



SPIEGEL
RESEARCH
CENTER

Branded App ROI

\ Evidence of the Value of Consumer
Engagement Via Branded Apps



Data-driven insights on the benefits—and
risks— of launching a branded app

\ Executive Summary

Insights Into How Mobile Apps Drive Consumer Purchase Behavior

Smartphones and tablets have unquestionably reshaped the consumer marketing landscape. But for marketers thinking about how to allocate their digital budgets, important questions remain about branded apps' efficacy in influencing purchase behavior, brand loyalty, and customer lifetime value.

Northwestern University's Spiegel Research Center has been at the forefront of answering these questions since 2011. As part of Spiegel's ongoing, multifaceted research into how consumers engage with brands and how that engagement shapes customer value, we have analyzed data from leading brands to quantify the financial impact of app usage.

Based on this research, we present our findings on the value—and risks—of developing and supporting mobile apps. We have found that:

- Engagement through apps increases order size and frequency
- Consumers' buying strategies vary by device and by product type
- Apps create a unique set of risks for brands

We believe that our data-driven insights on these topics will allow marketers to make informed decisions about the role that branded apps should play in a cross-platform, integrated marketing strategy.

QUESTIONS WE ADDRESS

Using consumer engagement and transaction data from Spiegel's research into mobile engagement, we address the following questions about branded apps:

- How much does app adoption influence customer order frequency and size?
- What types of products do shoppers buy on mobile vs. desktop?
- Should brands encourage engagement on apps over other types of devices?
- What are the characteristics of apps that drive customer value?
- What are the risks of creating a subpar app?

In This Report



Insights from Peapod research

Build Engagement Platforms, Not Just Apps

Brands need to develop apps in the context of a multi-device engagement strategy. Based on research from online grocer Peapod, we examine the impact that app usage has on order frequency, order size, and the types of products purchased across devices.



Insights from Air Miles Rewards Program research

Sustained Engagement Is What Matters

The positive impact that apps have on customer value is driven by continued usage, not initial downloads. Based on data from Air Miles Rewards Program (AMRP), one of the world's largest coalition loyalty programs, we examine how the depth and duration of members' app usage influences purchase behavior.



What these insights mean for brands

Data-Driven Strategies for Maximizing the ROI of Branded Apps

We provide core principles that brands should follow when determining their app strategy and when developing and supporting branded apps.

\ Insights from Peapod

Build Engagement Platforms, Not Just Apps

Spiegel's research into data from online grocer Peapod showed that apps are indeed powerful drivers of customer value—and this value is maximized when the apps are part of a multi-device strategy that understands the various ways that shopping and engagement occur in a digital ecosystem. By decreasing time between orders and increasing order sizes, app engagement grows customer lifetime value.

About the Research:

Spiegel teamed up with Peapod to analyze data from the online grocer's customers from 2011 to 2013—a timeframe during which the adoption of Peapod's mobile app significantly increased. This research allowed us to examine how customers' purchase behavior changed as they adopted Peapod's app. Specifically, we compared order size, order frequency, and types of products purchased by consumers who used personal computers (PCs), smartphones, tablets, and various combinations of these devices to complete their orders.



EVIDENCE-BASED INSIGHT ON APP ENGAGEMENT AND CUSTOMER VALUE:

1. Apps users purchase more frequently
2. Multi-device shoppers place larger orders
3. Multi-device shoppers have greater lifetime value
4. Shoppers' buying strategies vary across devices

