LiveArea

Progressive Web Apps

Making sense of the app-less app revolution



Table of contents

Foreword 3

Part I: A new benchmark for organizations 5

- Introduction: Bridging the app gap 6
- What are PWAs? 9
- Why are they called Progressive Web Apps? 10
- The benefits of PWAs 12
- In a mobile first world 16
- A new cure for app fatigue 18
- Why now? What's changed? 20
- Faster, better conversion and revenues with PWAs 22
- Challenges deploying PWAs 25

Part II: Let's get technical 27

- Service workers enhance UX 28
- PWAs work well with headless commerce 29
- Technical considerations 32
- Invest in PWAs now or wait? 33

The future: PWAs are not a magic bullet 35

Foreword

Unlocking the power of devices in ways native apps never could.

The future is already here, it's just not very evenly distributed. This could easily be used to describe the uptake of progressive web apps. PWAs are the next generation of applications, combining the best of web and mobile apps. Those who have built them, worked with them, and seen customers adopt them realize they are the future. PWAs are a gamechanger.

They're faster loading than native apps, boosting customer loyalty and retention, since convenience is king. They work offline, and download straight from a webpage, so no need for an app store. They're also on the ascendance, when app fatigue is everywhere, and when most eCommerce is going mobile. But these are incremental benefits compared to their real potential.

Advanced architectures will allow us to unify our experience, brand, and platform across multiple channels backed by intelligent, directed engagement. New devices and technologies will engage customers in novel and creative ways. PWAs are truly a part of this larger revolution.

They allow brands to be proactive rather than reactive. You no longer have to wait to engage customers. For instance, by using geo-sensing and proximity sensors, brands know when a customer is outside a store. In the blink of an eye they can research their profile and shopping habits, and send a personalized promotion to entice them in.

It's these opportunities that will allow us to metaphorically shake the hands of our customers and literally be there for them when they need it.

And although we often focus on mobile use, the true impact of PWAs extends beyond this. For the first time in history we now have the capability to effectively solution across all channels with a single application and code base. This includes on a watch, a smartphone, a laptop, voice channels or a smart television. It can serve almost all of their needs, igniting interactions with brands across a multitude of touchpoints.

It also presents global commerce with entirely new ways to engage customers, providing a single solution, a single application, across all channels. Companies that successfully embrace PWA architecture will set themselves apart from the rest.

First-mover advantage

Developers have been evangelizing about PWAs for a while. But main stream adoption of a new technology requires a few exceptional case studies and leaders. We have started to see this over the past year or so, with companies like Pinterest, Uber, and Starbucks not only moving to this architecture but providing data that shows large gains in loyalty, retention, and conversion.

PWA, by nature, is an ideology and not a strictly defined architecture, so no clear, prescriptive, one-size-fits-all approach is available. This leaves many executives and development teams unsure of the way forward or hesitant to adopt.

With strong case studies of large scale PWAs and the benefits brands are seeing, we're starting to see the potential. But these are still early days. It will take leadership and forward-looking brands to take PWAs to the next level. When this happens, we will see a lot faster adoption and more maturity. Therefore, there's still a lot of potential for first-mover advantage.

The reality is this: building a PWA application is expensive and takes longer to develop than a native app. This deters adoption, although PWA benefits – both quantitative and qualitative – are greater over time. Also, it involves more than just giving the green light to a development team. PWAs represent an ecosystem challenge involving teams involved in user experience and design, sales, marketing and data scientists.

If PWAs can enrich every channel, you really need to understand the engagement your customer will have with your digital channels and how this new architecture can play to your brand's strengths, not only currently, but how everyone will use this new system in the future.

Let's be honest, not every business needs a PWA. You need to ground your approach to this app architecture in your needs and realize the benefits you want to achieve. Don't approach this without doing the homework.

Then, work collaboratively across all disciplines as a team to collectively design your web app.

Will every application be a PWA by the end of 2020? Nowhere near that. Will most applications embed some aspects of this exciting development by year's end? Yes. What will drive uptake is education, not evangelizing from developers, not hype, but understanding.

Everyone needs to realize in black and white what's on offer, what's at stake, what the potential is and why we need to move in this direction if we're to move beyond native apps and bring the next generation of customer engagement to the market. That's why we've produced this ebook.



Paul Bidder,
Senior Sales Director, LiveArea EMEA



Sean Farrington,
Area Vice President, Interactive Design, LiveArea

PART I

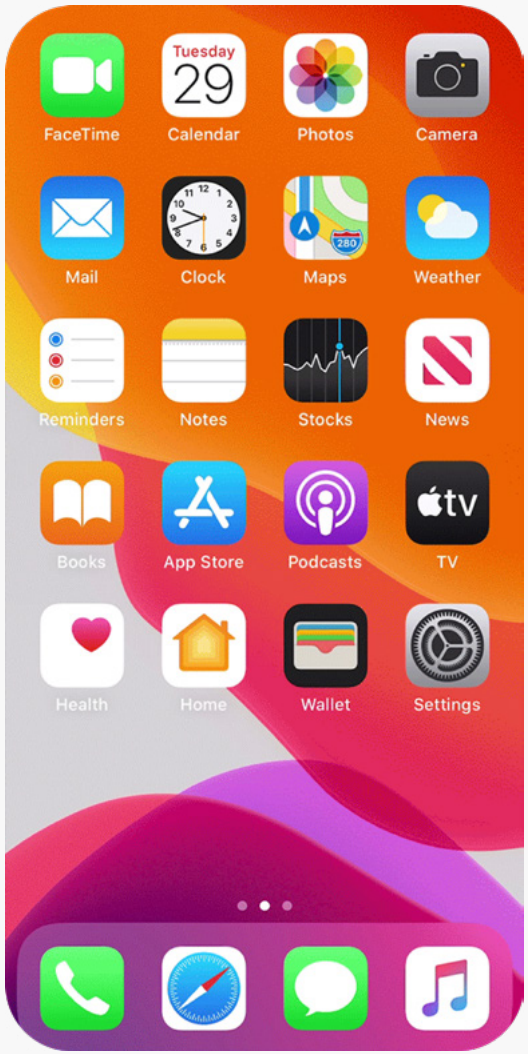
A new benchmark for organizations

INTRODUCTION

Bridging the app gap

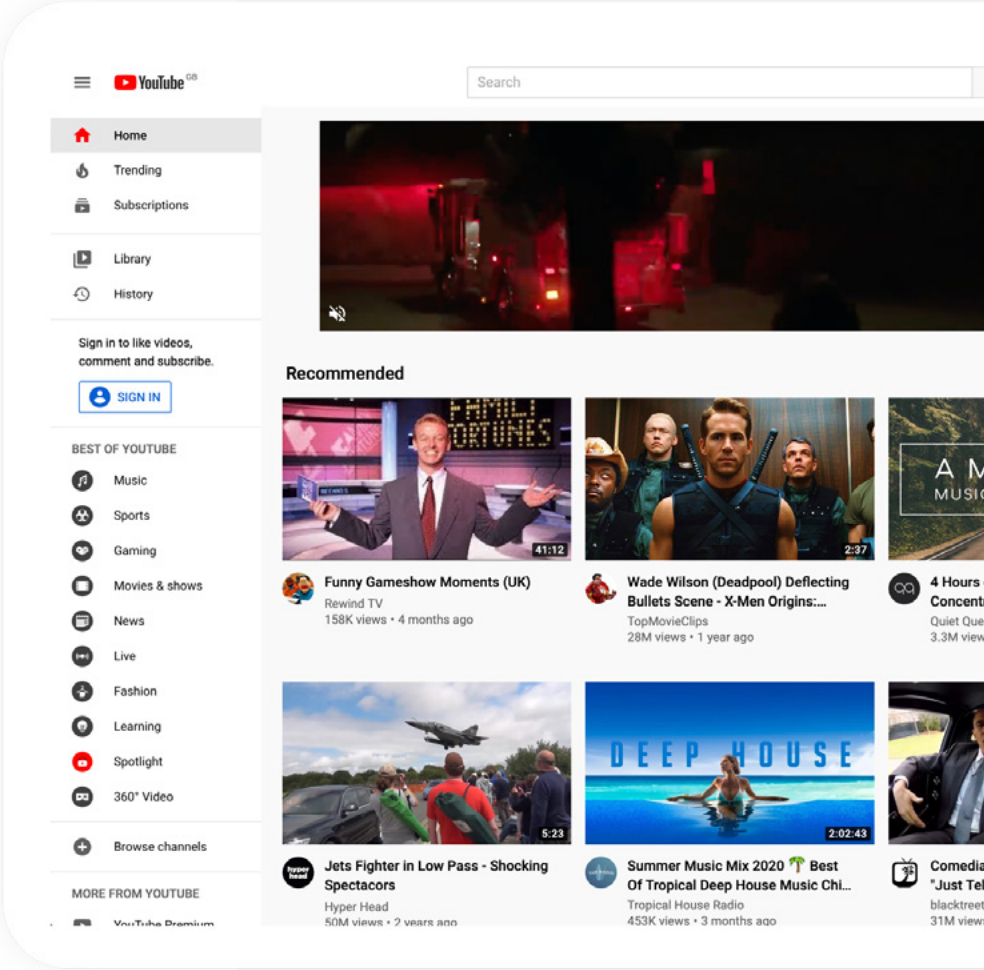
It's easy to say *ditch native applications and start developing PWAs or progressive web applications because they're better.* It's easy to say *they're a game-changing solution for consumers and developers across the globe.* But many questions remain: What are they? What are the benefits? Could PWAs be superior to native apps? If they're so amazing, why isn't there mass adoption?

