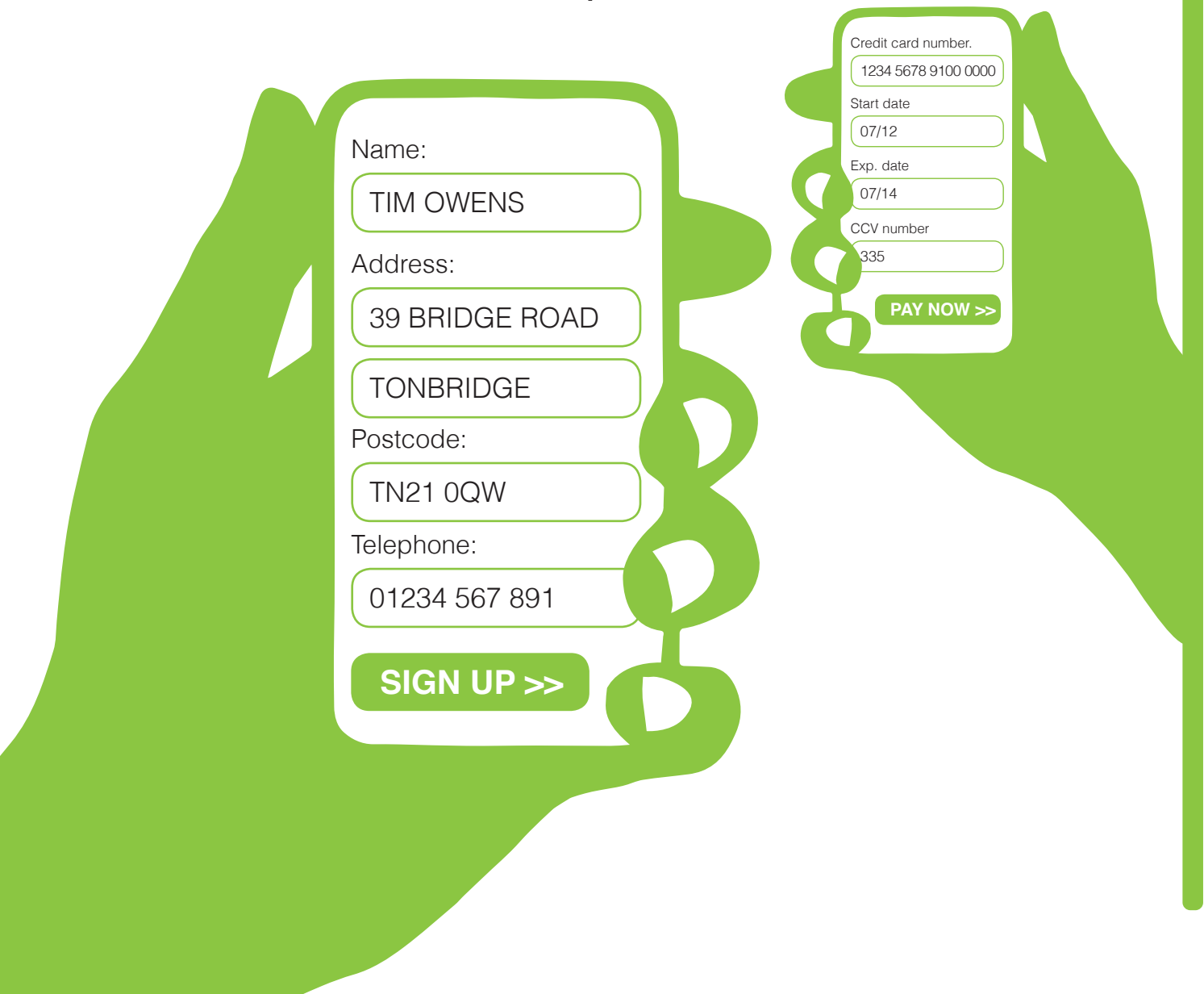




Five tips to make sure that customers transact with your app

A Jumio White Paper



Getting started

So when did apps install themselves in our mobile lives?

Was it when the first smartphones came out? Or when Steve Jobs released the first iPhone? As it happens, apps have been around for a little longer than that....

A very early and primitive app that made it into mainstream consciousness was Snake, which first appeared on a Nokia 6110 device in 1997. It's now on over 400 million mobile phones and is in its ninth version.¹

Back in 2003, the predecessors of today's smartphones came onto the market. Big clunky things they were and a bold move in the opposite direction to the then current trend that smaller was better.