\ Insights from Peapod

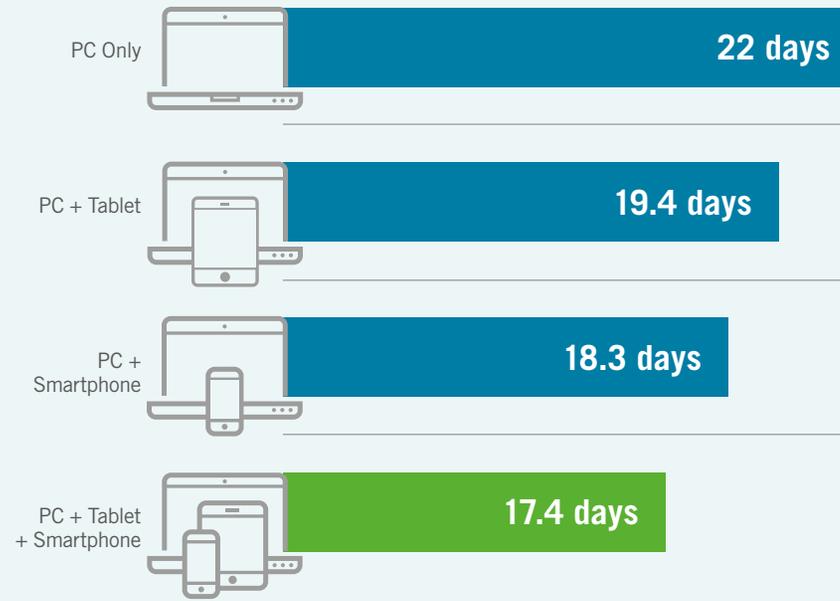
1. Apps Users Purchase More Frequently

Shoppers who made purchases using smartphones or tablets had significantly shorter time spans between purchases than shoppers who ordered only on PCs.

Multi-device shoppers using PC, smartphone, and tablet shaved almost five days off their time between purchases. This translates to approximately five additional orders per year per user.

Smartphone-only purchasers increased frequency by 18% over PC-only purchasers, while tablet-only purchases were 12% more frequent. The increase in order frequency after downloading the app was even greater for low-spending customers.

AVG. DAYS BETWEEN PURCHASE



Shoppers who use all three devices order 26% more often than PC-only users. This translates to an average of five additional purchases per year per user.

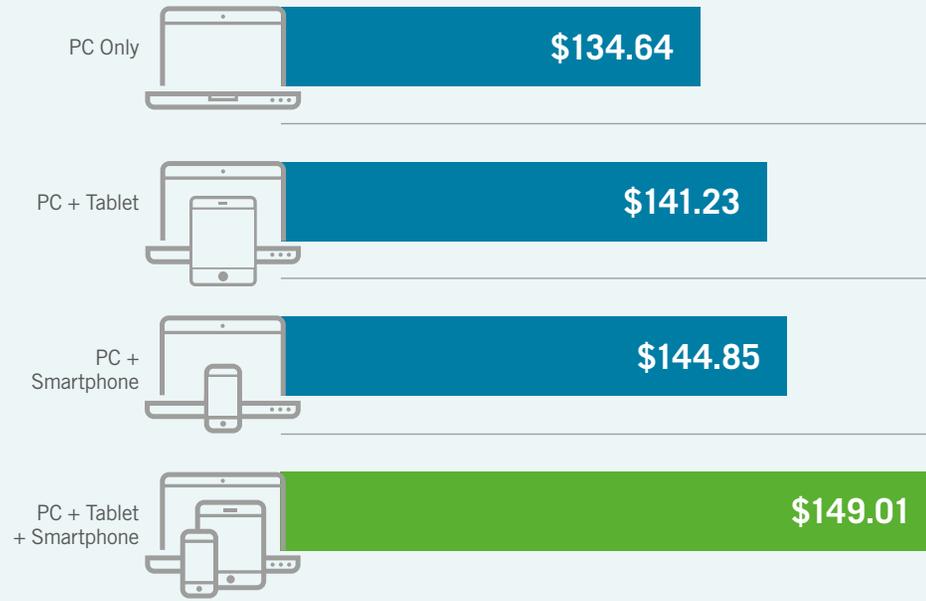
\ Insights from Peapod

2. Multi-Device Shoppers Place Larger Orders

Not only do multi-device shoppers purchase more frequently, they also place larger orders—and the more devices used the larger the increase. Shoppers who used all three devices had 11% larger orders than than PC-only shoppers. This illustrates the strong correlation between multi-device engagement and customer value.

We also found that shoppers who used only a smartphone or only a tablet when compiling an order had smaller order sizes than shoppers who used only a PC. This suggests that shoppers like using smartphones and tablets for speed and convenience when making smaller, simple purchases, but are less likely to use mobile devices alone for more elaborate orders. As a result, the optimal multi-device approach should leverage smartphones as an addition to rather than a replacement for PC and tablet orders.

