

Progressive Web Apps

Native Apps

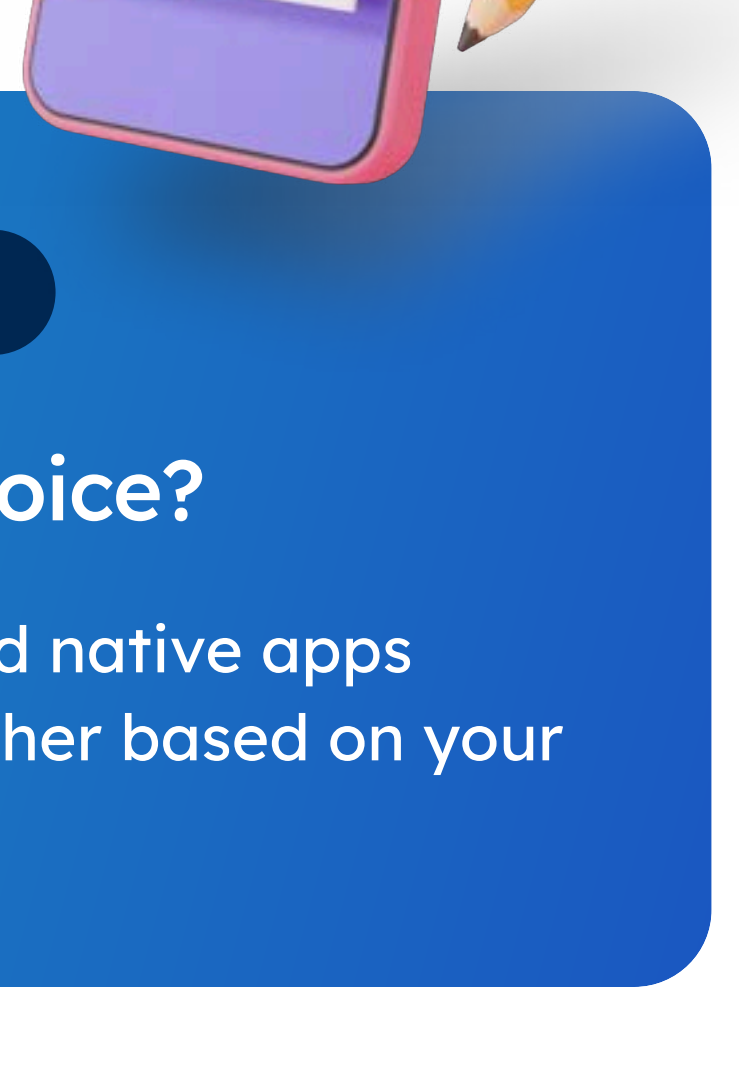
The Ultimate Face-Off

Preview

Your next app might need an app store—or it might not need one at all.

Native apps have long been the “real OG” of mobile experiences, but PWAs are flipping the script, promising:

- ✔ Native-like performance without the bulk.
- ✔ Lightning-fast downloadability right from the browser.
- ✔ Easy offline accessibility.



PWAs hit the sweet spot between web and mobile...

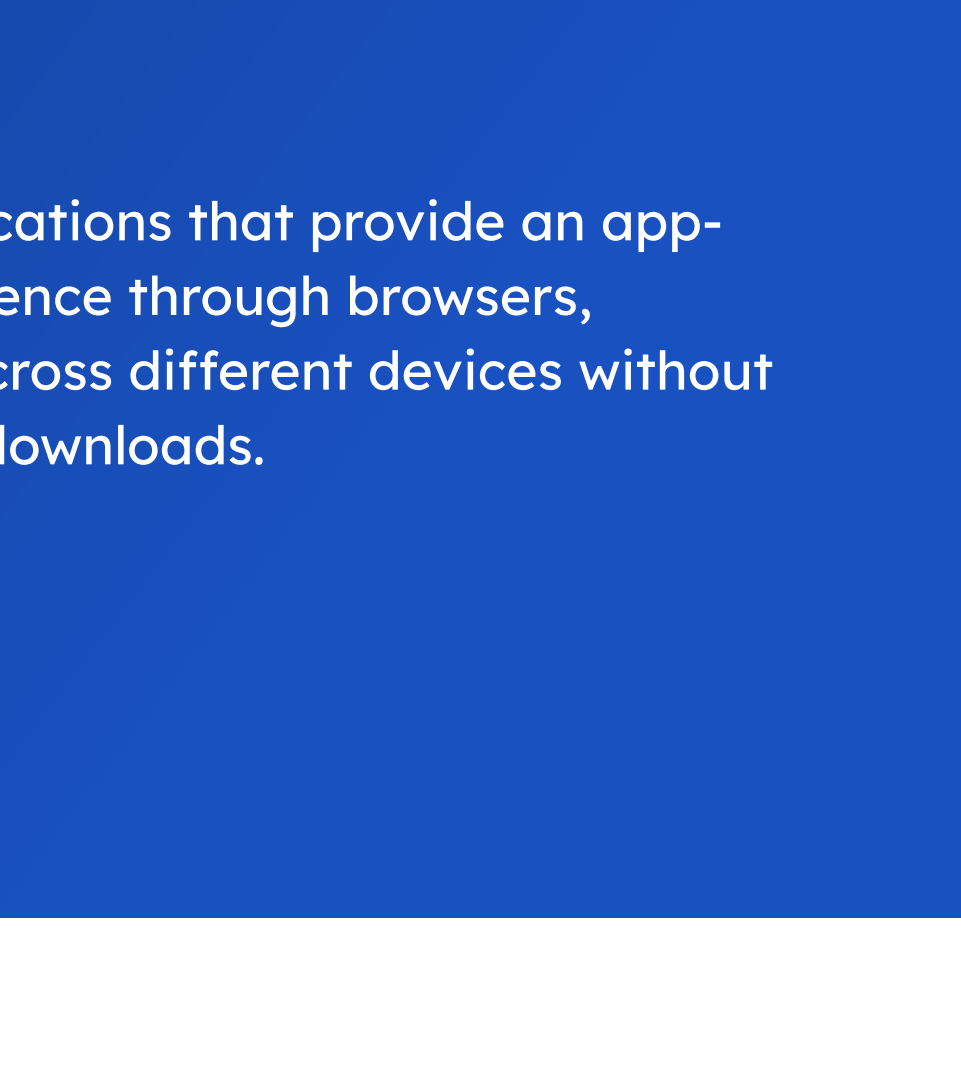
However, are they always the right choice?

