Mobile commerce strategies for delivering an omni-channel customer experience

Drive sales across all channels with a Smarter Commerce approach to mobile
Mobile technology has unleashed a seismic shift in the commerce landscape. Armed with smartphones and tablets, customers have seized control of the merchant/customer dynamic. Mobile commerce requirements and capabilities continue to unfold rapidly, with a succession of devices and technologies that complicate decisions for organizations intent on pursuing mobile commerce opportunities.

This white paper highlights research by IBM and independent analysts into the state and future of mobile commerce. It also outlines key focus areas and opportunities for merchants to embrace mobility to create a seamless cross-channel experience and increase sales across mobile, online and in-store channels. With an IBM Smarter Commerce approach that puts the customer at the center of the commerce value chain, organizations are poised to reap sustainable rewards in our new mobile, digital and connected world.

### The rise of mobile commerce

The growth of mobile commerce has been nothing short of phenomenal. Consider: The percentage of e-commerce sales over smartphones and tablets on Black Friday 2012 surged to more than 16 percent, up from 9.8 percent on Black Friday 2011, according to IBM Digital Analytics Benchmark data aggregated from more than 500 US retailers. Mobile as a percentage of website traffic on Black Friday 2012 leapt to 24 percent, up from 14.3 percent the year earlier — a stunning 68 percent gain.

Transactions over mobile devices are only part of the story. Wielding smartphones and tablets, customers strolling through brick-and-mortar stores are increasingly checking competitor pricing and products before making a purchase decision, often by simply taking a photo of an item. Blurring the lines between the physical and virtual, this growing practice of “showrooming” is forcing traditional retailers to rethink marketing and merchandising strategies and counter with innovations to minimize the loss of sales to online competitors and leverage mobile to enhance the in-store buying experience.

<table>
<thead>
<tr>
<th>% Increase</th>
<th>Description</th>
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<tbody>
<tr>
<td>63%</td>
<td>Leap in Black Friday 2012 mobile sales vs. 2011</td>
</tr>
<tr>
<td>252%</td>
<td>Growth in US mobile commerce expected between 2012-2017, to $86.7 billion</td>
</tr>
</tbody>
</table>
More than half of US smartphone owners use their device to perform retail research while inside a store, 20 percent scan product barcodes and 13 percent check competing prices.³

More disruption is on the way. Independent analyst firm IDC predicts that mobile access to the web will surpass PC access by 2015 on a worldwide basis. Forrester Research predicts mobile payments to grow more than 600 percent over five years, from USD12.8 billion in 2012 to USD90 billion in 2017, for the three mobile payments categories of in-store payments, mobile peer-to-peer (P2P) and remittances, and mobile remote commerce.⁴

The fastest growing of those categories is expected to be in-store payments by mobile devices doubling as credit or debit cards, which Forrester predicts will reach USD41 billion in 2017 — or half of all mobile payments. Already beset with competing priorities, organizations in retail, travel and hospitality, financial services, food and beverage and other industries are being forced to weigh multiple trends and adjust their strategies to the unique dynamics of the mobile audience.

Those dynamics include mobile shoppers having a laser focus on buying and a substantially higher “bounce rate” as compared to web shoppers. IBM Digital Analytics Benchmark data finds roughly 45 percent of mobile users view just one page before leaving a site, compared to 37 percent for PC users. Organizations are challenged to implement mobile-specific strategies that address the lower time on site and fewer page views for mobile shoppers to improve conversion rates while incorporating mobile in an omni-channel environment that supplies a consistent and seamless experience across touchpoints.

Mobile commerce efforts are not keeping pace
To date, the rate at which businesses have invested in their mobile commerce experience has not matched the strong adoption of mobile among shoppers. For example, just 40 percent of US and UK e-commerce organizations ran smartphone- and tablet-optimized websites in 2012, according to a Forrester Research survey on behalf of IBM.⁶ However, 73 percent of those organizations planned to have mobile-optimized sites in place by 2013, while 69 percent intended to make available mobile applications in the same timeframe.

Key objectives behind mobile initiatives include brand enhancement, extending existing e-commerce offerings, driving in-store sales, providing a new sales channel and keeping up with competitors, according to a study by RSR Research.⁷ (See Figure 1.) But overall, uncertainty over business objectives and return on investment (ROI), funding limitations, apprehension over additional complexity, and a “wait and see” mindset have kept mobile from the commerce forefront.

