

“How much is that doggie in the window?”

If you’re holding a smartphone in your hands, you can ask and get answers to many more questions. Does the store down the street have a cheaper doggie? Can I get it in black instead of white? Does anyone have a 20 percent off doggie coupon? Can I find this doggie cheaper online and get free shipping? What do I feed this doggie? What do other people who bought this doggie think – is it a four-star doggie or a one-and-a-half-star doggie? And if you decide to buy this doggie, you can instantly tweet out a picture to the world on JustBoughtIt.

Today, if you have a smartphone, you have the tool that’s redefining “power shopping” and getting more and more powerful every day.

People have been buying things with their cell phones – wallpapers, ringtones, games, songs, and the like – for just about as long as cell phones have existed. In more recent years, users have been able to text (SMS) donations to their favorite disasters. All this was simple, relatively inexpensive, and the charges just showed up on your phone bill (with the carriers taking a significant cut, at least of the for-profit purchases).

But you couldn’t really use your cell phone to buy the doggie in the window – until you got a smartphone in your hands. The rocketing consumer adoption of smartphones with active geolocation capabilities and persistent Internet connections has transformed the way consumers use the Internet, and nowhere is that transformation more striking than in the area of mobile commerce, defined here as anything that facilitates the buying and selling of goods and services via a mobile device. It’s still early in the mobile commerce game, but it is projected to grow ten-fold by 2015, to nearly \$25 billion in the United States.¹

LOCATION, LOCATION, LOCATION

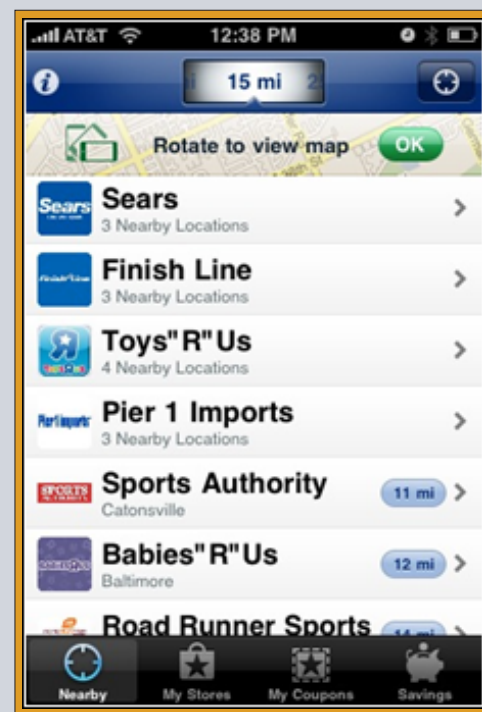
Geolocation has the potential to totally change the shopping paradigm for consumers and the marketers trying to reach them, and that transformation has begun. Smartphone-wielding shoppers can quickly locate other stores nearby to find better prices, selection, or to find out if something is in stock. Retailers can push coupons, merchandise suggestions and time-sensitive offers to consumers who are near or in one of their locations; and they have an active, location-aware, always-on channel to deliver their marketing messages. It’s a two-way wireless street, and the traffic on it is quickly picking up.

ROUGH EDGES FOR VIRTUAL COUPON CLIPPING

One of the most basic mechanism of mobile commerce is coupon delivery and redemption. Coupons have been pushed out through text messages by aggregators and individual retailers for years with a reasonable degree of success. Today, though, as more and more consumers carry smartphones and operate in an app-centric world, mobile couponing has some catching up to do. It’s a shopping cart-and-horse problem; limited participation by retailers in mobile couponing apps, for example, renders those applications of limited use to consumers, which in turn limits their adoption. A search of the Apple App Store returns dozens of couponing apps, but a disproportionately high number are dominated by one-star ratings, with the biggest complaints being lack of relevance or out-of-date offers. *Benchmark’s* own cursory testing of a few of the apps delivered, among other misfires, coupons for a Target store that didn’t exist at the indicated location, and a listing of all the Sears locations nearby, but without a single coupon.

