PROXIMITY MARKETING IN RETAIL

The Proximity.Directory Report
State Of The Proximity Industry
Q1 2017

Made by **Unacast.**

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ABOUT THE REPORT

Purpose
The aim for our reports is to give industry status updates and educate the market about the proximity industry. In addition to industry status, each report is given a specific theme, wherein we provide details about specific areas and showcase real-life use cases from the companies that have signed up to Proximity.Directory.

Use
All information in the report is free to use and share, as our main goal is to give insights to the industry and educate the market.

Want access to more?
Interested in more details about the report? Please get in touch with us at info@Proximity.Directory

A MESSAGE FROM THE CEO & CO-FOUNDER

Proximity.Directory is the world's largest directory for proximity solution providers

THOMAS WALLE
CEO & Co-founder Unacast

Dear all,

As Q1 2017 just ended we again see growth in the proximity industry with more sensors deployed and a continuous focus amongst the industry players on retargeting, attribution and monetization of location and proximity data.

Brick-and-mortar retailers face challenges as we see a drop in store traffic. This is leading to decreased sales, declining stock prices, resulting in stores closing all over the U.S. The answer for retailers lies within utilising proximity data, to give customers a personalised shopping experience and to use the generated data for analytics. 75% of the top 20 U.S. retailers have already implemented beacons and we see a high ROI potential for retailers who take advantage of the technology.

In this report, you will learn more about the importance for retailers to take advantage of proximity data, as well as get insights into real-world use cases provided by members in the directory.

I hope that you'll enjoy the report and I look forward to your feedback.

Best,
Thomas

EXECUTIVE SUMMARY

In the PSPi ranking, Kontakt.io is still in the lead in the hardware category, while Swirl is number one, yet again, in the platform category

As of Q1 2017, 14,486,000 sensors are registered to have been deployed globally, an 11% increase compared to the previous quarter: beacons account for 65%, Wi-Fi points - 20%, and NFC -15%

Retail & shopping malls are still the most popular segments for proximity solutions, while 50% of the PSPs operate in 10 or more verticals

More companies adopt the Eddystone protocol: 56% of the industry supports it, however, iBeacon is still more widespread with 87%

Proximity marketing is not only for big-box retailers: small/medium-size businesses can increase an operating profit by 8% with a ROI of 365%

75% of top 20 U.S. retailers have implemented proximity technologies

According to the US Department of Commerce, U.S. department store sales have declined by 31.2% from 2005 to 2015.

90% of smartphone owners have at least one subscription to access coupons, promotions, and special discounts

PROXIMITY MARKETING IN RETAIL

STATUS OF THE RETAIL VERTICAL
Increased revenue and ROI potential for retailers

Brick-and-mortar retailers face challenges. A steep and persistent drop in store traffic leads to decreased sales. According to the US Department of Commerce, U.S. department **store sales have declined by 31.2% from 2005 to 2015.**[1] The market capitalization of Sears, one of the largest department stores in the world, has declined by 95% from 2007 to 2017.[2] In order to stay competitive, retailers need alignment of the "in-store" and "online" sales strategies.

Consumers still enjoy traditional shopping as more than 90% of sales come from "brick and mortar" retailers.[3] To keep customers, it is necessary to develop excellent in-store experiences and create personalized purchasing journeys. Location based marketing is, therefore, a key for retailers because it delivers campaigns and enables personal communication when users are close to the store.

Smartphone users increasingly rely on their devices to do shopping and 90% of smartphone owners have at least one subscription to access coupons, promotions, and special discounts.[4] Retailers with implemented proximity solutions are able to get a real-time overview of the customer behavior, adjust strategies accordingly, increase engagement, and boost sales. Beacon technology allows analyzing traffic pathways throughout the store and gives insights into the most frequently visited areas. Once the customer enters a certain area, coupons, promotions, and discounts are sent to drive purchases.

Retailers that struggle from negative profit due to changing demand and increased use of e-Commerce (e.g. book retail) can **improve their position and gain an operating profit by almost 9% with a ROI of as much as 175%**. The potential for small/medium-size retailers is also high as not only big-box retailers benefit from proximity solutions: operating profit can grow by 8% with a ROI of 365%.

Proximity technologies can help grow operating profit with a
ROI of 365%

TOP RETAILERS WHO HAVE IMPLEMENTED PROXIMITY SOLUTIONS
75% of the top 20 retailers in the U.S. have implemented beacons

Proximity solutions implemented **since 2014**

Implemented proximity solutions in **more than 4,500 stores**

Implemented proximity solutions in **all 800 stores nationwide**

Proximity solutions implemented **since 2015**

USE CASES FROM RETAIL

All use cases seen in the Report have been provided by Proximity Solution Providers that are members of the Proximity.Directory. The directory contains over 150 proximity use cases.
These can be accessed on **Proximity.Directory**

MONDELEZ INTERNATIONAL
Use case by Turnstyle

Wi-Fi

Canada

BRANDS INVOLVED

Mondelēz International

SOLUTIONS BY

turnstyle

RESULTS

- Over 3,244 customers opted-in, demonstrating 81% increase in sign-ins over the prior 30-day period

- Approx. 14% of customers who received a coupon, redeemed it

- Customers returned to the local Mac's 25% more frequently than they had before the campaign

OBJECTIVE: Drive penetration with millennials and find unique and relevant ways to reach them with products in that moment of purchase for a high impulse category.

Cadbury and Mac's Convenience Stores brought their efforts together to reward customers who logged onto the stores' Wi-Fi. Mondelez International teamed up with a convenience store, Couche-Tard, that owns Mac's, and sought out location-based marketing provider, Turnstyle. Turnstyle's cloud-based Wi-Fi marketing platform, powered by Cisco Meraki access points, allowed the two retail giants to successfully map, analyze, and market to customers, generating a considerable increase in revenue and customer loyalty.

Throughout a 30-day period, six types of offers were distributed to consumers depending on visit frequency. Logging on to the Wi-Fi network at Mac's would reward visitors immediately and simultaneously serve as an opt-in to future communications with Mac's new program. Subsequent visits by opted-in customers would be recognized by the Cisco Meraki Apps and trigger Turnstyle's marketing platform to deliver additional, personalized rewards and offers to customers' mobile devices—all without the need for a mobile application. The offers sent were designed to modify consumer behavior by incentivizing repeat visits, thus creating loyalty. 30% of customers used Facebook to sign-in, creating a "treasure trove" of demographic information for the marketing team. With additional information such as age, gender, and visitor frequency, Mac's received information that could be used to tailor future marketing efforts to their primary audience.

ASOCENTROS
Use case by MOCA

BRANDS INVOLVED

SOLUTIONS BY

MOCA™

RESULTS

- More than 550 proximity experiences were delivered the first month with a 89% of CTR

- 47% mobile-reached audience

- 100% redeemed coupons

TECHNOLOGIES USED

Beacons   Geofencing

OBJECTIVE: Open up a new communication channel through a mobile and increase sales opportunities using proximity marketing and analytics

The company MOCA/Proxtopic developed a proximity solution for 13 shopping centers located in Colombia. The developed mobile application, called Malltopic, is the first of its kind in the country.

The application helps customers discover their favorite brands inside of the malls. Leveraged by the MOCA platform, the application enables the stores to deliver promotions, special offers, and alerts about upcoming events to the users that are geographically close to the locations and have matching profiles.

Beacons and Geofences were deployed in 13 Shopping Centers located in Medellín and Manizales to provide contextualized communications, discover consumer segments, and understand their behavior in the physical world.

MAJID-AL-FUTTAIM
Use case by July Systems

BRANDS INVOLVED

MAJID AL FUTTAIM

SOLUTIONS BY

JULY

RESULTS

- 60 million+ engagements delivered in eigth months
- 2.4 million unique users acquired
- 10x better engagement rates compared to social media campaigns
- Deep insights into visitor behavior

TECHNOLOGIES USED

Wi-Fi

GEOGRAPHY

United Arab Emirates

OBJECTIVE: Digitize the in-mall experience, understand the behavior of visitors at malls, enhance at-location customer experience, develop a central mechanism to engage visitors with consistent branding and services across 15 of their properties, and drive footfall to retailers

In the newly digitized world, malls' architecture and unique interior design are not enough to sustain a competitive advantage in the industry. To transform the shopping experience, July Systems, together with their channel & OEM partner Cisco Systems, digitized 15 of Majid-Al-Futtaim Group's malls, leveraging a free WiFi program called MallConnect.