Palm Pilot
Released March 1997

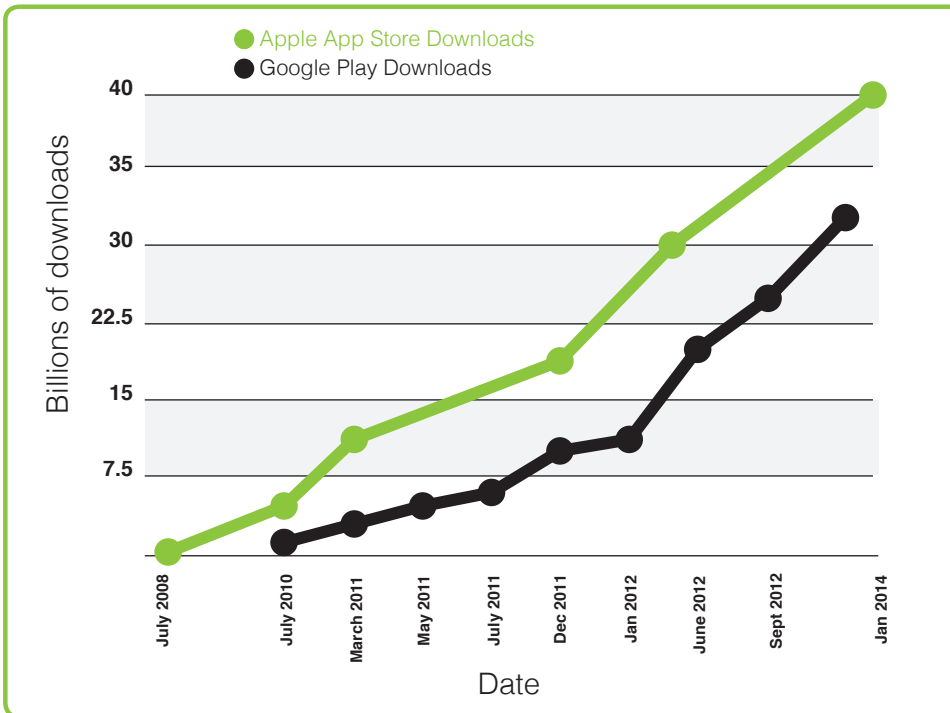
O2 xda
Released June 2002



These increasingly clever devices afforded increased computing power and a few forward thinking folks in the mobile industry championed the notion of installing applications that were not native to the phone when it came out of the box.

¹ Nokia Innovation (2012)

Fast-forward a decade and Gartner has predicted that mobile apps will be downloaded more than 268 billion times,² generating revenue of more than \$77 billion, by 2017. Apps are now mainstream, as demonstrated by the year-on-year growth for Apple's app store and Google Play.^{3 & 4}



Today's consumers are more likely than ever to use their mobile devices to make a purchase. Adobe estimates that approximately six out of seven mobile shoppers used a smartphone to shop in 2013 and overall app use posted 115% year-on-year growth.⁵

Although on many fronts the mobile economy is booming, there is a sobering side to this phenomenon that needs considering which is highlighted through a closer look at the lifecycle of an app.

Just because an app is available, it doesn't mean it will be successful. Getting to a critical mass of customers discovering and downloading is no mean feat; breaking into the top 50 iPhone app league means 23,000 downloads a day.⁶ Going to the next step, the stats show a shocking attrition rate in that 25% of downloaded apps are never opened and are discarded.

The path to building a successful app that customers will repeatedly transact on is fraught with obstacles and the growing pains of transacting over mobile devices are evident for all to see.







In this Jumio white paper we will share our research into the rise of the mobile app, why apps lose customers and examine why mobile commerce is actually underperforming against its full potential.

To help companies competing in the app economy, this white paper will share 5 key tips to help merchants ensure that their mobile apps aren't leaving money on the table.

² Gartner, January 2014
³ Apple App Store downloads, Business Insider
⁴ Inside Mobile Apps, Android reaches 25 billion app downloads
⁵ Adobe, 2013 Mobile Consumer Survey Results
⁶ Techcrunch, How do you break into iPhone app store top 50?

What can you do to make sure your app doesn't get deleted and brings in the money?

Here are Jumio's top five tips:

-  1 Be aware which operating system or platform will deliver the best return for your app 5-6
-  2 Be sensitive to data privacy concerns 7-8
-  3 Reduce payment friction 9-11
-  4 Balance functionality with speed and performance 12-13
-  5 Build customer retention into your app 14-15
-  And of course, consider how technologies like Jumio can help make customer sign-up and transactional processes quicker and slicker for a better customer experience. 16

