



# **UNDERSTANDING THE BEACON PROXIMITY LANDSCAPE**

**MMA Location Committee  
In-Store and Beacon Working Group**



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## INTRODUCTION

Beacon technology first hit the public consciousness in late 2013. With the release of iOS 7, these small bluetooth devices could wake up closed apps on an iPhone. With Apple Retail's chain-wide rollout, the buzz began to grow. Thanks to beacon technology, a whole new world of place-based experiences are now possible.

Today, nearly two years after iOS 7 "turned on" beacon technology on the device side, we have dozens of examples from multiple industries ranging from retail to entertainment that showcase the power of proximity. We also have a multifaceted proximity ecosystem with various stakeholders and numerous questions on the topic of "beaconing." This paper will describe who these stakeholders are and how they fit into the beacon system, while outlining the opportunities and challenges facing each.

## RETAILERS: OWNING THE AIRSPACE

Though we've seen beacon adoption in many categories -- from stadiums to museums -- retail has been the place where the fastest testing, adoption, and scaling has occurred. The reason is quite simple: Retail is extremely competitive -- particularly in light of omnichannel growth -- and the key players are constantly turning to technology to augment their consumer experience.



As of Q3 2015, major retailers like Macy's have announced chain-wide beacon rollouts, while smaller chains like Indianapolis' Marsh Supermarkets have gone so far as to connect beacons with the Apple Watch.

Research suggests that 30%-40% of retailers are testing the technology, and anecdotally it's probably higher than that. This year, BI Intelligence expects beacons to directly influence over \$4BN in U.S. retail sales, climbing tenfold in 2016.



The stage is set for beacon proximity programs to impact customers in the store. But the opportunities do not come without a few pitfalls.

## CHALLENGES

The hesitancy toward chainwide beacon deployments in 2014 and early 2015 could be chalked up to a “testing phase” for the major retailers. Most chains could be hesitant based on past experience with technologies that may have fallen flat for various reasons.

The difference between beacon technology and say, QR codes, is that beacons do not infringe on the existing consumer experience, or require the consumer to change her in-store behavior whatsoever. Beacon tech simply enhances what shoppers already do -- use apps on their smartphone in store -- and creates new engagements that are completely dependent upon the shopper’s opt-in at multiple levels. Most importantly, the best beacon engagements are native to the app in which they’re delivered. In other words, no one wants *Angry Birds* to ping them about shopping deals when they enter the store. A shopping list or loyalty app is a different story.

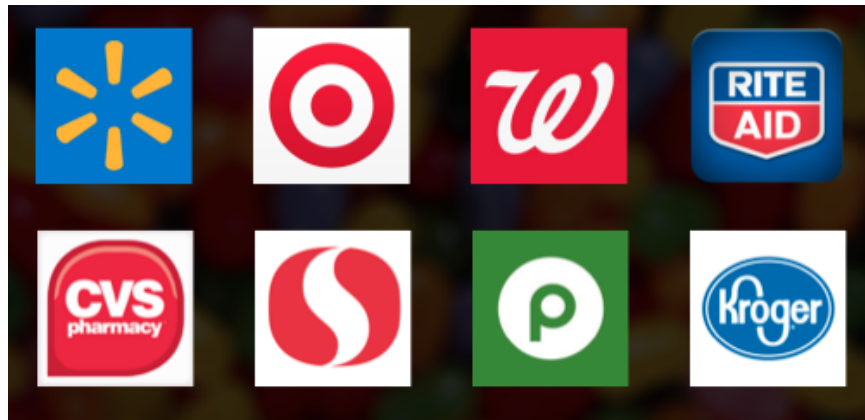
Which brings up a key consideration for retailers in the proximity space: *Beacons are 100% app dependent.* Apps listen for beacons -- not the other way around. And without enough app users listening for beacon hardware, the technology won’t deliver very impressive results.

### App Scale

The most critical part of beacon proximity success is most often overlooked by retailers who are jumping into the space. Apps are a conduit to the consumer on the phone. They are the channel in which we gather context about how to speak to a shopper, and they’re also 100% required when attempting to use beacons in any environment.