AVG. ORDER SIZE



The multi-channel advantage

\$14.37 increase in average order size of PC+Smartphone+Tablet vs. PC-only shoppers

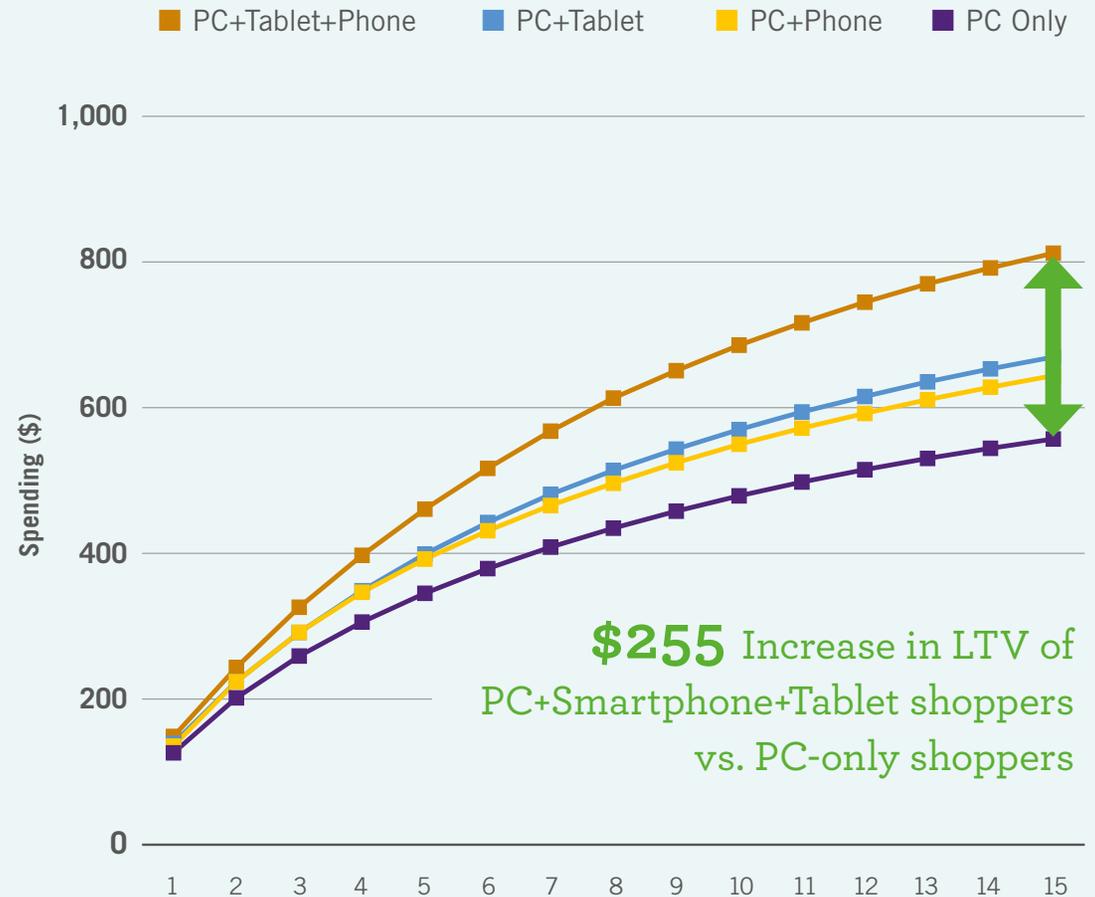
\ Insights from Peapod

3. Multi-Device Shoppers Are More Valuable

The combined impact of increased frequency and basket size among multi-device shoppers translates to significant gains in “lifetime value” for retailers utilizing a multi-device online sales approach.

The lifetime value of shoppers who use all three devices was \$255 greater than the value of PC-only shoppers. This equates to a bump of more than 50%, illustrating the importance of multi-platform engagement.

NEW CUSTOMERS' LIFETIME VALUE
BY DEVICE USAGE UPON ENTRY



3. Multi-Device Shoppers Are More Valuable

What This Means for Brands



The most engaged—and hence, the most valuable—customers are ones who shop across multiple devices.

As a result, brands should build digital platforms that encourage shopping experiences that span multiple devices, not just a single device. Apps should be developed in the context of a multi-channel strategy.