Leveraging existing investments in Wi-Fi infrastructure, Majid-Al-Futtaim Group used Cisco Enterprise Mobility Services Platform, a location-based cloud platform powered by July Systems, to understand the behavior of their visitors and engage with them at their malls. The solution provided real-time double deterministic visitor behavior data - with verified identity and location. The group was able to unlock actionable insights into individual visitor behavior such as frequency of visits, dwell time, where visitors spend their time, impact of

campaigns, variations in customer behavior across malls, etc.

Using multi channel engagements such as SMS, Native App and Smart Captive Portals, the mall group expanded the reach of their campaigns (to visitors with or without an App), with the advantage of targeted messages sent at the right place and right time.

Engagements occurred through a variety of use cases - from welcoming shoppers into the mall, to offering one click access to dining, movies, entertainment and other mall services, invites to mall events as well as promotions to drive footfall to retailers.

PROXIMUS
Use case by In The Pocket

Beacons

Belgium

BRANDS INVOLVED

proximus

SOLUTIONS BY

OBJECTIVE: Gain customers' attention and get more visitors in the stores

Thousands of people passed by the electronics retail store Proximus every day, as it is situated in the heart of Antwerp's shopping district. However, before implementing the beacon technology, Proximus could not find a way to get more customers in their stores.

To improve the situation, 10 custom-made beacons were precisely installed and calibrated by the Harald hardware team. The beacons were deployed around the two Proximus stores in Antwerp. When shoppers with the installed MyProximus app on their smartphones (and Bluetooth enabled) passed by or enter the store, they got a message saying that Proximus was offering a free gadget.

The free gadgets included selfie sticks, bracelets, and other items. Thanks to the user-friendliness of the Harald platform, Proximus itself was in charge of setting up the campaigns, having an overview of the current campaigns and the amount of interactions. Proximus was able to trigger live interactions with their customers and get their attention in a more precise way.

SUMMARY

- A retailer in the electronics segment increased foot traffic to the stores by implementing a proximity marketing campaign

- The campaign was targeted at the customers with the company application installed

- As a result, the retailer attracted 640,000 active users of the application

ESPRIT
Use case by Beaconinside

BRANDS INVOLVED

SOLUTIONS BY

SUMMARY

- Online and offline experiences of the omnichannel retailer were connected through a proximity marketing campaign

- High acceptance by customers was achieved through providing useful information in-store and tracking customer's path to purchase

- The data generated throughout the campaign helped to optimize Esprit's future strategy

TECHNOLOGIES USED

Beacons

GEOGRAPHY

Austria

OBJECTIVE: Provide customers an enhanced shopping experience in the stores by offering store navigation and further services and values, such as discounts and loyalty points, among others

Esprit aimed to complete its omnichannel approach by connecting online and offline shopping experiences: the company wanted to combine the information on the online customer journey with the data on offline customer behavior.

The initial national rollout in Austria carried more than 20 flagship stores and shopping outlets with, at minimum, eight beacons per store. Therefore, the focus was set on the entrance area, the checkout area and several differing product categories. The installed infrastructure was managed over Proximity DMP, the Beaconinside data management platform. The Beaconinside SDK was integrated into the Esprit App. Once a customer entered a physical store, the installed beacons detected the app and triggered messages.

Five different campaigns were created to connect with the customer:
1. Collecting e-points at the checkout counter
2. Messages on new products once a customer enters
3. Information on functionalities of the app, that a customer can use while in the store
4. Scan&Shop function: with this feature, a customer can order online sizes of a clothing piece that are not available in the store
5. Reinvigoration of abandoned online shopping carts, by alerting the customer that they can look at the product while in the store

THE TAUBMAN COMPANY
Use case by Spreo

Beacons   Geofencing   Wi-Fi

GEOGRAPHY

United States

BRANDS INVOLVED

Taubman

SOLUTIONS BY

SPREO

SUMMARY

● A mobile application provides an enhanced shopping experience to visitors of 23 malls in the U.S.

● The solution includes useful tools such as visual and audio indoor navigation, "Save my Parking Spot" function, and others

● The application is a platform for proximity marketing: special offers, coupons and promotions

OBJECTIVE: Improve visitor experience at Taubman's shopping malls along with increasing the visitor's engagement and satisfaction, to centralize all store information, promotions, news and buzz notifications in one versatile app and to gather analytic insights from the venue traffic and user behavior data

SPREO provided Taubman's 23 shopping centers nationwide an integrated indoor navigation and positioning solution along with location based services (LBS). The solution utilizes Bluetooth Low Energy (BLE) beacons and SPREO's Software Development Kit for Android and iOS mobile applications.

The app, which is the first of its kind in a major shopping center in the United States, offers shoppers and visitors easy access to a wide variety of innovative and useful indoor location-based services, including voice and visual blue-dot turn-by-turn real-time indoor navigation.

AUCHAN
Use case by Leantegra

Beacons

Ukraine

BRANDS INVOLVED

Auchan

SOLUTIONS BY

leantegra

SUMMARY

- French multinational retail group Auchan implemented a proximity marketing campaign in one of its stores with an area of 18,000 sq m

- Users of the application received messages with special offers as they walked through the store

- The beacons allowed the store to gain a deep understanding of the customers' behavior by calculating the average time spent at each aisle of the store

OBJECTIVE: Grow customer loyalty through personalized solutions, maximize effect from the marketing activities, and segment clients into groups and learn their interests

Auchan Ukraine deployed a Proximity Marketing pilot project at one of its stores; the installation occupied 18,000 square meters, with around 200 beacons installed. Users of the application saw push notifications with discounted items that were sold in the store while they went through aisles with goods such as cereals (cereal dept.), shampoo cosmetics dept.), and so on. They could also view an Offer List, which showcases all specials in the store (not tied to any location). In addition, if accessing a promo from the Offer List and clicking on the button 'view on the map', the store map with a pin (that shows where this good is located) appeared on a mobile screen.

Since Auchan deployed only Proximity Marketing (not an RTLS solution), and placed WiBeats at the beginning and at the end of each aisle in the store, it was possible to calculate the time spent in a specific section (while also showing the times when this section was entered and left).

Besides leveraging an additional media channel, the deployed system allowed Auchan to get deeper insights into customer behavior. Thanks to having access to the user-gained analytics, they were able to monitor how certain customer groups responded to campaigns and to tailor their messages accordingly.

COCA-COLA & MULTIKINO
Use case by Proxi.cloud

Beacons   Geofencing

GEOGRAPHY

Poland

BRANDS INVOLVED

Coca-Cola
Multikino®

SOLUTIONS BY

PROXI·CLOUD

RESULTS

- 260,000 "shakes" made by 80,500 unique users during the campaign
- 5% offline conversion rate resulted in coupon redemption in the cinema

OBJECTIVE: Engage clients based on their current location in order to distribute coupons to the cinema and special edition Coca-Cola cans

In 2016, Multikino launched a beacon network across their multiplex chain including 33 locations equipped with more than 370 beacons. The main goal was to monetize the location context together with the Multikino app and popular third-party mobile apps.

The infrastructure was created with the intention to engage millennials using mobile advertising campaigns inside the cinema as well as near the cinema by using geofencing. Push notification campaigns were a part of a digital advertising package offered by Multikino.

Multikino, together with Coca-Cola, prepared a mobile coupon campaign. In order to get a coupon, a user had to be in a specific location and "shake" their smartphone in order to get these special coupons. The coupons were different based on user location. Some were available only in a particular location — inside the cinema within the beacon range.

In order to create a proper scale of the campaign, Multikino decided to team up with a popular mobile app Qpony and connect to their beacons.

DELL
Use case by ShopAdvisor

BRANDS INVOLVED

SOLUTIONS BY

RESULTS

- 9.4 million impressions served between 183 retail locations

- Drove 20,276 incremental visits to retailers, a 42% lift compared to people who did not see the ads

- Customers were 4x more likely to buy in-store than online with 2,282 "nearby" clicks compared to 600 "buy online" clicks

TECHNOLOGIES USED

Geofencing

GEOGRAPHY

United States

OBJECTIVE: Build awareness of two particular computer products being sold across several regional retailers, drive mobile shoppers into select brick & mortar locations, and collect and analyze shopper traffic and demographics for use in future campaigns

In the third quarter of 2016, ShopAdvisor worked with Dell to build awareness and consideration around the Alienware and Pandora product lines and drive foot traffic to selected brick & mortar locations throughout several regions in the U.S.

ShopAdvisor provided a mobile proximity marketing campaign that included pre-targeting analysis, developing creative interactions, executing the digital advertisements, and driving foot traffic to selected locations.

