self-checkout at in store kiosks



fresh & easy™
Neighborhood Market

Customers carry a hand-held scanner device and scan product codes on items as they shop.

Customers **check out at self-service kiosks** and make payment at the register.

Source: Company Web site; press search

5. The 21st Century Cash Register: Advances in Self-Checkout and Digital Wallet

Wal-Mart testing self-service kiosks at checkout to cut time in lines

WAL★MART®

"Scan and Go" allows shoppers to use their **mobile phones** to scan items as they walk through stores and **pay at self-service kiosks**, skipping cashier lines.

Wal-Mart collects data on what customers buy and how long they spend in stores, and sends shoppers coupons in real-time as they scan items.

Wal-Mart has estimated it can save $12 million a year for every second it can cut from the checkout process.

Source: Company Web site; press search

5. The 21st Century Cash Register: Advances in Self-Checkout and Digital Wallet

Sainsbury's supermarket piloting a new service called Mobile Scan & Go

Sainsbury's supermarket is piloting a new service called **Mobile Scan & Go** that allows users to shop with their iPhone or Android phone and pay at the register without unloading their trolley or bags.

In stores, customers need to scan the **'Check In' QR code** at the location and then use the **phone's camera to scan bar codes on products as they shop**. As items are added, a running total shows how much a customer is spending and possible savings along the way. Customers then scan the 'Check Out' QR code at a till and pay as usual with cash or card.

Source: Company Web site; press search

5. The 21st Century Cash Register: Advances in Self-Checkout and Digital Wallet

An airport? No, Kroger tests self-checkout "tunnel" system

Kroger in Cincinnati has been testing a checkout system that uses **cameras to read bar codes** and **automatic belts** to process checkout.

Source: Company Web site; press search

5. The 21st Century Cash Register: Advances in Self-Checkout and Digital Wallet

Big US retailers are teaming up for their own mobile payment system

A group of retailers will introduce a mobile payment option of their own, called **Merchant Customer Exchange**, in which consumers download software onto their phones and then tap their device against a reader at checkout to make a purchase.

Members include*:

WAL★MART® BEST BUY® Dillard's 7-ELEVEn® TARGET®

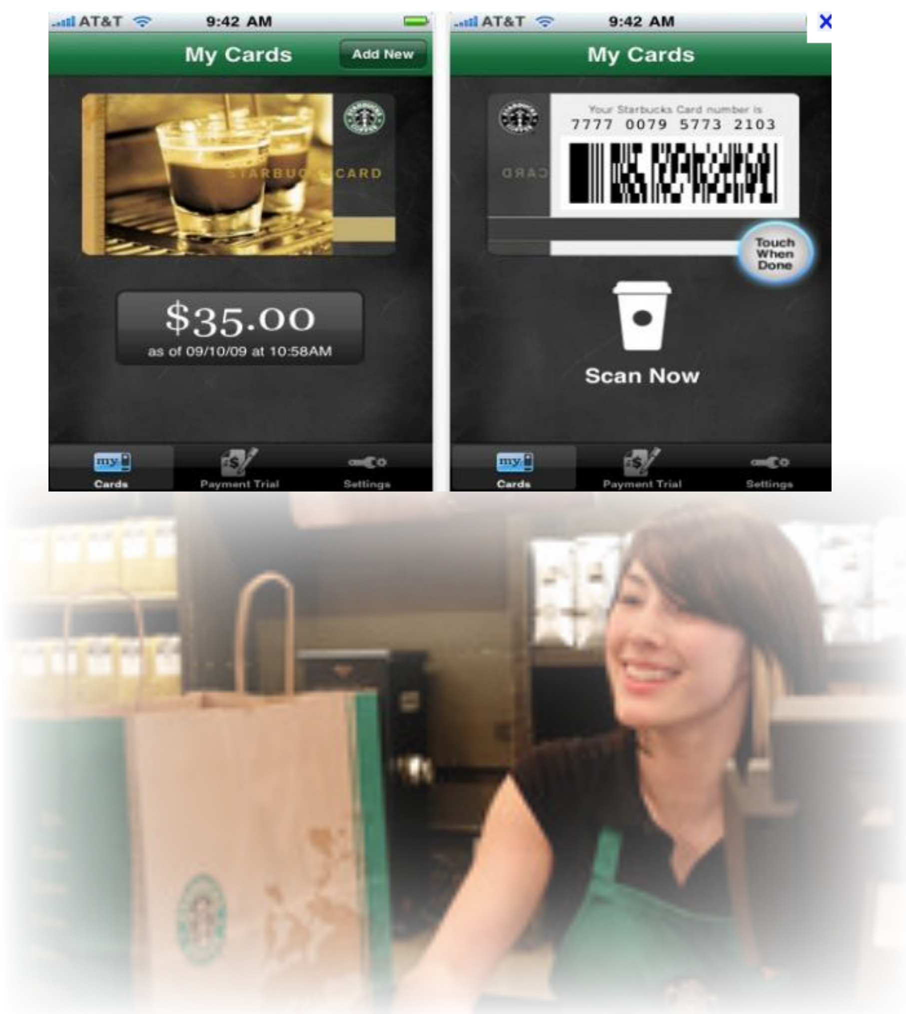
DUNKIN' DONUTS® GAP BED BATH & BEYOND®

* Not exclusive

Source: Company Web site; press search

5. The 21st Century Cash Register: Advances in Self-Checkout and Digital Wallet

Starbucks has adopted mobile payment from Square Wallet



Starbucks will begin accepting payment from Square which enables consumers **to make purchases using their mobile.**

Starbucks to push the technology further by automatically recognizing the cell number and individual customers to complete the transaction.

Source: Company Web site; press search

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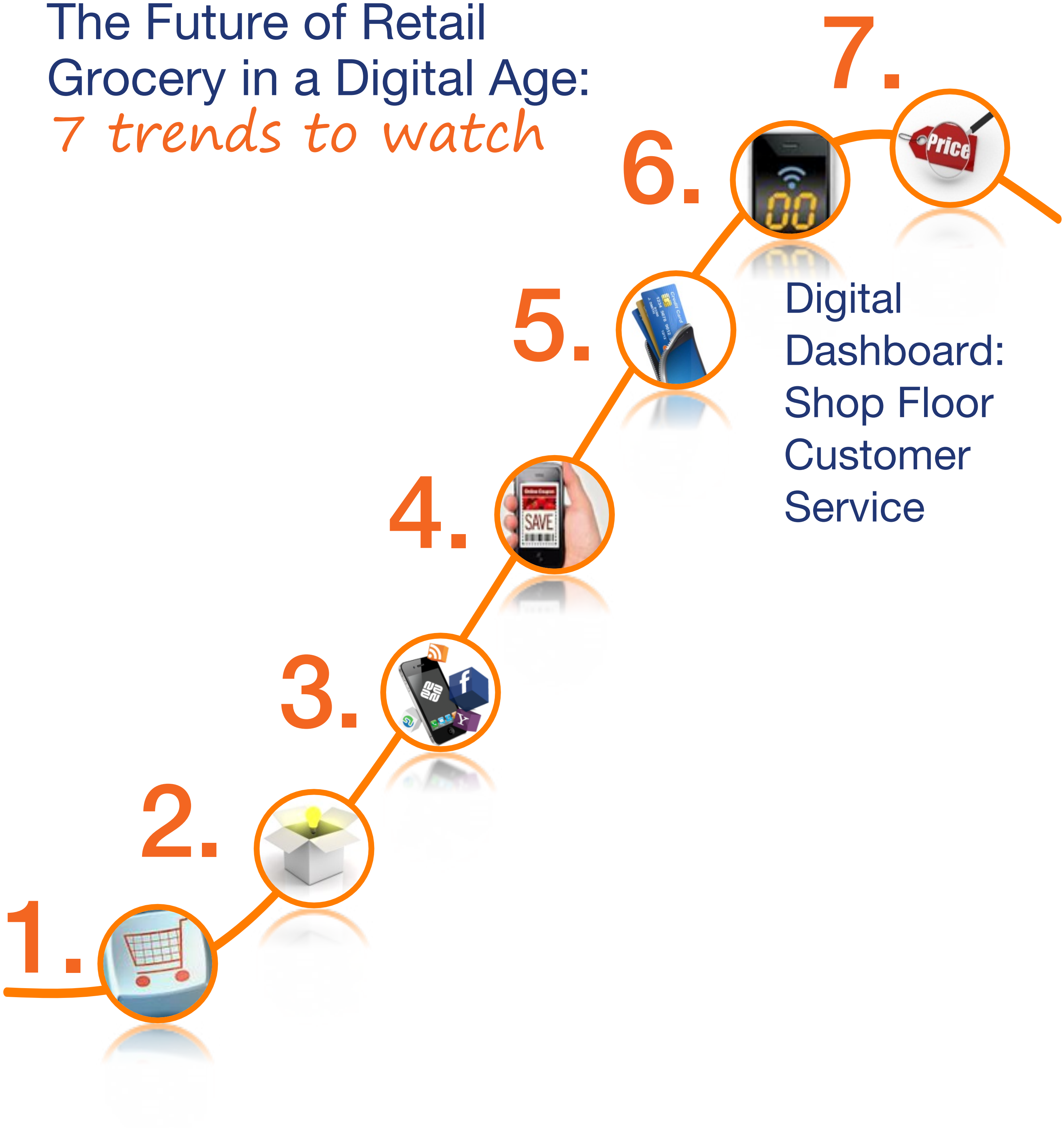