Retailers are fast at work, though, finding ways to leverage location – aware

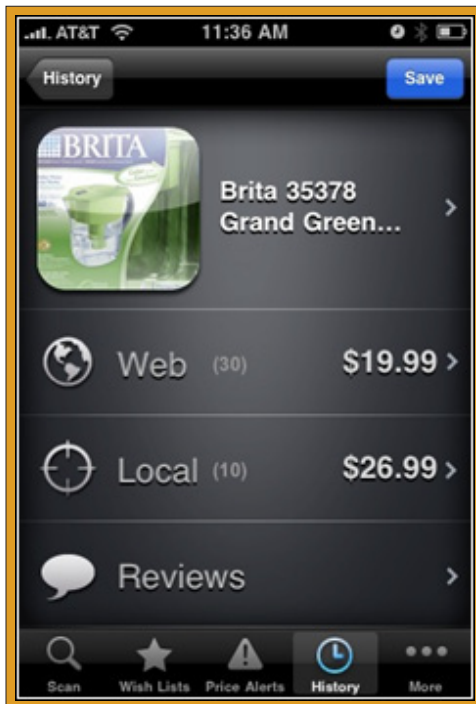
phones to their advantage. CauseWorld – an established player that rewards visits to participating stores with donations to charities – is working on a less altruistic application – called Shopkick that will enable retailers to send offers to customers in or near their stores; The Wall Street Journal reports that Best Buy and Macy’s have signed up to participate.ⁱⁱ Loopt and FourSquare are also working on ways for retailers to leverage their location-aware social networks to push out coupons and offers and build loyalty programs.



Coupon applications such as Yowsa! Find nearby deals, allow users to filter according to their preferences, and calculate their savings; customer reviews, however, often indicate dissatisfaction with the quality or relevance of results from some of the apps.

INFORMATION IS POWER (SHOPPING)

While smart mobile couponing may still be finding its stride, a smartphone equipped with the right apps is capable of saving money for consumers right now. There is a potential



Use an app like ShopSavvy or RedLaser to scan a product's UPC code, and the app returns a photo, product details, reviews, availability, and local and online pricing.

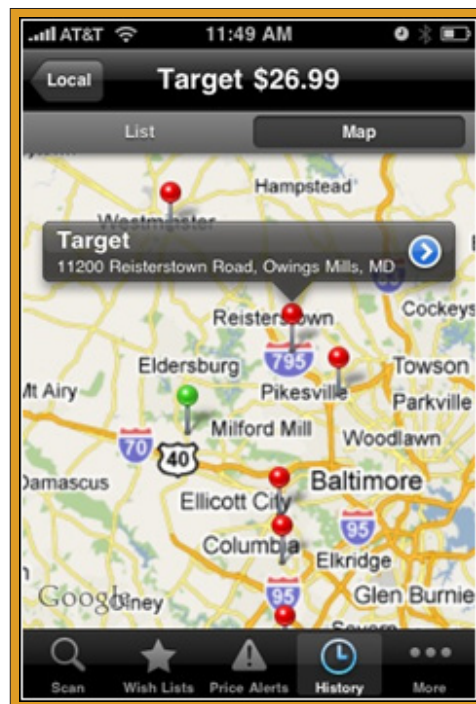
boon for consumers – and bane for bricks-and-mortar retailers – in competitive shopping apps that you can hold in your hand while you're in a store considering a purchase.

Apps such as RedLaser (12th-ranked paid application as of 5/17/10ⁱⁱⁱ) and ShopSavvy (#29) use the phone's built-in camera to scan a product barcode, and then deliver a list of locations nearby and online shopping sites where it is available, with prices. A consumer can then choose to run across the street or across town to buy it cheaper, order it online, or pay the price for the product in front of them if it meets their value threshold.

"Impulse is a large part of the equation," says Tim Murphy, Keynote mobile marketing manager. "Mobile gives you the ability to look up other stores or competition

and see where the best prices can be found. A retailer can catch people when they're passionate, they're excited, and they're ready to make the purchase."

It's up to the individual retailer to counter or match these offers for the customer standing in their store, or to let them walk. Retailers need to formulate policies that will satisfy their customers and their bottom lines; some cases have been reported where retailers would not even match their own online prices in their stores.



Local results include a list of retailers and their prices, along with a map to show how far you have to go to get a better deal.

Especially in these uncertain economic times, consumers seem eager to embrace these tools that can save them money. Last Black Friday, the Apple App Store saw a 77 percent year-over-year increase in shopping app downloads, according to Mobclix as reported in The Wall Street Journal. Over that same peak shopping

weekend, ShopSavvy reported 18 million uses of its app on iPhones and Android phones.^{iv}

MOBILE WEB VS. MOBILE APPS

About one-quarter of Internet sites considered "mobile friendly" are shopping and services sites, a category that includes the gamut from retail sites and shopping assistants to banks and real estate sites, according to Taptu as reported on ReadWriteWeb.^v But conversely, other research done by Rosetta concludes that only about 10 percent of retail sites are "full mobile players," meaning that their sites are optimized for mobile use with commerce capabilities, or that they have a dedicated app.^{vi} However, Rosetta also found that some 57 percent of retailers studied are delivering an "acceptable browsing experience," but the vast majority do not have mobile commerce capability.