ShopAdvisor provided the client with a one-stop solution that included:
- customized rich media; mobile creative
- implementation of the ShopAdvisor API to power the product finders by showing the closest retailer locations
- banner ads to target specific customer segment lists
- an in-store foot traffic study to measure incremental percentage of the media campaign including additional insight into shopper audience

LORD & TAYLOR
Use case by Swirl

Beacons

United States

BRANDS INVOLVED

Lord + Taylor

SOLUTIONS BY

SWIRL

SUMMARY

- A luxury department store was able to positively impact visit rate of in-mall shoppers as well as cross-department traffic patterns of in-store shoppers
- The campaign allowed the store to generate insights into the content, design and messaging approaches that drive the highest mobile engagement rates for in-store shoppers

OBJECTIVE: Understand and improve key retail store shopper behavioral metrics, including store visit rate of mall shoppers, cross-department shopping rate, and in-store mobile engagement

Before launching the in-store mobile marketing campaigns, Lord & Taylor used their beacon network and the Swirl platform to establish baseline performance levels for each key metric. Once the baseline was established, the company began testing messaging, content and creative design variations to identify the most impactful marketing tactics and executions.

For a mall visitor to a store shopper conversion campaigns, Lord & Taylor used entrance beacons that broadcasted BLE signals into nearby common areas of the mall. Mall visitors who walked by these areas received relevant, time-sensitive marketing messages that encouraged them to stop by the store during their mall visit. Additional in-store beacons were used to measure the number of messages received by mall visitors who came into the store. Swirl's Impact Analysis tool was used to compare the store visit rate of messaged shoppers vs. a control group of non-messaged shoppers, while ensuring that the results were statistically reliable.

A separate set of campaigns was developed to encourage in-store shoppers to visit the dress department. Beacons placed in complementary departments (cosmetics and shoes) were used to trigger delivery of mobile messages and content that showcased Lord & Taylor's broad selection of seasonal dresses. The messages highlighted sales that were currently underway on select dresses. Beacons placed in the dress department were used to measure overall traffic flow and compare the cross-departmental visit rate that resulted from each campaign execution.

MAGNUM & UNILEVER
Use case by Tamoco

Beacons   Geofencing

GEOGRAPHY

UK & France

BRANDS INVOLVED

SOLUTIONS BY

MAGNUM
Unilever

TAMOCO.

OBJECTIVE: Drive footfall and generate awareness of the recently opened Magnum ice-cream pop-up stores by targeting users based on location, provide effective measurement of how many users went on to visit the store, and prove the benefits of receiving location insights in real time in order to inform future campaigns for Magnum

The network of Tamoco is underpinned by the aggregation of proximity tech, which provided fast access to the most precise proximity sensors and the most relevant mobile audiences. This was perfect for Magnum during the campaign, as the pop-up stores were only opened for a few months. Therefore, Magnum focused on its actual marketing activity, rather than on deploying sensors and building relevant audiences.

Tamoco's platform provided real-time location data, so it was possible for Magnum to see in which locations the notifications were receiving the highest conversion rate and modify the campaign in real-time. It was also possible to see which messages were clicked the most, allowing for the content to be adapted if needed.

RESULTS

- Daily average of 3,091 and a total of over 85,000 push notifications sent to users as they entered the geofence

- 3,279 users opened the notification and 1,785 users visited the store after receiving the notification

- Conversion rate of 54%

BENETTON
Use case by Smart Beacon

TECHNOLOGIES USED

Beacons

GEOGRAPHY

Italy

BRANDS INVOLVED

benetton

SOLUTIONS BY

Smart Beacon®

RESULTS

- Walk-ins recorded at 155,000
- Conversion rate 20%
- Coupon redemption 85%

OBJECTIVE: Increase walk-in customer engagement; identify the most attractive areas of the shops for visitors

The company Workshop & Design conducted a six-month pilot project between March and September 2016, using the Smart Beacon test app designed for retail channels and in-store beacon technology.

The project involved 20 Benetton and Sisley single brand stores, where 160 beacons were positioned. The shops were able to get directly in touch with their customers, offering them a unique bespoke experience through the app by providing useful information on the garments displayed, size and color availability, and outfit possibilities.

Customer behavior was analyzed through the beacons: the most followed paths inside the stores and the most demanded garments of the season were identified. For certain periods, the company sent discount coupons to selected customers via proximity notifications; redemption rate was 85%. This was made possible because the Smart Beacon was integrated with the POS GoFIVE system, a SaaS software solution conceived for leading retail brands.

PROXIMITY INDUSTRY STATUS

The information contained in the following section has been aggregated from all data input by Proximity.Directory members. To navigate between companies, use the advanced filter labelled "Company Directory" at **Proximity.Directory**

PROXIMITY SOLUTION PROVIDER INDEX

The third Proximity Solution Provider index — an automated calculation to rank Proximity.Directory profiles under the categories of platform and hardware

PSPi
Proximity Solution Provider index

The Proximity Solution Provider index has been released for the third time, and we are happy to see more companies keeping their profiles up to date. We can see this yet again with **companies such as Beaconinside and Aruba both jumping into the top 20 since the Q4 2016 ranking.**

This index is only based on the information that is provided in company profiles, and is therefore not a scoring of the companies' success. We split the results into hardware and platform divisions to make the comparison more valid. In addition to the same measurements from the last report, we have added "when PSP last updated their profile" to make sure the data is accurate.

It is possible to get a total maximum of 10 points, and the scoring is weighed differently depending on what is most important (see above). For example, to have the company at a commercial stage is a more important aspect than the number of employees. In order to be classified at a commercial stage, it is mandatory to have at least one commercially launched use case in addition to listed client(s) in the Proximity.Directory profile.

You can see how companies have moved in the rank compared to the last report by looking at the number besides the score.

The following measurements were taken into account for the ranking:

- whether the company is in commercial or pilot stage
- clients
- sensors deployed
- number of employees
- geographic presence
- use cases in the profile
- when the PSP last updated the profile

PSPi HARDWARE

1. **Kontakt.io (Poland)** · · · **8,9 (-)**
2. **Estimote (UK)** · · · **7,45 (-)**
3. **Cisco Meraki (US)** · · · **6,25 (-)**
4. **BlueUp (Italy)** · · · **4,95 (+8)**
5. **Accent Systems (Spain)** · · · **4,85 (-1)**

PSPi
Proximity Solution Provider index

PSPi PLATFORM

Rank	Provider	Score
1.	Swirl (US)	7,55 (+0)
2.	Beaconinside (Germany)	6,35 (+24)
3.	Aruba (US)	6,25 (+35)
4.	Proxama (UK)	6,00 (-1)
5.	Tamoco (UK)	5,5 (-3)
6.	In The Pocket (Belgium)	5,35 (+2)
7.	Poi Labs (Turkey)	5,15 (-2)
8.	Xtremepush (Ireland)	5,00 (-4)
9.	Blesh (US)	4,9 (+98)
10.	Aloompa (US)	4,8 (+58)
11.	Bluvision (US)	4,75 (-2)
12.	Onyx Beacon (Romania)	4,65 (+2)
13.	Bleesk (Poland)	4,4 (+291)
14.	NearIT (Italy)	4,4 (+2)
15.	Zoniz (Romania)	4,4 (+2)
16.	Gimbal (US)	4,4 (-13)
17.	inBeacon (Netherlands)	4,25 (-8)
18.	Neoma (Hong Kong)	4,25 (+188)
19.	Infsoft (Germany)	4,15 (+79)
20.	Bubbl (UK)	4,05 (N/A)

Kontakt.io is still in the lead in the hardware category, as is **Swirl** which is leading the platform category.

However, we see that PSPs are catching up as more companies are keeping their profiles up to date with the newest industry data.