Among the top 10 major retailers, their apps reach an average of 4.5MM monthly active users -- or just a fraction of total shoppers who walk through their doors each month -- per comScore. Many retailers, in a rush to test beacon technology, may have procured the hardware and not considered the software side of the equation. And for the smart retailers who have, they may just now be realizing that their own in-house app does not provide enough shopper reach to move the needle with beacon proximity efforts.



Leveraging in-store beacons using just your own app is akin to placing digital ads on your own website. You'll very likely reach your most loyal customers, but you'll also miss millions of users outside of your own digital channel, in most cases well over 90%. There's a tremendous opportunity for retailers to work with the 3rd-party publishers whose apps most likely live on their shoppers' phones.

### **Securing the Airspace + Beacon Hijacking**

Geofencing has already created ways for 3rd party apps -- and potentially competitors -- to reach shoppers under retailers' own roofs. Retailers have a vested interest to adopt their own location strategies to combat their competitors at both the macro-location and micro-location level. When it comes to micro-location, secure beacons allow retailers to digitally curate in-store experiences. This allows those retailers to decide what can and can't be communicated via their beacon deployments. Additionally, this allows those same retailers to then digitally lease access to the



partner brands of their choosing while enabling a way for them to monetize beacon deployments, similar to what is already being done on their e-commerce sites, in-store end caps, shelves and more.

With beacons, the retail airspace is typically not 100% secure. By default, many beacons are “hackable” in the sense that competitors can sniff for the signal being emitted and then present their own beacon-triggered experiences. WikiBeacon lists over 30,000 beacons that are unsecured, out in the wild. In the store, this poses a major threat: imagine an ecommerce competitor piggybacking on a retailer’s hardware to deliver messages to its shoppers. It’s akin to a competitor handing out flyers in the store aisles.

It’s in the retailer’s best interest to identify hardware providers that have accounted for security in their beacons, so they can’t be hijacked by “airspace invaders” with many potentially damaging consequences.

## **The Shopper’s Experience**

Retailers - for good reason - worry daily about the impact of new technology on their shopper’s in-store experience. With so many shopping alternatives available both online and offline, the in-store experience must be carefully curated and managed to sustain and increase the number of trips each shopper makes to the store. However, well thought out beacon experiences can become a competitive advantage by creating the seamless experiences consumers increasingly expect regardless of what channel they are engaging with your brand through.

And even though shoppers have (often) triple opted-in to receive messages delivered via apps, those messages must add value to the shopping experience or the negative impact may be felt by the retailer. This can mean associating your location and brand with spam; potentially leading to the mobile app being deleted from the user’s phone. As a result, retailers need to carefully determine how they can use the technology to add value and create shopper experience ‘guardrails’ around what shoppers might receive on their phone in the store. It is vital for these retailers to consider what



business objectives they are trying to accomplish with the technology, and then decide what beacon use cases make the most sense.

## **OPPORTUNITIES**

### **Shopper Trip Capture via Mobile Ad Retargeting**

Retargeting is widely regarded as one of the most successful digital marketing tactics. Online shoppers know -- and expect -- that if they search for sneakers, they'll likely see Nike or Adidas ads throughout their web experience for the next few days. This is made possible through web cookies -- or little data packets that keep track of where a web browser goes.

Beacons are a lot like "offline cookies," in that they've made retargeting based on offline shopping habits possible for retailers. If a shopper spends a few minutes in the pet food aisle that is outfitted with a beacon, it is now possible to retarget that shopper based on their precise physical location, and know for a fact that a pet food ad will be delivered to a mobile device that has dwelled in the pet food aisle.

Offline retargeting is a great example of how beacon technology is about so much more than simply "delivering coupons in the store." The huge potential of retargeting based on offline shopping habits is only just starting to be realized. In August 2015, Coca-Cola ran a successful test at select theaters in Norway that retargeted moviegoers a week later with a free ticket to return to the cinema. Despite a small sample size, Coca-Cola achieved a click-through rate of 60% on retargeted messages, showing tremendous promise.

Retailers are beginning to test the efficacy of beacon-enabled mobile retargeting and at least one major retailer saw same-store shopper increases of nearly +8%/quarter during a Q4 2014 test. Compared to the national average of +1.2% same-store trip increases YTD during 2015, the potential is massive and obvious.