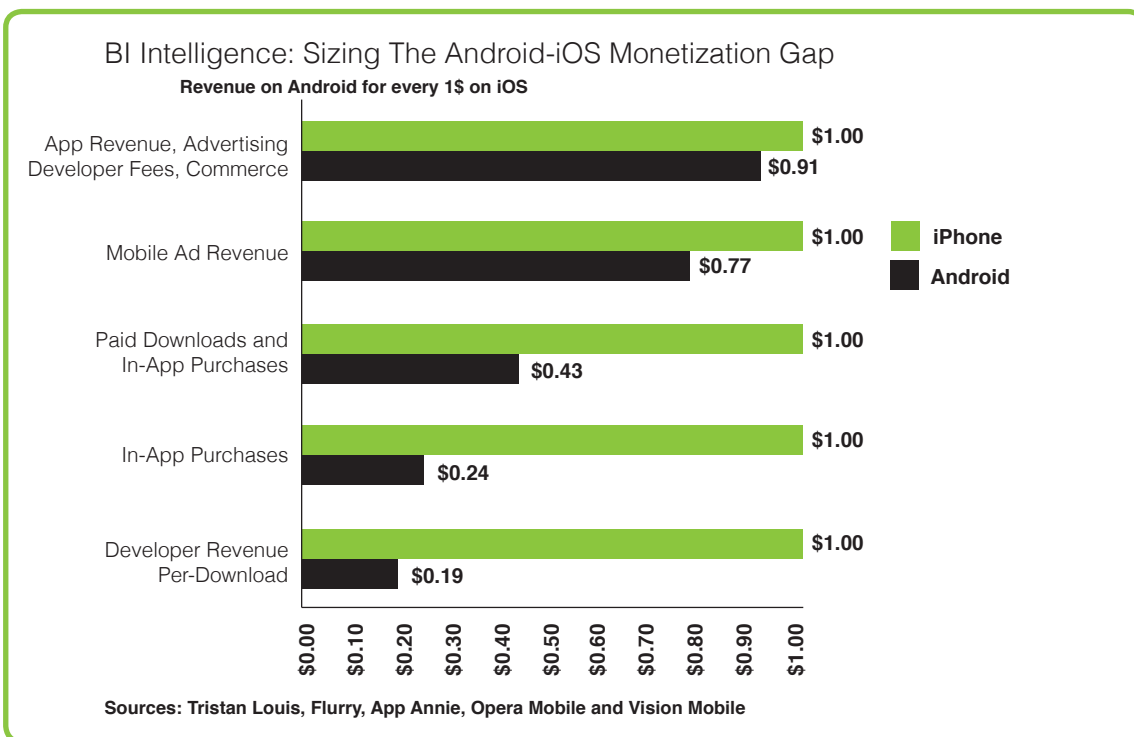


1

Be aware which operating system or platform will deliver the best return for your app

Not all app users are created equal...did you know that iOS users spend almost five times⁷ as much online as Android users, but that Android dominates the smartphone market with 80% market share?⁸

Here's how iOS wins hands down from a monetization standpoint⁹



While it seems clear from the BI Intelligence chart that iOS delivers greater revenue to the entire app ecosystem, anecdotal evidence suggests that this gap is closing.¹⁰

Which OS has the best reach?

While OS market share varies according to geographic region, Android leads globally with a reported 79% of the smartphone market.¹¹ And not only are there a greater number of handsets out there, but Comscore found that Android users also tend to engage in more categories of media than iOS users. The upshot of these two points is that Android offers a larger and a more media-diverse audience than iOS.

⁷ <http://www-01.ibm.com/software/marketing/solutions/benchmark-hub/dec26.html>
⁸ <http://techcrunch.com/2013/11/14/gartner-456m-phones-sold-in-q3-55-smartphone-android-at-82-share-samsung-a-flat-leader/>
⁹ <http://www.businessinsider.com.au/chart-of-the-day-the-difference-in-developer-revenue-between-android-and-ios-2013-11>
¹⁰ Forbes. Android apps closing the revenue gap with iOS rapidly
¹¹ Strategy Analytics January 2014



1

Be aware which operating system or platform will deliver the best return for your app

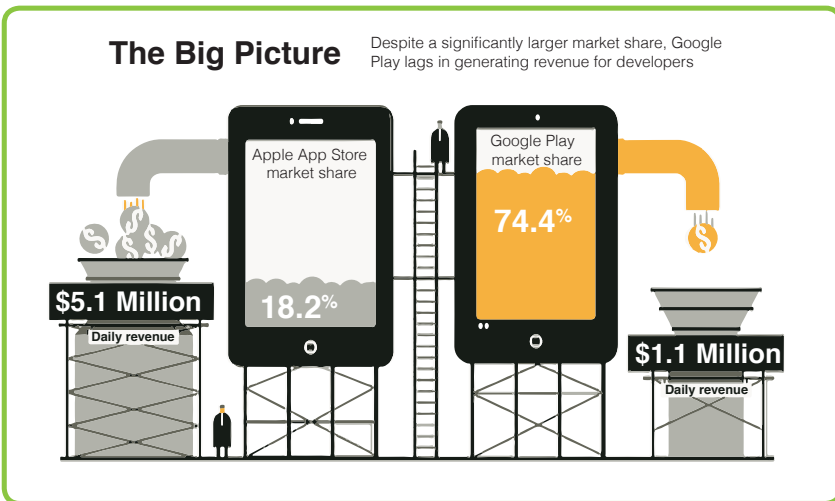
Who spends more?

A recent IBM study found that iOS users spend almost five times as much online as Android users.¹² And as a percentage of total US online sales during the peak festive season 2013, iOS drove five times the volume of sales that Android did, with a share of 23% versus 4.6% for Android. Also of note was that iOS users spent \$93.94 per transaction, nearly double the value of Android users, who spent \$48.10 per order.

Who's more engaged?

Even if you don't have a transactional app, there's evidence in the same IBM study to suggest that iOS users display six times the engagement of Android users.

Comscore reports similar traits, finding iOS users are 10% more likely to use social media on a daily basis, 7% more likely to access news, and 15% more likely to visit retail sites than their Android counterparts.¹³ In summary, we can't put it any better than the clever illustration (left) from Venturebeat¹⁴

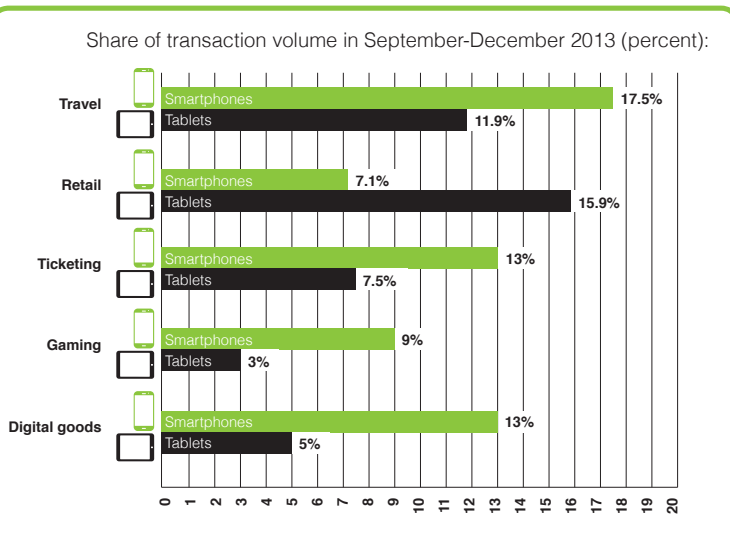


What about revenue characteristics by platform?