Firstly, it's worth stating a bold message here: As an alternative to native apps, PWAs have the potential to revolutionize how consumers interact with brands via our mobile phones, via the Internet, tablets and desktops as well as the eCommerce channels. Some even say PWAs are the future of computing. Their meteoric rise comes at a time when consumers face app fatigue or peak app – they don't want any new icons on their smartphone home screens. In the process, the app market has reached a state of inertia. PWAs answer this issue. They're app-less apps delivered via the web, bypassing the need to install an application in the first place.



Despite the ongoing hype, mainly among the developer community, most businesses are only in the 'I might be interested,' rather than 'actively considering them' phase. Some have yet to discover PWAs, while most consumers are largely unaware of what they are. They know about eCommerce apps of course, but PWAs draw a blank. By the end of 2020 this is likely to have changed.

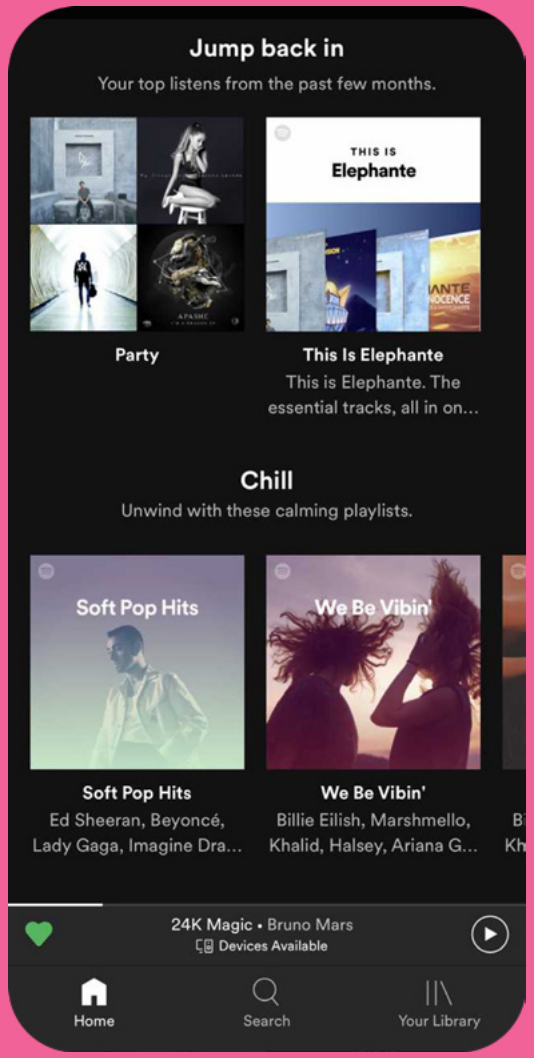
It helps that Google, one of the initial pioneers of this technology, is backing PWAs to the hilt. They are even replacing some Android apps on their Play Store with PWA counterparts. For instance, Twitter or YouTube TV apps are now PWAs. They are more efficient and less resource hungry when compared to Android apps. This could open up their use to a much broader set of users. Google is quietly making this change, but it is significant.

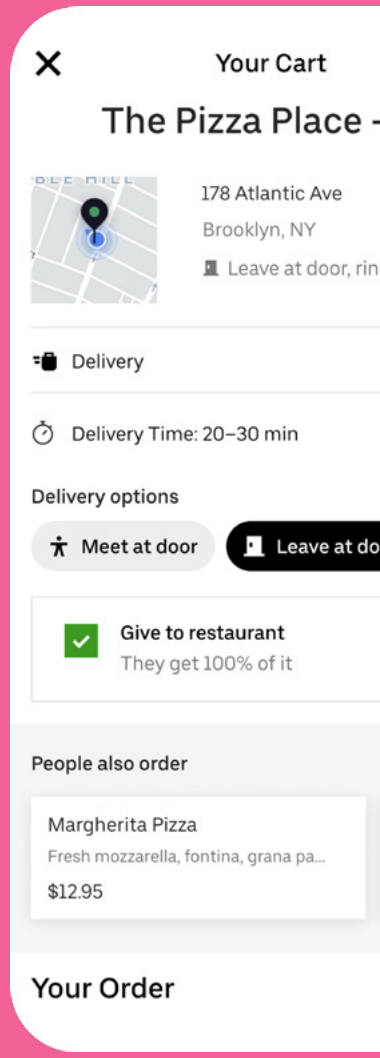


Increasingly, the long-term business opportunities for PWAs are becoming more tangible, so are the benefits, especially to do with user experience. A successful PWA will always start with a great design engineered to take advantage of the technologies associated with this type of application. Don't forget they've only been around for five years. Early adopters have already shown good results. Big brands such as Uber, Twitter and Spotify have all jumped on the PWA bandwagon.

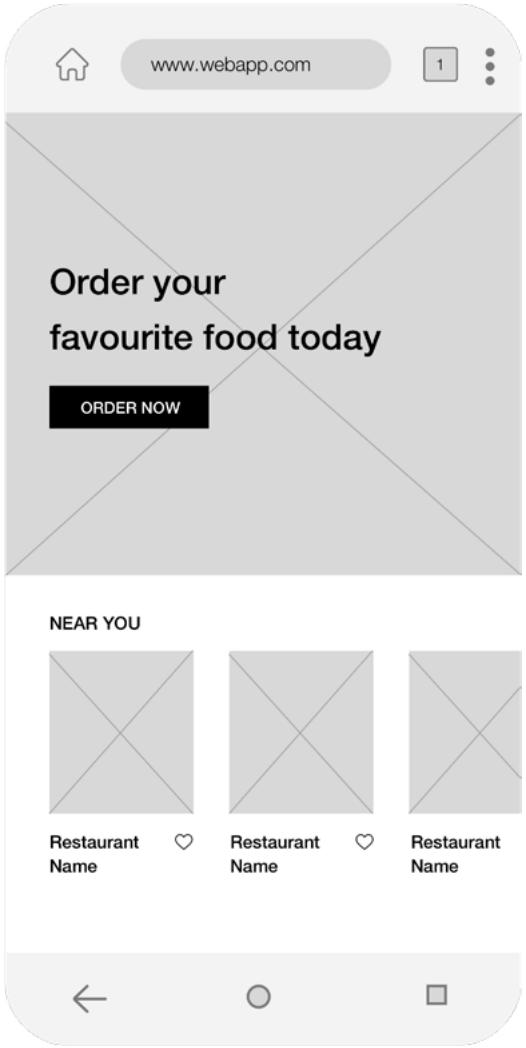
Yet this is a nuanced story. PWAs are still a relatively new concept, there are challenges with designing engaging user experiences in a browser that can rival or exceed what is so familiar to native mobile developers. This raises other questions: Will PWAs kill native apps? Should all businesses invest in developing them right now? Why do brands continue to use native apps rather than PWAs? Are web-based, app-less apps the future and native apps the past? Are PWAs a universal solution for all?