6 Digital Dashboard: Shop Floor Customer Service

Mobile technology can dramatically enhance in-store services. Equipped with devices like tablets or smartphones, store workers can improve customer service by having instant access to detailed product information, inventory data, and even competitive pricing details. Such real-time access to data will allow customers to get the same depth of information in-store as they would online. Store mangers can use mobile devices to see performance, out-of-stock and other inventory management data, enabling them to improve their operations and spend less time at a desktop at the back of the store. Shoppers, too, can utilize in-store tablets to acquire additional information about products in the store, much as they would if they were sitting at home in front of their computer. We expect that in the very near-term, tablet-enabled retail stores – both for shoppers and employees – will become the norm rather than the exception.

SOURCE: McKinsey Analysis

6. Digital Dashboard: Shop Floor Customer Service

Lowe's equipping its staff with 42,000 iPhones to improve customer service

Lowe's plans to equip employees with **42,000 iPhones** which will be used to answer shoppers' questions and ring up purchases.

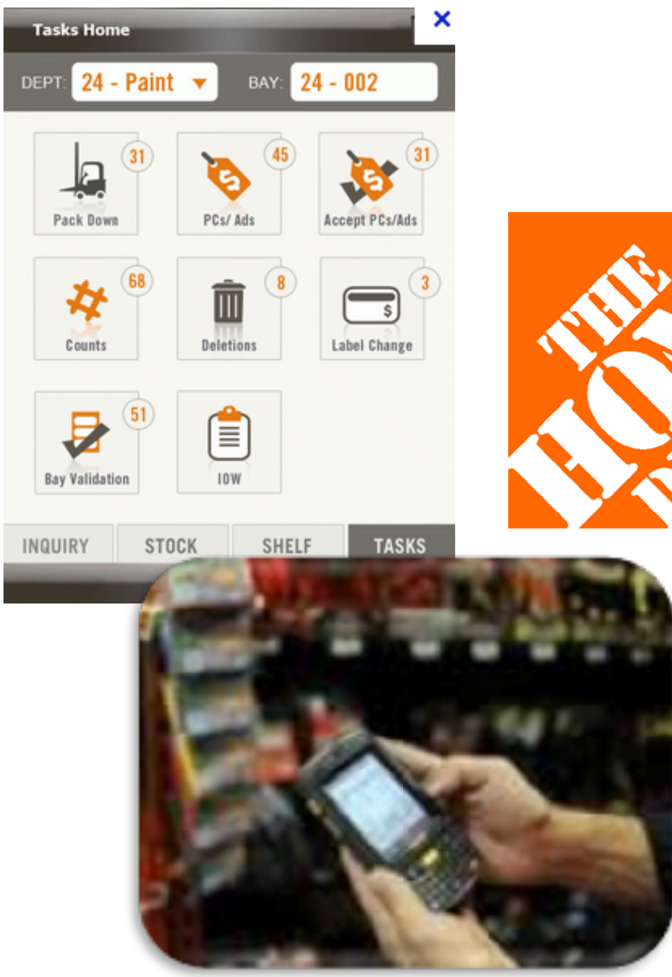
The phones are part of a technology push that includes the introduction of **MyLowes**, an online tool that customers will use to access store owner's manuals, warranties, paint formulas, and more.

