



The Psychology of Insanely Addictive Apps

Want to get users hooked on your app? Forget discounts and freebies, and find out how to focus on the first principles of consumer psychology.

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Introduction



In Greek mythology Sisyphus was condemned by the gods to push a boulder up a hill over and over again till the end of time.

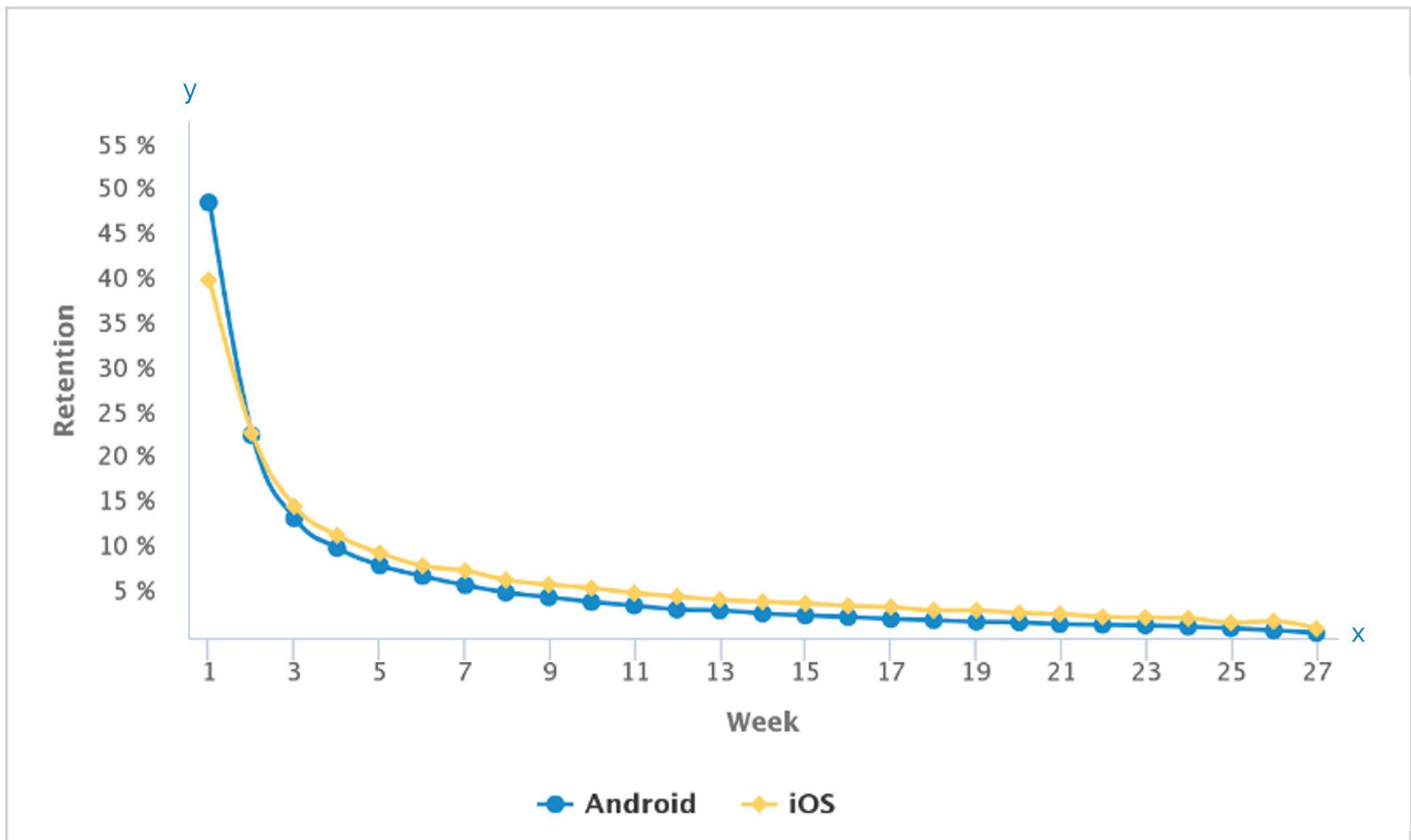
If you are an app marketer or an appreneur most of your day might seem Sisyphean.

Between changes in app store policies, dealing with device and OS fragmentation, chasing down missing users, and creating and promoting emotionally engaging content it sometimes feels like you have to do the same things over and over again.

The part about keeping users from bouncing is especially taxing.

Engagement and retention rates for mobile apps have been historically low. Take a look at median retention data across all apps over a 27 week period which use our tracking code.

Weekly Retention Rate among First Time Users for all



Notice how the numbers drop all the way to zero by 7 months?