## Shopper Conversion & Increased Basket Size

Top retailers have reported increases in basket size of up to 14%, thanks in part to reaching shoppers on their mobile devices while they're in the store.

Thanks to these early results, and the fact that retailers are keenly aware that over 80% of shoppers use their mobile devices while in store, retailers are rapidly developing strategies to leverage beacon-enabled messaging to compliment the vast array of shopper marketing tools already in use, from print ads to digital place-based media.

## BRANDS: THE REASON WE SHOP

Brands are the reason we shop. But inside the store, they're tasked with playing by the retailers' rules. The same rules that cover shopper marketing -- from end caps to displays -- extend into the airspace and digital communication. So while it's possible for brands to engage shoppers in a store with existing methods like geo-fencing, the more accurate beacon approach will require the retailer's participation -- either directly or through a beacon platform.

## CHALLENGES

There are over 35,000 products in the typical supermarket. For brands, the main challenge is a familiar one: Overcome clutter and help products "jump off the shelf" and into the shopper's basket. In terms of proximity marketing in stores, brands are still looking to create a meaningful conversation with the shopper, reinforce unique selling points and drive home the sale.

### The Right Channel

A key factor facing brands is in which app channel to reach shoppers. It's difficult enough for retailers to get shoppers to download their own apps. It's even more

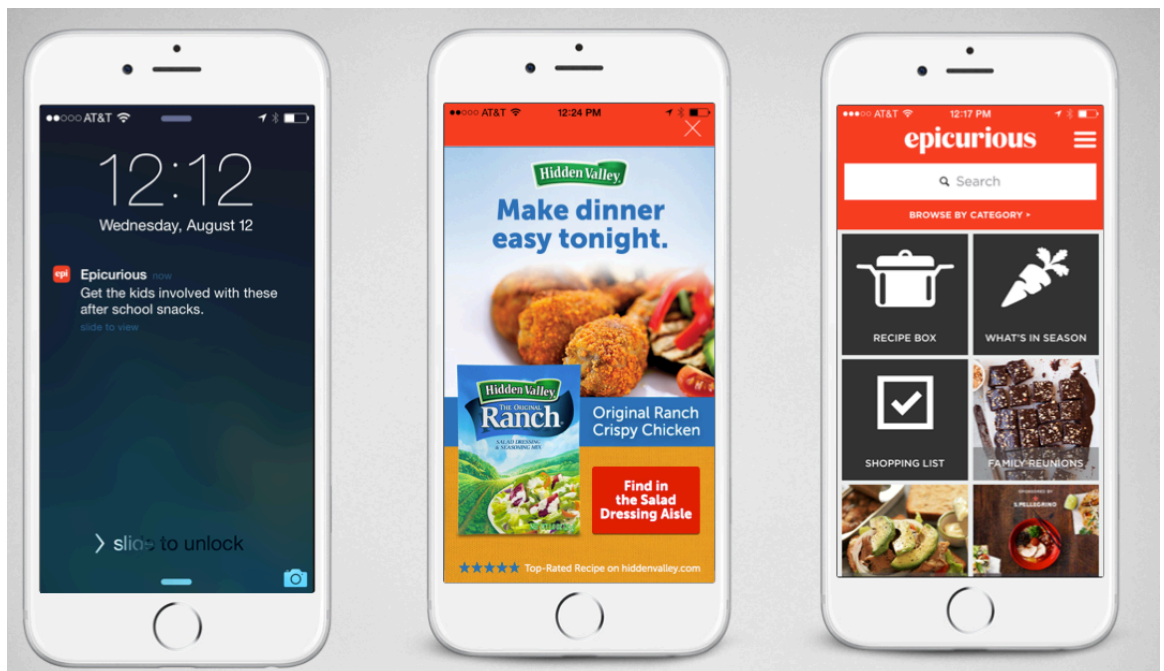




difficult for brands, who very rarely have their own app with enough user scale to run their own beacon proximity campaign. With that in mind, it's key that brands work with some of the top 3rd party apps and retailer apps in the marketplace to reach their customers in an impactful way.

## The Right Message

There is no single app that suits the needs of every shopper. The foodie might be interested in recipes, while the coupon-cutter might love rewards points. For brands, a second challenge comes in pairing the correct message with the right channel.