The retailer is also replacing 72,000 computer screens with flat panels in more than 1,700 stores, adding **Wi-Fi for shoppers**, listing additional items for sale online, and promoting a recently released app for iOS.

Source: Company Web site; press search

6. Digital Dashboard: Shop Floor Customer Service

Home Depot's mobile POS system improves in-store customer shopping experience



Home depot launched the FirstPhone system in all 2,000 US stores with 30,000 **mobile POS devices**, allowing workers to use wireless technology to assist customers.

The system is a combination of inventory management, analytics functions, a VOIP telephone, a store walkie-talkie, and label printing with POS.

Source: Company Web site; press search

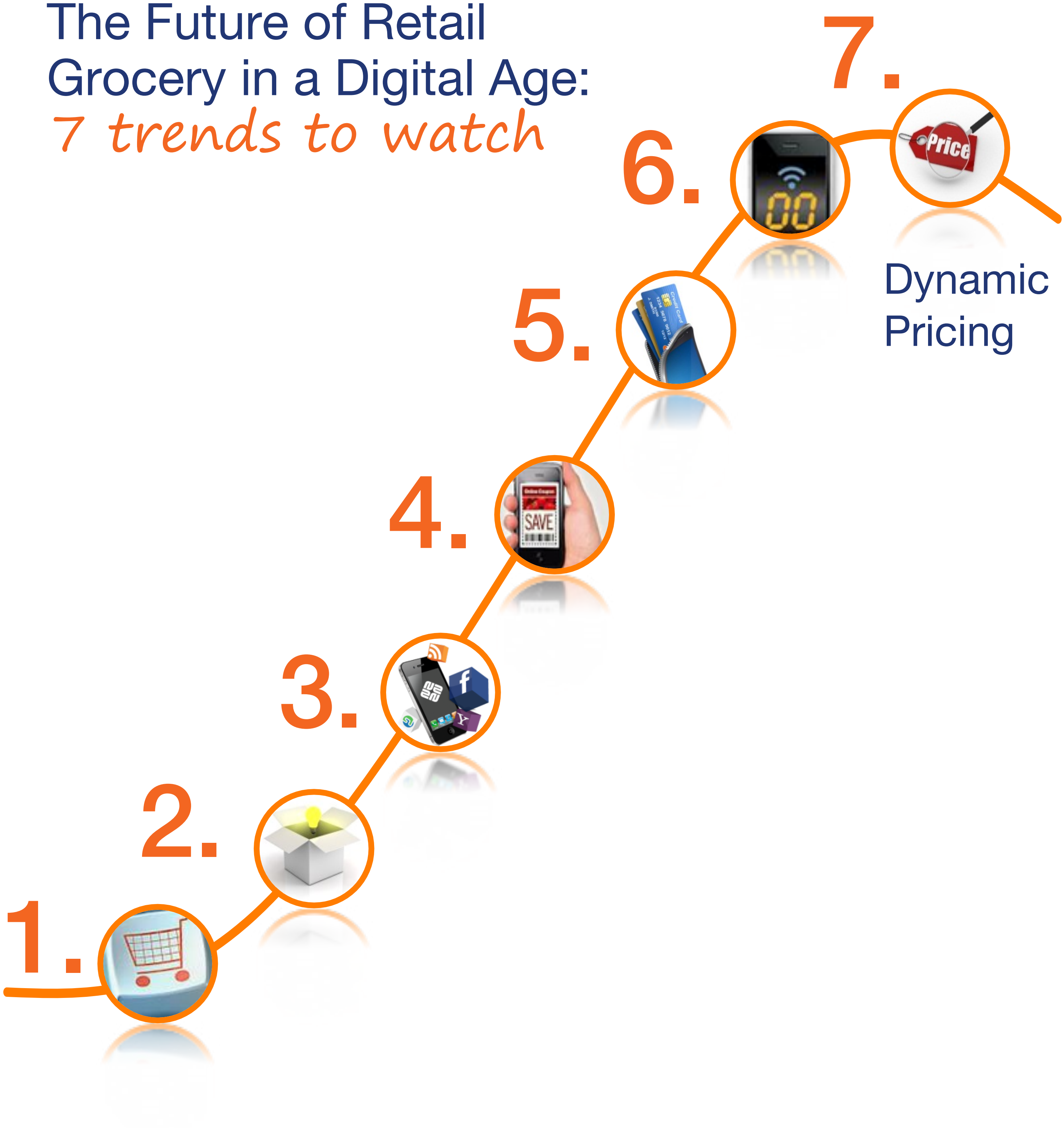
6. Digital Dashboard: Shop Floor Customer Service