Going beyond the debate around operating systems, it's worth taking into account transactional behaviour by platform. According to Comscore stats, per user, tablets drive about 20% more spending on average.¹⁵ In fact, research from Mobile Payments Today puts the average transaction value for tablets at 89 Euros (\$122), 67 Euros (\$92) for PCs, and at 66 Euros (\$90) for smartphones; evidencing an even higher revenue differential of 35% for tablets over smartphones.¹⁶

But digging a bit deeper, the below data from a 2013 Adyen survey shows that outside of traditional retail, smartphones account for a higher transactional volume

than tablets in sectors such as travel, gaming and digital goods.



In conclusion, it's worth taking some time to understand the pros and cons of each platform and thinking about their alignment with how you will measure success for your app. The evidence suggests that iOS users are more transactional, but Android will give you greater reach and that its tablets bring home the money.

¹² IBM. December 2013. Digital Analytics Benchmark.
¹³ Comscore. March 2013. A Tale of Two Smartphones.
¹⁴ Venturebeat. Comparing Apples and Google.
¹⁵ Comscore. 5 things every marketer should know about mobile commerce.
¹⁶ Mobile Payments Today. Tablets see higher value purchases than smartphones.



2

Be sensitive to data privacy concerns that may inhibit app usage

Trust is the number one barrier to the growth of mobile content and commerce.

That's according to the latest figures released by MEF, and it's a concern that's growing. This year, 40% of consumers named trust as one of the barriers to purchasing via mobile compared with 27% just 3 years ago.¹⁷ Extrapolating these figures, MEF predicts that "a lack of trust will prevent one in two mobile media users from purchasing via their phone by 2015."

Here's some insight as to what consumers are worrying about and how this lack of trust manifests itself.

The TRUSTe Consumer Confidence Privacy Report found that 80% of British smartphone users worry about data sharing when they use apps. And the challenge for app providers is that consumers are not sitting back passively worrying; 69% believe they are responsible for their own privacy and are taking steps to protect it. Nearly 1 in 4 consumers refuse to share any information at all with mobile apps and over 80% of consumers are not willing to share the data that many businesses want the most:



...will not share contact information.



...will not share precise location data



...will not share web surfing behaviour

The advice here is simple. Don't ask for information that you don't need in order to execute the app. It's understood that organisations want to build detailed customer profiles for a whole range of loyalty and customer insight business reasons, but this has to be done on the customer's terms and in a way that is easy for them to fill in.



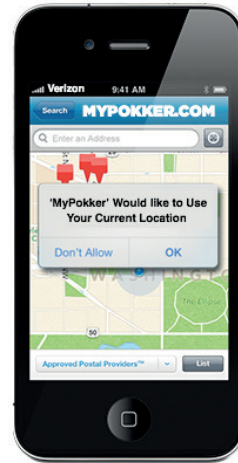
2

Be sensitive to data privacy concerns that may inhibit app usage

Here are a few DON'TS when it comes to asking for personal information:

DON'T ask for location...

If your app isn't a map, or in some way helping the user find a specific place. We all know that advertisers love location info and it could suggest that you're just asking so you can pass it on to them.



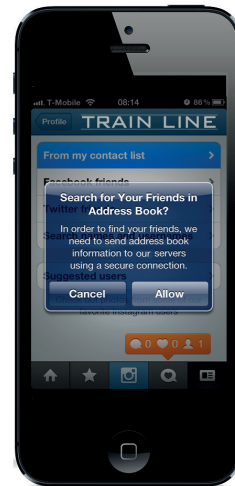
DON'T ask how old the user is...

When they just want to get lunch. We know you want to understand who your customers are to improve targeting, but it could be off-putting if irrelevant and cause potential customers to just delete the app. Only 19% of consumers are willing to share their date of birth unless it's for valid verification purposes, so asking for this information during account set up isn't going to go down well.



DON'T ask to access their contacts...

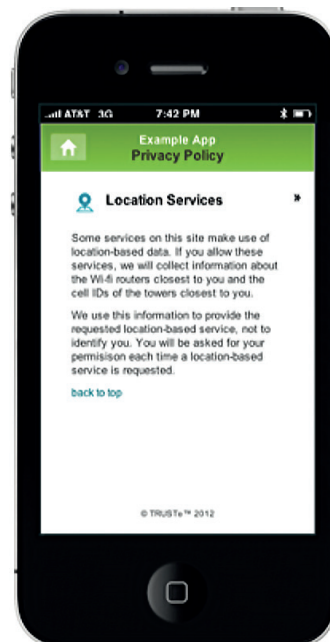
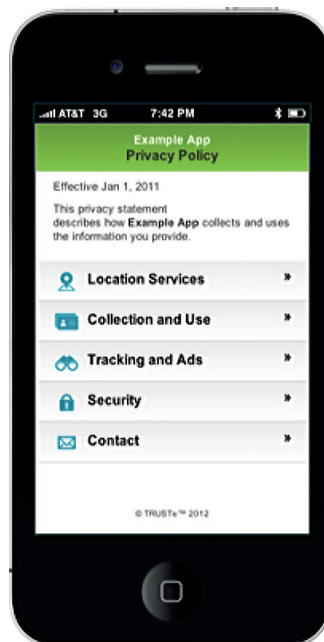
Unless your app is going to try to connect them with their friends. And even then, with stories about legitimate access being abused storing the contents of address books, many will be wary of sharing contact data at all.