This ebook will lay out most of the issues in black and white so you can decide. At LiveArea we are evangelists for digital transformation





What are PWA's?



Progressive Web Apps are essentially responsive websites. Yes, websites, and high-functioning ones at that. They are built and enhanced with modern APIs and behave like native apps, communicating with your smartphone or device. It is worth thinking of them as app-like experiences delivered via the Internet. You open them in a similar way to a webpage. This means that they are reliable and easily installed reaching anyone, anywhere, on any device with a single codebase.

Google announced their development back in 2015 defining them as: "experiences that combine the best of the web and the best of apps." This seems like a long time ago. But they've only recently taken off. PWAs launch in a browser and therefore have the reach of the mobile web, and because they act like native applications it means that PWAs have an experience that mirrors them, too.

> "Experiences that combine the best of the web and the best of apps."
>
> - Google Definition of WebApps.

Why are they called Progressive Web Applications?

The acronym **PWA** is best understood backwards:



They are an **application** because they install and run code or software on a device or computer.



They have **web** in the name because they use common Internet-based languages, including HTML, CSS and JavaScript.



Then it's **progressive** because they "progressively" add features based on device and browser while still working on older browsers or devices that do not support all the latest features.

The three pillars of PWAs

Capable

It used to be the case that only native apps could lay claim to a lot of capabilities that encompassed video, image technology, geolocation or push notifications. Not anymore. APIs for the web, and therefore PWAs, are evolving fast, encompassing features like file system access, media controls, app badging, and full clipboard support. These capabilities are only going to expand.

Reliable

Speed, performance and stability are critical for apps and PWAs demonstrate all three. They even work regardless of a network connection, even offline. It makes them highly reliable.

Installable

PWAs don't need an app store. They are launchable from a user's home screen, dock or taskbar. You can search for them and switch between them. A PWA moves from its own tab into a standalone window. This gives PWAs their own significant appeal.

"PWAs are the desirable forms of websites draped in an application's attire."

- Piyush Lathiya, CEO, Aureate Labs

The benefits of PWAs

PWAs are more than just up-to-date web applications with responsive design. They provide the user experience of a native app, utilizing web technologies. One of the most prominent benefits is that you publish anything you want, anytime, and the general public across the globe are free to determine if your PWA is worth the clicks. There is no third-party arbitration (namely Apple, Google or Microsoft). More importantly, PWAs have some core characteristics and advantages:

Low data consumption

Mobile data can be costly – particularly in developing markets. PWAs require a lot less bandwidth compared to native apps. That's because they're much smarter when it comes to caching. PWAs also run on old browsers – after all they are just websites.

App store independent

PWAs are independent of app stores. This is excellent news for SMEs and independent developers. Companies don't need to pay Apple or Google fees to be published on their app stores. Developers aren't restricted by any app store restrictions or policies either.

Available through URL

It seems obvious but downloading from a website URL means the number of steps to get an app is reduced with PWAs. All you need is a shareable address. It means downloading is frictionless. Perfect for eCommerce.

Geolocation and notifications

Imagine a time when you walk by a physical storefront. By using geolocation and a notification API, multi-channel retailers can now know exactly where a consumer is. Getting you into the store becomes easier with a PWA. In the past they've had no access to you, but not anymore. The PWA via a service worker can launch, connect you to a retailer's CRM, know your shopping habits and then deliver some type of intelligent marketing content while you are in the vicinity.

Benefits from SEO tactics

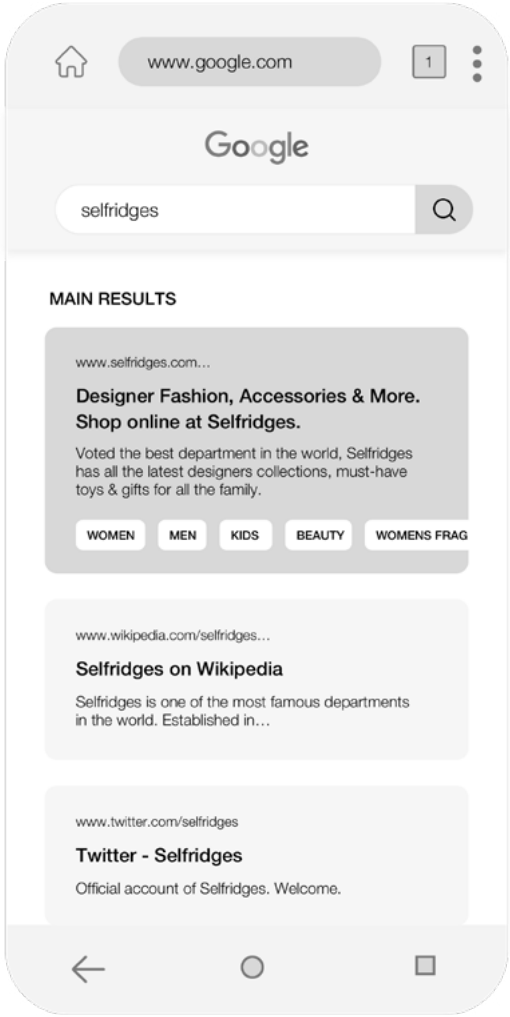
PWAs are referenced like websites. It means they can make the best use of SEO (search engine optimization). Therefore, they have much greater visibility on the web unlike native apps. Great for building brand awareness and visibility for the PWA itself.

PWAs install and launch from mobile home screen

Having an icon on someone's mobile device is a major benefit. The home screen is a sought-after piece of digital real estate. It is a trusted spot in people's lives. Just like native apps, you can now have them appearing as icons, so you don't have to remember the URL.

Lightning fast performance

PWAs use service workers. They are a script that your browser runs in the background and are great at caching and preloading. When the page is needed it can be displayed instantly, you don't have to go back to the server. This makes for a much speedier UX. PWAs can send push notifications as well.



Easier to mantain

PWAs are easier to maintain because the application is written in a single language across all supported channels.

They can run offline

Thanks to caching abilities PWAs can function when there is no or limited Internet connection. Certain web content and functionality is made available offline. Filling in a form, for instance, will be cached and then completed once a connection is back online.

Monetization

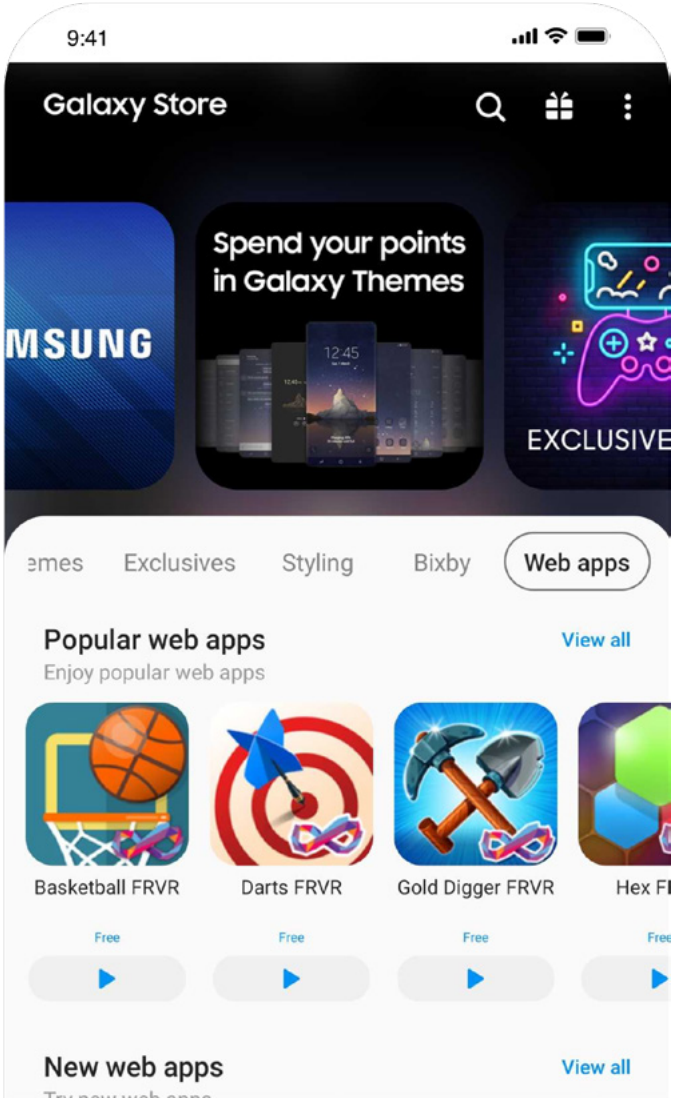
Native apps do not have a monopoly on monetary transactions. By creating a PWA you bypass the fees that, say, Apple charges if you buy something through an app from their store. You can also monetize ads that sit on your PWA. Banners and interstitials work just as well.