Woolworths supermarket managers have a new tool to help with their daily tasks

Built on Google App Engine, Tap for Support is a **one-click application** that makes it quick and easy for the manager to log support tickets.

Source: Company Web site; press search

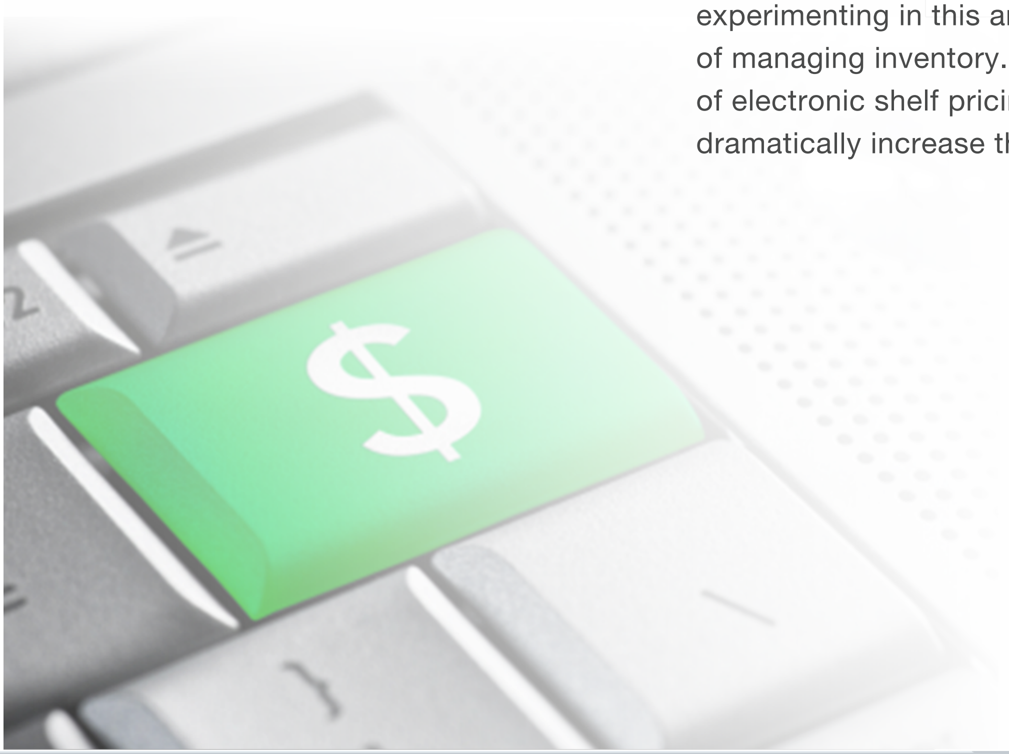
The Future of Retail Grocery in a Digital Age:
7 trends to watch



7 Dynamic pricing

As pressure from online retailers intensifies and price comparison apps gain in popularity, brick and mortar retailers are stretching their analytical capabilities to change prices within the same day. One example is flash sales, a modern update to Kmart's famous Blue Light specials in which discount prices appear for only for a defined period of time.