PROXIMITY SOLUTION PROVIDERS BY COUNTRY
Global distribution of Proximity Solution Providers

1-5 PSPs

6-10 PSPs

11-20 PSPs

20-50 PSPs

50+ PSPs
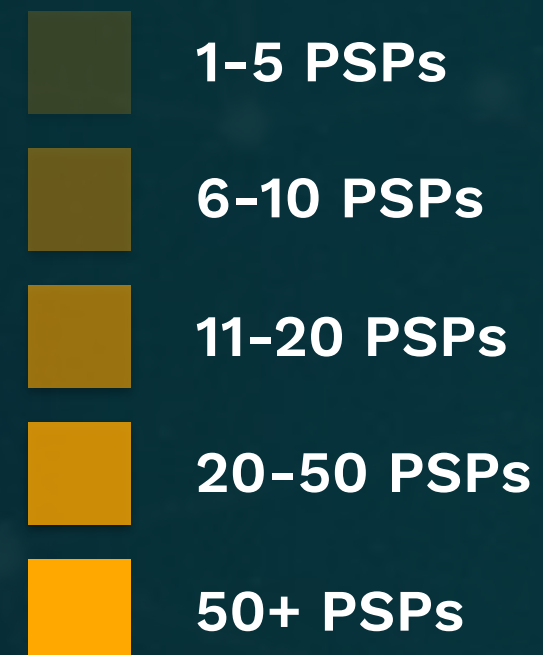
388 Proximity solution providers signed up to the directory as of Q1 2017 and these companies represent 52 different countries. The countries with the most Proximity Solution Providers are still **United States with 134 and the United Kingdom with 42 companies.**

PROXIMITY SENSORS DEPLOYED GLOBALLY
Another 11% increase in sensor growth in Q1 2017

SENSORS DEPLOYED GLOBALLY

As of Q1 2017, 14,486,000 sensors are registered to have been deployed globally in the Proximity Directory showing a continuous increase in number of sensors deployed. These sensors are split into 9,396,500 beacons, 2,127,500 NFC sensors and 2,962,000 Wi-Fi points, another 11% increase from Q4 2016.

Beacon technology accounts for 65% of the total, with Wi-Fi points at 20% and 15% for NFC. Beacons is clearly still the biggest out of the three, however, we see that Wi-Fi is starting to catch up. **A year ago, beacons were 80% of the total, where we now see that other proximity sensors are gaining traction.**

14,486,000 sensors registered as of Q1 2017 with **another increase of 11% overall**

14,486,000 (+11%)

13,074,000 (+11%)

11,770,500 (+42%)

8,273,500 (+33%)

6,201,000 (+22%)

5,103,500 (+52%)

3,349,000 (+208%)

879,500

Q2 2015   Q3 2015   Q4 2015   Q1 2016   Q2 2016   Q3 2016   Q4 2016   Q1 2017
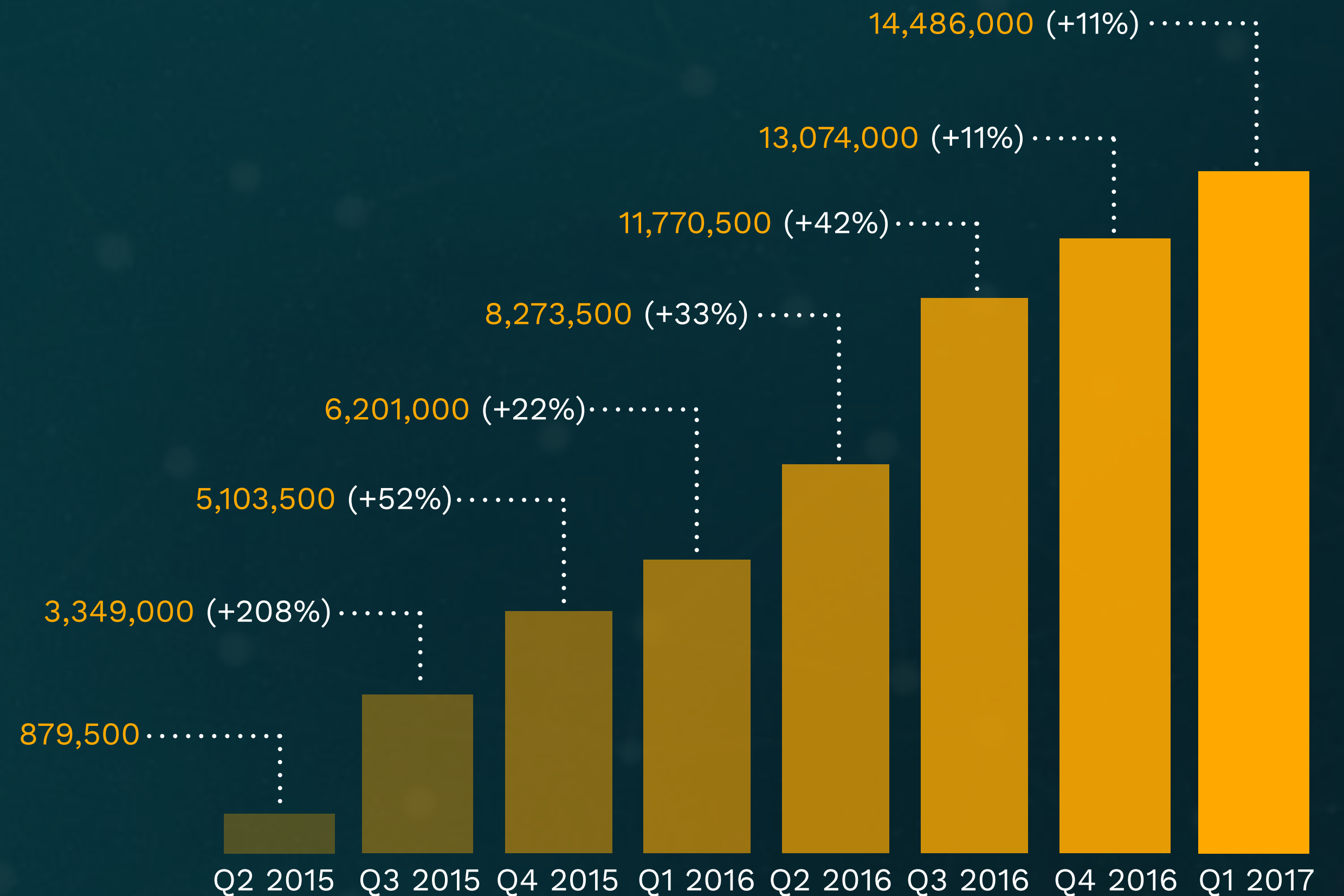
BEACON STANDARDS
More emphasis on Apple as Google continues to push

In 2013, Apple released their iBeacon, which was the biggest push behind the proximity industry. With iBeacon, you can trigger notifications within mobile apps and it is natively supported on iOS. In 2015, Google released the newest protocol to the market: Eddystone. Eddystone lets you trigger notifications in mobile apps, like with iBeacon, but also using URLs in browsers on smartphones. It is supported on both iOS and Android.

As Google allows to push notifications not only within mobile apps, Eddystone is continuing to see growth in the number of companies implementing the protocol. **Now, 56% of the industry are supporting their protocol compared to Apple iBeacon's 87%.**

It's been a long time since the release of the iBeacon in 2013 and we are still waiting for something new from Apple as a new device passed through the FCC that will come with both Bluetooth and NFC. In addition, when releasing the iPhone 7 they removed the headphone jack. Could this be Apple helping the market to adopt to Bluetooth before releasing the new iBeacon 2.0?

More companies adopting the Eddystone protocol — **56% of the industry supports Eddystone as of Q1 2017 compared to iBeacon's 87%**

POPULARITY OF DIFFERENT BEACON STANDARDS
% of total Proximity.Directory members supporting a beacon standard