HOW TO DRIVE CUSTOMER VALUE ACROSS A MULTI-DEVICE PLATFORM:

- **Don't push users toward mobile-only experiences**
- **Make it seamless for users to construct orders or shopping carts across multiple devices**
- **Encourage low purchasers to use additional channels**

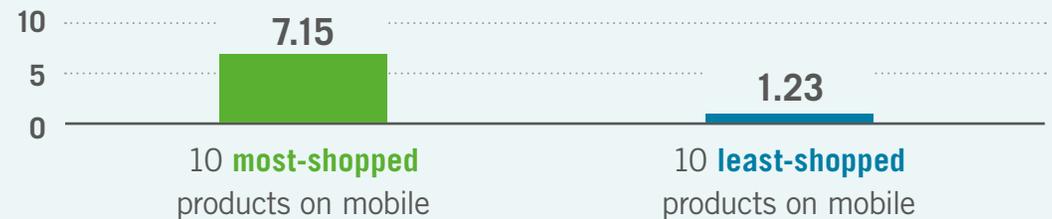
\ Insights from Peapod

4. Shoppers' Buying Strategies Vary Across Devices

The products that were the most likely to be purchased via mobile fall into “habitual” buying patterns—either brands frequently purchased, or categories in which brand choices have been long established. Conversely, the products that were least likely to be purchased online were ones that the consumer had less experience purchasing.

Consumers are more comfortable making “habitual” purchases on smartphones, whose relatively small screens do not provide much space for conveying information about the product. Conversely, consumers prefer to make high-consideration purchases on their desktops.

**AVERAGE NO. OF TIMES CONSUMER
HAD PREVIOUSLY PURCHASED THE PRODUCT**



**Examples of products
most-shopped on mobile:**

Baby food and formula
Beverages
Pet food



**Examples of products
least-shopped on mobile:**

Baking needs
Eye and ear care
Stomach aids and laxatives

4. Shoppers' Buying Strategies Vary Across Devices

What This Means for Brands



Consumers do not, it appears, “do mobile all the time.” Cross-platform strategies improve customer value.

Brands should start by thinking about consumers' level of decision uncertainty and the involvement that goes into a purchase. Then, brands should tailor their e-commerce and marketing strategies to the strengths and weaknesses of each device.

DEVICE-APPROPRIATE STRATEGIES FOR DIFFERENT TYPES OF PRODUCTS:

- **New products:** understand that apps, given the limitations of their small screen sizes, are not an ideal vehicle for consumers to learn about a product for the first time
- **High-consideration, high-involvement products:** for products that require a significant amount of research and comparison shopping, such as electronics or cars, apps should be used to help consumers begin their information-gathering process; brands need to realize that consumers will continue that journey on other devices
- **Habitual purchases:** for recurring purchases where there is a low degree of decision uncertainty, create smartphone alerts that remind consumers when their supply may be running low; make it easy for consumers to repurchase with one-click shopping

Sustained Engagement Is What Matters

Spiegel's research into app adopters vs. non-adopters in Air Miles Rewards Program (AMRP) yielded powerful insights about how app downloads and usage shape purchase behavior, as well as how discontinued app usage can hurt spending.

About the Research: Canada-based AMRP is one of the world's largest coalition loyalty programs. AMRP's members earn points for purchasing at partnering sponsors across various categories, including groceries, gas, banking, and auto repairs. Members then redeem the points for rewards such as merchandise, gift cards, and air travel. AMRP's app, launched in 2012, allows members to view account balances, redeem points, find nearby offers, and check-in at participating sponsors.

Our research examined the purchase behavior of AMRP members who downloaded the app in September 2012. We looked at their point accruals and redemptions for the six months before and after they downloaded the app. We also compared their behavior to members who are similar in terms of demographics and spending but did not download the app.