These suggestions aren't just good practice. In an effort to protect consumer privacy, Apple, Google and Microsoft agreed to require developers to inform users about data usage policies before they download apps.¹⁸

And importantly – you can't just pay lip service to privacy. Just last year in the US, the FTC fined Path \$800,000 for breaching its own privacy policy.¹⁹

There are some good tools out there to create privacy policies such as this one from TRUSTe, which is very clear and will let you create a basic privacy policy for free.²⁰



¹⁸ CNN. Tech firms agree to privacy protections for mobile apps
¹⁹ FTC. Path social networking app settled FTC charges
²⁰ TRUSTe privacy app creator



3

Reduce payment friction

The best payment experiences are the ones that users don't even notice. They happen in the background after they exit the taxi that was ordered through Uber, or as their skinny latte is collected from the barista, having jumped the queue because they ordered their favourite caffeine fix on their way to the coffee shop in advance using Beat the Q.

With spontaneity playing a major role in smartphone shopping (according to Google it accounts for 81% of purchases²¹), the closer we can get to Amazon-style one click payments, the better. But mobile commerce still has some way to go. Figures for Christmas holiday shopping in 2013 suggest that 47% of shoppers abandoned purchases on mobile devices due to payment friction, and the majority do not attempt the transaction later on a computer, which equates to almost \$15.9 billion in lost US sales and £1.5bn lost UK sales over that holiday period.²²

When it comes to payments, it seems mobile retailers are still underperforming. 47% of mobile purchases are abandoned because the checkout process took too long and 41% claim the process is too difficult on their device.

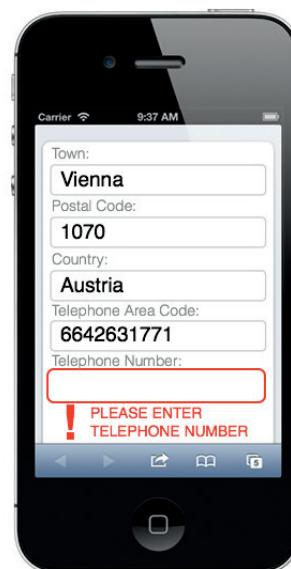
For those who would rather spend their time selling great products and delivering a great customer experience, here's a few ways to reduce payment friction:

Become a UX ninja

Many design gurus around the world would tell you that good design principles can solve everything. Many consumers around the world who have given up and abandoned checkout would agree. Those on the start of the path to UX enlightenment should first of all seek enlightenment from the Keystroke-Level Model - that's a scientific way of measuring how long it takes to type data into forms. And then learn the ways of the Gestalt Laws of Grouping - how the brain groups together data elements instead of processing a large number of smaller stimuli, allowing us to understand and conceptualize information more quickly.

Don't lay traps for your customer to fall into!

How many times have we all entered our full name into a first name field or our whole phone number into the cell or landline prefix? It's a simple enough task to parse the data out as it gets presented to the payment process or transactional servers. Nothing is fool proof but more fool the merchant who makes it easy for customer to fall into data entry traps.





3

Reduce payment friction

Be an autocue for your customers

Be intuitive and make life simple. For example, if you have a field that requires numerical data, ensure that the keyboard defaults to numerical data entry. The easier you make it, the more likely customers are to complete the transaction.



Help your customer see the light at the end of the tunnel

Include a progress bar that shows how far along the process your customer is. The psychology of having invested time to get to the half way stage of the checkout process will work wonders for your completion rates!

Streamline the form

Research shows that the fewer the fields a customer sign-up form has, the higher the completion rate. Imagescape's latest study into this dark art of enticing customers to complete web forms shows that forms with 11 data entry fields when shortened to 4 fields created an increase conversion of 160%.²³

With Gartner predicting that in-app purchases (IAPs) will account for 48% of app store revenue by 2017,²⁴ (a major increase from the 11% it accounted for in 2012) it's worth getting the payment experience right. The challenge for developers is to find the right balance between a payment process that is at once seamless, as well as offering enough control to consumers.

Why ask customers to manually type in their details at all?

Even better, why put your customers through a minute of hassle when they can scan their data into the transaction in less than five seconds?

Here's an example of how Jumio's computer vision technology means that customers don't need to type in their card data at all.