Unless you are an Uber, Candy Crush or Spotify this is how your app's retention rate will look down the line.

To keep the lights on, you are going to have to push that boulder up once more to acquire new users in 7 months time.

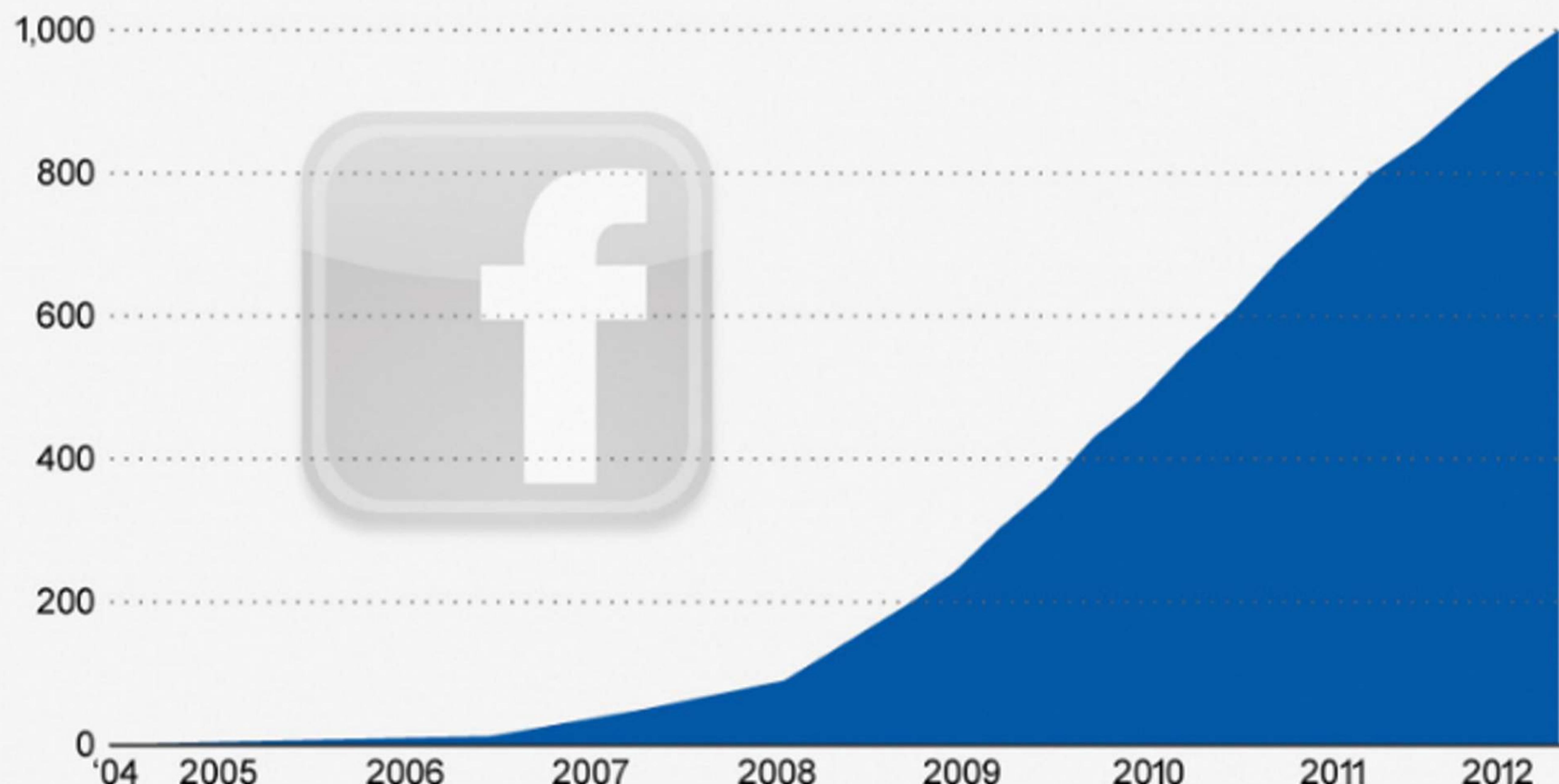
More ads, more discounts, more...you get the drift.

Or, you could flip the playbook!

Instead of trying to fill a leaky bucket, plug those holes which cause users to slip away. Make your app experience so good that they will not only keep on using it over and over again, but will experience a feeling of loss or discomfort if they stop using your app.

Facebook Hits 1 Billion Users!

Monthly active users of Facebook (in millions; as of September 14, 2012)



statista  The Statistics Portal



Source: Facebook

Why do most apps suck

You are not going to get growth like that by loading your app with features.