Eddystone: 5%, 25%, 38%, 45%, 49%, 55%, 56%, 56%

iBeacon: 96%, 96%, 93%, 90%, 89%, 90%, 88%, 87%

Q2 2015 | Q3 2015 | Q4 2015 | Q1 2016 | Q2 2016 | Q3 2016 | Q4 2016 | Q1 2017
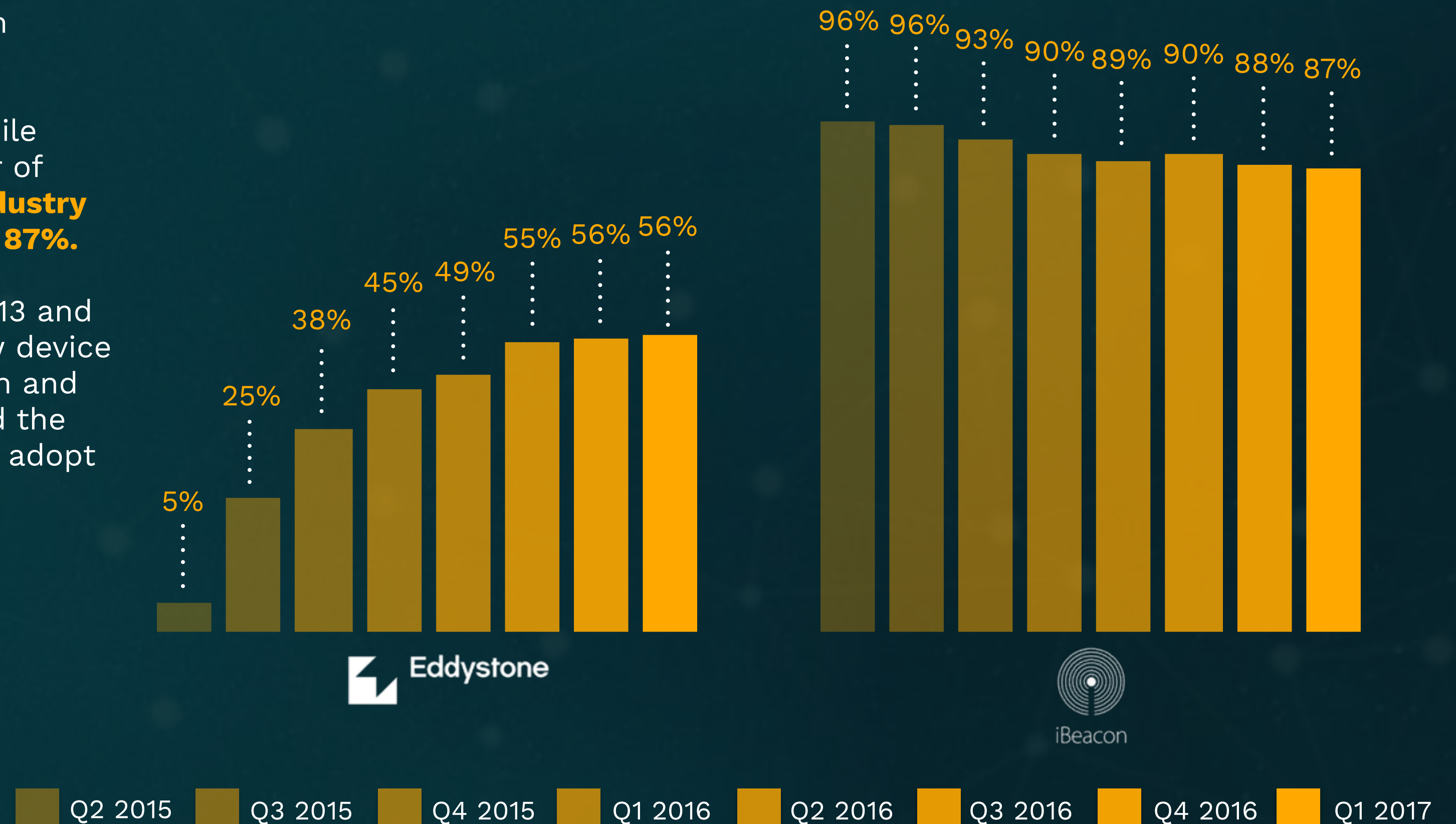
PROXIMITY PRODUCTS AND SERVICES

PSPs continue to add value to their product portfolios
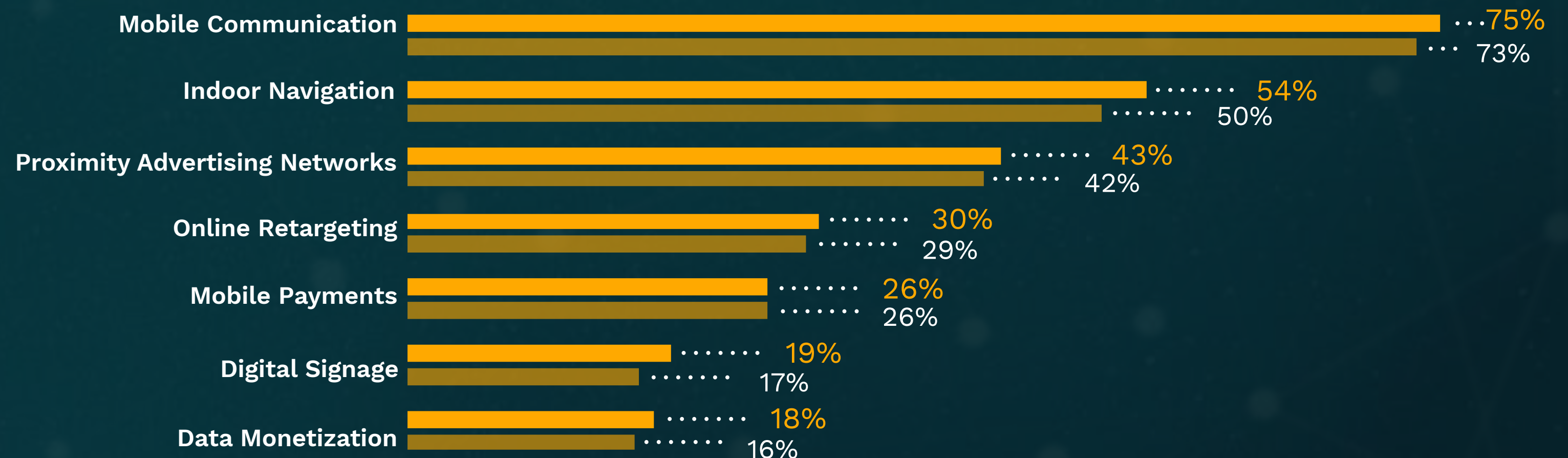
Proximity products can be categorized into seven main categories and three sub-categories.

As the demand for location and proximity data is growing, PSPs are taking advantage of this by finding ways to offer data through products and services as we see an increase in service added on top of their product portfolios.

Enabling third-party brands to deliver hyper-targeted advertising through existing sensor infrastructure in proximity advertising networks, monetize the data they gather through sensors and driving advertising campaigns through online retargeting are important value-adding factors.

Going into 2017, we see an increase in all products and services, and yet again **proximity advertising networks, data monetization and online retargeting are gaining traction amongst PSPs**

PRODUCTS

Category	Q1 2017	Q4 2016
Mobile Communication	75%	73%
Indoor Navigation	54%	50%
Proximity Advertising Networks	43%	42%
Online Retargeting	30%	29%
Mobile Payments	26%	26%
Digital Signage	19%	17%
Data Monetization	18%	16%

OTHER SERVICES

Category	Q1 2017	Q4 2016
Project Management	55%	52%
Beacon Networks	47%	47%
Consulting	50%	47%

Q1 2017
Q4 2016

% of total Proximity.Directory members providing products and other services
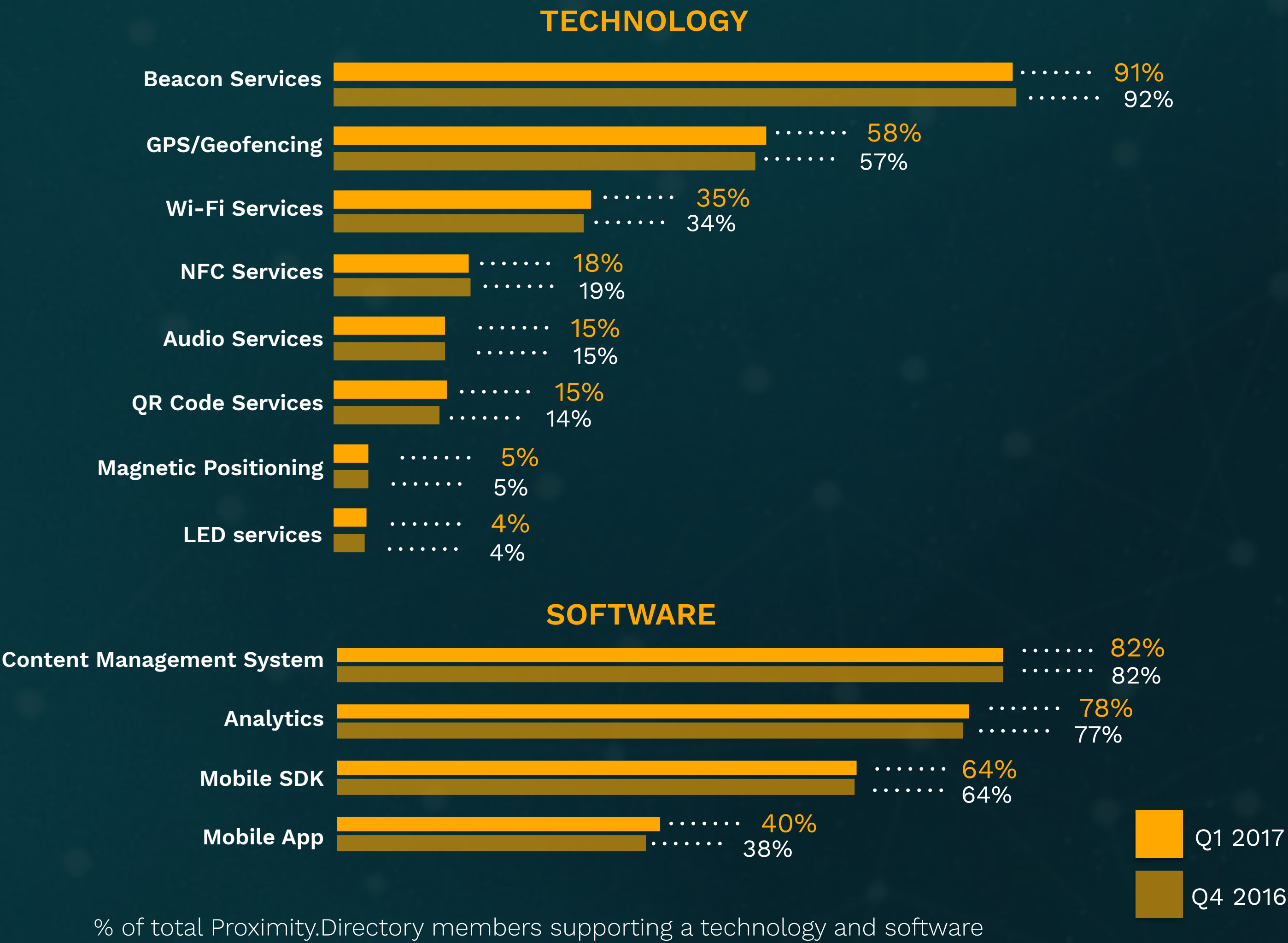
PROXIMITY TECHNOLOGY AND SOFTWARE
More proximity technologies are gaining traction

