Executive Summary
The retail industry has embraced the ubiquity of mobile devices across the consumer landscape. Studies of shopping behavior clearly indicate increased reliance on mobile devices, especially by value-driven consumers for product research and comparison.

Large retailers are responding by both accelerating and continuously fine-tuning their mobile commerce channel strategies. Retailers across categories have had varying levels of success in harnessing mobility, but the trend is clear: Successful retailers are those that are succeeding with mobility.

The 2011 U.S. holiday shopping season witnessed an explosion in shopping conducted using mobile devices such as smartphones and, increasingly, tablets. Various surveys revealed a sharp rise in the number of mobile devices used to research and purchase products over the previous year, especially on key shopping days like Black Friday. This indicates a fundamental shift in how consumers have begun to approach the mobile shopping proposition, one that is likely to be even more pronounced in the current holiday shopping season. The new playing field comes with its own challenges, the biggest being continuously changing technology and the rapidly evolving landscape of third-parties and their related solutions.

Mobility is one of the few areas where retail has led other industries. Most mobility investments have been driven by the ever-increasing number of consumers — existing and potential — armed with smart devices with access to high-speed Internet and the resulting demand for mobile shopping solutions. But mobility in retail has also been impacted by third-party applications and offerings such as RedLaser and Decide, which provide intelligence to customers unavailable just a short time ago.

The interplay of the various actors in this environment affects the outcome for retailers striving to build a successful mobile commerce channel. Factors include their strategies around app development and design; their understanding of — and response to — consumers' mobile shopping behavior; the way they leverage lessons learned from the first wave of e-commerce; and a desire to keep pace with the plethora of platforms and applications proliferating today.

Additionally, the growth of tablet usage has created an even greater impetus for retailers to develop and execute a mobile strategy.
Tablet owners shop more, have a higher conversion rate and ultimately spend more using their tablets than do the owners of smartphones—due primarily to the improved shopping experience. Tablet customers and applications should be the highest priority for retailers today.

Mobile strategies must address capabilities through both mobile browsers and applications. While customers can be attracted through the browser, many retailers feel they can best retain customers through capabilities only possible through a mobile app—thus the need for both. However, shoppers are growing more aware of the demands that mobile applications place on their smartphones, and retailers need to be careful of overloading capabilities and, subsequently, data and battery usage.

**Mobile Commerce Trends**

Mobile-led shopping is on the rise. Moreover, mobile-empowered consumers are rewriting the rules of the retail game, compelling retailers to play along. Retail revenues generated by the mobile commerce channel are projected to influence 17% to 21% of all store sales by 2016.

One reason: Consumer bargain-hunting is significantly bolstered by smartphones and tablets. With economic uncertainty abounding, shoppers who engaged in "digital deal-seeking" during the 2011 holiday season utilized their smart devices to research products, compare prices and secure the best discounts available (see Figure 1). These near-ubiquitous devices equipped buyers with superior tools, strengthened their purchase decisions and improved their overall shopping experience. According to a Google study, 77% of tablet owners used their devices for shopping during the 2011 holiday season. A National Retail Federation survey notes that 37.4% of consumers with tablet devices used them to conduct pre-purchase research during the 2011 Black Friday weekend, and 25.7% used them to buy products.

Our research, conducted with over 2,000 shoppers in 2012, confirms that mobile checkout and payment are not yet embraced by the majority of consumers, but younger shoppers and high-income shoppers show the highest propensity to take this approach. Thus, we believe it is a matter of “when” and not “if” retailers should begin developing mobile checkout capabilities (see Figure 2, next page). (For more detail, explore our Third Annual Shopper Experience Study, conducted with RIS News, “Enabling Retail Without Boundaries.”)

**The Tablet Phenomenon**

According to research from the E-tailing Group, tablet owners use their devices for shopping to a greater degree than smartphone owners. The survey found that 69% of tablet owners rated their recent shopping experiences via these devices superior to the smartphone, with 39% reporting a significantly better experience. The remaining 30% rated their shopping experience as somewhat better vs. shopping with their smartphones.