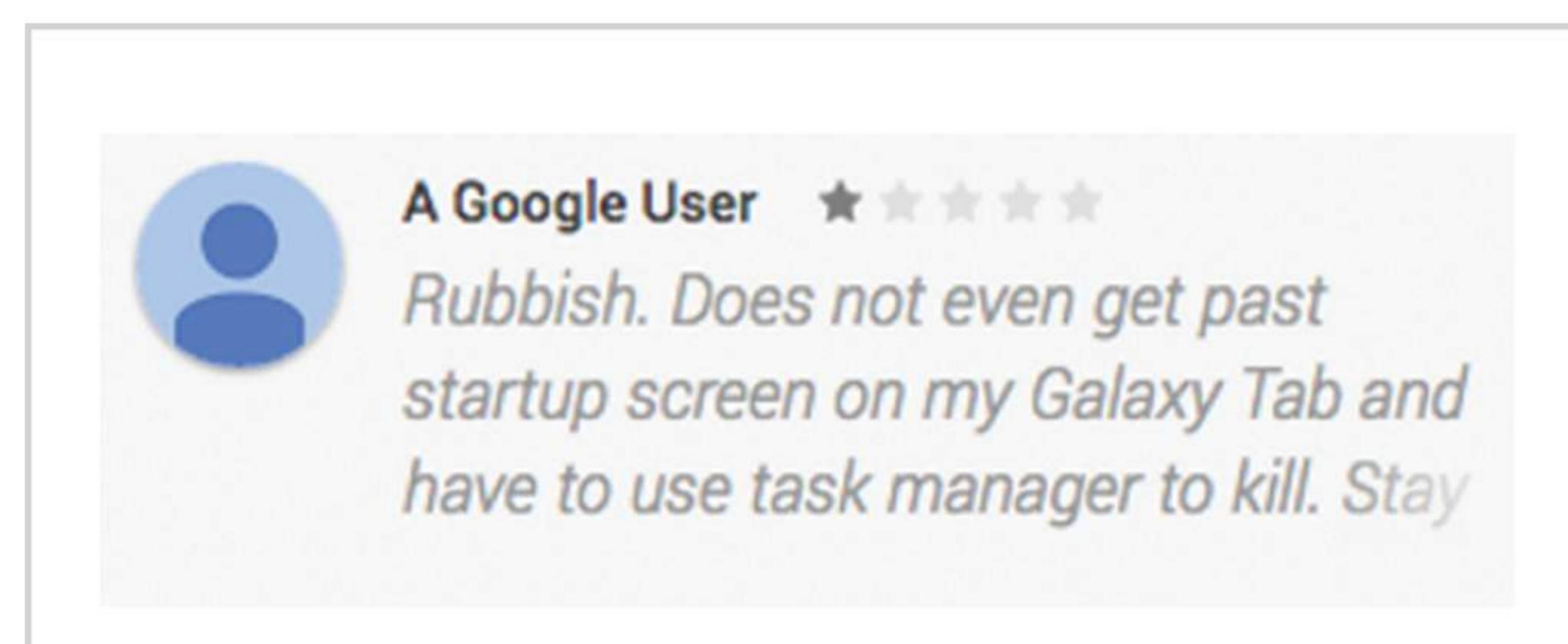
If you go down that route, you will be one app in a sea of hundreds of similar apps in every category in the app stores.

This me-too feature heavy design thinking will get reflected in everything, right down to app icon. As an example just check out this screenshot of productivity apps in the iOS App Store.