No forced updates

Native apps need updating. It's an ongoing process with apps, sucking up more memory. PWAs update themselves in real-time, just like a website, so don't force any kind of updates like native apps do.

Access to some device features

Yes, PWAs can get access to such device capabilities as GPS, Bluetooth or your camera. However, unlike native apps they can't access all features yet.



Factors driving PWA adoption



App fatigue and increased visibility



Direct correlation between page load time and customer engagement, conversion and loyalty



Abililty to deliver a consistent, seamless experience across a wide range of connectivity scenarios



Push notifications and the ability to engage with customers in new ways



Faster time to market since there is no approval process via an app store



Reduction in the cost of ownership since there is one application and one team across a majority of the channels

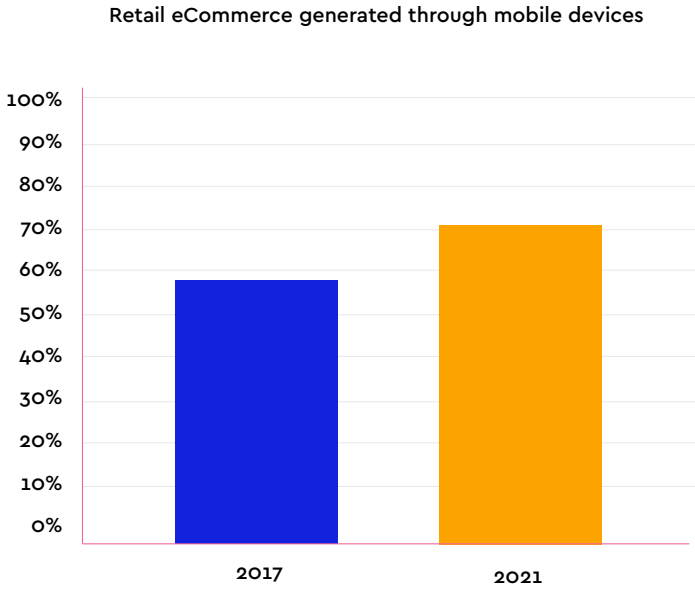
In a mobile-first world

We've reached a milestone when it comes to Internet traffic, globally. Now over 50% is generated through mobile devices. This is significant. In the last quarter of 2019 our smartphones, excluding tablets, generated 53% of all traffic worldwide.

The mobile phone serves as a person's digital ID. It represents their digital persona, especially in verticals such as eCommerce. Often, at any time during the day or night, your cell phone is with you, easily within reach.

In fact, there are 3.5 billion smartphone users in the world right now, almost every third person across the globe owns one. This is forecast to grow by several hundred million in the next few years, which has huge implications for PWAs. Why? Because their use and rise to domination will be dependent on us evolving into a mobile-first world. This is happening fast. At the same time demand from consumers for rapid experiences on smartphones is driving up demand for PWAs. Then there's the rise of eCommerce on mobile phones. By 2021, 73% of all retail eCommerce is expected to be generated through our mobile devices, up from 59% in 2017. The development of PWAs sits at the heart of this development.

Native apps clearly have a future, too. But remember they aren't searchable via the web. Also, the market growth is likely to come in emerging markets, where Internet connections are slower and mobile platforms are likely to be diverse. PWAs are more suited to these developments. They load quickly, are small and are platform agnostic. They are presenting themselves as the new standard for mobile-first solutions across the globe.