We've seen this deployed successfully by Clorox brand Hidden Valley Ranch, who announced a major push to reach millennial moms with "easy dinner idea" messaging through a recipe app like Conde Nast's Epicurious. Engaging shoppers with recipe content -- in a recipe app, in the grocery store -- simply makes sense.

The Clorox program leveraged beacons, but the success of the campaign really lies in the relevant messaging delivered at the right time, to the right user at the right place.



## OPPORTUNITIES

### Product Interaction at the Shelf

At this point in 2015, multiple brands have demonstrated the power of beacon proximity efforts to reach shoppers in the store. Outlets from TechCrunch to AdWeek have reported that by delivering beacon proximity engagements in-store, brands can increase product engagement at the shelf by 19x, ultimately leading to increased purchase intent and sales.

In a widely cited case study, Hillshire Farm was able to increase purchase intent by 20x and drive sales for its American Craft smoked sausage product, by delivering in-store engagements via beacons. These positive results for brands are less about the hardware, and more about the ability to speak to the consumer at the right time and place, via the most appropriate medium.



### Brand Awareness

One of the most commonly cited use-cases for brands utilizing beacons is the ability to “send consumers a coupon in store.” While there are some cases in which couponing might make sense, overall there is much better ROI stemming from overall brand awareness, when the messaging is native to the app in which it’s delivered. Brands like Hidden Valley Ranch and Soy Vay are using the technology to deliver helpful content like easy dinner ideas. By reaching shoppers when they’re in the store, ready to buy, Hidden Valley and Soy Vay are creating a much more impactful connection with the shopper than anything if that person were at home or at work.

### Efficient Marketing Spend

For years, the concept of pay-per-click was only applicable to online marketing. Now thanks to mobile proximity efforts, accountable advertising methods have been



extended to the real-world shopping experience. In terms of beacon proximity marketing, there's an opportunity for brands to pay per engagement, creating a low-risk, high-reward proximity opportunity. National brands leveraging the inMarket beacon proximity platform are achieving an average of 1.8x - 2.2x ROI based on the cost to run a campaign, while achieving 18%-23% increase in brand awareness with the targeted audience.

## **PUBLISHERS: THE CONSUMER CONDUIT**

Both retailers and brands do not have enough app scale on their own to reach shoppers effectively with beacons. They need 3rd-party app publishers involved, bringing large, relevant audiences to the table based on the value that they present.

So what's in it for the publishers? Proximity enables publishers to significantly boost their app retention and usage rates, thanks to simply reminding people to use them at the right time. Additionally, retailers and brands are willing to pay for access to the right audiences. However, a couple of challenges need to be overcome.

## **CHALLENGES**

### **Programmatic Location Inaccuracy**

A 2015 study from Thinknear showed that 63% of programmatic location data is inaccurate. And for the 37% that is accurate, it is only to within 100 meters -- or about the size of a city block. That's the difference between the shopper in the grocery store and the shopper in the dry cleaner next door. In other words, it's a risk factor for publishers who are trying to reach people accurately. And the consequences are severe. However, accurate micro-location data signals are now available through beacon technology which can be effective from 50 meters down to centimeters.



## Relevance and Oversaturation

Apps can get close to locating shoppers inside most retail establishments, thanks to geo-fencing. But without years of first-party GPS data, they risk missing the mark -- and annoying consumers into app deletion. A 2014 inMarket study showed that irrelevant or oversaturation of beacon messages caused a 313% drop in app usage over the next 30 days -- indicating app deletion.

With that in mind, app publishers -- more so than brands and retailers -- are the ones who really need to push for accuracy in consumer-facing proximity. They're the channel in which all other parties are talking to consumers, and they're the property that gets deleted if the message is irrelevant or too frequent.

## OPPORTUNITIES

### App Retention and Active Usage

For apps that locate shoppers accurately and relevantly, the rewards are plentiful. App usage and retention are two the key metrics for app publishers across the board. Beacon proximity engagements have shown to create a 16.4x increase in app usage within the store, and 6.4x increase in app retention over the next 30 days. In other words, app publishers are actually leaving active users on the table by not delivering proximity-based engagements.

Theoretically, it's simple: By reminding folks to use an app with relevant information at the appropriate time, they use it more often and become more loyal.