EVIDENCE-BASED INSIGHT ON APP ENGAGEMENT AND CUSTOMER VALUE:

- Consumers spend more—and more frequently—when they engage with an app
- App adoption creates an immediate—but not necessarily sustainable—bump in customer activity
- When app usage decreases, so does purchase behavior

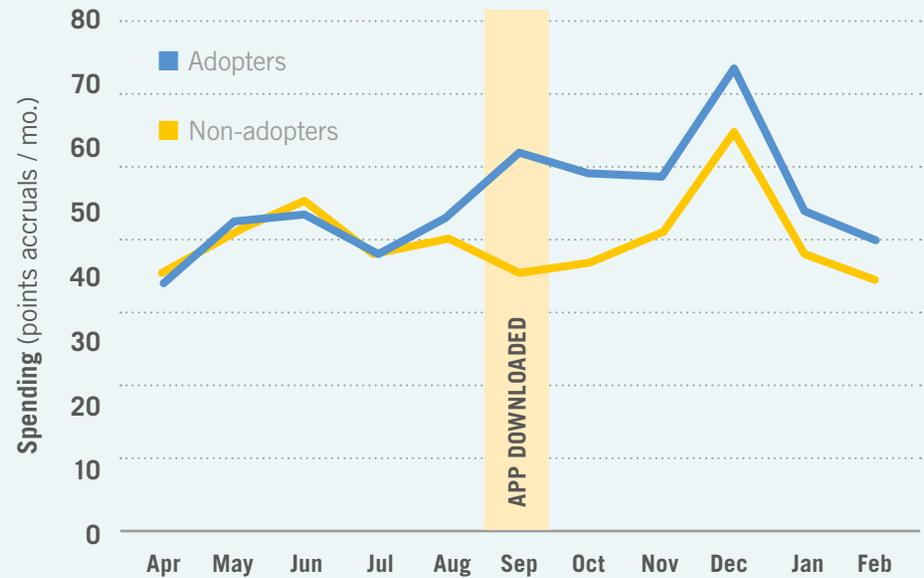
\ Insights from Air Miles Rewards Program

1. Consumers Spend More—and More Frequently—When They Engage With an App

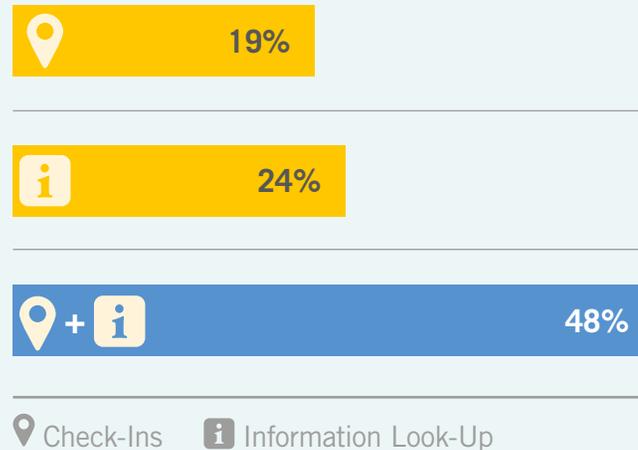
Our research found that mobile adopters spent significantly more after downloading the app than non-adopters. As shown in this chart, adopters outspent non-adopters in each of the six months following the download. In the month of initial download, spending jumped nearly 50%.

The impact of app engagement on consumer spending became all the more dramatic as we drilled into specific features. Members who used the app to check-in at participating sponsors saw a 19% increase. Members who used the app to look up information saw a 24% increase in post-adoption spending. And members who used both features saw a 48% increase.

SPENDING BY APP ADOPTERS VS. NON-ADOPTERS



APP USERS' AVERAGE INCREASE



1. Consumers Spend More—and More Frequently— When They Engage With an App

What This Means for Brands



An app is more than an access tool;
it is the brand experience.

When developing an app, include functionality that generates several levels of customer engagement. With AMRP, we found that customers who engaged deeply in an app by participating in a brand’s “Check-in Challenge” contest spent more.

Branded Apps’ Role in the Consumer Engagement Engine

Spiegel’s 2016 report, “**The Consumer Engagement Engine,**” explains how engagement in today’s digital ecosystem no longer functions like a funnel that is managed by a brand, but like an engine where brands and consumers synergistically interact with each other. This “engagement breeds engagement” dynamic was clearly at work with AMRP members and the app. Members who engaged with the app increased their purchase and redemption transactions, and these transactions, in turn, led to more engagement with the app and the brand.

When developing an app, brands should be relentlessly focused on how the app will deliver value for users.

Does your app help users:

- Find your stores?
- Find your products/services?
- Get more value out of your products/services?
- Interact with the brand or other customers?
- Learn about special offers?

