“Software is eating the world” is a famous quote from investor and software engineer Marc Andreessen. Given this thought, it seems to me that mobile devices, as the focal point of social software, appear to be little Pac-Man characters hungry for more, with mobile growth trends continuing on hockey-stick trajectories. By 2017, three billion smartphones and one billion tablets are expected to be in the hands of users worldwide.¹

Many organizations are thus trying to understand how best to leverage the unique combination of content, data, and functionality provided by mobile devices. This is especially true in the retail sector, where significant mobile commerce growth is predicted. According to Internet Retailer, of the 49.6 billion visits to the top 500 e-retailers in 2014, 26.4 billion (53.2 percent) will stem from smartphones.² Similarly, the percentage of online retail sales placed via mobile devices will grow from 11 percent in 2012 to 25 percent by 2017.³ However, ecommerce and transaction statistics are only one part of the picture when it comes to leveraging mobile commerce.

A New Perspective
Given that so many people have smartphones these days, you might expect the cost of a mobile ad to be higher than that of an ad appearing on a desktop or laptop computer. Surprisingly, this isn’t the case. Mobile ads are one third the cost of desktop ads, according to David Cost, VP of Ecommerce for Deb Shops, a retailer catering to 15–24 year-old women who live on their smartphones. One reason for this, according to Cost, is that it’s difficult to track activities from mobile devices and tie them to subsequent behaviors. Even though someone might begin to research a product on his or her smartphone, in many cases, the person completes the purchase on a full-size monitor or in the store. However, mobile commerce presents unique opportunities to engage with consumers. Many enterprises that deal directly with consumers are extending their mobile capabilities to interact in ways that strengthen the brand and the consumer relationship both before and after the sale.

Engaging the Customer
Customers expect certain core functions that naturally mesh with mobile device usage, such as store-locator capabilities (users often access information about a specific store they plan to visit⁴). Customers use their mobile devices for a range of activities related to purchases, including

- accessing coupons that they redeem at a local store,
- receiving offers that they use to make a purchase on a laptop or desktop PC,
- downloading apps that let them browse their favorite retailers,
- browsing and previewing email from retailers that prompt them to make purchases on their smartphone,
- using apps that make in-store and at-home shopping more productive, and
- checking inventory at a local store.

For some retailers, the key isn’t so much transactions and commerce-focused functionality but rather consumer engagement—even when consumers aren’t shopping. Pre-purchase research...
Leveraging User-Generated Content

Cost explains that many of his younger customers are on Instagram, where they constantly share photos, so he wanted to take a more visual approach. “We use Olapic [www.olapic.com], which lets us engage in a unique way. Customers take pictures of themselves wearing something from Deb Shop, submit [the photos] to us, tag which items they are wearing, and we make the picture shopable.” This lets Deb Shops feature user-generated photos of their product in all kinds of different settings.

This engagement strategy has paid off. “Our desktop traffic declined by 8 percent between 2012 and 2013, but our mobile traffic was up 60 percent and Tablet traffic was up 130 to 140 percent,” says Cost. “It’s about your approach and what you are presenting to prospects. When we started our social media program about two years ago, we decided we were going to have an engagement strategy and not worry about driving people directly to make a purchase on the website.”

Instead, the goal was to create an environment where people came back once a day or more through interaction with social media content. That way, the retailer would be on the customers’ minds, and the logic was that conversions would follow, even if those conversions couldn’t be directly tracked. “We had 30,000 Facebook fans when we started this process and added 1 million the first year [and another million] the second year. We now have 2.3 million fans.”

Retargeting Ads

Tying social media engagement directly to sales is one challenge. Another is tracking behaviors from device to device and across channels, which complicates efforts to deploy resources and allocate funds appropriately. Mobile devices don’t use cookies consistently, so organizations are trying new software and approaches to monitor and track customer behavior and mine that behavior to segment buyers and create customized user experiences.

One company, Tellapart (www.tellapart.com), uses predictive analytics and machine learning techniques to look for patterns in online behaviors and integrate with purchase histories and third-party data feeds. The goal is to identify high-value customers, track them across channels and devices, and model purchase intent. The common identifier is the user’s email address.