Our head-to-head comparison between PWAs and native apps unpacks when and why to choose one over the other based on your business needs.

1 Native Apps vs. PWAs: A Quick Snapshot

Native Apps

Mobile applications built specifically for iOS or Android, offering high performance and deep integration with device features.



PWAs

Web applications that provide an app-like experience through browsers, working across different devices without requiring downloads.

2 An Eagle’s Eye View of PWAs

Features	Benefits	Challenges
Built using standard web technologies (HTML, CSS, JavaScript)	✔ Cost-effective (single codebase for all platforms)	✖ May be more susceptible to cyberattacks like Cross-Site Scripting (XSS) and Cross-Site Request Forgery (CSRF) and require additional security measures.
Works across different devices and platforms	✔ Fast updates without app store approval	✖ Limited access to device hardware (e.g., Bluetooth, sensors)
Installs directly from the browser without an app store	✔ Search engine discoverability (SEO friendly)	✖ iOS support restrictions (push notifications, background sync)
Uses service workers for offline functionality	✔ No installation required, lightweight storage	✖ Lower visibility compared to app stores
Push notification support (limited on iOS)	✔ Offline functionality via service workers	
Secure with HTTPS		

3 An Eagle’s Eye View of Native Apps

Features	Benefits	Challenges
Developed separately for iOS (Swift, Objective-C) and Android (Kotlin, Java)	✔ High performance and responsiveness	✖ Higher development & maintenance costs
Installed via app stores (Google Play, Apple App Store)	✔ Full access to device features (GPS, camera, biometrics)	✖ Requires separate versions for iOS & Android
Full access to device hardware and system features	✔ Stronger security with OS-specific encryption	✖ Longer time to market due to app store approvals
Works offline with local storage capabilities	✔ Superior user experience and smooth animations	✖ Requires manual updates by users
Optimized for platform-specific performance and security	✔ App store credibility boosts downloads	

4 PWAs vs. Native Apps: A Factor-by-Factor Analysis

Feature	PWA	Native App
Platform Compatibility	Works across all devices via browsers	Separate iOS & Android development
Installation	No app store required, browser-based	Requires app store installation
Performance	Good for most apps, limited for complex tasks	High performance, utilizes hardware optimally
Offline Functionality	Limited via caching	Full offline capabilities
Device Access	Limited (e.g., no Bluetooth, biometrics)	Full access to device features
Security	Uses HTTPS but lacks deep security integration	Enhanced security with OS-level features
Discoverability	Search engine indexed (SEO-friendly)	App store visibility only
Updates	Automatic in-browser updates	Requires user download via app stores

5 The Cost Breakdown of PWAs and Native Apps

Factor	PWAs	Native Apps
Codebase	Single	Separate for Android/iOS
Time to Market	Faster	Slower (Multiple Approvals)
Development Cost	Lower	Higher
Maintenance	Easier (One Codebase)	Complicated (Two Codebases)
Hardware Access	Moderate	Full