Such changes allow retailers to compete more effectively with online rivals and perhaps land at the top of price comparison searches. Real-time pricing can also be used by retailers to boost sales during slow hours or otherwise optimize store traffic. While we have yet to see true dynamic pricing at a brick and mortar retail grocery, we expect some innovative players to begin experimenting in this area, at least in terms of managing inventory. The growing adoption of electronic shelf pricing displays will dramatically increase the ease of doing so.



Source: McKinsey Analysis

7. Dynamic pricing

South Korea's E-mart uses shadow QR Codes to boost lunchtime sales

E·MART

E-mart launched mobile program **Shadow QR** code to resolve lagging sales during midday lunch hours

Each day at lunch, pedestrians are treated to a three-dimensional "sun-shadow" **QR Code** display, visible and scannable only during the hours of 12pm – 1pm. The code generates digital coupons that could be purchased in-store or delivered to a customer's home.

The overall promotion resulted in a 58% increase in Emart membership and a 25% increase in mid-day sales at the store at which it was tested.

Source: Company Web site; press search

7. Dynamic pricing

Delivery pricing also beginning to be managed dynamically (based on delivery time)

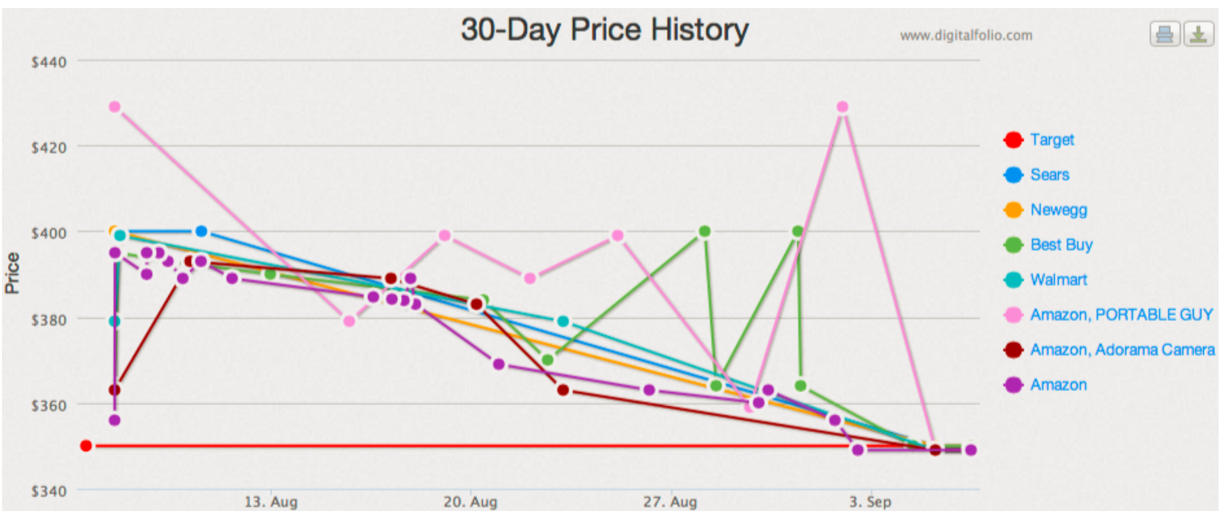
E-grocer Ocado is able to increase margin and improve delivery efficiency by adjusting delivery process based on order day and time.

Source: Company Web site; press search

7. Dynamic pricing

Retailers change prices for one item frequently

A 30-day history of dynamic prices for a Canon SX40 HS camera.



In the area of consumer electronics, "price" is no longer a static concept, as the price depends on the "trading" equity in the market. Could consumables be far behind?

Source: Company Web site; press search

7. Dynamic pricing

Kiddicare rolls out ZBD's epaper system across UK superstores

zbd.

kiddicare
BABY SPECIALIST

ZBD, the leading provider of fully **graphic epaper display systems** for retailers and industrial users globally, announced that Kiddicare, the UK's largest online baby equipment retailer, has chosen to roll out ZBD's epaper system across its entire store estate.

