

FOURSQUARE
PILGRIM SDK

Boost App Engagement with Location

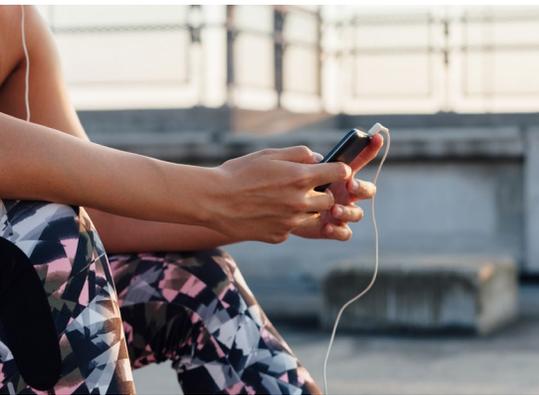
How Developers Can Use Location-Based
Segmentation to Increase Retention and
Drive Monetization

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Introduction

No matter how long you've been working with consumer apps, a few things quickly become clear when it comes to audience engagement. To start: Many of your users probably won't stick around for long. Soon after downloading your app, they'll disengage and uninstall, impacting the overall health and monetization potential of your product. In fact, more than 70 percent of users will uninstall an app after 90 days, according to [Localytics](#). And that number is even higher in categories with more fickle users, like entertainment and travel.



To prove these stats wrong, developers and product managers are challenged to build apps that keep users interested and push out personalized and relevant communications. Here's an example: A quick-service restaurant (QSR) chain might send a coupon to its app users during lunch hours or when they're out and about. As a result, frequent visitors are likely to keep checking to see what new offers they might receive each day.

But personalized app experiences can only come from a deep knowledge of each customer, combined with advanced audience-segmentation capabilities and technology. Delivering personalization is critical, because decreased engagement puts app revenue at risk. Implementing Foursquare's location-based segmentation capabilities—gleaned from contextual data—can help you do just that.

In this white paper you'll learn:

- How user engagement directly impacts monetization
- How audience segmentation drives personalization
- How Foursquare's [Pilgrim SDK](#) delivers next-level contextual segmentation capabilities

Why Engagement Leads to Monetization

To level set, monetization occurs when user engagement converts into revenue. For example, a food-delivery app needs to keep users loyal and consistently engaged to ensure their app stays top-of-mind. The more users return to an app, the more money the app can earn—in this case, through in-app purchases. Still, this is just one of many monetization strategies that can

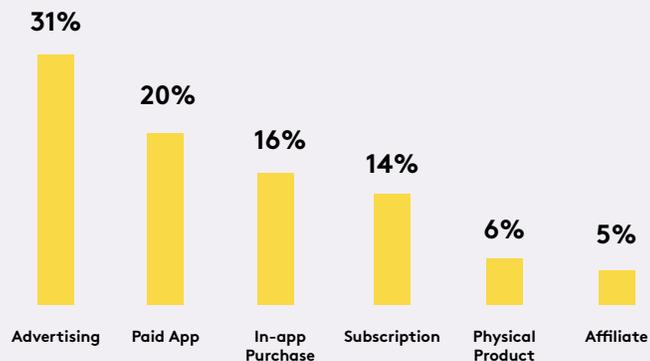
be utilized; what's critical, however, is that developers and product managers personalize the experience in ways that keep users coming back, making users feel like the app is designed just for them.

Audience segmentation, when used in tandem with advertising, is not only one of the most powerful ways to keep users engaged, but it also creates a truly individualized experience.

According to [AdColony](#), more than 30 percent of product managers turn

to advertising for app monetization. So how does building a comprehensive, inside-out profile of who your customers are result in better segmentation, to power ad targeting and campaign performance?

App Monetization Strategy



Source: [Tamoco](#)

Audience Segmentation and Ad Monetization

Maximizing engagement is an essential ingredient to growing the value of your user base, with segmentation positively impacting the effectiveness of ads-based monetization efforts. Let's examine how the two paths to segmentation—basic and sophisticated—can increase advertising revenue.

An Introduction to Basic Segmentation

A basic approach to segmentation buckets users based on their foot-traffic patterns to venue types—chains, or even individual chains that can be lumped into the same category. By analyzing visitation frequency and recency to particular venue types, developers can understand their users' lifestyle preferences. For example, venue-type segmentation might sort out people who go to gyms of any kind, and then market fitness or active-lifestyle messaging to them. Or you can dig in even deeper, segmenting those who go to a specific gym, like 24 Hour Fitness or Gold's Gym. This is also known as chain ID segmentation.



Basic segmentation can also be tied to certain location-based events, like when someone enters or exits a geofenced area. Once you decide on segmenting criteria, you'll capture the data, explore it and upload it to a mobile marketing automation (MMA) tool. MMA systems **fulfill much of the same purpose** as traditional marketing automation tools—like the ability to segment a marketing database and conduct drip-marketing campaigns—but with a focus on mobile communications.

This includes SMS messages, in-app communications and e-mails designed specifically to be viewed on smartphones. Because MMA providers and partners come in all shapes and sizes, from those designed for large enterprises all the way down to small businesses, you'll have to evaluate vendors carefully to ensure that the one you purchase meets your needs.

For a real-world example, let's consider how Walmart might segment their Black Friday shoppers. Under a basic segmentation framework, Walmart shoppers could be classified by chain ID, venue type or shopping date, all positive criteria that Walmart might use to market to shoppers more effectively before and during Black Friday. People who have visited video game stores like GameStop in the past month, for instance, might be enticed by Walmart ads related to gaming consoles and accessories. Once those segments are uploaded to an MMA, Walmart can reach out to each person at the most relevant times with a tailored message.