With retail on the mobile Web not quite up to its potential, the supercharged mobile shopping experience is still largely an app-driven proposition. Third-party applications can handily aggregate product information, availability and pricing. And individual retailer applications can highlight a store's offerings, locations, and special deals, and offer specialized functionality and interaction.

Top-tier e-commerce players like eBay – which did \$600 million through its mobile channel in 2009, and expects to do \$1.5 billion in 2010^{vii} – and Amazon have mastered the mobile experience through their apps, delivering a high degree of usability, the right feature set, and acceptable performance. Now other big names in retail – especially those with real-world stores – are quickly trying to catch up.

Target is aggressively increasing their mobile presence and feature set. They've invested in the point-of-sale technology



Target is the first national retailer to install readers in all its stores that can both read mobile coupon barcodes and gift card barcodes, allowing customers to use coupons and pay with their smartphones.

necessary to scan mobile barcodes at the cash registers in all of their stores, opening up new levels of functionality and convenience for the consumer. Shoppers can opt-in to receive localized Target coupons via SMS, and then have those coupons scanned right off their phones at checkout. Target customers can also manage and use their gift cards right from their mobile phones.

Starbucks customers can leave their gift cards behind when they shop at Target, too. Following a successful beta test in Starbucks' home territory in the Pacific northwest, Starbucks has rolled out mobile gift card payment capability to all of its

in - Target stores. Starbucks Mobile Card app users can check and reload their balances via the app on their phone or online, and then use the app to pay for the venti-skim-no whip latte they order at their nearby Target.

Sears has assembled a sizeable team to accelerate its e-commerce efforts, including location-aware mobile apps that make product recommendations based on locale, like offering home-team sports apparel specific to a store's physical location.^{viii} Another old-line retailer, J.C. Penney, is working on new mobile apps that will push promotions out to customers when they come in the store, as well as deliver product info, reviews and pricing when customers scan barcodes with their phone's camera, à la RedLaser.^{ix}

"It's been very interesting to see how everything was on hold, on hold, building up, building up," says Shlomi Gian, director of mobile business development at Keynote. "And then the gates were open, and you've got all of your retailers racing to catch up."

FUELING THE MOBILE COMMERCE ENGINE WITH ADVERTISING

In many ways, mobile is a marketer's dream come true. You have a good idea who the prospect is. You have a good idea what they are doing. You know within a few feet exactly where they are. And now you have a channel to deliver a message directly to them at the time and in the place it matters most.

Google and Apple clearly believe mobile advertising is the next big thing. Google successfully outbid Apple to purchase mobile ad company AdMob for \$750 million last November; at this writing, that acquisition is in the final stages of FTC review. Apple responded quickly by turning around and acquiring smaller AdMob rival Quattro Wireless in January for \$275 million.

The increasingly bitter rivalry between Apple and Google is likely to play out

in the mobile advertising arena. Each company has a distinctly different view of the mobile ad market, and very different ways to approach it.

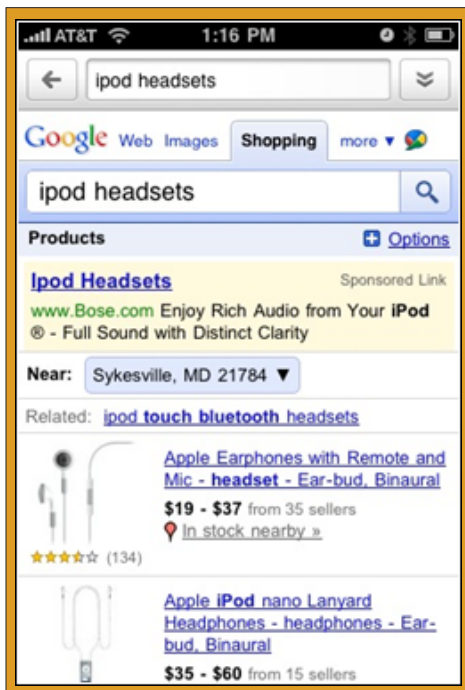


Merchants lucky enough to be selected as a favorite place get this sticker to put on their window. Passers-by use an app to scan the QR code and get information and reviews about the business.