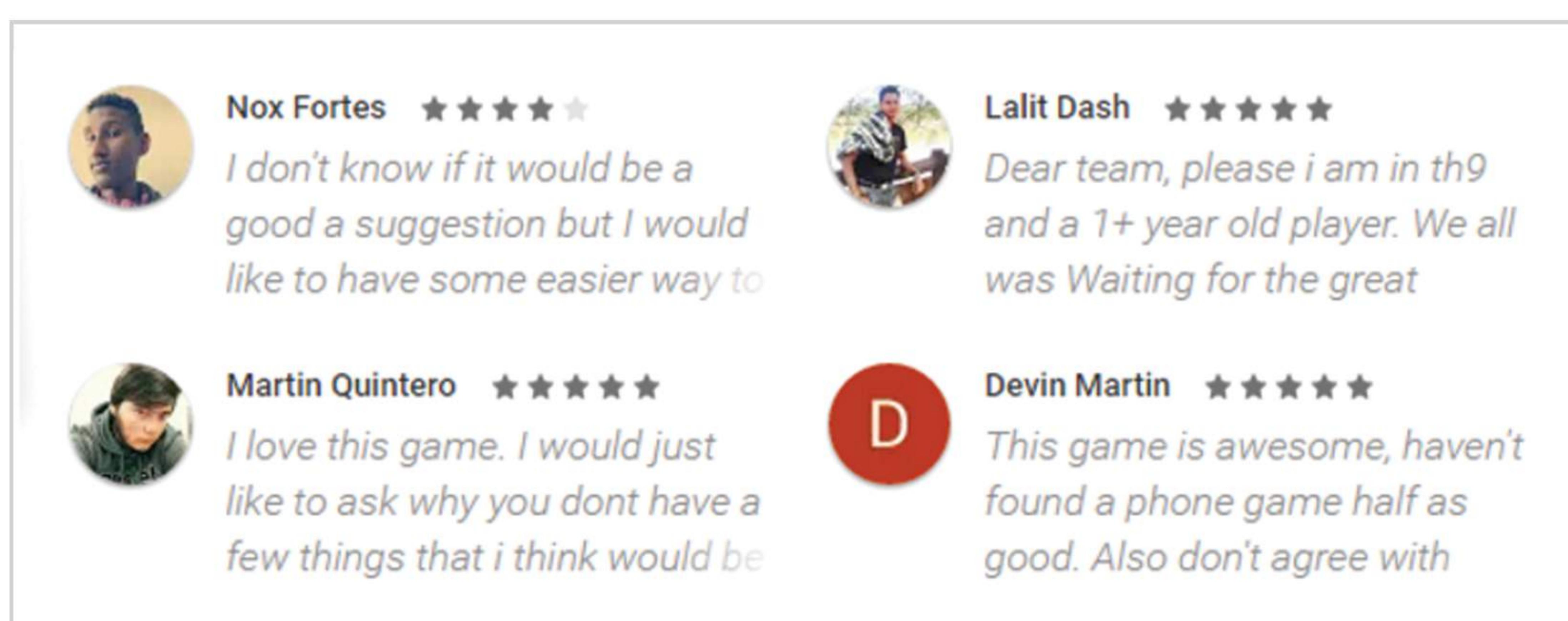


If your app was in this line up the odds of an user clicking on it are around 1 in 48.

Many of these users will be window shoppers, and will never open your app a second time. And those that take the pain to write reviews or ratings won't really be the happy and satisfied users.



Contrast this screenshot with reviews amassed by highly addictive games like Clash of Clans.



The second screenshot is the result of creating an app experience which floods the brain's reward centers with dopamine.

This isn't about menus and loading speed and a buttery smooth experience on any device. The dopamine kicks in because of several psychological effects and frameworks at work.

Some of them are:

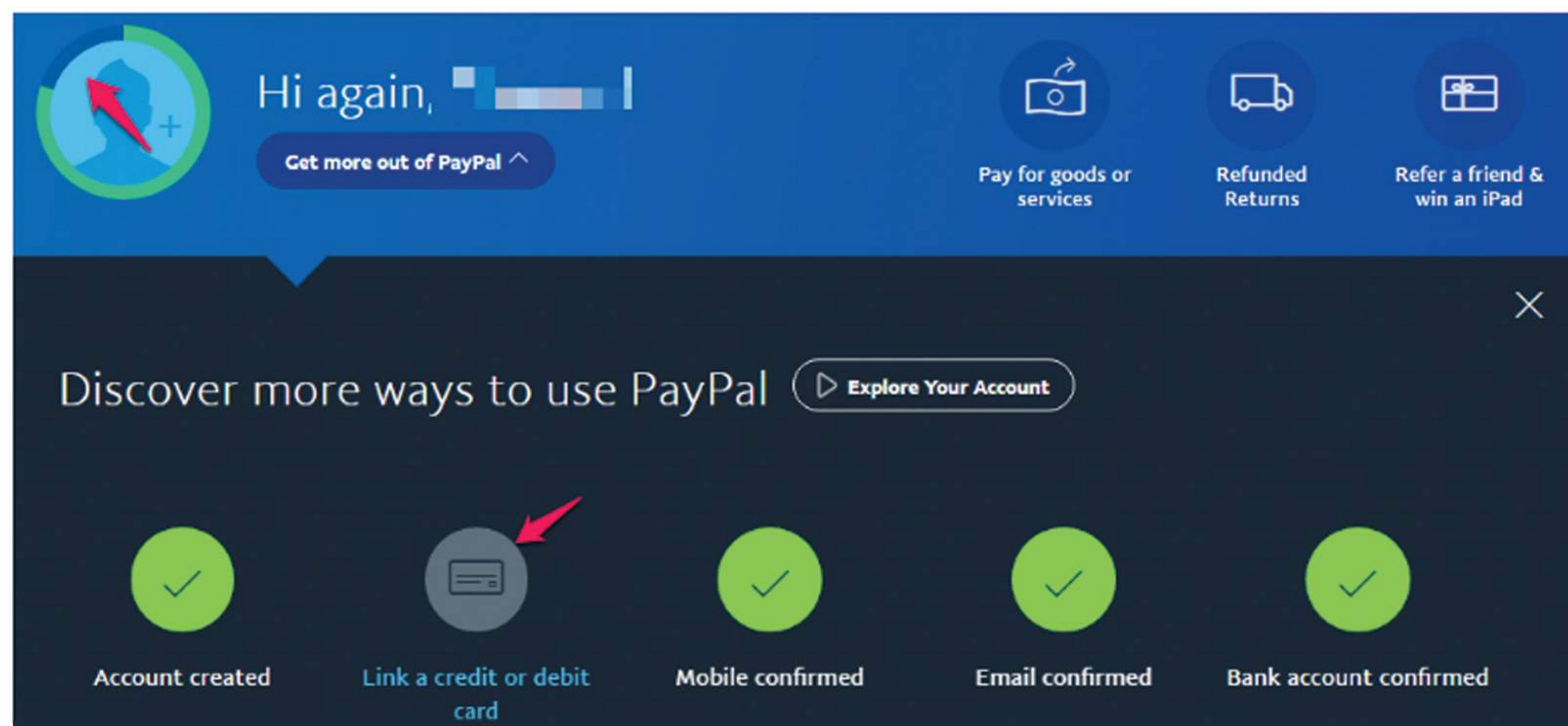
1. The Zeigarnik Effect

This effect is described by Baumeister and Bushman in "Social Psychology and Human Nature" as

The tendency to experience automatic, intrusive thoughts about a goal that one has pursued but the pursuit of which has been interrupted.

That's the reason why progress bars in onboarding flows or multi page forms work so well. This effect makes users want to complete the process until all the steps in the flow are complete.

PayPal does a great job of using this effect to get users to complete their profile by highlighting steps that haven't yet been completed



Every time I open PayPal, I am drawn to the incomplete tasks

If you have trouble with low onboarding completion rate in your app you should test with a different flow which shows users incomplete tasks.

2. Endowed Progress Effect

According to this effect, people are more likely to complete a series of tasks if they get a head start.

Think about the time when you are supposed to fill a form or create an account.

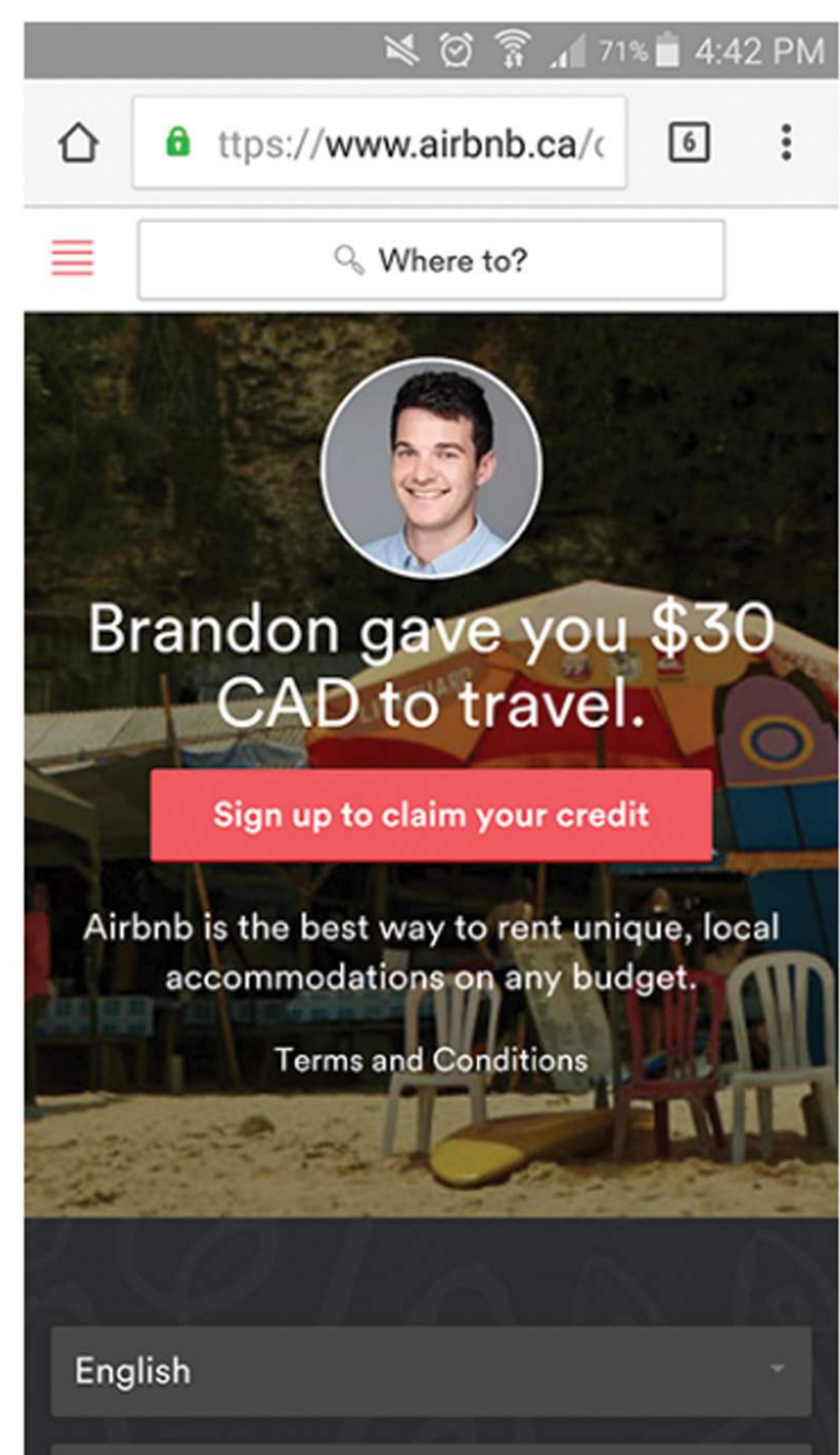
Wouldn't you be more likely to fill out the form if some of the form fields were already pre-filled?