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**Shopper Use of Smartphones Leading into the 2011 Holiday Season**

<table>
<thead>
<tr>
<th>Activity</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Looked up product information</td>
<td>57%</td>
</tr>
<tr>
<td>Compared prices</td>
<td>52%</td>
</tr>
<tr>
<td>Searched for coupons</td>
<td>47%</td>
</tr>
<tr>
<td>Scanned a barcode or QR code</td>
<td>43%</td>
</tr>
<tr>
<td>Checked inventory availability</td>
<td>40%</td>
</tr>
<tr>
<td>Redeemed a digital coupon</td>
<td>39%</td>
</tr>
<tr>
<td>Used shopping app to earn points</td>
<td>30%</td>
</tr>
<tr>
<td>Used mobile payment</td>
<td>24%</td>
</tr>
</tbody>
</table>

*Source: Shoppersciences.com Holiday Shopping 2011 Survey*

*Figure 1*
Features that make the tablet more enjoyable for shopping include a larger screen and better user functionality for browsing. A significant amount of online shopping is done in the comfort of a living room, and with their larger display and immersive features, tablets enhance the entire shopping experience. Also, tablet owners tend to be gadget-buying early adopters — young, educated and affluent and, hence, traditionally greater spenders.

A Forrester/Bizrate survey clearly indicates that tablet owners across all age groups use these devices for shopping and prefer tablets over smartphones for shopping-related activities (see Figure 3, next page). The trend is more prominent among the younger Gen Y and Gen X consumers, as they are early adopters of gadgets. In fact most Gen X, Gen Y and baby boomer consumers find shopping on a tablet at least as convenient as on a PC.

Adobe Digital Index analyzed the more than 16.2 billion online transactions of over 150 U.S. retailers in 2011. The research indicates that tablet visitors are more likely to make a purchase and spend more per purchase than other visitors using other devices. Adobe also predicts that for the 2012 holiday season, tablets will spearhead the online sales channel. Tablets will constitute 13.5% of all online sales, followed by smartphones (6.5%) and other devices such as e-readers (1%).

The average order value (AOV) by tablet visitors was 16%, 56% higher than smartphones and laptop/PC purchases for the 2011 holiday season (see Figure 4, next page). The AOV of purchases made using tablets also remained significantly higher than smartphone and laptop/PC visitors on Black Friday and Cyber Monday.

Retailer strategies for the 2012 holiday season and beyond should focus on developing Web sites and apps optimized for the unique user experience offered by tablets. This may encourage these consumers to shop more than they do when visiting sites optimized solely for smartphones or traditional computers. Further, they should develop promotions and incentives that appeal

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High-Income Shoppers Show Highest Propensity to Use Mobile Checkout

![Figure 2: High-Income Shoppers Show Highest Propensity to Use Mobile Checkout](image-url)

*Source: “Enabling Retail Without Boundaries,” Third Annual Cognizant Shopper Experience Study, conducted with RIS News, 2012*

*Figure 2*
more directly to tablet visitors and/or utilize the tablet user experience.

Conversion rates from tablets are also substantially higher than those from smartphones. For the 2011 holiday season, the conversion rates from tablets were 1.8% higher than those of smartphones. The rate further increased on Black Friday and Cyber Monday, when they were 2.4% and 3.2% higher than smartphone visits (see Figure 5, next page).

With the number of tablet owners expected to skyrocket over the next few years, these shoppers potentially constitute the most important market segment that successful retailers will factor into their mobile and merchandising strategy in the years ahead.

### Apps vs. Mobile Browsers

Dedicated mobile applications have been a cornerstone of retailers’ mobile strategies since the introduction of the iPhone in 2007. Our research indicates that 26 of the top 30 retailers (by revenue) have a dedicated iPhone app, and 23 have optimized their Web sites for the iPhone browser. Our study also suggests, however, that consumers, overall, do not show a preference for a dedicated app across all stages of the purchasing cycle. In some cases, they display a marked disinclination toward using a dedicated app over a Web site optimized for mobile browsers, according to an Adobe survey (see Figure 6, next page).

Consumers seem to prefer browsers over dedicated apps because of the convenience of simply typing their queries directly into the

### Tablets Claim Higher Average Order Value

![Graph showing average order value across devices for Black Friday, Cyber Monday, and 2011 Holiday Season](source: Adobe Digital Index Report, 2011)

Source: Adobe Digital Index Report, 2011

Figure 4

**Figure 3**

Source: Forrester/Bizrate Insights, Q2 2011 Tablet Commerce Flash Online Survey
browser instead of having to first search for and then download apps from an app store. Given that the mobile browsing and search environments for most devices closely resemble the desktop experience, it seems that desktop-based browsing behavior is being transferred to the mobile environment. Finally, most consumers are unlikely to download and maintain a large number of apps.

**Retailers’ Mobile Strategies**

Our study of retailers’ mobile strategies reveals significant variations in their pursuit of growth in the online and mobile channels. A major variation is the extent of sales achieved through e-commerce/mobile channels. Studies from Retail Systems Research (RSR) indicates that retail leaders (those that have grown faster than the average industry growth rate of 8.85%) achieved a higher percentage of sales through mobile devices than their competitors (see Figure 8, page 7).