The electronic shelf labelling solution brings dynamic price and product information to the shelf edge, and overcomes retailer challenges, such as price compliance, automatic price changes, the elimination of paper labels and its associated costs, and much more.

Source: Company Web site; press search

What it all means: Implication for retailers

1. Customers will come to expect a **different type of shopping experience across channels** that they choose at a time they want – retailers that don't meet expectations will lose traffic

2. **Technology** will allow for further increases in productivity, **increasing pricing competition even further**

3. Retailers will need to keep a **careful watch-out for non-traditional competitors, including attackers** (e.g., Peapod, Amazon, others) and even consumer goods companies

4. **Tracking, analyzing and monetizing customer data** will become **increasingly important**

5. **Capability requirements** will continue to **change materially for retailers**, particularly in areas such as Technology, Marketing and Merchandising

6. **Exclusive assortments** (including both private brands and those from nationally recognized manufacturers) **likely to be part of the winning equation** for brick and mortar players so that **brick and mortar players need not directly compete on price in every category or individual SKU**

7. Ensuring **"last mile"** delivery capacity likely to become more challenging, and we are likely to see more partnerships emerge to most efficiently manage cost, capacity and demand

About the authors

Brian Salsberg

Brian Salsberg is a Principal in McKinsey & Company's Tokyo, Japan office and has been with McKinsey for 13 years. Brian is one of the leaders of McKinsey's Consumer and Retail practice in Asia, where he works with both multinational and domestic clients. His experience working with major global and domestic retailers in Asia includes new market entry, merchandising, marketing and consumer insights, store operations (including labor productivity and supply chain transformation) and re-organizations, including post-merger integrations. Brian has worked with retail clients throughout Asia, including on engagements in Japan, China, Korea and throughout Southeast Asia.

Parag Desai

Parag Desai is a Principal in McKinsey & Company's Melbourne, Australia office and has been with McKinsey for 13 years. Parag is one of the leaders of McKinsey's Consumer and Retail practice in Asia. Parag is one of the leaders of our work on operations in consumer-facing industries and leads our internal joint venture between our Operations and Consumer practices across Asia. He primarily serves retailers and packaged goods companies on operational and strategic topics including front-line transformation, format renewal and market entry, and has worked with clients all over the Americas, Asia, Europe, and Australia.

Ali Potia

Ali Potia is a consultant in McKinsey & Company's Singapore office and has been with McKinsey for 5 years. Ali is one of the core members of McKinsey's Consumer and Retail practice in Southeast Asia. Ali focuses on strategy and operations topics in consumer facing industries. He has worked with retail and consumer clients in all the major markets in Southeast Asia across a variety of topics, including market entry, network expansion, consumer insights and store operations. Ali's is currently looking at the digital convergence of the virtual and physical worlds in telecoms, media and retail.

McKinsey & Company's Global Retail Practice

A leading strategic consultancy to the retail industry, we help clients around the world and across all retail formats increase efficiency and drive growth by refining the commercial offer and developing new organizational and technological capabilities.

Our areas of expertise and service lines include:

Big Data & Advanced Analytics

The amount of data available to retailers is exploding: companies can make use of transaction logs, loyalty card profiles, ad tracking, and custom research. Our experts empower retailers to derive meaningful insights from this data and translate these insights into opportunities.

Digital & Multichannel Excellence

Online shopping, smartphones, and social networking are part of the shopping experience today. We work with clients to embrace these new opportunities, develop comprehensive multichannel strategies, and improve their digital marketing performance.

Emerging Markets

While most established retail markets have reached maturity, emerging markets are seeing spectacular growth; developing economies will account for 50 percent of all private consumption by 2025. We help retailers figure out where and how to play.

Marketing

Retailers know so much about their customers—where they shop, what they buy, and how they pay for it. We help turn these insights into growth by balancing data-driven analytics with creative communication.

Merchandizing

The commercial offer is at the heart of retail value creation, driving customer satisfaction and overall profitability. We help retailers optimize crucial merchandizing activities such as pricing and promotions, assortment, and supplier management.

cont.