Aren't you more likely create an account if you have the option of taking a shortcut by clicking on a social sign in button instead of laboriously filling out a form?

To make your app more engaging find out how you can provide artificial progress towards the goal. In most cases, you don't even have to give anything substantial.

If users are given 10 tasks to complete where 2 are already done for them versus 8 tasks from ground up, they are most likely to complete the former.

Airbnb executes this very well with their referral program. When you already have money sitting in your account you are more likely to add more money and start transacting.



I already have money in my account? Sweet!

3. Big Fish Little Pond Effect

This effect¹ explains why people feel better about their performance if they are placed at the top of a low performing group rather than at the bottom of a high performing group.

If your app relies on leaderboards (for example, any gaming app) you can keep users engaged by comparing them to similar players, or show the player at the top of smaller lists rather than at the bottom of bigger lists.

Here's how you can keep your users engaged by taking advantage of this effect:

- *Instead of ranking users on a global scale, rank them against the list of their Facebook friends also playing the same game.*
- *Use location data to rank users against players in the same town or office or even those who has visited your location in the last 30 days.*
- *Change the ranking system by highlighting achievements that are common to general users and the top performers.*

4. The Principle of Least Effort

According to the best selling book “Thinking Fast and Slow” by Nobel Laureate Daniel Kahneman the human brain operates on two modes

- *Mode 1, where little thinking is required and decisions making is impulsive, emotional, fast, and automatic.*
- *Mode 2, where more effort is needed and decisions are made after careful and conscious thought, with plenty of analysis.*

The human brain is heavily biased towards Mode 1 type decisions, and highly engaging apps don't make users think.

Want to connect with someone on Tinder? Simply swipe.

Want to hail a cab on Uber? Just type your destination and you are good to go.

Not forcing users to jump through hoops has always been one of the core tenets of UX design, and the less cognitive load you impose on your users the more engaged they will be with your app.

5. Gambler's Fallacy

Gambler's fallacy is essentially the human belief that the world is fair and balanced, and if you had been down in the past the universe will conspire to make things right in the future.

Gambler's fallacy kicks in when you start believing that if five flips of a coin has turned up heads every time the 6th flip will be tails.

Game designers have long used gambler's fallacy to keep users playing, and this video² gives a very good overview of how Candy Crush, one of the most addictive games deploy this fallacy to trick our brains so that we advance through the game, even when it gets progressively harder with every level.