### New Revenue Streams

There are millions of apps on the market, and most of them don't make a dime. There's a delicate balance between building a business model and impacting the user experience. That's why the need for context in beacon proximity engagements create such a huge opportunity for publishers. Retailers and brands both need 3rd party apps to reach mobile users at scale. This creates an opportunity for publishers to generate new revenue streams -- like ad revenue from top CPG brands -- by working with these partners.



## CONSUMERS AND INDOOR LOCATION

With today's indoor location solutions, when it comes to engaging with customers, the sky's the limit. If you can imagine it, chances are this next generation technology can deliver, turning shopper's mobile phones into a personal concierge that is always at their fingertips.

### THE BENEFITS

#### Money Savings, Convenience and an Enhanced Shopping Experience

The following are just a few of the ways today's indoor location technologies can be leveraged to create a differentiating shopping experience.

- **Personalized offers and promotions**

Receiving real-time, personalized discount offers and promotions based on shopping history or location, helps shoppers save money and time — without the hassle of clipping coupons.

- **Navigation**

With features like store maps and wayfinding in the store, shoppers no longer need to locate an associate to find an item. Shoppers can search through store inventory inside of the application and select any item in the store to receive step-by-step directions from their current location in the store to the item they are seeking.

- **Customer service in record time**

When shoppers need help, the less time they are kept waiting, the better. Now, shopper smartphones





and the associated shopper location data can cut time-spent waiting for an associate to a minimum. When shoppers can request help via an application, their location and identity is known. Store managers can instantly send the right associate to assist, minimizing shopper wait times. Proactively, sales associates can be prompted to tend to customers in need, based on dwell time at a place.

- **Unique services**

Today, the customer experience is everything. With the competition always at a shopper's fingertips, just a few quick taps away on smartphone, retailers must stand out by delivering the best possible customer experience each time a shopper walks through their doors. Below are just a few examples of how to stand out amongst the competition.

- Customers who create shopping lists in the store loyalty app can be rewarded with multiple features that can help them get in and out of the store faster. Upon arrival, you can prompt shoppers to pre-order items on their list from the deli, bakery and butcher department to eliminate the typical waiting time in those departments.
- If a store is co-located next to other stores, since Wi-Fi range is 300+ feet, retailers can detect when customers are in nearby stores and send any helpful reminders to maximize the efficiency of their shopping trip. For example, a drug store can determine that a prescription for a shopper that is in the store next door or passing by is ready and waiting, and send a friendly reminder for pickup —eliminating a second shopping trip.
- Any store that carries greeting cards could allow shoppers to input a list of birthdays for family and friends. When the shopper enters the store, a reminder could be instantly delivered for upcoming birthdays — and a discount coupon could be issued when the shopper enters the birthday card aisle.



## BEST PRACTICES

The consumer's primary goal is shopping. Beacon marketing needs to deliver immediate value.

### - **Control Communications from the Retailer, Brand, and Publishers**

Determine and control how and when to give access to brands and publishers' marketers.

### - **Keep the Consumer in Mind**

Shopper Smartphones are inherently personal, and marketing to them carries a huge responsibility. Be transparent (Opt-in/Opt-out). Be relevant, Create value. Optimize content. Offer high-value services. Give shoppers a good reason to keep their smartphone location services on and utilize the retailer's loyalty app by providing high value "can't-do-without" location-based services — it will take more than the standard coupons that are available to all shoppers via loyalty cards, printed paper coupons in mailers and coupon websites.

- Create exclusive offers - reward loyalists, stimulate conversion increase basket size, cross-sell
- Leverage existing sales and promotions - highlight in-store promotions, deliver pre-existing channel coupons, promote manufacturer rebates, highlight clearance/close-outs
- Develop relevant content & services - timely advice/tips, easy access to maps/guides/services, interactive merchandising displays, loyalty program integration

Your success is in their hands . . .  
Did it help me make a buying decision?  
Did it save me time or money?  
Did it inspire me?  
Did it make my shopping experience better?



## THE PRIVACY PRIORITY

- **Put your shoppers in control** with a clear ‘opt-in’ privacy policy. Make sure shoppers know that every time they step foot in the store, they are always in full control over whether their location data is accessible and what level of location data is accessible — and know how to opt in or opt out of location services inside the app.
  