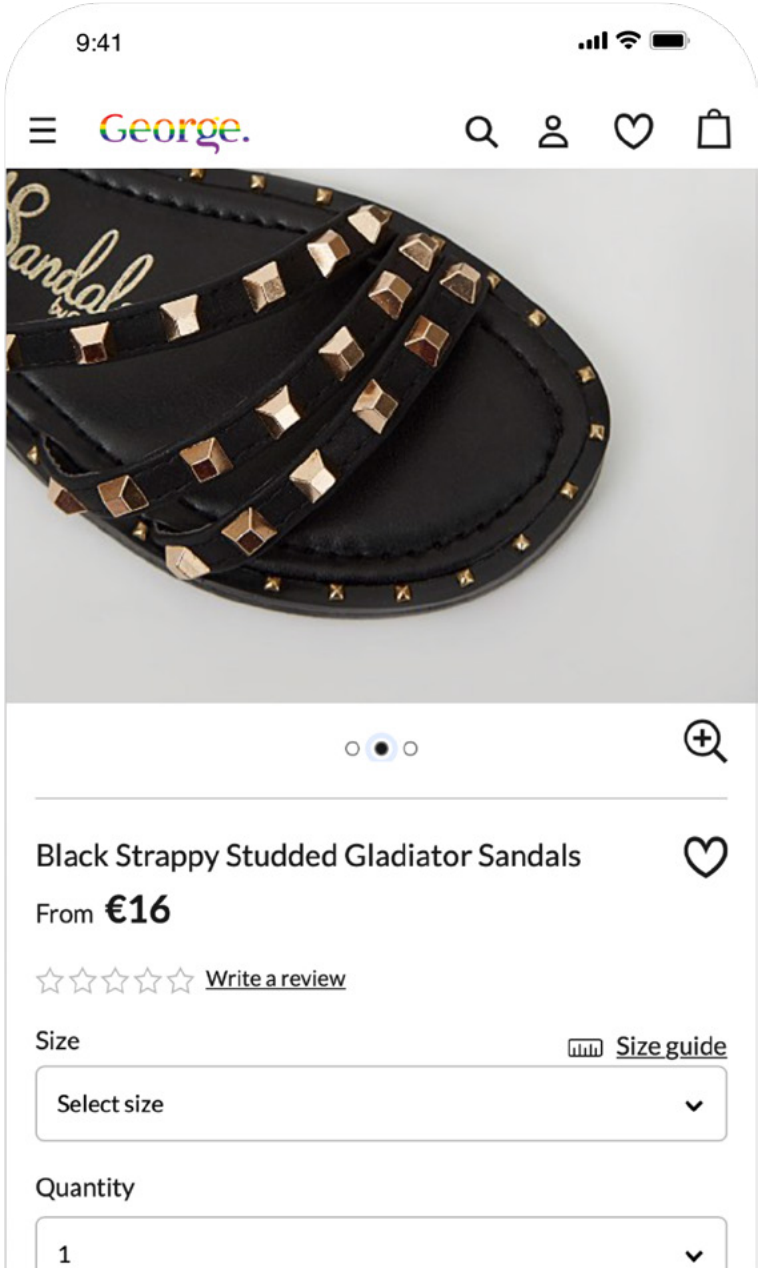


Gamechanger for mobile commerce

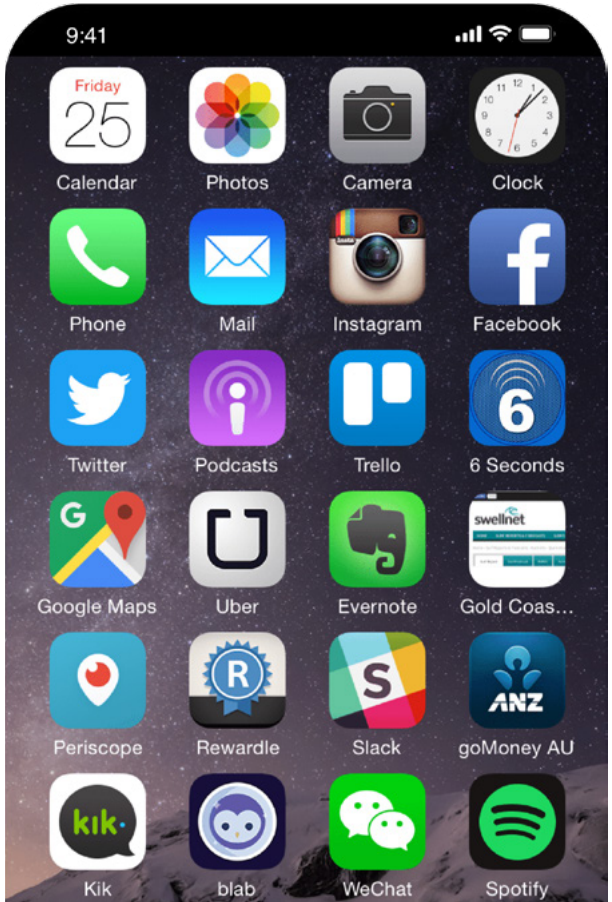
PWAs represent an opportunity to create a better, more stable, smoother mobile shopping experience. They work well on low-quality networks and have full functionality when loaded. You can even checkout offline.

They also have consistent design across all platforms to support omnichannel strategies. There is excellent scope for linkages, since you can share product pages and links – remember they are webpages after all. They also support push notifications via service workers, a big plus for customer re-engagement.
Because they are searchable via the Internet it also makes them easy to discover. This then leads to instant gratification when it comes to m-commerce.

Current mobile experiences struggle to meet consumer expectations, PWAs represent the next evolution in mobile-driven commerce. Some eCommerce giants like Flipkart and AliExpress are already using PWAs' mobile conversions to dominate their markets.



A new cure for app fatigue



Consumers worldwide don't want to download and install native apps anymore. In the time it takes for someone to download a new app, you've lost their business. Think about that new app for parking your car in a lot out of town. Forget it. You need to get on with your day, not wait around for it to download and then pay. This is the inertia many people feel on a daily basis.

We know that consumers are tired of native apps. Everyone's prized home screen is full. We are all creatures of habit, app fatigue has well and truly set in. Most of us only download a handful of main applications such as WhatsApp, Facebook, or Instagram and abandon other native apps.

The pace of app downloads is slowing down in many consumer markets. This is particularly true in mature economies. Most app downloads are to new phones or involve restoring a user's existing apps on a replacement device. Outside of native gaming apps, they've fallen out of favor to some extent.

The issue is that most native app downloads don't substantially improve people's lives. They don't offer anything really significant above what people can achieve via a mobile website. It raises the question: Why download a native app that's going to gobble up smartphone memory? It is these kinds of issues that provide fertile ground for PWAs and why it is an opportune time to look at them. The PWA installation process is instantaneous. Users don't need to go through the process of going to an app store, searching for the app and then installing it on a device, creating passwords and preferences. Only loyal fans of certain brands download eCommerce apps.

The big question is: Do your customers interact with you frequently enough to warrant a native app? Are they loyal enough to offer you lots of smartphone memory? Most of the time the answer is no. Could native apps be seen as a vanity metric for brands? Some people now think so too.

Therefore, PWAs may be the answer, especially for occasional, infrequently engaged users, which is most of the global consuming population.

> “The pace of app downloads is slowing down in most consumer markets around the globe, especially where mobile device adoption is mature.”
>
> **- Gartner**

Why now?
What's changed?

How many PWAs do you use in your daily life? Probably very few, if any. Magento has said that PWAs deliver a level of complexity rarely encountered by developers and it's this complexity that is taking time to figure out. There's still a gap between what PWAs can do and the capabilities of native apps. But that gap is closing rapidly.

Many companies will find that nearly everything is available in some context via a PWA. Yet, there is still a novelty factor in the market.

However, there are other things driving change. Google has now rolled out a page speed algorithm and turned this into an important ranking factor in mobile searches. Those websites and online stores which have implemented PWA technology will rank highly in searches. Remember PWAs are quick to download. Google is keen to promote this synergy.

Google has now rolled out a page speed algorithm and turned this into an important ranking factor in mobile searches.

“To me, it became clear that PWAs should be the future of software delivery,”

- Sam Richard, Developer Advocate, Google

Native applications once outperformed mobile websites in terms of user engagement. However, PWAs are closing that gap. This is happening fast. PWAs now function in similar ways to native apps while still performing like responsive websites. Therefore, they offer the best of both worlds.

However, there is inertia in the market. Traditionally, brands have been trained and told that consumers the world over want native apps over web-based experiences. Yet right now the web has caught up in terms of the features it can offer. At the same time vendors are quickly moving into this space from Magento to Salesforce, and many others including LiveArea.

The results of upgrading to a PWA

Take the Tinder Android App. It's 30 megabytes (MBs), the PWA version is less than three MBs. Pinterest's is only 150 kilobytes as a PWA, while on iOS it is as much as 56 MBs.

Take George, a UK clothing brand, which is part of ASDA Walmart. After upgrading their website to a PWA, the brand saw a 31% increase in conversion on its mobile site.

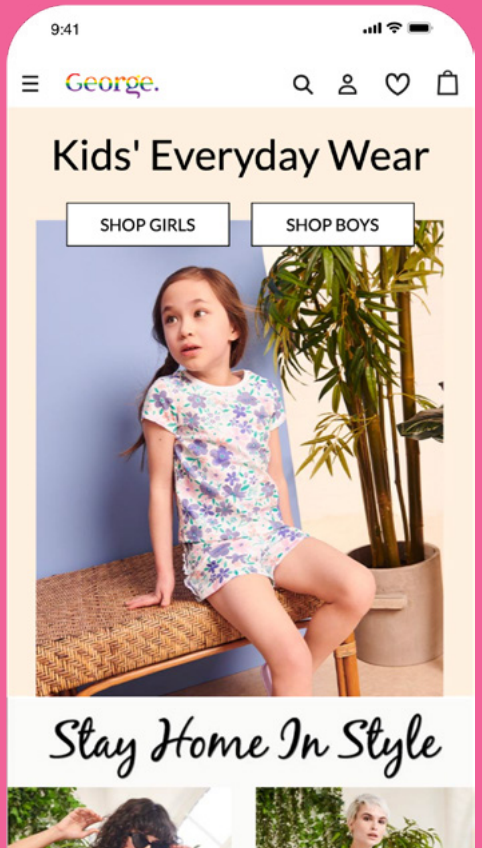
3.8x
Faster average page load time

2x
Lower bounce rate

31%
Increase in conversion rate

28%
Longer average time on site for visits from the home screen

20%
More page views per visit



Faster, better conversion and revenues with PWAs

There are many examples illustrating quantifiable benefits of PWAs versus native apps.

Debenhams

The user journey time from browsing to purchase from this British department store was two to four times faster. PWA helped deliver a 40% increase in mobile revenue and a 20% increase in conversions.