6. The IKEA effect

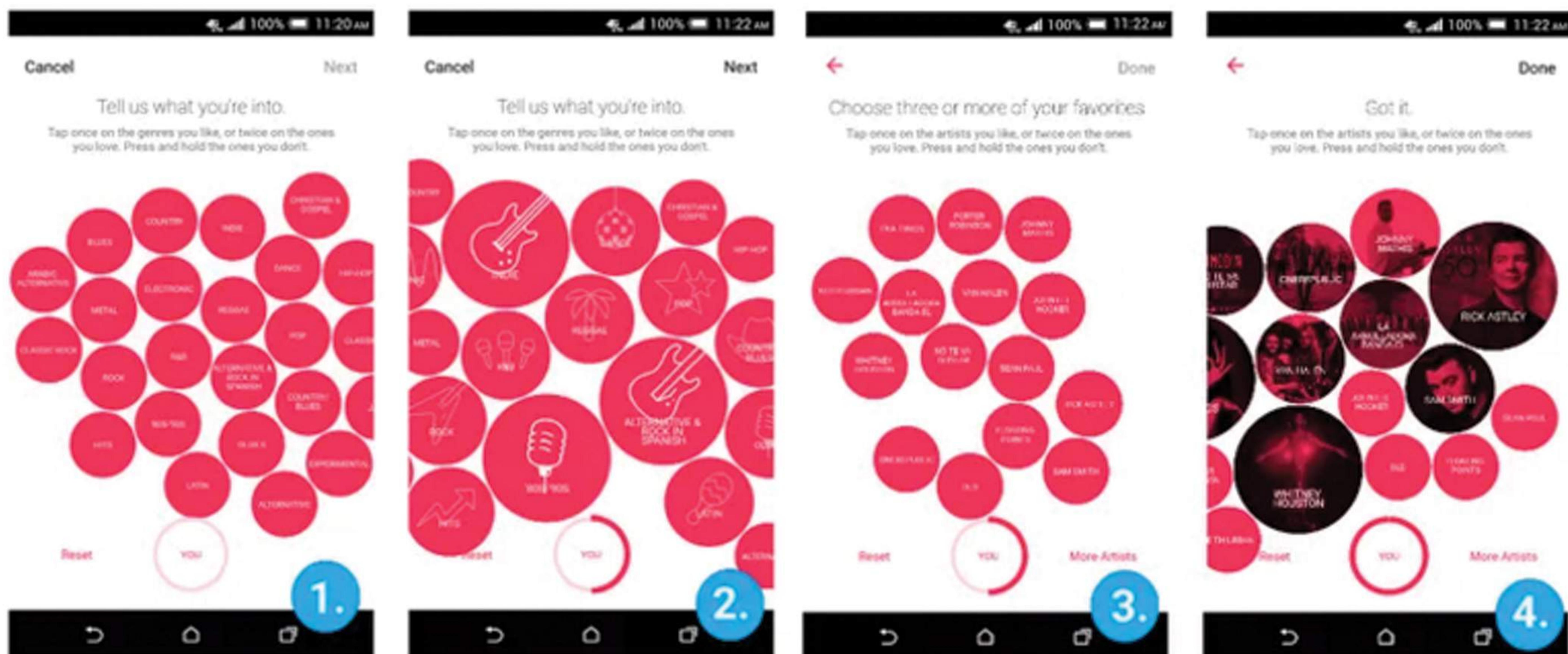
IKEA effect is a cognitive bias where people place more value on things they have built, even partially, over similar but polished products build by third parties.

This effect is the reason why Spotify or Netflix is so addictive: the more you create playlists and watch lists, the more the app feels something that you own.

The IKEA effect is why Amazon has a wishlist, and it's also the reason why it's just so hard to create a Facebook killer, because of the head start they have on user generated content.

High engaging apps will harness the IKEA effect to get users to share, create and co-create, right from the onboarding stage so that the user becomes emotionally invested in the product.

The IKEA effect



An example of using the IKEA effect to improve onboarding in Apple Music

From engaged users to investor favorites

Using these psychological cues to build a high engaging app makes your company attractive to investors as well.

According to Sarah Tavel, partner at Greylock Ventures (early investors in 4 of the 5 tech companies created since 2000 worth more than \$10billion), companies whose products have high user engagement are more likely to grow to sustainable multi billion dollar business.

She evaluates apps using the “Tavel Hierarchy of Engagement” which has four levels, where the foundational level is based on engagement.