Google continues to leverage its unmatched strength in search as a means of delivering subject - and location-relevant ads, particularly sponsored links. As is its fashion, Google is percolating a number of ideas to augment its presence for mobile users. For example, businesses that sign up for Google Places and are lucky enough to meet Google's unpublished criteria to qualify as a "favorite," are sent a "We're a favorite place on Google" sticker for their door. That sticker contains a QR (quick response) code that a passerby can scan with their phone to receive details and reviews about the business. Google also rolled out the Google Shopper app for Android this spring, its own product information app that can search by barcode scan, photo, or voice. Presumably, any or all of these efforts will include paid advertising.



Google's premise, however, is that search will be the dominant gateway on mobile, as it is on the desktop. But that's not a premise that all the experts agree on. Many believe that apps are and will be the main online entryway for mobile, especially since mobile browser performance is often so painful. It's no surprise, then, that Apple is approaching advertising entirely from the app side of the equation.



Google has transferred its search smarts onto mobile devices, giving users the ability to find items locally as well as online, and advising which nearby stores have items in stock.

After the hoopla died down following the introduction of the iPad this spring, Apple dropped what could be an announcement of equal or greater significance: iAd. In hallmark Apple fashion, rather than tag onto existing technology, Apple chose to invent an entirely new mobile advertising platform. Arguing that banner advertising is of limited effectiveness ("sucks"

was how Steve Jobs described it), Apple debuted in-app advertising that essentially becomes an app in itself, with a host of interactive application functionality including video and downloads. When the viewer is done with the ad, they click on the "x" and are returned exactly where they left off before they clicked on the banner.

"Maybe I'm too optimistic, but it is so logical, the way they approached this," Gian says. "If you're seeing an ad, you can act on the ad, while the emotion is there. You're reading your sports site and see a Nike ad, you click on it and it's almost like a Nike application pops up. You can interact, you can buy something from Nike from the ad without having to open your browser up."

App-based ad delivery makes a good deal of sense for the mobile platform. Unlike the desktop, where users primarily interact via a browser and it's not difficult to visit a series of sites in a matter of seconds, on smartphones sites take much longer to load. Users are not eager to be taken from an app to the browser, or from one site to another. Hence, the emphasis on apps over the browser on mobile.

"The way I see it now, with the standard technologies, you can only drive users to the mobile site," Gian says. "It's easy to say, 'click here' and then open the browser and go to the mobile site. It's more difficult to say 'click here and let's launch, for example, the Safeway application.' And by the way, do we have the Safeway application? Let's launch it, because that's the better experience.

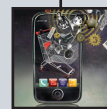
"This new concept of Apple will allow Safeway or whomever to build their ads as stand-alone application – like experiences, to buy things and do things through that ad. That will drive users from impression to action. If I'm right, this thing could be more successful in converting impression to action than even the [wired] Internet. This is what could drive and differentiate mobile

commerce even more than e-commerce."



Apple promises to raise the bar yet again with its new iAd program, which lets advertisers deliver content-rich mini-apps from their banner ads—all without taking the viewer out of their current application. Click the "X" and you return right where you left off.

Apple has another ace in the hole in the form of the iPad. While not likely destined to be a mass-adopted consumer device, it sold a million units in its first month on the market, and will be able to deliver a significant audience of affluent consumers. And with its larger form factor, though it is unlikely to be carried around and into a store like a phone, it promises to be an impressive device to maximize the impact of iAd delivery (and perhaps presages Apple's intent to move iAd onto the wired Internet; it was not just mobile banner ads Mr. Jobs was disparaging).



Of course, this great potential is contingent on advertisers being willing to operate inside Apple's walled garden, and invest in advertising "apps" that could be expensive to build just for one platform. And like the apps themselves, the ads will have to be approved by Apple. That approval shouldn't be hard, since Apple will have to be actively involved in creating the ads; at this writing, they have yet to release a software development kit that would enable advertisers or their agencies to create the ads on their own. According to Advertising Age, Apple is charging \$50,000 to \$100,000 to develop an ad, twice the agency going rate. The cost to run the advertising could be twice the going rate as well.^x

What's at stake in the mobile advertising shoot-out? This year, \$1-2 billion in ad revenue, depending on how quickly Apple's iAds take off. By 2014, perhaps four times as much.^{xi} Even in the worst-case scenario, it is a healthy showing against the total online ad industry, which currently totals over \$20 billion per year, and mobile is now growing at a much faster rate. If it can come close to delivering on its promise of higher conversion rates – more click-throughs, more purchases, more revenue – that rate will accelerate even more.