Jumio

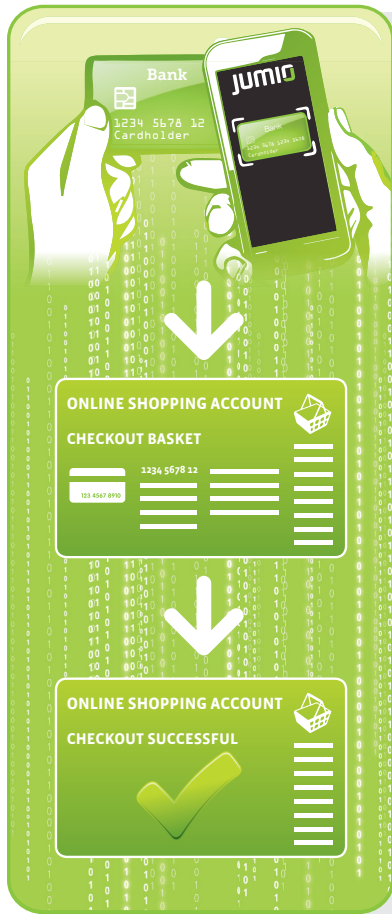
23 Imagescape. Making forms more efficient
24 Gartner. September 2013



3

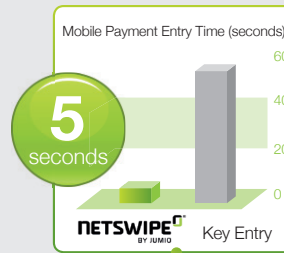
Reduce payment friction

How to make a card-not-present transaction more present



1

Apps using Jumio's Netswipe offer their customer the option to check out by scanning their card with their device camera.



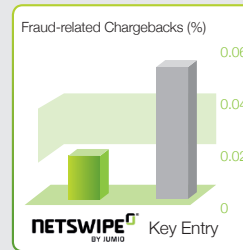
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Jumio scans card number, expiry date, customer name (and sort code and account number if needed) and sends it directly into the payment process.

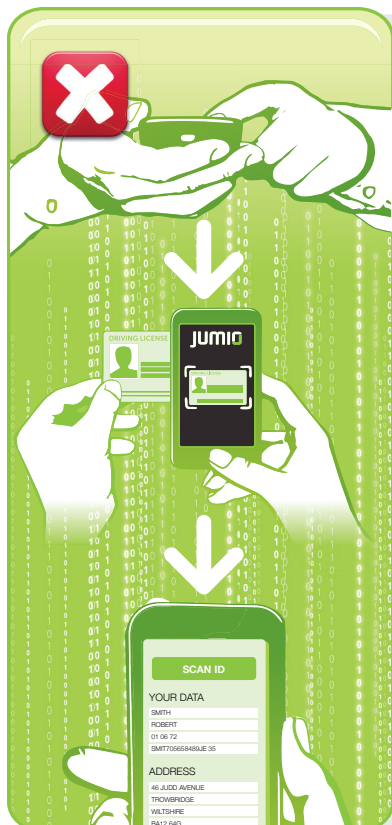


3

Customer evidences that they have the physical card and flies through deposit and transaction is complete.



And you could also make it faster and easier for your customers to enter personal information



1

Fastfill makes it easier for your customer to complete your sign-up form, with fewer keystrokes to reduce abandonment caused by laborious data entry.

2

Your customer simply taps the Scan ID button, selects the ID they wish to use and holds it up to their device camera.

3

Fastfill scans the ID, extracts the data it contains and feeds data into your new account form. It takes just a second or two.

Jumio

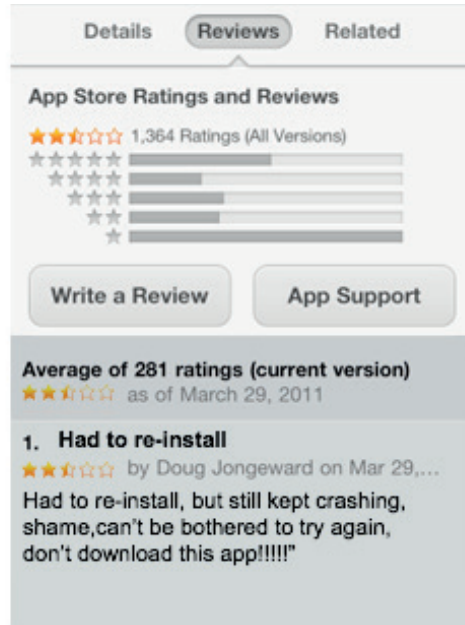


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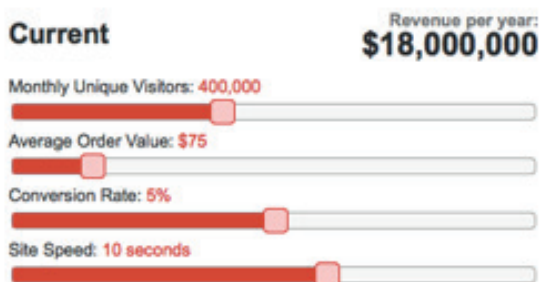
Balance functionality with speed and performance

Speed and performance matter, because they strongly affect ratings, rankings, and discovery. More than half of the 1-star rated apps (among the top free applications in the Apple App Store) cited poor performance as a major issue.²⁵ And 15% of those were specifically about speed; apps were slow, took a long time to load or failed to load entirely.