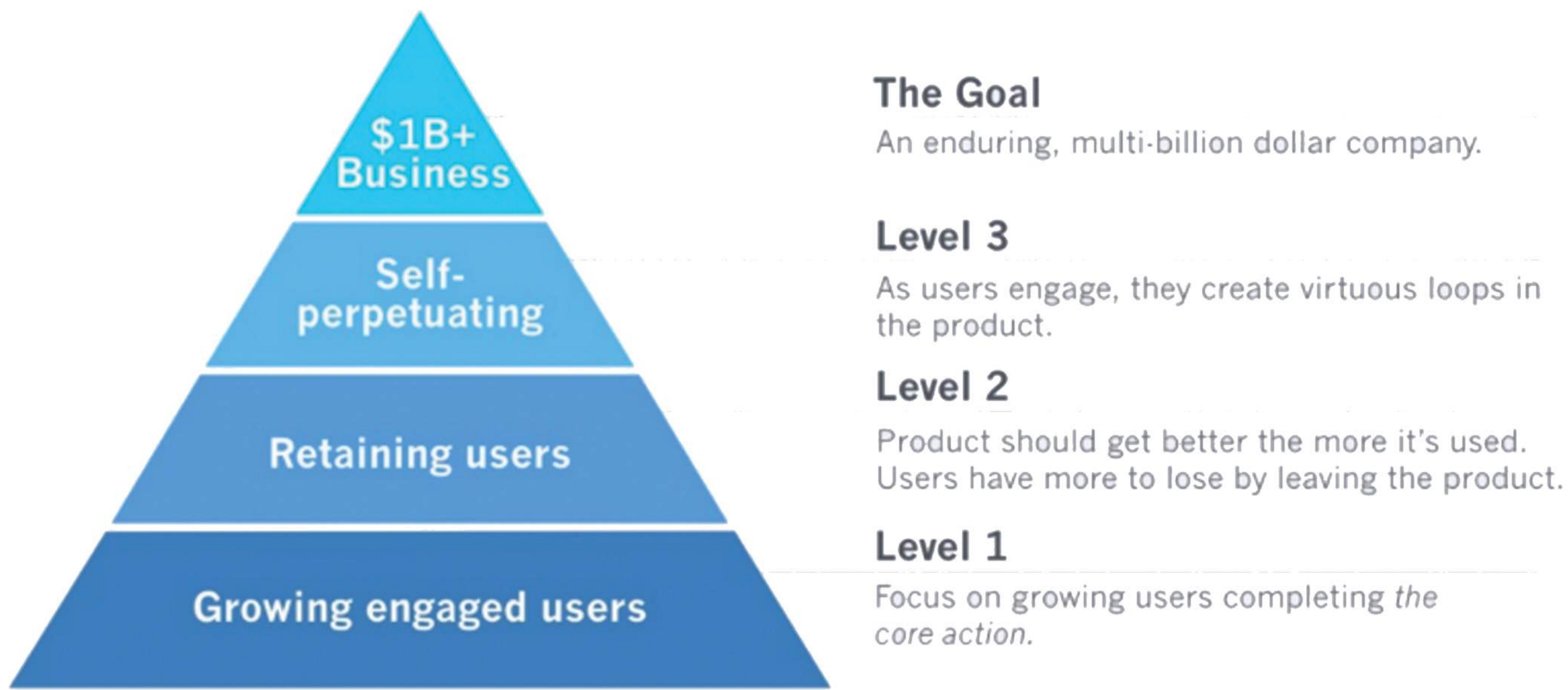


Image courtesy [Slideshare](#)

At **Level 1** companies should focus not just on any kind of user growth.

They should focus on growth of users completing core app actions which generate value for users. High growth apps like Snapchat, Twitter, Pinterest, and YouTube respectively focused on getting users to snap, tweet, pin and upload videos.

This cohort of engaged users will supply the fuel that will power exponential and organic growth.

In this context, Tavel also highlights the Fogg Behavioral Model which predicts the actions can generate habits.

To find out more about Tavel's framework you can check out her Slideshare presentation.³

Why engagement IS still the king

You can solve the user acquisition problem by throwing money at it. It's relatively easy to buy traffic off Facebook or Google ads, dangle attractive discounts or freebies, or run a viral campaign to snag eyeballs and sign ups.

It's how thousands of products and apps, most of them running on VC money, have acquired users.

However, no matter how deep your pockets are you won't be able attract people to use a sub par product over and over again.

Building a sticky product requires a deep understanding of the psychological forces which drive human behavior.

Couple that with a monitoring and engagement tool such as **Clevertap** which not only tells you what your users are doing inside your product but also lets you tweak their in-app experience in real time and you have got yourself a winner.

About Clevertap

CleverTap provides a comprehensive behavioral analytics and user engagement suite that enables brands to identify, target, engage, measure and monetize users across mobile and web.

CleverTap's unique approach, which consolidates analytics and engagement on a single platform, along with industry-first features such as live-user segments, is a powerful solution for businesses who want to design and implement real-time, personalized and impactful strategies for rapid business growth.

Since launching in 2013, **CleverTap** has helped more than 4,000 customers, including leading brands such as McDonalds, Star, Sony, Samsung, DC Comics, DealsPlus, and BookMyShow to better serve their customers

See Clevertap in action

Thank you!

The CleverTap platform offers blazing fast app and web analytics, powerful segmentation and multiple ways to engage with your users via push notifications, in-app messages, emails, web notifications, SMS, or browser push. We help you understand your users, and effectively engage them with marketing campaigns. Our technology is solid, secure and scales as you grow. The CleverTap team is spread across Sunnyvale, San Francisco, Los Angeles, New York, Mumbai and Bangalore.

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