As Forrester Research noted, “While consumers are rapidly adopting smartphones and tablets... retail executives are taking a measured view of the immediate benefits of these efforts—in part because of the myriad of challenges that must be considered when investing in mobile for their company.”⁸ Despite the perceived challenges of a mobile strategy, businesses don’t have time to wait. Leaders are deploying mobile solutions and gaining advantage as recognition of mobile’s key role in the customer experience continues to grow.
Leading organizations also recognize that mobile devices are more than just a portable desktop, offering contextual insights into customer behavior such as location, intent, direction, time, activity and identity. Mobile opens new frontiers for immediacy, precision and innovation. One example: In South Korea, the Homeplus retail chain runs virtual stores that feature images of products, but not actual goods. (See Figure 2.)

Using a Homeplus mobile app, mobile users scan barcodes on product images to trigger purchase and delivery of the items to their home. Customers don’t even need to be at the “virtual store”—the mobile app lets them scan the barcode on a product while at home, in the office or on the street for subsequent delivery.

### Mobile strategy objectives

<table>
<thead>
<tr>
<th>Objective</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Enhance our overall brand</td>
<td>86%</td>
</tr>
<tr>
<td>Extend our existing e-commerce offering</td>
<td>85%</td>
</tr>
<tr>
<td>Drive sales to the store</td>
<td>81%</td>
</tr>
<tr>
<td>Provide a new sales channel</td>
<td>79%</td>
</tr>
<tr>
<td>Keep up with competitors</td>
<td>75%</td>
</tr>
<tr>
<td>Empower our employees</td>
<td>65%</td>
</tr>
<tr>
<td>Provide a way to launch new products and/or brand</td>
<td>65%</td>
</tr>
<tr>
<td>Provide rich content and community input</td>
<td>62%</td>
</tr>
<tr>
<td>Give a critical “face” to our brand</td>
<td>57%</td>
</tr>
<tr>
<td>Give consumers a way to match our prices/products to competitors</td>
<td>41%</td>
</tr>
</tbody>
</table>

*Figure 1: Retailers who “agree” or “strongly agree” with the statements in an RSR Research study, “The Impact of Mobile in Retail,” January 2013.

### Rethinking commerce in the mobile world

It’s important to recognize that mobile is not a channel unto itself, but should extend and enrich in-store, web, point-of-sale (POS) and call center touchpoints as an integral part of an omni-channel environment. Embedding mobile capabilities and seamless interactivity across all touchpoints in the commerce value chain positions merchants to meet customer expectations, deepen engagement and drive sales.
With innovative new technologies and solutions optimized for mobile commerce, merchants are positioned to re-engineer cross-channel commerce for mobile in four key areas: the in-store mobile experience, sales and engagement on mobile devices, mobile marketing and understanding mobile customer behavior.

**Meet ARISTO**
IBM Research is developing innovative mobile applications that provide in-store shoppers with real-time product rankings, recommendations, rewards points, coupons and more over their smartphones. With these technologies, recommendations and other data can be superimposed over the image the shopper sees when aiming a smartphone camera at a store shelf.

Image analysis technology in ARISTO (Augmented Reality for In-Store Offers) means the shopper doesn’t need to scan a bar code. Shoppers can set up profiles and preferences, which are enriched over time by purchase behavior. With innovative mobile technologies and applications like ARISTO, retailers can evolve beyond the creation of mobile-optimized web stores to leverage the capabilities and awareness mobile devices possess to:

- Improve revenue with targeted messages and cross-sell recommendations
- Increase profitability by reducing costs for promotions, marketing and store personnel
- Build customer loyalty with a personalized, innovative shopping experience

**The in-store mobile experience**
E-commerce has been gradually eroding brick-and-mortar sales for a number of years, but now leading retailers see mobile devices as driving a renaissance for the physical store. Innovators are implementing mobile strategies to empower both store associates and customers with mobility, digitizing the store experience and diminishing traditional channel boundaries.

Store associates wielding mobile devices are equipped to deliver better customer service by quickly responding to inquiries—for instance, checking availability of an out-of-stock product at a nearby store, or explaining ship-to-store or ship-to-customer options for a product. With mobile devices, associates can “save the sale” on the store floor, driving revenue and building customer loyalty.