- **Educate your shoppers.** Help combat privacy fears by making sure shoppers understand what information is visible — and the circumstances that are required to make that information visible.
  - Wi-Fi location data access. Until today, the moment a shopper entered a store, if the Wi-Fi radio in their smartphone was active, Wi-Fi location services could track their movements in the store — even if they opted not to access the store Wi-Fi network. A new movement in smartphone technology is addressing this concern. Starting with iOS 8 Apple protects the shopper’s identity until the shopper decides to join a Wi-Fi network —and it is expected that other smartphone manufacturers will follow suit. Shoppers carrying an iOS 8-based smartphone will not be consistently providing location-based data unless they opt in to the store Wi-Fi network. Make sure shoppers carrying other smartphones understand they truly are in control of their location data at all times — they can simply to turn the Wi-Fi radio off to prevent retailers from accessing Wi-Fi location data. But a “friendlier” way to solve this is to participate in the [www.smart-places.org](http://www.smart-places.org) location analytics opt-out for Wi-Fi and Bluetooth.
  
  - Bluetooth location data access. Make sure shoppers know they are in complete control over whether retailers can see their pinpoint location in the store at the product level (within 3 ft./1 m). Shoppers who opt to open the store loyalty app but leave the Bluetooth radio turned off” can still obtain the benefits of Wi-Fi location services, able to receive targeted offers based on known “macro” location data (department or aisle level), as well as the same step-by-step directions and the rapid assistance that Bluetooth Smart allows, putting shoppers in charge of the level of detail the retailer can see.





## CONCLUSION

With their ability to provide real-world insights and location-triggered mobile engagements, it is no wonder why beacons are receiving significant attention and adoption rates by marquee brands, retailers and advertisers. With a profound new way for these parties to communicate with their consumers at the right time and place at different points of their user's buying cycle or journey, beacons are proving to be a valuable location tool in any modern retailer's toolset.

However, with the need to modernize current offerings with location technologies, it is crucial for the retailers, brands and advertisers considering beacon technology to carefully assess how they will implement, measure and perfect this outlet, similar to what has been done with other technologies (E.g., social media, email marketing, e-commerce sites, etc.). Carefully determine what business objectives and use cases you are trying to enable with beacons and decide how you will measure success of the program. Additionally, choose a technology partner that has the security, scalability, and management tools required to successfully run and perfect campaigns.



## MMA OVERVIEW

The MMA is the world's leading global non-profit trade mobile marketing association comprised of more than 800 member companies, from nearly fifty countries around the world. Our members hail from every faction of the mobile marketing ecosystem including brand marketers, agencies, mobile technology platforms, media companies, operators and others. **The MMA's mission is to accelerate the transformation and innovation of marketing through mobile, driving business growth with closer and stronger consumer engagement.** Anchoring the MMA's mission are four core pillars; to cultivate inspiration by driving the innovation for the Chief Marketing Officer; to build the mobile marketing capabilities for the marketing organizations through fostering know-how and confidence; to champion the effectiveness and impact of mobile through research providing tangible ROI measurement; and advocacy. Additionally, MMA industry-wide committees work collaboratively to develop and advocate global best practices and lead standards development.

Mobile Marketing is broadly defined as including advertising, apps, messaging, mCommerce and CRM on all mobile devices including smartphones and tablets. Members include: American Express, AT&T, Colgate-Palmolive, Dunkin' Brands, Facebook, Ford Motor Company, Foursquare, Google, Group M, Hewlett Packard, Hilton Worldwide, iHeartMedia, Johnson & Johnson, Kellogg Co., MasterCard, McDonalds, Mondelez International, Inc. Pandora Media, Pinterest, Procter & Gamble, Razorfish, R/GA, Starcom Worldwide, The Coca-Cola Company, The Weather Company, Unilever, Visa, VEVO, Vodafone, Walmart, xAd and many more. The MMA's global headquarters are located in New York with regional operations in Europe/Middle East/Africa (EMEA), Latin American (LATAM) and Asia Pacific (APAC). For more information about the MMA please visit [www.mmaglobal.com](http://www.mmaglobal.com).



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