There are eight main proximity technologies that are used to offer proximity solutions and four categories of additional software.

Among the different proximity technologies, Beacon is still the most popular technology with **91% of the companies in the industry delivering beacon solutions. Next we see that GPS/Geofencing together with Wi-Fi is continuing to grow as well, accounting for 226 and 135 companies. Since Q1 2016, both of these technologies are the ones with the most growth.**

Adding software on top of the product offerings is important as competition in the market is tightening up. 154 PSPs are providing a mobile app software and that category has seen huge growth the past year.

Beacons are still the most popular proximity technology in the industry, **at 91% followed by GPS/Geofencing at 58% and Wi-Fi at 35%**

TECHNOLOGY

Technology	Q1 2017	Q4 2016
Beacon Services	91%	92%
GPS/Geofencing	58%	57%
Wi-Fi Services	35%	34%
NFC Services	18%	19%
Audio Services	15%	15%
QR Code Services	15%	14%
Magnetic Positioning	5%	5%
LED services	4%	4%

SOFTWARE

Software	Q1 2017	Q4 2016
Content Management System	82%	82%
Analytics	78%	77%
Mobile SDK	64%	64%
Mobile App	40%	38%

■ Q1 2017
■ Q4 2016

% of total Proximity.Directory members supporting a technology and software

INDUSTRY VERTICALS

PSPs are flexible as their focus is in many different verticals

Proximity.Directory covers 19 industry verticals where proximity technologies are leveraged. **Retail, shopping malls, hotels & tourism, stadiums/sports and airports are the top five verticals where we see companies operating.**

PSPs continues to go into different verticals, as it is important to be diverse in product offerings. Although we can see a minimal decrease in both retail and shopping malls compared to Q4 2016, they are still the most popular ones whereas **285 and 264 companies are operating as of Q1 2017.** Small shifts are happening in all verticals; however, looking at it with a yearly perspective, we see a growth in all verticals.

50% of the PSPs in the directory are operating in 10 verticals or more while as many as 14% are operating in all of them. Since the technologies and product offerings can be standardized across different verticals, PSPs can operate in multiple verticals with the same technologies and software and be more flexible.

Retail & Shopping Malls are still the most popular while **50% of the PSPs are operating in 10 or more verticals**

Vertical	Q1 2017	Q4 2016
Retail	73%	74%
Shopping Malls	68%	68%
Hotels/Tourism	56%	55%
Stadiums/Sports	53%	53%
Airports	51%	51%
Cafes/Restaurants	52%	51%
Museums	50%	50%
Concerts/Festivals	46%	47%
Conferences	45%	46%
Theme Parks	41%	41%
Healthcare	40%	40%
Transportation	41%	40%
Cinema/Theatre	38%	38%
Automotive	36%	35%
Banking	35%	35%
Education	35%	34%
Real Estate	32%	32%
Gas/Service Stations	30%	29%
Logistics	27%	26%

% of total Proximity.Directory members providing services in a certain vertical
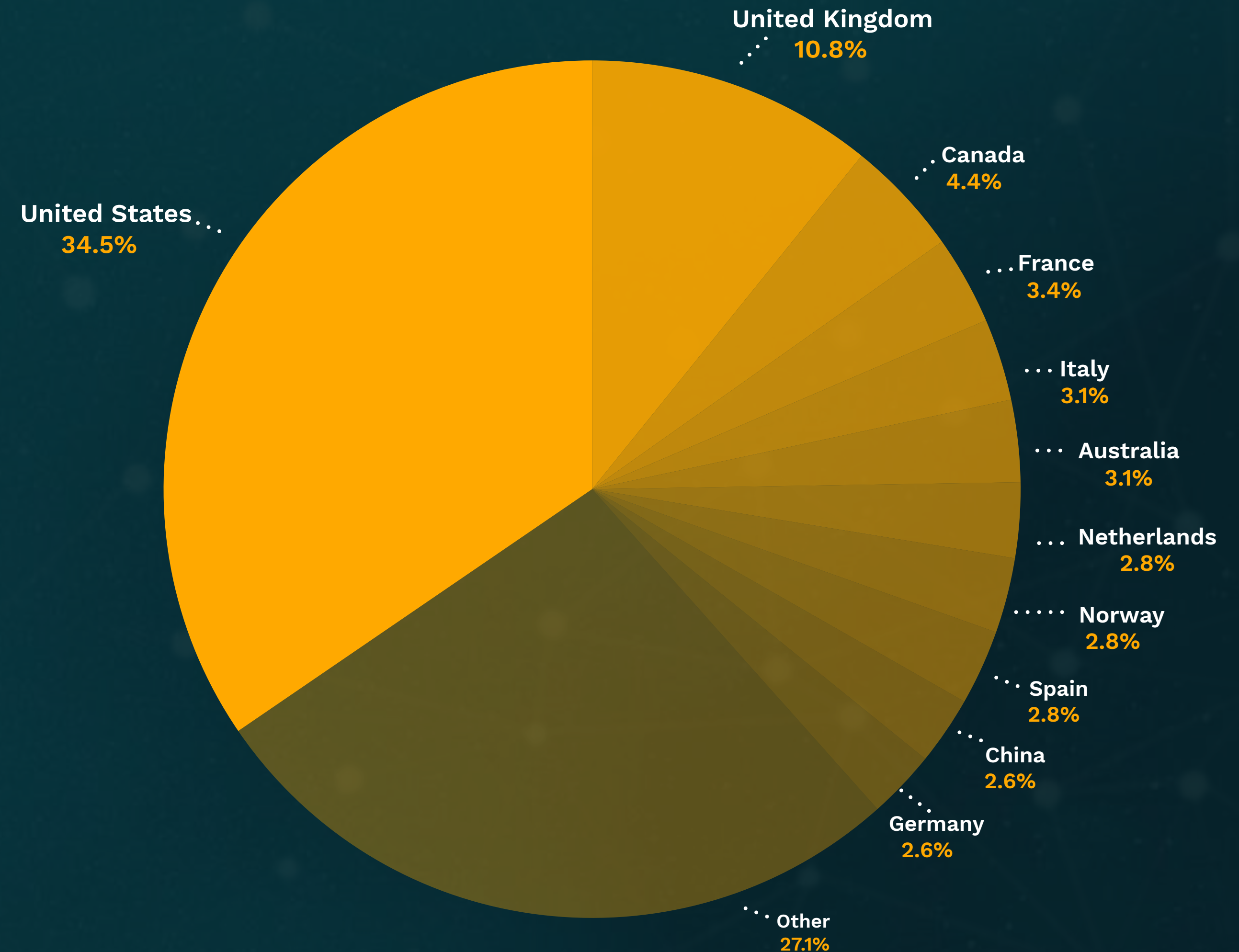
PROXIMITY SOLUTION PROVIDERS PER COUNTRY

Europe still ahead with the total number of PSPs registered in the directory

In total, 388 PSPs are registered in the directory, representing 52 different countries. **The total number of PSPs in all areas are increasing: Europe has 43%, North America 40%, and Asia at 12%.**

The United States is still the biggest country in regards to the number of PSPs, with 134 companies in the directory. **This accounts for 35% of the total number with the United Kingdom at second with 39 companies — 10% of the total industry.**