RSR research also indicates that most retailers are looking to leverage mobile devices to increase customer interaction and intimacy and also to provide better tools to their associates. This objective was given higher priority than “save the sale,” indicating that retailers view mobility as a strategic capability (see Figure 9, page 7).

However, when retailers’ planned investments in the mobile channel are assessed, this strategic intent is less visible. Most retailers seem to be playing catch-up and are still working to develop baseline capabilities (see Figure 10, page 8). Using our annual Shopper Survey as

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**Tablet Conversion Rates Substantially Higher Than Smartphones**

![Table Conversion Rates](source)

*Source: Adobe Digital Index Report, 2011*

**Shoppers Prefer Browsers to Mobile Apps**

![Shoppers Preference](source)

*Source: Adobe Mobile Consumer Survey*

Figure 5

Figure 6
To App or Not to App

Retailers lagging behind in the race to offer mobility have either been hampered by resource and infrastructure challenges, or are feeling overwhelmed by what they see as the scorching pace of adoption and the leaders’ rapidly evolving capabilities. Also, many are unable to decide whether to introduce an app or use the conventional e-commerce Web site for their offerings.

According to a survey by Adobe, despite all the attention branded apps received in 2011, the connected consumer does not like shopping via branded smartphone or tablet apps. Instead, a significant majority chose smartphone or tablet mobile browsers as their preferred platform. Even as investments rise, successful retailers will need to continuously evaluate how their apps integrate with the lifecycles of targeted consumers.

Another survey by RSR reveals that 33% of retailers remain “neutral” on mobile apps, and 20% do not believe apps will yield more engagement than a mobile site. Meanwhile, 47% think mobile apps will add value to their brand offering, and 79% feel that just creating another version of a desktop-based e-commerce site is not a viable option (see Figure 7).

Will an App Be Apt?

A downloadable app will yield more engagement than a mobile site

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>9%</td>
<td>38%</td>
<td>33%</td>
<td>19%</td>
<td>1%</td>
</tr>
</tbody>
</table>

A cut-and-paste version of a full e-commerce site is a viable mobile strategy

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1%</td>
<td>12%</td>
<td>51%</td>
<td>28%</td>
<td></td>
</tr>
</tbody>
</table>

Source: Retail Systems Research

Figure 7
Business capability: There was a fair degree of similarity among retailers in similar sub-segments, with some basic capabilities extending across all offerings. For example, two luxury department stores offered basic deals and in-store events that are likely to be of interest to their customers.

Technical platform: The iPhone appeared to attract the heaviest concentration of capabilities, although the pace of Android releases is increasing.

Implementation/release timing: Most retailers have implemented major functionality in fairly large releases that typically occur only once or twice a year.

Product-related research and pricing is the most popular service that retailers provide through their mobile site/app, followed by store location services.

Check-out services are the least popular mobile service offered by retailers. The complexity of integrating back-end supply

The Mobile Opportunity

1. Deeper customer engagement to build loyalty through mobile channels
2. Identify innovative mobile use cases that no one else is doing yet
3. Deeper customer engagement to drive sales through personalized offers
4. Deeper insight into shopper behavior through mobile site or app
5. Empower store employees through mobile site or app access in stores
6. Mobile “save the sale” at the shelf
7. Stop the decline in store sales
8. Mobile in-store concierge to alleviate sales burden from store staff
9. Disrupt other retailers by providing a mobile experience that encourages the use of my product
10. Discourage the use of price comparison by offering another mobile option

Source: Retail Systems Research Survey
Figure 9

* Retail leaders are defined as those that have grown faster than the average industry growth rate of 8.85%.

Source: Retail Systems Research
Figure 8
Chain and payment systems is a significant challenge in providing such services.  

- **Services aimed at improving the shopping experience** — from store location services and product locators to couponing services — are a key component of mobile app development strategies for the retailers studied.  
- **Coupons and discounted prices remain a significant driver for mobile shopping**, and hence, most of the retailers studied provide coupons to attract customers.  

### Challenges Facing Retailers  
Despite the progress so far, retailers still need to devote a fair amount of resources to further develop and integrate mobile capabilities into their ongoing business plans and technical release strategies. RSR found the key inhibitors for mobile commerce to be budget and ROI, closely followed by a lack of skilled mobile/e-commerce resources (see Figures 12 and 13, next page).  