Advertisement “retargeting” depends on the ability to track sites that users have visited. If a site visitor bounces from that site without purchasing or registering, the advertiser can present an ad to them when he or she visits another site that’s part of the ad network. This approach won’t work consistently with mobile devices. An approach that one vendor (Drawbridge; www.drawbridge.com) is using is based on “statistical methods that rely on anonymous data to track people as they move between their smartphones, tablets, and PCs.” An anonymous profile is assembled using a variety of data sources, and an aggregate identity of users is tracked across devices.

Facebook, Google+, and Twitter all have the ability to track users across devices and offer various advertising products that retarget ads to mobile users. Although the approaches vary, because users log in across devices, those networks can monitor user desktop activities and enable cookie-based data to be integrated with consumer mobile device behavior to serve content and advertisements that are appropriately targeted to users.

Exploiting Mobile Trends

Mobile technologies and approaches are evolving and changing rapidly, but there are several trends that analysts have identified. These developments help to make mobile devices capable of true one-to-one marketing—an aspirational goal that marketers have had for decades. By targeting, personalizing, narrow casting, and communicating through friends
and colleagues, marketers will be able to more closely provide prospects with the things they need, when they need them. Rich media and games mean that communications are more engaging and entertaining, customers will be better served, and organizations that cater to them will reduce the cost of finding and serving customers. Of course, users must be willing to accept potentially intrusive monitoring of their activities in exchange for a better user experience with more targeted content.

**Personalization**

Personalization and customization of messages and content-based user context is even more important on a mobile device due to limited screen real estate and user attention. Mobile devices connect with consumers on a very intimate level, and many approaches require explicit permission and proactive engagement. Without high-value, appropriate offers, that permission and engagement won’t likely take place. Also, some approaches, such as mobile messaging, can be seen as intrusive without the correct preliminary interactions.

**Geotargeting**

Sending offers that relate to a user’s location can be accomplished at the macro level (nearby shops, for example) or the micro level (noting where the customer is standing in the store or when a high-value customer enters the store). At each level of granularity, the user’s context can inform messaging and personalization.

**Social Network Channel Integration**

Conversations are taking place on social media about products and services on a continual basis. Successful marketers are integrating their messages into social media and mining social media for sentiment and trends. This requires a deft touch and is less about technology and more about the nuances and needs of the audience and channel.

**Narrow Casting Content**

This can take place via attributes in Facebook or LinkedIn. Rather than broadly disseminating a message across a wide range of users, narrow casting is about more carefully targeting the content and message. Mobile targeting platforms build this capability through data monitoring, collection, and integration techniques, but they might begin to encroach on privacy issues.

**Rich Media Messaging**

Rich media messaging (RMM) is another mechanism for interacting with users on their mobile devices using over-the-top applications that let users bypass the carrier’s text messaging service and avoid additional fees. The messages contain video and interactive content that’s optimized for the user’s smartphone. Multimedia messaging (MMS) can include attachments that the user can open, but in RMM, the entire message can contain graphics and functionality. Engagement rates through RMM applications are significantly higher than through character-based SMS, MMS, or email messaging.

**Gamification of Mobile Ads**

This technology lets users score points or achieve ranking (badges or through competing with friends) that increases mobile engagement.

**Developing Mobile Location Strategies**

The great power of mobile technology is the ability to leverage location and multiple levels of granularity to specifically target users given the context of their activities. Phil Hendrix, of research based consultancy IMMR (www.immr.org), considers location from a temporal and contextual (as well as geospatial perspective):

Location is not merely a position as reflected by latitude and longitude. Consumers are situated in time and space. Mobile enables marketers to deliver marketing at the intersection of both, thus targeting the moment in time and the location context around it. As a result, marketers can deliver marketing that is appreciated and valuable because it is inextricably linked to the world around us and related to our lives at precisely that point in time.

According to Hendrix, location is a continuum that ranges from the macro level—the span of communication at the city level, typically served by local newspapers, TV, and radio—down to the micro level of an individual product on a shelf. The eight layers as defined by Hendrix are **city, area, vicinity, center, store, aisle, package, and product**. In some cases, these leverage

**Users must be willing to accept potentially intrusive monitoring of their activities in exchange for a better user experience with more targeted content.**
the same applications, approaches, and technologies and lead to the same outcomes, but the scale varies. In other cases, the tools and approaches are fundamentally different. They all point to the complexity and power of mobile tracking, analysis, and targeting.