Europe is still the biggest with 43% compared to North America's 40%, which is continuing to move ahead, **while the United States represents 35% of the total number of PSPs.**

United Kingdom
10.8%

Canada
4.4%

United States
34.5%

France
3.4%

Italy
3.1%

Australia
3.1%

Netherlands
2.8%

Norway
2.8%

Spain
2.8%

China
2.6%

Germany
2.6%

Other
27.1%

GROWTH TRENDS OF PROXIMITY SOLUTION PROVIDERS
Number of proximity companies starting up still increasing
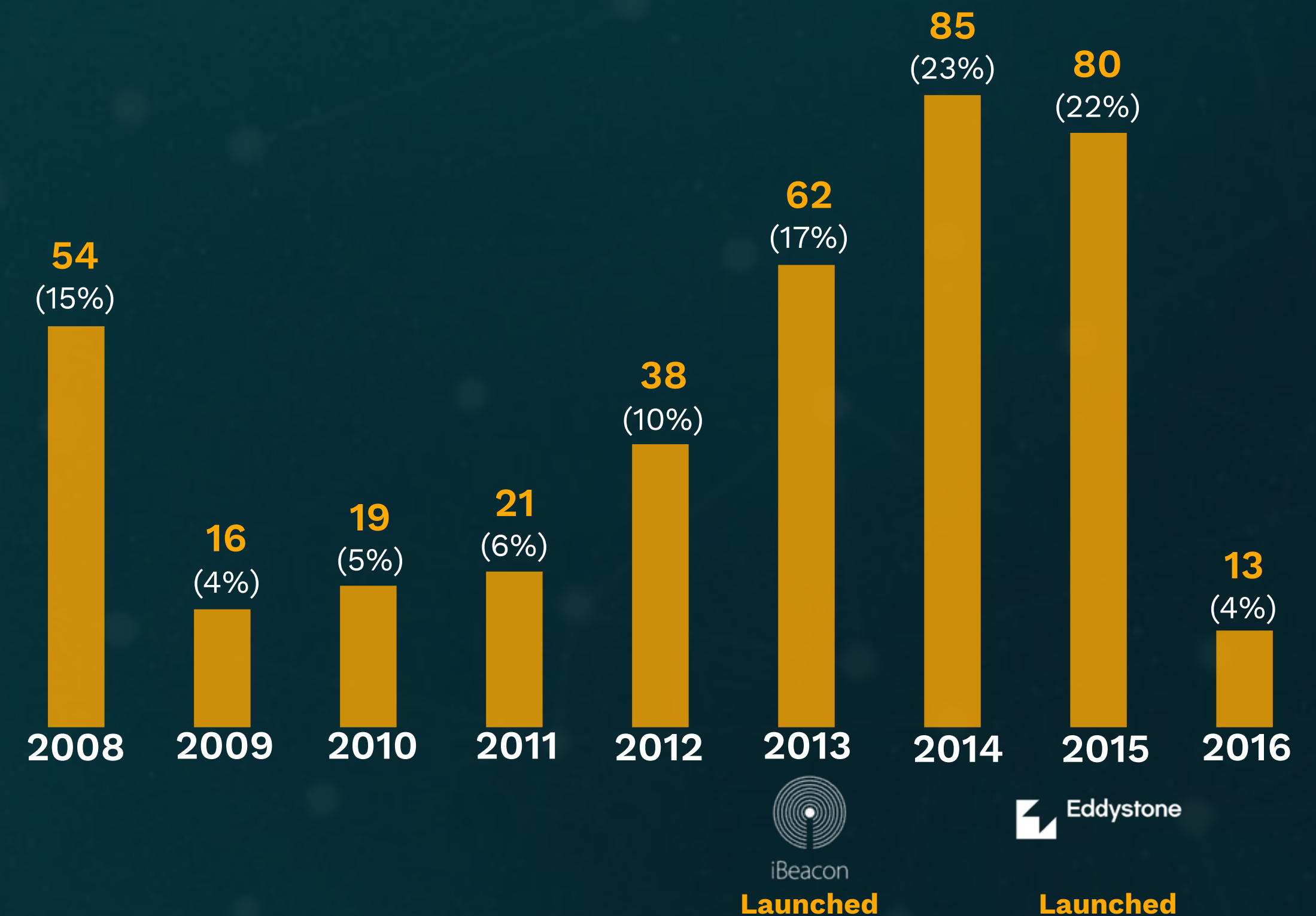
Looking at the newest numbers of Q1 2017, **the huge increase in companies that started up happened in 2014 as 85 PSPs started up, 23% of the total.** The main reason behind the development of PSPs in the industry is explained by the release of iBeacon in 2013 followed by Eddystone in 2015; **62% of the companies in the directory started up in 2013 or later.**

The knowledge around proximity technology is growing each quarter, and, as a result, the demand for PSPs to implement their products and services is rising. This is again leading to more companies entering the market, together with more innovation in the industry. Some big players are really leading the proximity space further, but there's still room for innovations from smaller players to do it big.

As much as 62% of the PSPs in the directory started up in 2013 and later as a result of the release of iBeacon and Eddystone

PROXIMITY SOLUTION PROVIDERS BY YEAR FOUNDED
% of total Proximity.Directory members founded by year

- 2008: 54 (15%)
- 2009: 16 (4%)
- 2010: 19 (5%)
- 2011: 21 (6%)
- 2012: 38 (10%)
- 2013: 62 (17%) — iBeacon **Launched**
- 2014: 85 (23%)
- 2015: 80 (22%) — Eddystone **Launched**
- 2016: 13 (4%)

CATEGORIES OF PROXIMITY SOLUTION PROVIDERS

There are five categories of proximity companies

166 companies are focused on providing a proximity platform. A proximity platform consists of a content management system, analytical dashboard, a mobile app for consumers and a mobile SDK. A proximity platform is used to offer products like mobile communication, proximity advertising networks, data monetization, indoor navigation, digital signage, online retargeting and mobile payments. Examples of proximity platforms include Footmarks and Plot Projects.

30 proximity solution providers focus mainly on hardware. A proximity hardware provider typically provides beacons, NFC, Wi-Fi, RFID or other sensors. To manage the hardware, tools for fleet management and SDKs are provided. Examples of proximity hardware providers are Kontakt.io and Estimote.

133 members in the directory provide both a proximity platform and hardware. Examples of platform and hardware providers are Signal360 and Gimbal.

39 members focus on providing and distributing proximity apps (which are essentially proximity platforms). Examples of these apps are ShopAdvisor and Check.

18 companies focus on proximity solutions consulting, such as Statler Consulting and HeyBuy.

Platform is the biggest category followed by Platform & Hardware, Apps, Hardware, and Consulting