HOW TO LOSE MOBILE CUSTOMERS

If there's one fundamental rule that the best Internet retailers have learned, it's this: Customers are always just a click away from leaving you. The same rule applies for mobile. If the coupons are out of date, or the product info is missing, or your site isn't as easy or useful as the competition, or there are delays

in loading your pages, they're gone and not likely to come back.

It's a real catch-22 for mobile retail site owners. The expectations for online performance have been set by the wired Web, where sites load quickly with few failures. But performance on the mobile Web is inherently less reliable, with sites taking much, much longer to load, failures not an uncommon occurrence, and data traffic overloading some networks, as evidenced by AT&T's woes in New York and San Francisco.

Although it's not a one-to-one comparison, a look at Keynote's Performance Indices illustrates the relative difference between wired Web and mobile performance. For the first week of May this year, the average response time for the Keynote Business Top 40 was 2.06 seconds, and average availability was 99.68 percent. For the same week, the average response time for the Keynote Mobile Performance Index was 6.38 seconds, with a average success rate of 96.31 percent. More specific Keynote analysis of mobile retail sites in particular, however, indicate much slower performance, with well over half the sites taking 9 or more seconds to load the home page, and only two out of 14 loading faster than 8 seconds (for a similar week to the indices referenced above).

While users may expect and accept some delays on mobile – particularly when it's a novel experience and they're enjoying all this enhanced functionality for the first time – experience shows that such patience doesn't last. This is a particular concern in the case of branded apps where, instead of staring at a browser while it's loading and thinking it's a

network problem, the user is staring at the brand logo. The issue becomes associated with the brand, not the browser, and not the carrier.

"On the phone, depending on what network they're on, people are usually more forgiving, and willing to wait 10 and 15 seconds," Gian says. "But I think we're getting to the point where users are less forgiving about the long delays, especially if they're using an application, which they typically expect to be faster than a browser. With that brand logo in front of me, it doesn't look like the browser trying to find its way to the brand URL – it looks like a brand issue."

Even given the vagaries of network performance, it is still critical to monitor the end-user experience on the mobile device, whether it is a mobile-optimized Web Site or a dedicated app. Site and app owners have a high degree of control over client-server interaction and can optimize the data flows for performance – but only if that performance and user experience is being monitored over the actual networks.

"Performance on mobile matters," Murphy says. "If you get the product information after you left the store, if you get a coupon delivered after you left the store or the next day, or you try to make a transaction and you don't get a confirmation that it went through, instead of having an enhanced experience, you get the opposite. You're quick to switch brands to a company that can deliver. Or at the very least, you've lost a bit of confidence in the company you had once held on a pedestal."



FOOTNOTES

- i. The Wall Street Journal, "J.S. Penney spends to Get Ahead on Mobile Shoppers, Other Trends," by Rachel Dodes, 5/4/10
- ii. The Wall Street Journal, "Retailers Reach Out on Cellphones," by Geoffrey A. Fowler, 4/21/10
- iii. Mobclix, Top 100 paid applications, 5/16/10
- iv. The Wall Street Journal, "Price Check: Finding Deals With a Phone," by Geoffrey a. Fowler and Yukari Iwatani Kane, 12/16/09
- v. ReadWriteWeb, "Top Mobile Trends of 2010, Part 3: Emerging Markets," by Richard MacManus, 4/22/10
- vi. Mobile Commerce Daily, "Retailers are quite active in mobile: Study," by Giselle Tsurulnik, 3/3/10
- vii. BloggingStocks, "eBay Tracking for \$1.5 Billion in Mobile Sales," 3/30/10
- viii. The Wall Street Journal, "Sears Scrambles Online for a Lifeline," by Miguel bustillo and Geoffrey A. Fowler, 1/15/10
- ix. The Wall Street Journal, "J.C. Penney spends to Get Ahead on Mobile Shoppers, Other Trends," by Rachel Dodes, 5/4/10
- x. Advertising Age, "Is It Worth \$1M in Media to Be a First Adopter With Apple's iAd?" by Kunur Patel and Michael Learmonth, 5/3/10
- xi. ABI Research, "Mobile Marketing Strategies," "Mobile Marketing Spending, North America, Forecast: 2009-2014"