Mobile devices in the hands of store employees are also central to mobile POS strategies that minimize checkout wait times, enabling transactions anywhere in the store. Also emerging
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are mobile POS systems that let customers purchase goods over smartphones without the need to interact with a store associate. For instance, Apple's EasyPay app lets customers scan and pay for merchandise at Apple stores, emailing a receipt.

Mobile POS systems are the top mobile initiative in the works for physical stores, a Forrester Research study in 2012 found. Thirty-seven percent of retailers surveyed had mobile POS systems implemented or in pilot phases, with 57 percent planning for full implementation by 2014. Those initiatives align with customer expectations, with an IBM study finding that 52 percent of customers want to use mobile devices at checkout.

Sales and engagement on mobile devices
Creating an exceptional web experience optimized across multiple devices is essential for today's business. Users now expect to be able to browse the web on their phones just as easily as on their desktop computer. Despite customers’ exuberant usage of mobile devices, IBM Digital Analytics Benchmark data found that mobile users spend less time on shopping sites, view fewer pages and are more likely to “bounce” after a single page view than PC users.

Sites poorly optimized for mobile devices exacerbate their inherent real estate and functional limitations, generating subpar results. Similarly, usage of mobile apps may suffer unless they are monitored and tuned to meet the needs of mobile users. Mobile apps need to be relevant and valuable to users while returning value to the business.

Both mobile websites and apps introduce new complexity and uncertainty, including targeting the right devices, ensuring security and choosing the best web, native or hybrid mobile app model. Developing a sound mobile app strategy, optimizing the mobile web experience and accelerating time to market are key objectives.

How customers want to use mobile devices

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Reason</th>
</tr>
</thead>
<tbody>
<tr>
<td>52%</td>
<td>want to pay for goods at checkout</td>
</tr>
<tr>
<td>44%</td>
<td>want to find coupons and promotions</td>
</tr>
<tr>
<td>42%</td>
<td>want to seek out lower prices</td>
</tr>
<tr>
<td>42%</td>
<td>want to locate products in-store</td>
</tr>
<tr>
<td>39%</td>
<td>want to receive personalized promotions</td>
</tr>
</tbody>
</table>

Figure 4: Source: IBM Institute for Business Value, “2012 Smarter Consumer Study,” September 2012.
Developing a mobile app strategy. Leading organizations typically consider four major areas in devising mobile app strategies:

- **Audience.** Who is the target user? How will usage of the app drive engagement and sales, differentiate our brand or reduce costs? What functionality will users find more relevant and valuable?
- **Device type.** With a rapidly growing universe of device types (for example, Apple iOS, Android, Microsoft, RIM), prioritizing development and support for mobile apps requires analysis on usage and trends forecasting to maximize return on investment.

- **Distribution.** Will the app be distributed through an app store? Can users search for it online or access it through a web portal? Sound planning is important to optimize app distribution, as well as updates, add-ins, data and content.
- **Development and management.** Based on decisions regarding audience, device types and distribution, organizations need to determine which mobile app model best fits their business objectives. Figure 5 summarizes web, hybrid and native application approaches.

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**Figure 5**: A summary of development approaches for mobile applications
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Without proper tools, the challenge of optimizing mobile websites across an array of devices and mobile platforms could consume and sink an organization’s efforts to deliver a simple, seamless mobile experience to customers. Development tools that eliminate the need to create custom code for each and every platform give developers a faster, easier way to ensure that mobile websites are optimized for multiple devices and platforms.

Responsive web design is an increasingly popular approach for creating a single website that optimizes content and layout for a variety of devices based on screen size, device and orientation, eliminating the need to design for a specific user device preference. Responsive design ensures organizations get the most out of web design efforts by providing a way for the user interface to optimize automatically for screen resolution, orientation or capabilities.

**Accelerating time to value.** An e-commerce platform that enables quick and easy creation of mobile sites provides significant speed advantages in launching and optimizing mobile initiatives. Meanwhile, pre-built yet customizable e-commerce store templates for mobile enables developers to quickly implement a mobile website or native or hybrid web app, and adapt it to unique needs after its initial launch.

The ideal mobile “starter store” solution will translate into several languages and support multiple web browsers and platforms, with centralized management of multiple mobile stores for different brands, business models or geographic markets. Figure 6 illustrates a clean, sparse mobile store layout suitable for a smartphone.