In theory, marketers could target the geographic and spatial context of a consumer with varying levels of granularity, depending on the message, reach, activity, and specific call to action.

**City Level**
At the city level, marketers can link newspaper or magazine ads to QR codes, which mobile users can scan using an app on their smartphone to bring them to a website with the next step in the engagement process. Radio ads can now use Shazam, the music fingerprinting application typically used to identify and purchase music, to tag ads and bring users to a website where they can access content and applications. (By “shazam-ing” the broadcast advertisement for an automotive manufacturer, users can access a variety of features and functions, including a user-controlled, gyroscopic view of a car’s interior from the driver’s seat, a virtual pedal to rev the engine, and even see the customer’s purchase history to determine if VIP treatment is warranted.

Another approach at the store level is that of “conquering”—that is, advertising and promoting your brand or product next to content about a competitor. Originating in the print world, it now has new meaning using mobile technology as businesses geofence around their competitors and promote offerings to customers while they’re in the competitor’s location.

**Aisle Level**
At the aisle level, retailers can interact with customers in a number of ways using QR codes, near field communications, and Bluetooth to engage with customers as they browse merchandise. Beacon technology is another tool that can determine traffic patterns and monitor movements within departments. This technology is valuable in determining effectiveness of store layouts and signage. According to the Mobile Marketing Association, “Real-time ‘footstream’ traffic is analogous to clickstreams on digital properties.”

**Package and Product Levels**
Package- and product-level granularity leverage many of the same technologies but are different applications—packaging can have a QR code or sensor, as can the product itself.

**Omnichannel Marketing**
In-store mobile applications sound appealing in theory, but in practice, they’re challenging to get right. It’s difficult to synchronize across channels, and data on effectiveness isn’t yet widely available. However, retailers will continue to explore the possibilities that mobile devices offer, finding ways to address integration and privacy issues. Retailers want to synchronize across channels—having the same offers whether online, in the store, on a
mobile device, or through traditional advertising and media. The experience on smartphones and tablets should be consistent with that on a Web browser on desktop. “We have chosen an omnichannel approach. We keep the marketing messages the same between online and brick and mortar,” says Cost. “Google is trying to focus on how to quantify Adword impact on in-store sales. They want to increase their advertising base by working with retailers to try to quantify the benefit of Adwords to brick and mortar stores.”

Cost also says a company called Euclid Analytics (http://euclidanalytics.com) is trying to be “the Google Analytics of the physical world.” With their technology, if you offer Wi-Fi to a customer who has Wi-Fi enabled on his or her smartphone, the phone will then transmit a unique media access control (MAC) address. Euclid Analytics’ Wi-Fi device can then identify certain MAC addresses that were in the store on any particular day. If the customer later opens an email from the retailer, the company can associate the device MAC address with the customer’s email. Cost explains that this type of technology “can be used to test store signage, allowing A-B testing, because the company can see who walks by the store versus who comes in.”

Motorola is also offering a Wi-Fi device for brick and mortar stores to tie in email addresses, and Google has similar plans. However, these are new approaches for leveraging store-level geotargeting, so there’s not a lot of related data yet.

There’s also a good deal of debate on apps versus responsive design versus mobile optimized approaches. Although there are numerous vendors approaching retailers with apps, in Cost’s experience, customers haven’t shown much interest. In particular, Shop

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Mobile commerce and omnichannel marketing present tremendous opportunities for all industries, so organizations will want to have mechanisms for serving customers on their smartphones and tablets. Omnichannel approaches present new challenges and require new solutions to data integration, predictive analytics, content modeling, and user attribute development. IT professionals will be well served by tracking these fascinating technology developments and understanding the changing face of commerce and customer interaction strategies. These fields are rapidly evolving and will require IT professionals to continually update their knowledge and skillsets to serve their business stakeholders as they attempt to leverage mobile commerce to gain a competitive advantage.

References


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