McKinsey & Company's Global Retail Practice

Operations

Operations are core to a retailer's bottom line, and success requires both superior operational strategy and flawless execution. We help retailers safeguard shopper value and improve margins through operational excellence in stores and along the supply chain.

Organization

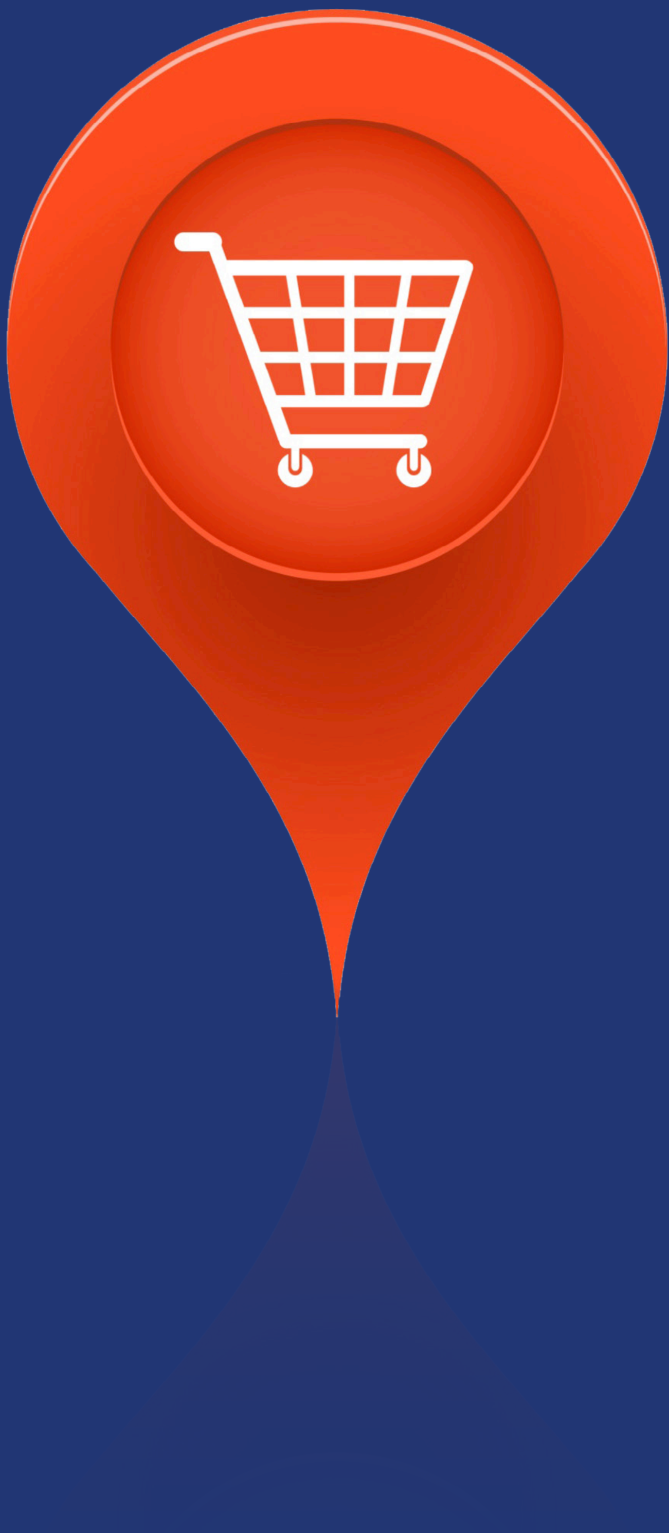
Retailers depend on discipline and agility across their store networks. We help clients optimize the design of their organizations to push for better performance.

Strategy

Even the most successful retailers are challenged by shifts in customer behavior, increasing corporate consolidation, and ongoing format evolution. We help companies develop successful strategies to drive value creation.

Technology

Technology is driving a revolution. While it used to help retailers win the game, it's now changing the game. We help retailers use technology to achieve substantial performance improvements across the entire retail value chain.



Produced by McKinsey’s Asia Consumer and Retail Practice