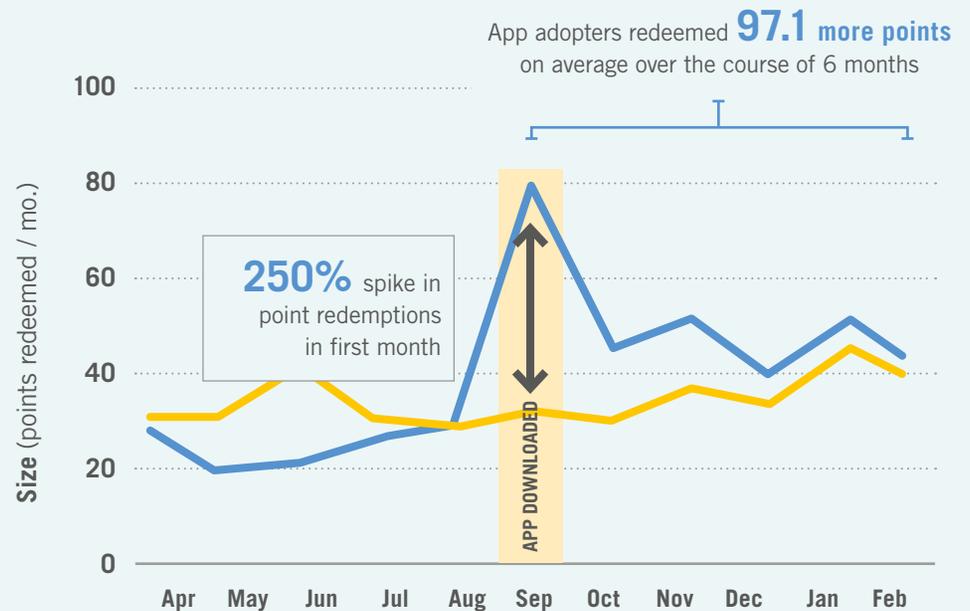
More importantly, is your app easy-to-use?
Does it create an “always-on” brand experience?

\ Insights from Air Miles Rewards Program

2. App Adoption Creates an Immediate—But Not Necessarily Sustainable—Bump in Customer Activity

The impact of downloading an app on spending and customer activity is greatest immediately after adoption. In September, the month when the app was downloaded by the AMRP members whom we studied, there was a clear spike—both in terms of the frequency of point redemptions and the size of point redemptions. But this bump quickly disappeared as users disengaged with the app. It is important to note that the research does not definitively indicate whether the decline was driven by active disengagement.

PURCHASE BEHAVIORS – ADOPTERS VS. NON-ADOPTERS



2. App Adoption Creates an Immediate—But Not Necessarily Sustainable—Bump in Customer Activity

What This Means for Brands



Great apps deliver great value—and do so on an everyday basis.

Habit-inducing apps make users more likely to engage on a regular basis and less likely to consider other brands. Brands should anticipate and take advantage of the bump in engagement that occurs immediately after the app is initially downloaded. Brands may want to consider offering special promotions during that first month or sending personalized messages to help the user learn how to use all of the app's features. However, brands should take care to avoid oversaturating users with notifications that are too frequent and/or not valuable or relevant to users' daily lives.

THREE EXAMPLES OF “STICKY” APPS

Digital Trends' list of 2016's best apps* features several examples of branded apps that provide multiple levels of engagement for users:

- **Food Network In the Kitchen** provides access to recipes from the network's celebrity chefs and meal ideas. The app also lets users look up recipes for meals that are currently being shown on one of the network's shows.
- **Nike+ Training Club** lets users download the personal workouts of professional athletes and trainers. Users also can build customized training plans and share their results with other members of the Nike+ community.
- **Xbox's** app allows gamers to find groups for multiplayer games, watch and interact with game content, and share updates and clips from their games.

*Digital Trends, “100 Awesome iPhone Apps for 2016,” October 15, 2016.