40%

increase in mobile revenune

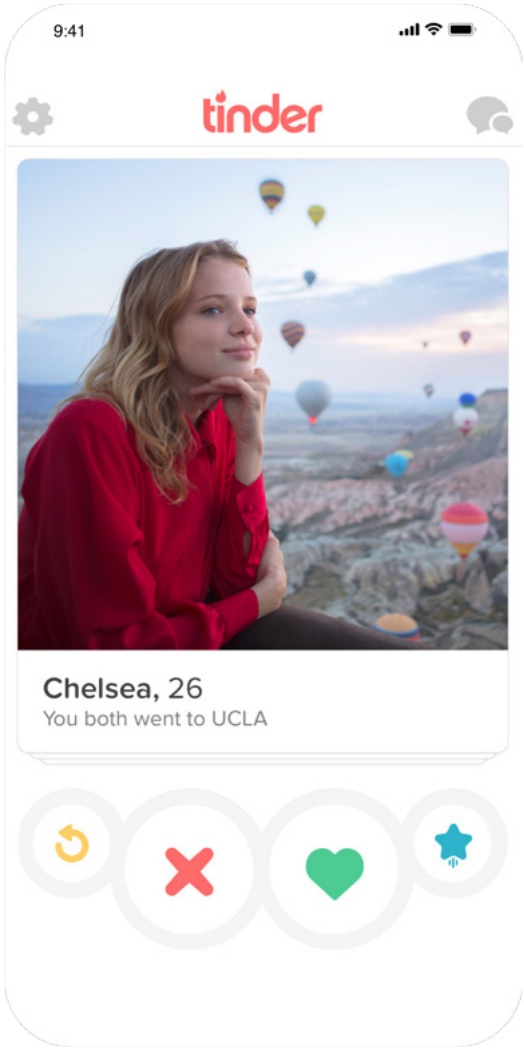


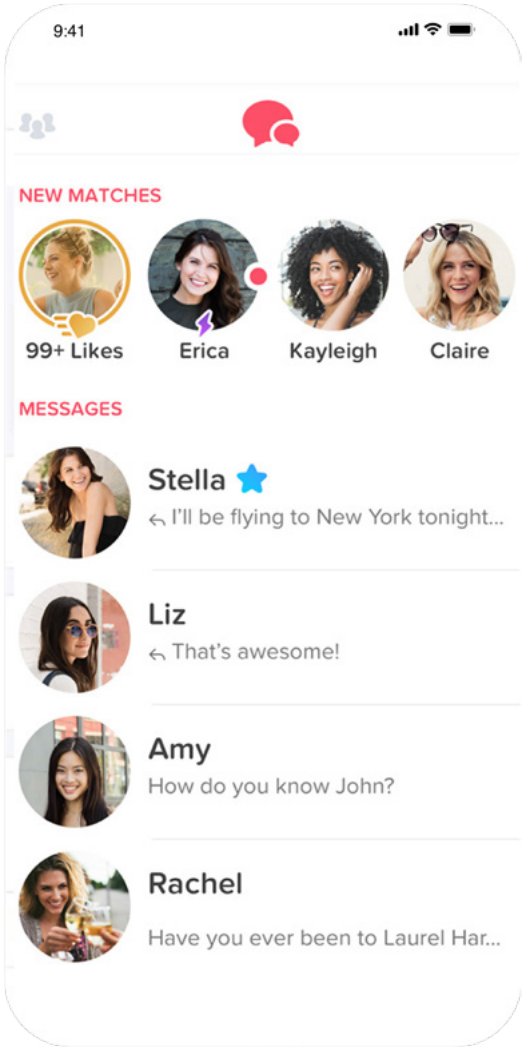
Tinder

By using a PWA Tinder cut load times down to 11.91 seconds to 4.69 seconds. The PWA is 90% smaller than Tinder's native Android app and user engagement is up across all parts of the app.

90%

smaller than Tinder's native app



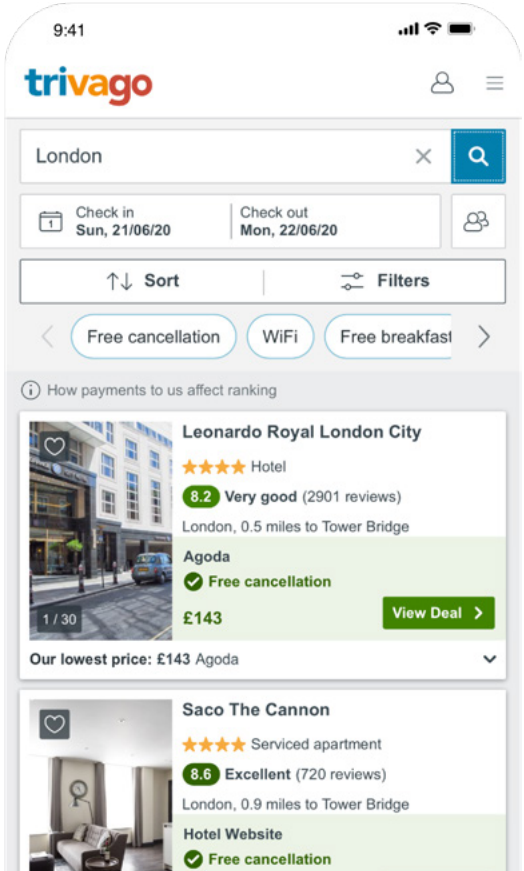


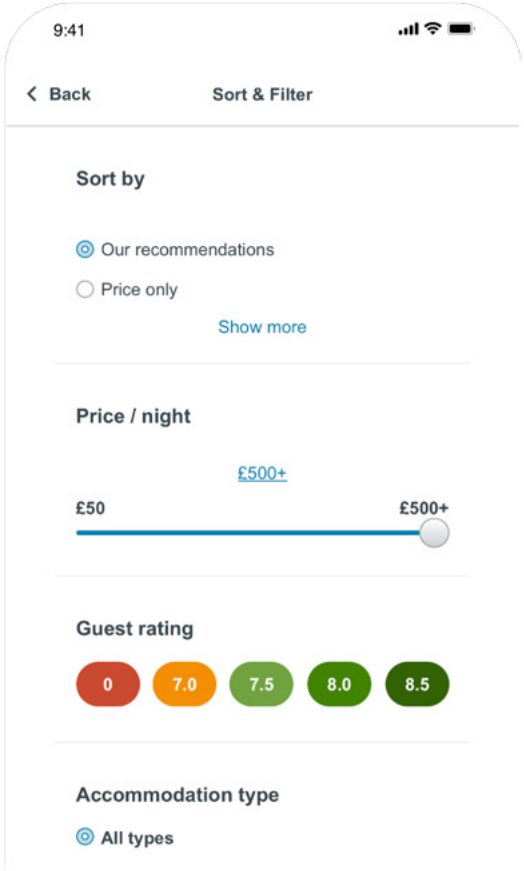
Trivago

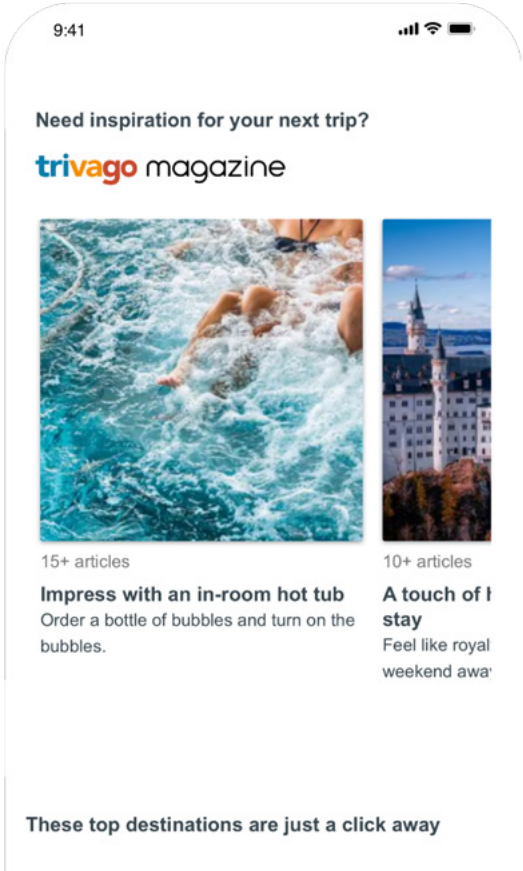
The hotel and holiday search engine has deployed a PWA with a 150% increase in customers adding it to their home screen, and a 97% rise in clicks onto hotel offers.

97%

rise in clicks onto hotel offers







Challenges deploying PWAs

PWAs are not without their challenges. Otherwise there would be a full-scale defection from native apps. We are just beyond the early adopter phase for PWAs. The challenges are worth knowing in detail at this stage, so you can gauge when and if to jump in:

Inertia to move from native apps

For many brands that have invested a large amount of money in sophisticated and long-established native apps, it may be difficult to make the move. If it's not broke, don't fix it.

Awareness is still nascent

But it is on the increase and that's what matters. Most agencies and eCommerce players are now aware of PWAs as a viable solution to slow page speeds and poor user experience for some native apps.