Most retailers agree that quantifying the returns from mobile commerce investments is difficult, and a significant number (28%, as shown in Figure 12) also state that the fast pace of technology change makes it difficult to keep up. A key differentiator between retail leaders and other players is that leaders recognize consumer trends before others and so are better equipped to stay a step ahead of the technological curve. Because many retailers introduced price-match-
ing policies late in 2012, they are looking to mobile to arm associates with capabilities to address shoppers’ concerns at the point of purchase.

The Road Ahead
We believe successful retailers will concentrate on the following key elements for a winning mobile-device sales strategy:

- **Pay obsessive attention to both content and design:** Craft a user experience that goes beyond just a mobile app and Web site to a mobile-optimized Web experience.
- **Leverage existing technology and intelligence where possible.** Apply current investments, existing tools and technologies and accumulated knowledge associated with prior desktop delivery methodologies to provide mobile-optimized experiences.
- **Listen to what customers tell you and learn from their behavior.** Continuously assess mobile shopping and usage behavior, satisfaction levels and expectations by leveraging the wealth of analytical data capture and analysis tools.

Organizational Obstacles for Mobile Commerce

<table>
<thead>
<tr>
<th>Obstacle</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROI is hard to quantify</td>
<td>60%</td>
</tr>
<tr>
<td>Budgeting – there is little capital investment available</td>
<td>51%</td>
</tr>
<tr>
<td>We don’t have enough e-commerce/mobile resources to manage all the available opportunities</td>
<td>40%</td>
</tr>
<tr>
<td>Difficulty getting IT resources for e-commerce/mobile projects</td>
<td>37%</td>
</tr>
<tr>
<td>Mobile technology changes too quickly for us to be able to make solid investments</td>
<td>28%</td>
</tr>
<tr>
<td>Stores don’t understand the mobile, social or cross-channel opportunities</td>
<td>19%</td>
</tr>
<tr>
<td>Stores are a higher technology investment priority</td>
<td>19%</td>
</tr>
<tr>
<td>Our executive team doesn’t understand the mobile opportunity</td>
<td>16%</td>
</tr>
<tr>
<td>We don’t know how to turn data gained from mobile channels into actionable business intelligence</td>
<td>16%</td>
</tr>
<tr>
<td>The marketing organization does not understand the digital strategies we need to support</td>
<td>9%</td>
</tr>
</tbody>
</table>

Source: Retail Systems Research

Figure 12

Mobile Business Challenges

<table>
<thead>
<tr>
<th>Challenge</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mobile price comparison at the shelf is hurting our business</td>
<td>4%</td>
</tr>
<tr>
<td>Our competitors have a mobile strategy and we need to respond</td>
<td>23%</td>
</tr>
<tr>
<td>Our competitors don’t have a mobile strategy</td>
<td>24%</td>
</tr>
<tr>
<td>Store sales are getting cannibalized; mobile can help</td>
<td>24%</td>
</tr>
<tr>
<td>Mobile technology is moving too quickly; we can’t keep up</td>
<td>38%</td>
</tr>
<tr>
<td>We’re seeing significant online traffic from mobile sources and need to respond</td>
<td>38%</td>
</tr>
<tr>
<td>Consumers are using mobile as part of their shopping experience and we need to be there</td>
<td>42%</td>
</tr>
</tbody>
</table>

Source: Retail Systems Research

Figure 13
• **Engage across a variety of consumer segments:** Smartphone adoption will soon be ubiquitous, and differences in user engagement will narrow. Retailers must be smart about ensuring that large consumer segments are not under-served due to a narrow focus on one slice of the pie. Doing this requires:
  > Integrating their mobile capabilities as part of a multichannel/omni-channel business organization, focused first and foremost on the customer experience.
  > Developing and executing a technical development strategy that brings new capabilities to market at a speed that meets consumer needs.

With mobile platform-influenced revenues estimated to be about one-fifth of retail revenues by 2016, the choices that retailers make in their strategies and related investments will be a key indicator of future business performance. As previously discussed, most shoppers are giving retailers some latitude in how quickly they develop mobile capabilities, but building these capabilities takes time. Retailers cannot wait to develop strategic capabilities that will impact such a large portion of their revenue.

These strategic choices will determine whether these revenues will come at the expense of existing channels or will open up a plethora of possibilities, such as deeper and more meaningful consumer engagement. Successful retailers are treating (and will continue to treat) mobile retail as a strategic imperative and not merely as an adjunct to the existing e-commerce channel. The mobile application strategy for retailers is thus a C-suite issue and not merely a to-do item on the e-commerce division's agenda.

**Footnotes**


**References**

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