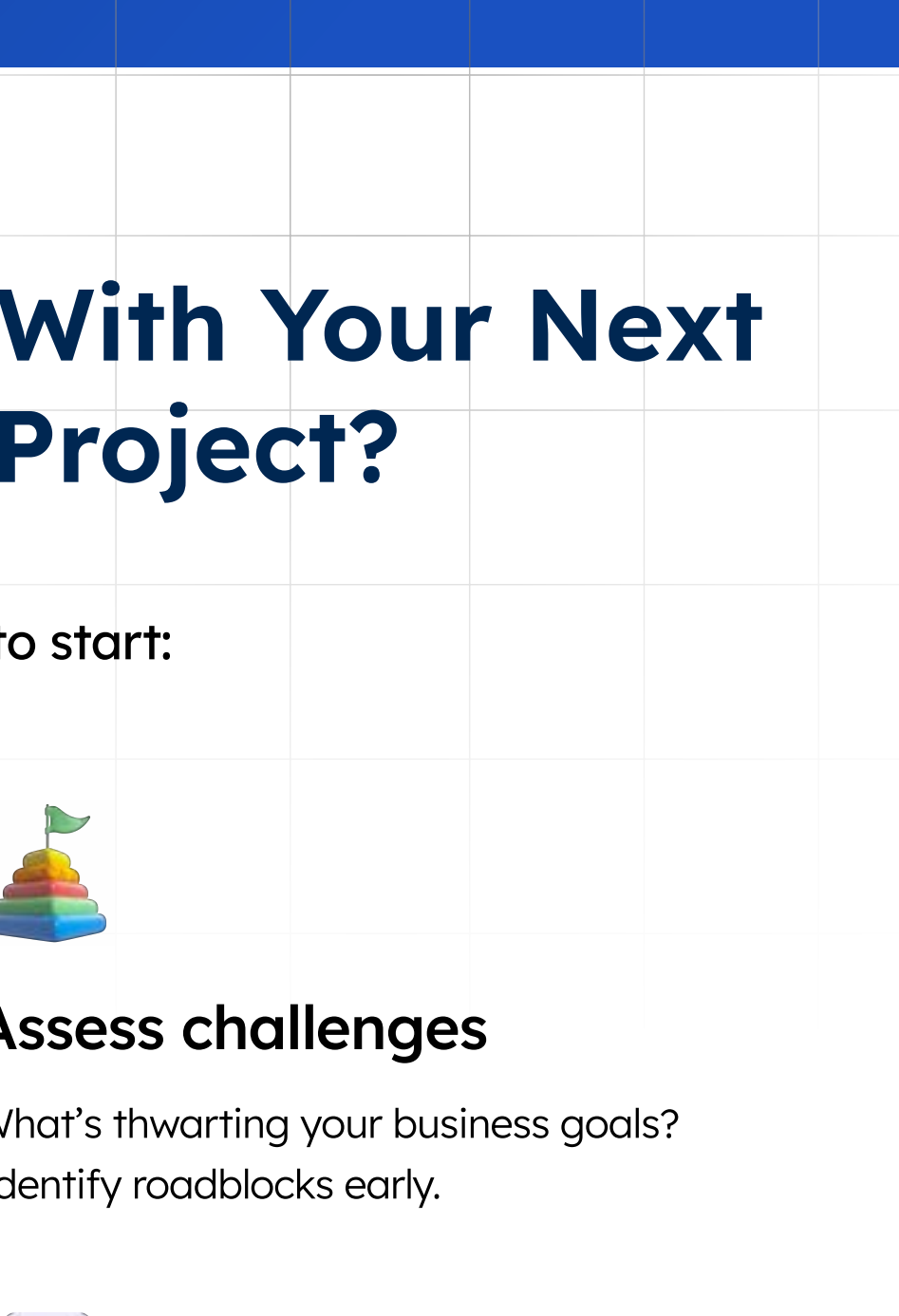
6 When to Use PWAs

- ✔ Limited budget for a native app.
- ✔ Need for rapid market entry.
- ✔ Essential cross-platform compatibility.
- ✔ Requirement for offline functionality.
- ✔ Desire to improve SEO performance.
- ✔ Aim to enhance user engagement.
- ✔ Targeting areas with unreliable networks.



7 When to use Native Apps

- ✔ High-performance graphics and animations.
- ✔ Need for deep device integrations.
- ✔ Strict security and data encryption.
- ✔ Essential real-time push notifications.
- ✔ App store visibility and monetization.
- ✔ Need for complex background processing needed.



8 How to Get Started With Your Next PWA or Native App Project?

Building a PWA or native app? Here’s how to start:



Define your goals

Is it speed, scalability, or user experience? Get clear on what matters most.



Assess challenges

What’s thwarting your business goals? Identify roadblocks early.



Plan smart

Act decisively and map out a risk-free, future-ready strategy tailored to your needs.



Design & develop

Blending sleek UI/UX with powerful tech for a seamless user experience.



Launch & scale

Continuous innovation to keep your app ahead of the curve.

Still unsure how to move ahead? Connect with experts at **Unified Infotech** for the right guidance and direction to make your next app a true-blue success!

[Learn More](#)

We’re recognized for our excellence

50 Deloitte. Technology Fast 50



Who are we

Founded in 2010, Unified Infotech is a global digital transformation partner. We help turbocharge your growth by using cutting-edge technologies and the best-in-class processes and practices.



Get in touch with us at hello@unifiedinfotech.net

Get Connected