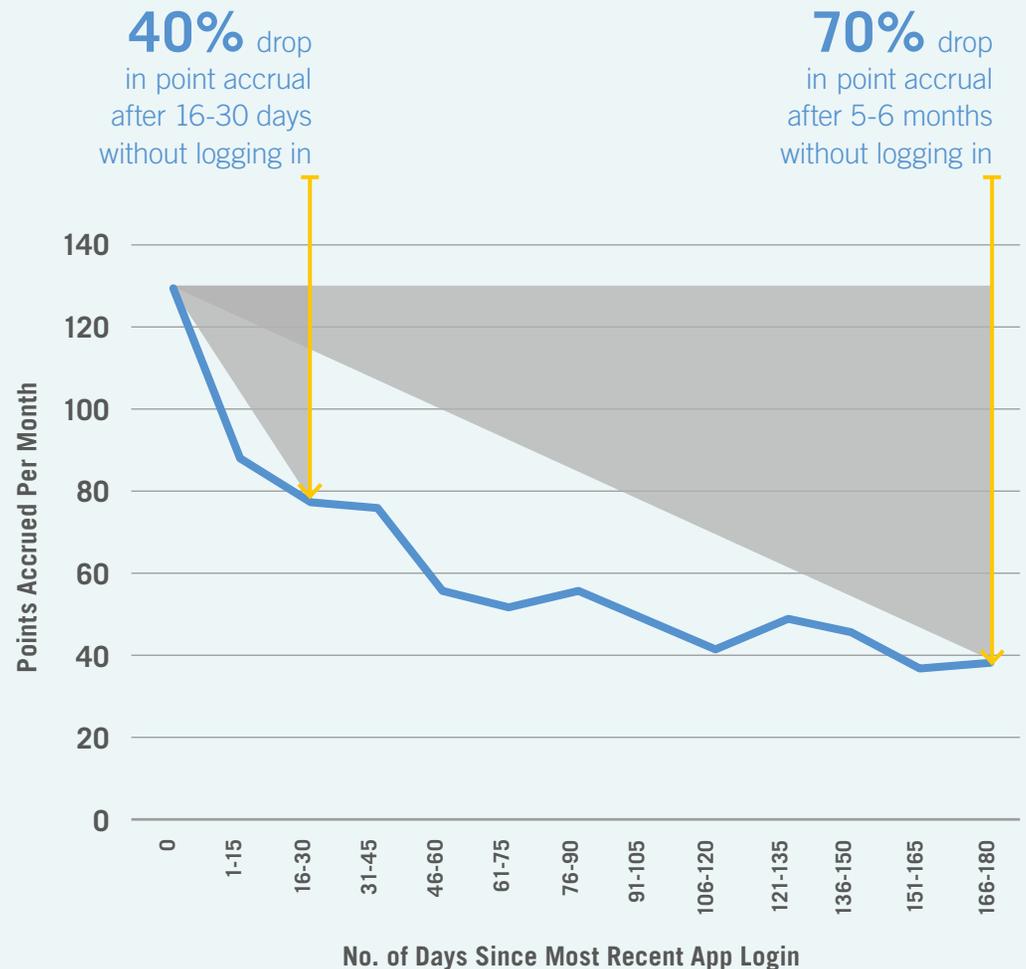
\ Insights from Air Miles Rewards Program

3. When App Use Decreases, So Does Purchase Behavior

This chart shows the risk of having customers download the app and then discontinue using it. Our research into AMRP participants found that as adopters went longer without using the app, their spending per month decreased substantially.

Unfortunately, major drops in app usage soon after download is the norm for most apps. Based on data from mobile intelligence provider Quetra, technology analyst Andrew Chen found that the average app loses 77% of its usage three days after install and 90% after 30 days.*

*Chen, Andrew. "New data shows losing 80% of mobile users is normal, and why the best apps do better."



3. When App Use Decreases, So Does Purchase Behavior

What This Means for Brands



App disengagement can result in brand disengagement.

As our research shows, if consumers disengage from your app, that means they can disengage from your brand and purchase less than they did before downloading the app. Brands should guard against launching apps that customers will stop using because of technical glitches or failure to provide utility. Conversely, brands should work to create apps that become a part of their customers' daily routines.

APP PRE-LAUNCH CHECKLIST

Before launching an app, brands should test against the following questions:

Is the app functionally sound?

Users are impatient with app malfunctions, such as crashing, freezing, or loading errors. Consumers are unlikely to try again if an app fails to download or work properly. Thus, providing a faulty app may be more detrimental to the brand than not having an app.