One drawback of this approach is that it is fairly static, and lacks insight into the detailed historical visitation profile of each consumer. The fact that these segments are not pre-built or pre-defined also makes basic segmentation highly labor intensive. Moreover, the necessity of conducting a data export to your marketing automation tool requires additional technological know-how and resources.

Although basic segmentation can be a great starting point for those not conducting any form of segment-based marketing to increase engagement, a more sophisticated approach is required to unlock the most value from your customer base.

The Benefits of Sophisticated Segmentation

The ad experiences best able to increase monetization are powered by sophisticated, attribute-based segmentation models. They successfully tap into contextual user data to engage each segment with personalized, location-aware experiences and content. Consider some of the more hyper-popular apps that have an extremely broad user base. Postmates, for instance, has customers ranging from fitness and health food fanatics to sports fans who enjoy pizza and wings. For each of these customer types, Postmates needs to communicate with personalized, up-to-date content on a regular basis. If they don't, their competitors certainly will, leading users to disengage and forget about their app.

Here are a couple of examples in the categories of retail and entertainment that show how advanced segmentation can be leveraged.

Imagine you're a retailer and want to bring visibility to your storefront by targeting a subset of your user base. You might choose to partner with an app like Groupon to run an awareness campaign for a segment you think can be most successfully monetized. With advanced attribute-based segmentation, you can activate and engage these target users at the right places, times and moments that they're most likely to accept a promotion and visit your physical location.

An entertainment app, such as the streaming music service Pandora, might segment by targetable attributes that would be useful to advertisers. Pandora can combine music preferences with location-based data that gives further insight into users' lifestyles, and design segments that can be employed for hyper-targeted advertising at scale.

Sending the right message at the right time isn't just a benefit—it helps you avoid sending the wrong message at the wrong times, turning off your users. But to truly master ad-monetization efforts, you must drill down and create the specific attribute-based segments to benefit you or your clients' targeting efforts.

The Power of Context and Pilgrim SDK

[Launched in May 2017, Pilgrim SDK](#) continues to be a one-of-a-kind tool for companies to understand users' visit behavior and to better engage them with personalized, location-aware experiences and content. The most recent addition of [SDK Segments](#) elevates our clients' abilities to deliver contextual app experiences by grouping users into user profiles based on visits to specific categories and chains. It also enables advertisers to better connect with consumers based on where they go.

Digging into Attribute-based Segments

When using pre-built, attribute-based segments, like the ones provided by Pilgrim SDK, you'll get a seamless plug-and-play data flow, eliminating the need to build segments from scratch. Additionally, attribute-based segmentation allows you to consider more customer traits, and with greater granularity. You'll be able to gain insights into some of the following:

- Category depth
- Satisfaction ratings
- Pricing sensitivity
- Age and gender demographics
- Visitation history, including recency and frequency

Let's take a look at what it might take to build an attribute-based segment profile of a college student, one that goes beyond the basics of their age and where they go to school. While their age category might be fairly standard—say, 18 to 24—you could potentially include up to 15 different sub-segments for various student types. You can then use location-based data to sort students based on visits to a diverse range of on-campus venues: cafeteria halls, laboratories, science buildings, history classrooms or technology workshops. You might then further categorize based on which venues they've visited more than three times in the past six months.

This type of attribute-based segment methodology has been long been validated by clients acting as the foundation to [Pinpoint](#), Foursquare's ad-targeting solution. Because it's trusted and used by 60 percent of the companies listed in the AdAge 100, we've been able to identify top-performing segments that informed the 17 core segments that commonly provide the most value to businesses.

Integrating Pilgrim SDK Successfully

When integrating Pilgrim SDK into your current technology stack, there are several considerations and tactics that can make the implementation of SDK Segments go as smoothly as possible.

SDK Segments

During setup, keep in mind that your segments will be based on activity that occurs after the system has been enabled. The software will start seeing patterns within a few days, and begin assigning individuals to segments after two or three weeks. It usually takes up to a month of visit activity and data collection to then start bucketing the majority of users into the most appropriate segments.

You'll need to have patience as Pilgrim SDK analyzes visit data and goes through the segmentation process. It takes time to confidently amass enough data to place someone in a segment, and the software tends to err on the side of accuracy in order to avoid false positives. If a customer is prematurely

placed in the wrong segment, that can lead to a poor advertising or user experience and, subsequently, decreased engagement. Keep in mind that user data is not retroactive, meaning the system won't have access to any activities that occurred prior to when the feature was first enabled. Again, the one-month timeframe is a good rule of thumb, after which all user segmentation should be accurate.



Add your desired MMA partner from the Integrations page in the Foursquare Pilgrim Console.

Finally, you'll need to find the right method of implementation that gives you visibility into cross-channel attribution and measures the effectiveness of advertising. You'll need to create a webhook to your MMA partner, whether it's a service like mParticle, Braze or Iterable. Also consider how the automated data export to and from Pilgrim SDK will take place, be it via secure file transfer protocol (SFTP) or a service like Amazon Simple Storage Service (S3).

Conclusion

Integrating a powerful location SDK like Pilgrim SDK not only enables you to personalize the user experience, but also to increase your app's monetization potential. Delivering the hyper-personalized experience that customers now demand requires an even more nuanced understanding of your customer, something that can successfully be accomplished with attribution-based audience segmentation.

You'll need to work with an experienced partner, like Foursquare, to implement segmentation technology and communicate with your audience in a way that's effective, timely and relevant. We can also help with location-permission best practices and crafting impactful and clear user opt-in language.

If you're already a partner, please download Pilgrim SDK version 2.1 or later. Enterprise companies looking to build contextual app experiences for their users can reach out to us at enterprise.foursquare.com/pilgrim.