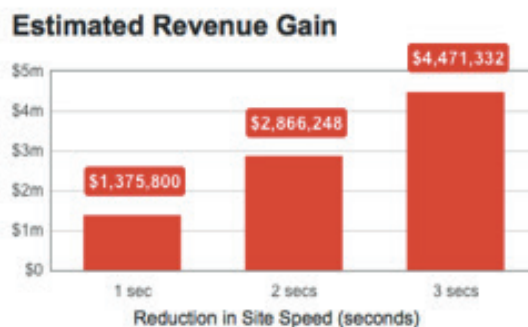
A more recent study by Apurify found that an overwhelming majority of developers (87%) have seen a direct connection between the performance of their apps and the reviews and ratings they receive in app stores.²⁶



It's not exclusively a mobile problem, but one that affects online as a whole and is the focus of a number of studies. There are also products to help you monitor performance and impact, such as TagMan's calculator that lets you calculate lost revenue for each additional second that it takes a site to load. Simply stick in your average basket size, conversion rate, monthly unique visitors, and site speed and the figures speak for themselves.



Revenue per year: **\$18,000,000**



More worryingly 78% of consumers expect mobile apps to load as fast as — or faster than — a mobile website.²⁷ Four out of five app users expected an app to launch in three seconds or less and 31% expect it to launch in just 2 seconds.

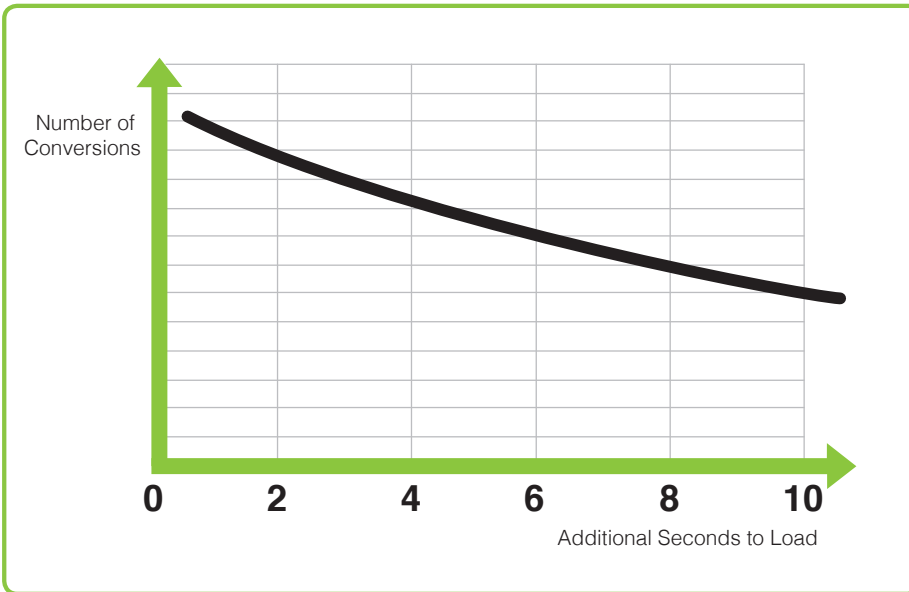
²⁵ Apurify, October 2013. Mobile App Discovery. A Definite Need for Speed
²⁶ Apurify, February 2014. The State of Mobile Development and Performance 2014
²⁷ Compuware. Mobile Apps: What Consumers Really Need and Want



4

Balance functionality with speed and performance

Based on known data points of load time intolerance, here's how conversions will decrease for every additional second of load time.



On top of all this, consumers are increasingly aware of performance issues thanks to resources such as Verizon's list of High Risk Android™ Apps. It lists the top offenders in terms of loss of functionality (e.g., loss of data connection), unexpected high data usage, battery draining 2 or 3 times faster than normal and security or privacy exposure.

Many of the issues that impact speed and performance are best considered at an architectural level. Tactics such as reducing the number of APIs that the app calls out to and batching up the information that you send to the server will significantly improve processing speed and, more importantly, deliver a better customer experience. And as always, don't get greedy for customer data. Process only what you absolutely need to.

Think lean

We think that following the lean start-up principle of creating a minimal viable product, popularised by Eric Ries, provides a helpful framework for approaching mobile app development.

Minimum viable product is described as "that product which has just those features (and no more) that allows you to ship a product that resonates with early adopters"²⁸

In other words, the key to success is creating simplicity, easy functionality, and fast processes that keep customers on board and encourage on going adoption.

"Lean thinking defines value as 'providing benefit to the customer'; anything else is waste"