Does it provide unique value?

Apps that fail to provide proper value for the user risk hurting the brand. An app for a grocery store, for instance, that only provides store hours but doesn't help users build shopping lists or find items in the store provides little additional value relative to a simple Internet search.

Is it secure?

Marketers need to make sure their apps are not vulnerable to hacking or other security breaches, which can be ruinous for a brand. Cybersecurity experts should be part of the app development team.

Do you have a strategy for creating fresh content

You can't afford to have a "set it and forget it" attitude when it comes to the app's content. You need a plan for providing fresh content that gives users a reason to continually revisit the app and make it a part of their daily lives.

In Review

Data-Driven Strategies for Maximizing the ROI of Branded Apps

Based on Spiegel's extensive research into how branded apps affect purchase behavior, we recommend that brands follow these six principles when developing and supporting apps.

Give users a reason to keep coming back	Encourage multi-device shopping	Do NOT use a one-size-fits-all approach across devices	Deliver relevant value for users' daily lives	Create "sticky" experiences	Protect against the downside
Apps usage increases order frequency and size, but only if you give users a reason to keep using the app. Think about incorporating loyalty programs, gamification, and other tools for driving continuous usage.	Shoppers who engage across multiple devices are more valuable. Create a seamless shopping experience across devices, and don't try to push people to become "app-only" customers.	Consumers have different buying strategies for different devices. For habitual purchases, use alerts and other tools that make it easy for users to complete the purchase. For high-consideration products, use the app as a place for users to begin their buying journey.	When developing an app, be relentlessly focused on how it creates tangible value for users. Think of the various ways that an app can make users' relationship with the brand more interactive, entertaining, valuable, and/or efficient.	Create strategies for overcoming the tendency for users to forget about the app soon after the initial download. Create "sticky" engagement experiences that make using your app a recurring part of your customers' daily or weekly routines.	A bad app experience can hurt a brand and destroy customer value. Before launching an app, rigorously test to make sure it is functionally sound, provides unique value, and protects users' data. Also make sure you have a strategy for providing fresh content.

Review the Research

Branded Apps Research Team

The research supporting this report was led by the following members of the Spiegel Research Center:

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Professor of Integrated Marketing Communications

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Assistant Professor and Research Associate

Rebecca Wang

Assistant Professor and Research Associate

Su Jung Kim

Assistant Professor and Research Associate

PUBLISHED RESEARCH ON APP ROI

The results and insights from the Spiegel Research Center's research into how branded apps influence consumer engagement have been published in the following journals and textbooks:

Kim, S.J., Wang, R. J.H., Maslowska, E., & Malthouse, E.C. (2015). The Effects of Adopting and Using a Brand's Mobile Application on Customers' Subsequent Purchase Behavior. *Journal of Interactive Marketing*, 31, 28-41.

Wang, R, Malthouse, E.C., Krishnamurthi, L. (2015). On the Go: How Mobile Shopping Affects Customer Purchase Behavior. *Journal of Retailing*, 91(2), 217-234.

Wang, Kim and Malthouse (2016), *Branded Apps and Mobile Platforms as New Tools for Advertising, The New Advertising: Branding, Content and Consumer Relationships in the Data-driven Social Media Era*, edited by Ruth Brown, Valerie Jones and Bryan Ming Wang, Praeger, Santa Barbara, CA.

More Insights from the Spiegel Research Center

As the digital marketing communications landscape evolves, we will continue to look for innovative ways to measure the impact of engagement on consumer behavior.

To dive deeper into Spiegel's research into how engagement via mobile apps and other channels influences purchase behavior and customer value, we invite you to visit us online.

LEARN MORE about the Spiegel Research Center's research-driven insights on marketing communications by visiting: spiegel.medill.northwestern.edu



Social Media Contests

Do consumers who engage in social media contests buy more?



Online Negative Word-of-Mouth

Do negative posts in a social media environment impact purchase behavior?



Consumer Engagement Engine

How consumers engage with brands and how engagement affects customer value



Loyalty Programs

Do instant rewards drive purchase in a loyalty program?



Online Reviews

How do star ratings and reviews content influence purchases?



Multi-Platform Engagement

How does multi-channel engagement affect purchase behavior?