**Figure 6**: A smartphone starter store provides a rich storefront for many mobile devices.

**Mobile marketing**

Mobile devices open a new frontier for marketing. Personalized emails and text messaging to opted-in customers, location-based marketing, mobile-optimized websites and apps, and product and content recommendations offer opportunities to expand marketing beyond traditional digital and physical channels to deepen engagement and drive sales among mobile customers.

Mobile marketing is high on the radar screen for most organizations. For instance, 96 percent of marketers expect to run mobile-optimized websites over the next several years, according to an IBM study. About 88 percent plan to roll out mobile apps and mobile email over the same time frame.
However, the majority of mobile marketing initiatives are ad hoc, discrete and not aligned with other campaigns, the IBM study found. Just 21 percent of marketers had integrated mobile into campaigns and advertising running across email, web and other channels.

Without integration, mobile marketing is at risk of becoming siloed and introducing confusion and duplication into the customer experience. Mobile delivers the greatest returns when incorporated with progressive outbound and inbound campaigns orchestrated across channels, using analytics to devise tactics, track and segment customer response and measure success.

Besides mobile websites and apps, precision marketing, location-based marketing, digital ads and personalized recommendations, and email are key focus areas for marketers looking to capitalize on the mobile opportunity.

**Precision marketing.** Today's best omnichannel engines enable e-commerce professionals to readily extend precision marketing strategies to a mobile audience. With precision marketing, offers and promotions can be dynamically adjusted to target a shoppers’ online behavior such as browsing history, referral sites, search and past purchases. Mobile devices provide additional context, like location that can be used to further refine offers to better target the mobile shopper.

Precision marketing is geared toward deepening customer engagement across channels, including mobile. However, a comprehensive solution that covers all digital channels is essential to avoiding conflicting or duplicate messages and engaging with customers over the channel of their preference, mobile or otherwise. For example, precision marketing allows outreach based on customer actions, such as an SMS text message to an opted-in shopping cart abandoner.

![Image](image.png)
Location-based marketing. Location-based marketing is widely regarded as among the most promising mobile marketing initiatives. Growing use of smartphones with GPS accuracy of 20 to 30 meters has given marketers a powerful way to reach customers via SMS text messaging (and to a lesser extent email, mobile apps and display ads) with immediacy and geographic precision not possible by other means.

Leading marketing technology provides latitude/longitude calculations and combines customer profile information with real-time context to decide what offer to serve to a customer. As part of a broader cross-channel interactive marketing framework, the technology uses customer response to location-based offers in decisioning for future outreach and to avoid duplication. A data repository on location-based marketing effectiveness lets marketers analyze results and fine-tune their approaches.

Digital ads and personalized recommendations. Mobile devices open a new avenue for conventional marketing through display and paid search advertising, as well as personalized product and content recommendations. Though, according to IBM Digital Analytics Benchmark data, conversion rates are lower on mobile devices than on PCs, advertising is an effective way to elevate brand awareness among on-the-go shoppers.

As on a PC, display ads for mobile can retarget customers who abandoned their carts after they leave your site, prompting return visits and purchasing either via the mobile device or a PC. By tightly coupling marketing and commerce capabilities, mobile can play a key role in a broader cross-channel interactive marketing framework. Marketers can monitor response to display and paid search ads, and incorporate it into customer profiles to inform subsequent campaigns.

Email marketing. Ensuring that emails render attractively across various devices is critical to driving clickthrough and conversion. As Figure 8 shows, emails can display quite differently depending on device characteristics. A good email rendering tool enables you to preview and test how an email displays across more than 100 devices, browsers and email clients, offering wizard-driven automation to guide you through best practice steps to test and optimize mobile emails in all major languages.

A rendering tool will also align with monitoring of email deliverability—your success at reaching the inbox rather than landing in the spam folder, being quarantined or being blocked by an ISP. With IBM email benchmark data showing that one in five emails don’t reach the inbox, monitoring deliverability, including the day and time a mobile email is opened and whether it is repeatedly accessed by various devices, is important to sizing up roadblocks and broadening your mobile marketing reach.

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**Figure 8**: Emails render differently on an Android (left) and an iPhone.
SMS text marketing. With high open and response rates, text marketing is a key focus area for marketers, with IBM’s survey finding that 55 percent of organizations intended to have text marketing programs in place by June 2013. But the practice can involve cost, complexity and risk. Securing opt-in is essential and best achieved by promotion through conventional email, website, mobile ad and display ad channels.