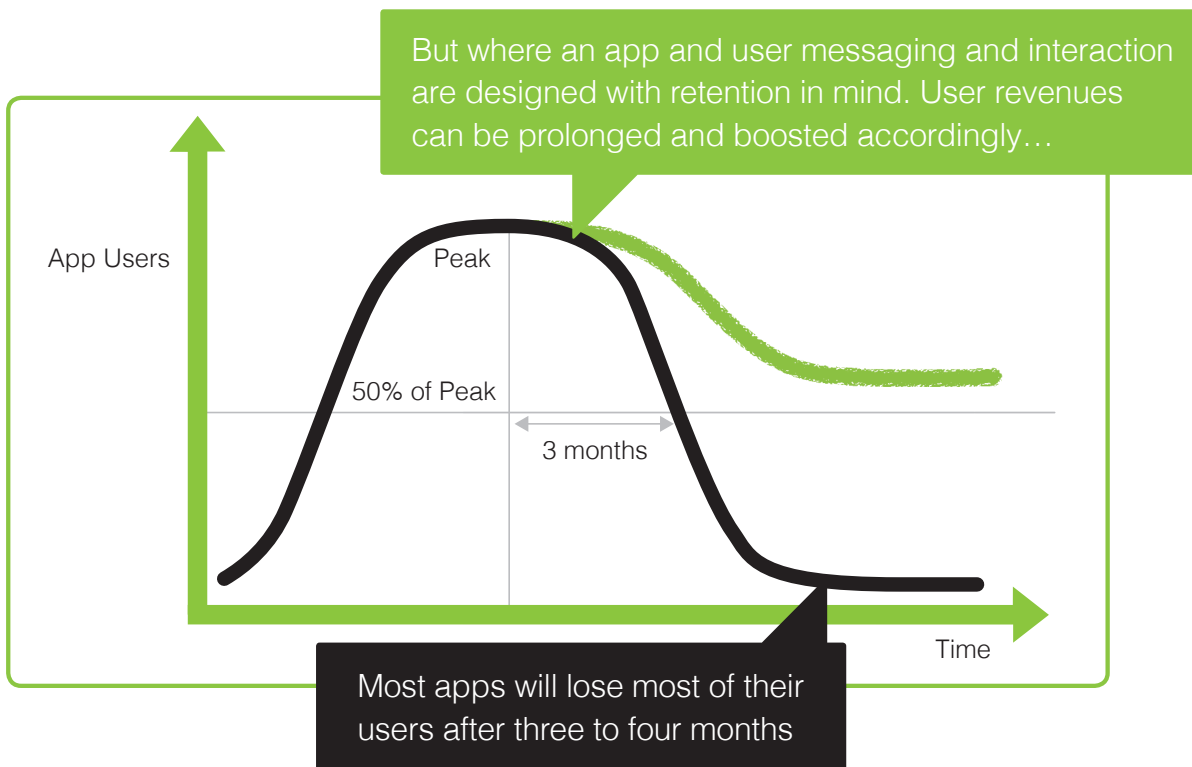
Eric Ries, Silicon Valley entrepreneur and pioneer of the lean start-up movement



5

Build customer retention into your app

Recent research from Flurry suggests that the first few months of an app's life on a smartphone are key, because the rate at which people delete apps from their phone levels off after about four months. Flurry's figures suggest that half of apps lose half their peak users within 3 months, but holding on to users beyond this critical 4-month mark can have a significant impact on average revenue per user.²⁹



So how can you hold on to your users? One of the simplest fixes is to measure use and performance of the app to ensure good, consistent functionality.

Analysing crashes and fixing the causes are also important for retention. When consumers were asked if they had encountered a problem (app crashes, freezes, errors, or either slow to load or won't load) accessing a mobile app within the last six months, a majority (56%)³⁰ said yes. Crucially 79% would only retry a mobile app once or twice if it failed to work the first time, making deletion much more likely.

Once you have consistent performance fixed, there are a number of things you can do to stop your customer from hitting the delete button.



5

Build customer retention into your app

Integrate new features

Ensure that your app remains relevant. Life style and beauty app Sephora reports 300% year-on-year growth and presents a great case study of how an app can evolve over time.³¹ In particular, Sephora has introduced a number of social features, such as Instagram-type functionality, which lets users take beauty photos and share content, building engagement and community among their users.

Send relevant reminders that you're there

Runtastic also does a great job of building participation and community among users and offers relevant health related tips to trigger use if the app hasn't been opened for a while.

Promote the benefits of your app

Swiftkey does this well, letting users know how much time they've saved using its mobile keyboard app and presenting the information in a format that encourages sharing through social media. This has the effect of reinforcing its value to the current user as well as recruiting new customers from friends and followers.

Personalise your customer's experience

Hailo remembers its user's journeys, making the process of ordering a cab even faster over time. In an age where consumers want things simple, fast and instant, personalisation is one of the easiest ways to improve the customer experience and encourage repeat use. There's nothing more valuable than convenience and ease of use whilst we're constantly on the go.

JUMIO

³¹ Mobile Commerce Daily, December 2013

How can Jumio help make customer sign-up and transactional processes quicker and slicker for a better customer experience?

We hope that this White Paper has given you some ideas on how to make your app more successful, not just in terms of downloads but towards the ultimate goal of making a transactional app that delivers revenue from loyal and satisfied customers.

At Jumio we specialize in computer vision technologies that ensures your customers sign-up and transact, then transact some more.

Our computer vision products are easily integrated into your app so that their device camera is turned into a payment card or an ID document reader. Instead of laboriously typing in their details the old fashioned way, your app users can sign-up to become a customer and make an in app payment in a quicker slicker way.

Here's how...



Turn your customer's smart-phone or computer into an ID scanning terminal that makes it fast and easy to capture and verify their ID and other credentials to meet KYC requirements and reduce fraud. The ID verification process only takes about 60 second from start to finish.



Enable your mobile app or site with credit card scanning and validation at the touch of a button. Netswipe removes payment friction by turning your customer's phone or computer into a real-time, secure credit card reader.



Dramatically improve your new account sign-up and shopping cart completion rates with near-instant population of your customer's personal data.

Jumio is a next-generation payments and ID software-as-a-service company that utilizes proprietary computer vision technology to reduce mobile payment friction and ID fraud. Half of the top 10 consumer internet companies, along with hundreds of other retailers, financial institutions, marketplaces, gaming companies across the globe have adopted Jumio products.

Jumio

email: AppTips@jumio.com