10%
App

5%
Consulting

PSP CATEGORIES IN DIRECTORY

43%
Platform

34%
Platform & Hardware

8%
Hardware
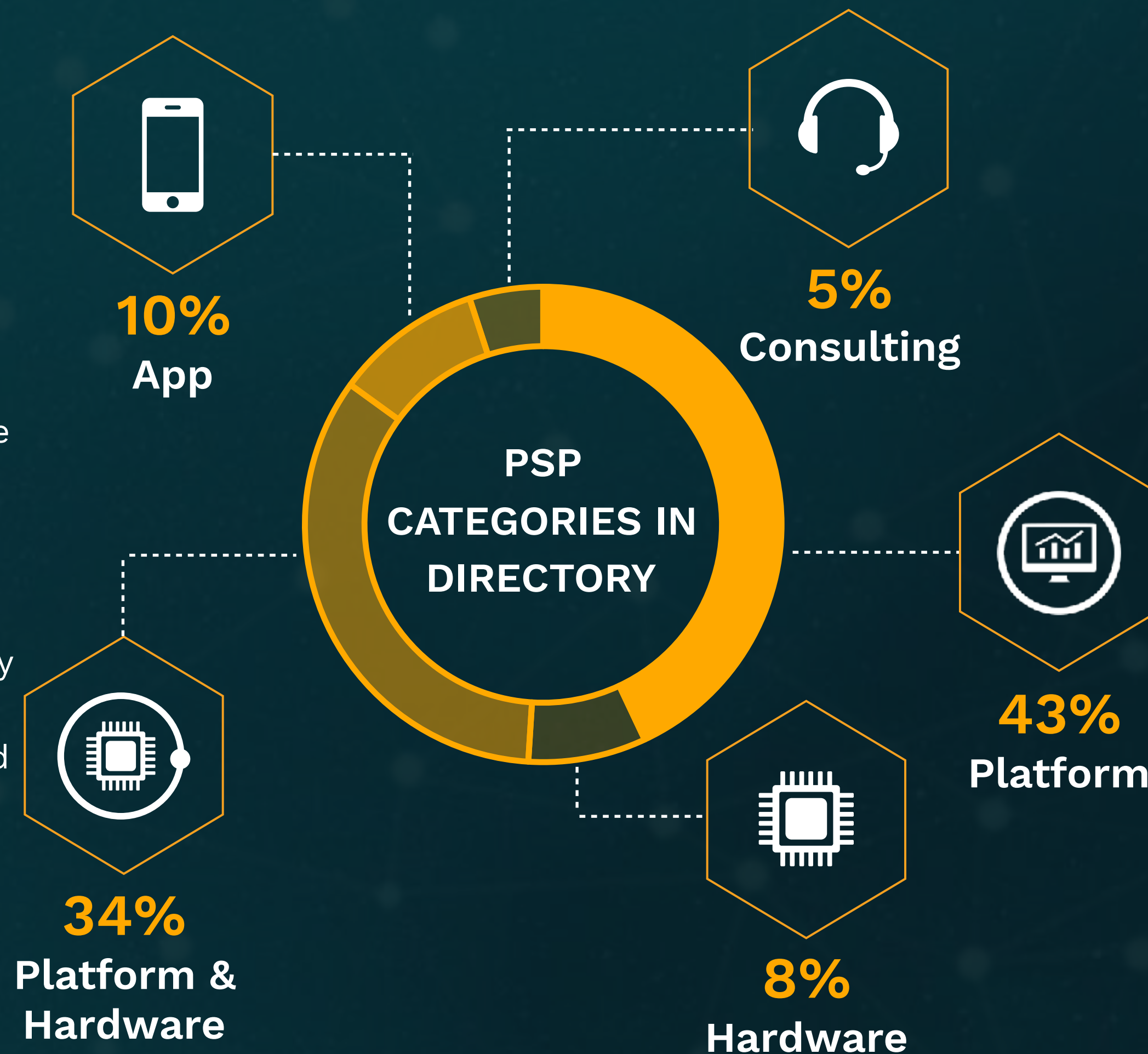
HELP US SPREAD THE WORD

Our goal is to educate the world on proximity and if you find the
report useful, you can contribute by spreading the
"Word of Proximity" by hitting the below share buttons!

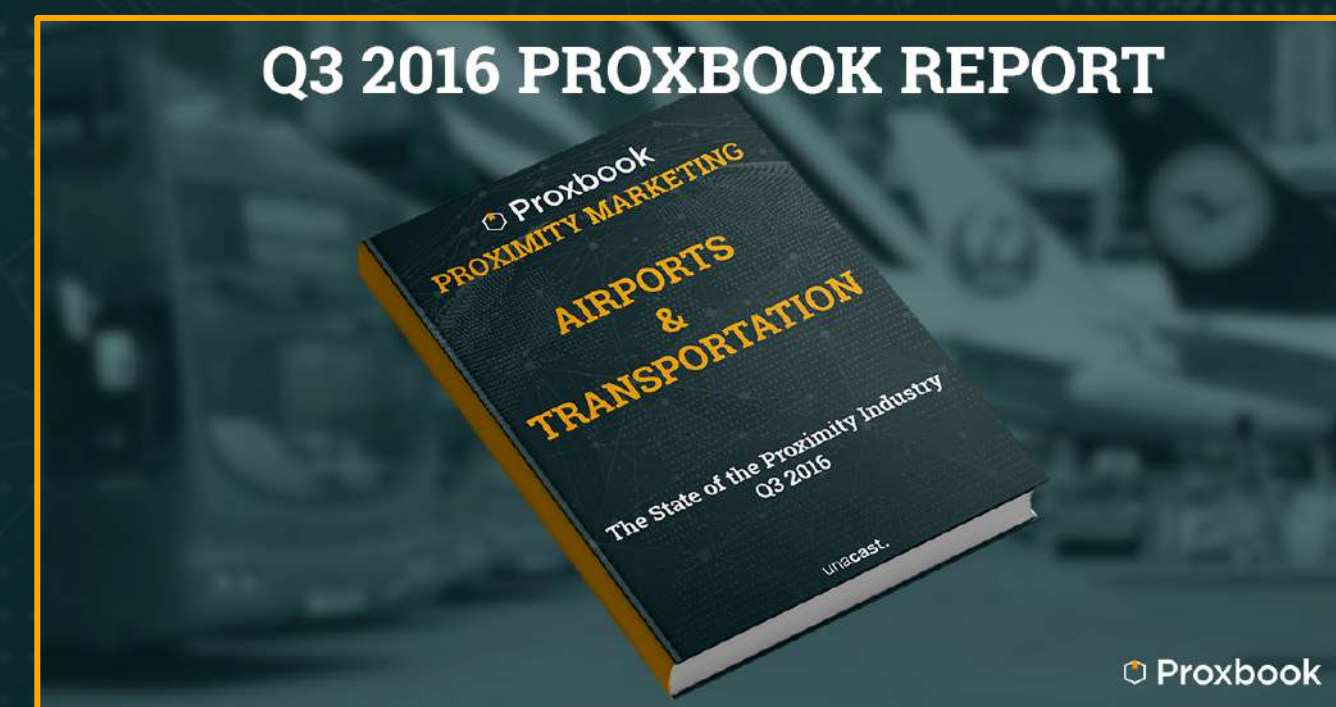Share   Tweet   Share   +1   Forward

READ UP ON PREVIOUS REPORTS

Q4 Report: Smart City

Q3 Report: Airports & Transportation

METHODOLOGY

The Proximity.Directory Report is published quarterly

Conducted by Unacast, the Proximity.Directory Report is based on data from Proximity.Directory as of April 1, 2017. Data and information used in industry standards section is submitted by Proximity Solution Providers (PSPs).

The amount of sensors deployed (on page 26) is based on a number range (e.g. 50-100) submitted by the PSPs where the average of the range (e.g. 75) has been used to calculate the numbers of sensors deployed.

The PSPi is an automated calculation based on use cases in the Proximity.Directory profile, whether the company is involved in commercial or pilot stage projects, clients, sensors deployed, number of employees, and geographic presence.

The directory was launched in June 2015 by Unacast, in cooperation with the Location Based Marketing Association and Statler Consulting LLC (Stephen Statler).

The Proximity.Directory Report is published quarterly; **download previous reports here.**
You can contact us at info@Proximity.Directory

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ABOUT UNACAST

Unacast is the world's largest proximity and beacon data platform

Unacast is the world's largest proximity data platform, and built the **Real World Graph™** to understand how people and places are connected, empowering the next generation of data driven industries with unique **double-deterministic™** data sets.

Unacast is based out of NYC and founders Thomas Walle and Kjartan Slette were also part of the founding team behind TIDAL, the music streaming company acquired by Jay Z. Unacast has been awarded multiple awards for its platform, its campaigns and for its rapid company growth.

Today's location-based industry is heavily focused on geo-location and lat/long, which is probabilistic. As this data comes from apps and bid requests combined with a geo-location API, accuracy is very difficult to pinpoint — especially indoors. Proximity sensors, on the other hand, provide deterministic, accurate data and they work indoors. So far it has been difficult for advertisers to access that data as it is fragmented between hundreds of brands and proximity companies that own the deployments.

We connect to physical pieces of proximity hardware, such as beacons, that are placed in specific and known locations, like a particular store department, or next to a specific product type. Simply put, proximity technology is granular and targeted and it works perfectly indoors. That's why we call our data double-deterministic™.

By aggregating data from our proximity partners, we solve the fragmentation problem and provide value to the entire ecosystem. For the first time, advertisers have scalable access to proximity data through a single integration and can use the data for retargeting and attribution, based on the taxonomy that we have created for the physical world. Proximity companies receive an opportunity to monetize their sensor infrastructure, enabling a passive new revenue stream helping to win more deals.

Visit us at **www.unacast.com** to learn more or to sign up.

Overall Winner, I-COM Data Venture Challenge Awards 2016
i-com

"Best Location-Based Campaign", 2015 Local Visionary Award
STREETFIGHT

"Unacast is one of the top 10 global companies in the $3.5 billion retail analytics industry"
OUTSELL

"Unacast: The Prototype for the New Advertising Generation"
ABIresearch

Unacast chosen to Unilever's Foundry 50 out of 4,500 companies

"Best Verticals & Marketplaces", LSA17 Ad to Action Awards
LSA LOCAL SEARCH ASSOCIATION

unacast.