To streamline operations and maximize results, a text marketing solution vendor should be supported by a mobile aggregator, an intermediary between texting companies and leading telecommunications carriers. For example, IBM partners with Tier 1 mobile aggregators that can deliver messages globally, provision short codes and assist with carrier approval of messages.

Understanding mobile customer behavior
Analytics is fundamental to the development and growth of a mobile commerce strategy and understanding customer behavior with mobile devices and the impact on other channels. Companies need analytic frameworks that closely track key characteristics and metrics of mobile users and their devices, interactions with the brand, and conversions.

Without analytics, mobile commerce efforts are likely to fall short of their potential. Investments in mobile apps, mobile-optimized websites, location-based marketing, opt-in text alerts or other initiatives require diligent measurement and optimization, particularly given the ceaseless introduction of new devices and growth in the number of mobile shoppers.

A digital analytics platform gives mobile commerce professionals a powerful solution to track high-level metrics in real time and drill down into critical details that can make or break the success of mobile commerce. Key data points to track include:

- Make and model of smartphone, tablet, e-reader or game console
- Device operating systems, screen size and resolution
- Web pages and content accessed, for example, store locators, reviews, blogs or click-to-call
- Time on site, conversion rates, average order value and similar metrics for mobile users
- Mobile app uptake and usage, for example in-app purchasing, subscriptions and ad response
- Individual mobile user site access by multiple channels and devices, for example, laptops, smartphones and tablets

Figure 9: Device pathing in IBM Digital Analytics illustrates device interaction sequences through the conversion funnel.
As shown in Figure 9, IBM Digital Analytics device pathing functionality illustrates various mobile devices and PCs used by shoppers as they progress through the conversion funnel.

**The IBM Smarter Commerce approach to mobile**

IBM offers true end-to-end capabilities for mobile commerce in the framework of our Smarter Commerce initiative, designed to put the customer at the center of the value chain. IBM cross-channel commerce and digital marketing technologies give B2C and B2B merchants all the tools they need to incorporate mobile into an omni-channel environment.

With a Smarter Commerce approach, your enterprise can innovate beyond simply creating a mobile-optimized storefront to deliver the seamless, relevant shopping and brand experience that customers seek across mobile devices and other touchpoints. As mobile commerce continues to grow at a rapid pace, meeting customer mobile expectations in the near term is essential to driving loyalty and sales. An IBM Smarter Commerce approach can help enterprises turn mobile aspirations into reality with the following technologies:

**Cross-Channel Commerce**

IBM Cross-Channel Commerce extends the customer touchpoint to mobile for browsing your online catalog, conducting side-by-side product comparisons, receiving personalized marketing and promotions, completing transactions, obtaining store location information and providing an accurate view of orders and inventory availability.

Our mobile commerce solution can enable your company to quickly adopt mobile as a new selling channel while seamlessly leveraging the power of personalized marketing and extending the power and reach of your brand. With mobile and tablet starter stores and reference applications, you can quickly take full advantage of smartphone and tablet browsers and touchscreens to deliver an optimized mobile shopping experience.

**IBM Enterprise Marketing Management**

IBM mobile marketing, location-based targeting and customer experience management capabilities provide the marketing components that can help you realize mobile's potential as the anywhere/anyplace extension of your brand-customer relationships. IBM's mobile portfolio is infused with digital analytics that enables detailed tracking of customer activity across mobile sites, apps and other channels, giving you insights to optimize interactions.
Leading marketers today are realizing returns from mobile marketing, aligning mobile with broader cross-channel initiatives and building a foundation for long-term success with IBM capabilities for mobile analytics, customer experience management, mobile email optimization, SMS text messaging, location-based communications, and mobile ads and recommendations.

Click here to explore IBM mobile marketing solutions.

**IBM Mobile Development Platform**

The IBM mobile application development platform for smartphones and tablets helps organizations of all sizes efficiently develop, connect, run and manage both customer-facing and store associate mobile applications.

IBM enables the creation of rich, cross-platform apps without the use of code translation, proprietary interpreters or unpopular scripting languages while reducing cost, complexity and time to market and enabling a better user experience across a variety of mobile devices. IBM provides all the essential elements needed for complete mobile development, deployment and management within a business.

Click here to explore IBM Mobile Development technology.

**For more information**

To learn more about this offering, contact your IBM sales representative or visit ibm.com/gbs/contact.
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