Not critical mass yet working on it

The industry needs a critical number of developers working on PWAs. A community is then able to address problems, share best practices and leverage expertise. We're not quite there yet. The numbers are growing, but it's still early days.

UX is still catching up with native apps

There are some features that are still difficult to emulate with PWAs. There are those in the industry saying that native apps are still ahead. PWAs miss out on some features, for instance, file system access. Not all user experiences work well within a browser. Dragging, pinching, and swapping are activities that are limited through web apps, as are complex animations.

The bite of Apple

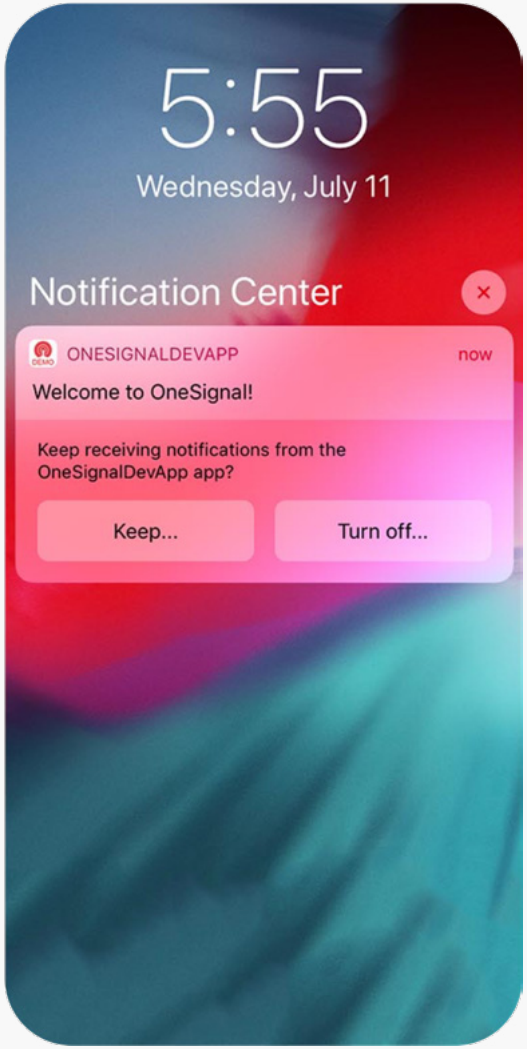
PWAs compete with the App Store. Therefore, you've got to question whether Apple wants them to succeed and work well on iOS and MacOS. For PWAs on iOS there are certain limitations.

PWAs are browser dependent

They heavily rely on the browser they are opened in and work well on the most recent version of popular browsers. Users may not have certain features, such as offline functionality, on older browsers. It's worth noting, you will not will not experience bugs or errors. Remember, the "P" in the PWA stands for "progressive" and implies that on browsers that don't support the latest PWA features, the application will degrade gracefully.

Miss out on native device features

PWAs are still limited by the integrations offered by web browsers. Right now, they cannot access all hardware and software within a device. It will take time before PWAs offer the same UX as native apps.



PART II

Let's get technical

Those with a more technical background, including developers and those focused on IT, need to know about the benefits and challenges that they could face when considering progressive web apps. This section is focused on the technicalities from a strategic perspective.

Service workers enhance UX

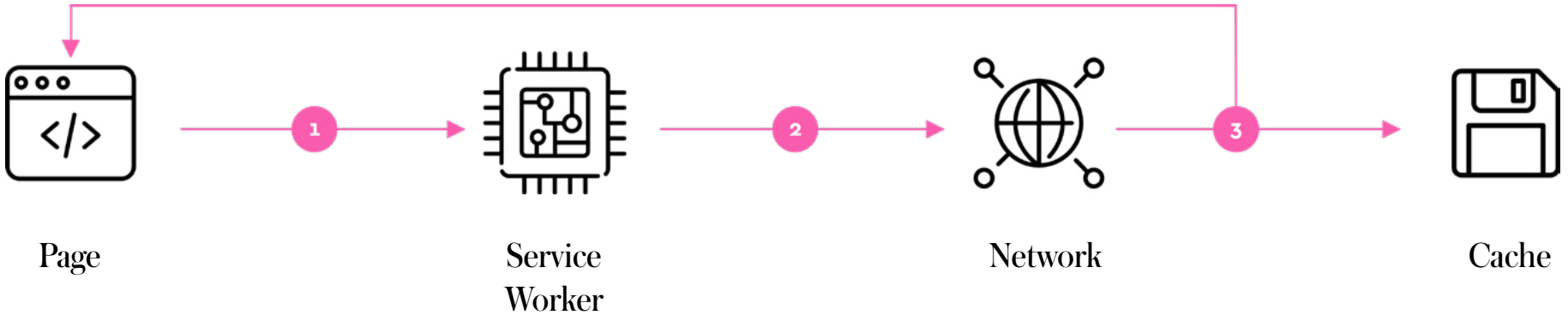
Service workers are the foundation for most PWAs. They offer a way to enhance or augment traditional user experiences.

Service workers are a script that a browser runs in the background, separate from a web page. It allows people's devices to preload and cache the code of a PWA so that when the page is needed, it can be displayed instantly. There is no need to go and ask for it from the server time and again. This is one way a PWA application can achieve extremely fast load times.

The service worker makes it easy to fetch or process specific tasks in the background on a separate thread. Data can be requested behind the scenes. This is important in eCommerce, where page load times are directly linked to customer conversion and engagement.

A service worker functions without the need for an open web page or user interaction. It also allows other services such as capturing user actions while offline, which can then be delivered when the consumer is back online.

Perhaps the largest enhancement to UX is the ability to engage customers with push notifications, although these have been available for some time on native apps, they can now be encompassed across all devices. Looking forward, service workers could allow businesses to develop entirely new ways to engage customers, especially when combined with server-side intelligence that dictates the best way to engage with the customer based on the context of a notification. In a world where many decisions are based around simplicity, convenience, and a sense of digital familiarity this could differentiate an offering and increase customer loyalty.



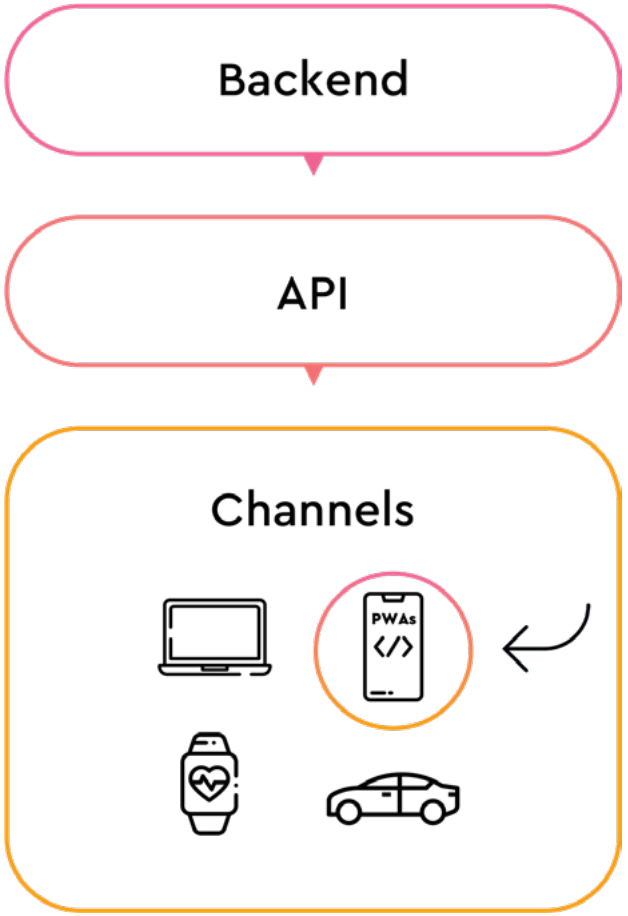
PWAs work well with headless commerce

Traditionally, eCommerce platforms include a pre-defined or an out-of-the-box interface. In a world where companies spend millions of dollars to differentiate and define their brand, they are realizing that a default look, feel, and experience does not align with their vision. This is especially true on mobile devices, which may be the first or only interaction point between the brand and its customers.

Headless architecture allows you to step outside of that box and appeal to your customers in unique ways while delivering the same experience on the application that a customer may have in the store.

Many companies have adopted multiple channels to provide customers with optimal service and experiences. A headless architecture will push raw data consumable by all channels or devices from the backend.

Converting to headless architecture can be complex and is typically implemented over time.. But the move is proving popular because retailers can easily update storefronts. Headless commerce is also being driven by a move toward omnichannel commerce and the ability to deliver rich and unique experiences that better personify a brand.

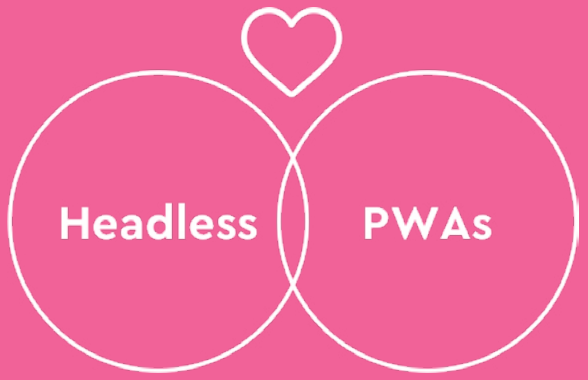


“Retailers who neglect to implement PWAs with headless commerce leave the opening for their competitors to do so.”

Ronald Dod, CMO, Visiture

Headless + PWA = A great combination

- Better conversion rates since the two work together at lightning speeds
- Boost to organic traffic
- Reduced bounce rates and higher return on investment from search engine marketing
- Having a headless CMS and a flexible PWA allows quick updates or experiments with the UX
- PWAs are searchable via the Web, delivering content from a headless CMS
- Combining the two allows PWAs associated with voice, smartphones and other devices to interact with headless commerce via service workers
- Companies aren't locked into specific vendors for developing PWAs, since headless commerce allows many APIs to be developed.
- Increased website speed due to simpler and reduced coding



Examples of brands using Headless PWAs















"You really need to understand how headless commerce can power PWAs effectively. It's not just about having your old CMS and throwing a PWA on the front-end."

- Paul Bidder, Senior Sales Director, LiveArea, EMEA

Technical considerations

Think about your developers

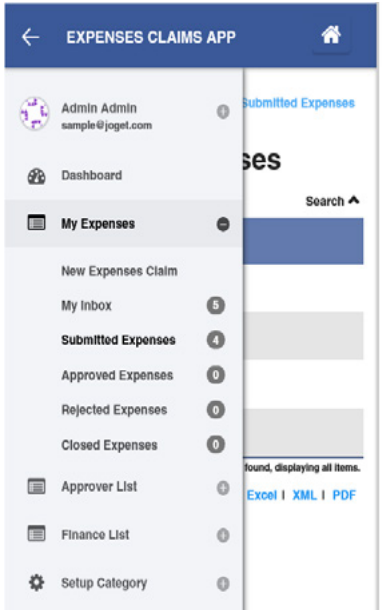
PWAs have clearly focused on providing a best-in-class user and customer experience, but there are differences in the back-end. This affects developers and analysts; data analytics can be more difficult to set up and manage. Your development teams may not be ready to implement PWAs.

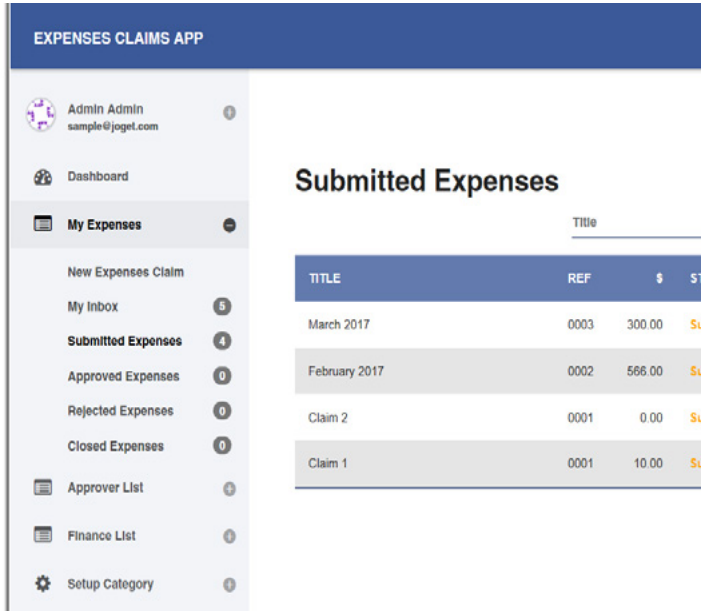
Choosing the framework to use

There is a proliferation of PWA frameworks and tools. The best choice is a rich front-end web framework such as React or Angular combined with Google Workbox. This combination simplifies development and provides a point of view for the architecture.

PWA integrations

When developing PWAs, most of the budget is spent on the integration part of the project, integrating the web-app with backend systems, including the content management and customer relationship management systems.





Invest in PWAs now or wait?

Those in charge of investing must decide soon whether to be a 'not-so early adopter' or wait and see if they want PWAs to be part of their mobile strategy in the future. If you are reviewing budgets right now, redesigning websites, going headless with eCommerce or moving to a new CMS, it makes sense to start looking at PWAs. There are other considerations too:

Think about cost

Although PWAs are more expensive to design and build up front, they are cheaper to support and maintain over time. They are built as webpages, and development costs are lower. By developing PWAs you also eliminate the cost of maintaining both a web experience and a native app. Native apps also require more investment in time, PWAs are simpler, they use HTML, JavaScript and CSS. They also work on all platforms.

Gain speed and conversions

If you are facing challenges with your native app's speed or conversion rates it makes sense to look at PWAs since they are light on memory and create speedier customer experiences.

It is all about budget

Do you have money to develop? This is the million dollar/pound/euro question. If companies want to reach a mobile audience, they invest in a native app. This is common since development budgets tend to be targeted and conservative. PWAs offer more with a view to the future.

What should you do now?

It is worth asking a few questions at this stage:

- Why do you need the benefits of a new PWA?
- What would you achieve by developing a PWA?
- Where will PWAs fit into your mCommerce and eCommerce strategy?
- What would a PWA mean to your company from a business perspective?
- If you decided to develop a PWA, how would it affect your current strategy?
- What do you see as the challenges and issues to developing a PWA?
- What are the new opportunities that you think a PWA would create?
- Why consider a PWA over a native app for your business?

The future: PWAs are not a magic bullet

Let's face up to reality, consumers the world over are not using apps as often as they used to. With app fatigue well and truly entrenched, penetrating the native app market involves deep pockets, a lot of marketing and a constant rush of push notifications in a bid to engage users.

At the same time there are questions over whether PWAs are ready for the global market. The technology is still developing and maturing. Aside from issues of cost and identifying the talent to implement, PWAs still don't have full functionality with all devices, particularly with Apple products.

If Google is prioritizing speed in its algorithm, it will boost PWA use, so will their ability to be discovered via web searches. Google initially developed PWAs, it's therefore likely to do a lot more in the future to promote them, so watch this space.

Investing in a PWA really depends on a company's specific needs and business goals. And if you say: "no one in my organization has delivered and supported a PWA," this is where LiveArea can help.

Get in touch

ABOUT

LiveArea

LiveArea is a full-service, award-winning global customer experience and commerce agency. Our expertise lies in connecting brands and people through creative commerce experiences that transform and enliven the customer journey from start to finish. Our mission is simple: Create inspired interactions that elevate commerce.

LiveArea brings together a broad portfolio of services for end-to-end solutions – from data-driven marketing and omni-channel experience design through technology selection and platform implementation, managed services, fulfillment, and customer care. We create clear, compelling and cohesive journeys for B2B, B2C and B2B2C interactions.

Clients cover a variety of verticals, including health and beauty; fashion and apparel; luxury; consumer packaged goods, retail; automotive; and business to business. An extensive network of ecosystem partners includes leading commerce platform providers along with an array of solution partners. LiveArea, a PFSweb Inc. business unit, has offices in Dallas, Seattle, New York City, Raleigh, London, Sofia, and Bangalore.

LiveAreaCX.com