

July 2021



App Monetization Industry Outlook

HOW MOBILE GAMING BUSINESSES CAN
PREPARE FOR FUTURE GROWTH

fb.com/audiencenetwork



FACEBOOK
AUDIENCE
NETWORK

Introduction

What does the future of app monetization look like?
And what should mobile gaming businesses focus on
now to get there?

2021 has brought immense change for mobile game businesses — iOS updates, the continuation of pandemic-influenced spending behaviors and the ever-evolving regulatory landscape. Facebook Audience Network has taken a closer look at how these shifts impact monetization across various parts of the in-app economy.

This App Monetization Industry Outlook presents our point of view. We'll talk about the current state of app monetization and some of the exciting possibilities through 2025. Then, we'll offer practical recommendations for businesses looking to create sustainable monetization now while they build toward the future.

In developing our forward-looking App Monetization Industry Outlook, we talked with 25 thought leaders from across the industry including ad tech business executives, industry analysts, game publishers and other leaders in this space.

INDUSTRY VOICES

We talked with 25 industry leaders about app monetization today and in the years ahead.

Ali Pasha, Group Product Manager

Ayşegül Yildirim, COO

Becky Ann Hughes, SVP, Growth

Ben Chen, EVP Global Developer Relations

Candice Mudrick, Head of Market Analysis

Dan Sack, VP of Platform

David Simon, CRO and Global Head of Revenue Operations

Dimitry Kovalenko, Monetization Director

Gal Brill, General Manager

Guillermo Escofeto, Principal Analyst, Digital Consumer Platforms

Han Qiu, Partner

Karsten Weide, Program VP, Digital Media and Entertainment

Michail Katkoff, Founder

Nikhil Mishra, SVP of Product

Robin Wheeler, Global Head

Sandra Schneider, VP Strategic Partnerships

Scott Koenigsberg, Chief Product Officer

ADMOB

ADMOST

GLU MOBILE

TAPJOY

NEWZOO

APPLOVIN

FYBER

MAIL.RU

APPSFLYER

OMDIA

89 TRILLION

IDC

DECONSTRUCTOR OF FUN

CHARTBOOST

MOPUB, A TWITTER COMPANY

IRONSOURCE

ZYNGA

Annie Coonan, Product Marketing Lead, App Solutions

Jason Rubin, VP, Play

Karen Teo, VP, APAC Global Business Group

Meera Krishna, Privacy & Ecosystem Lead

Rick Kelley, VP Global Gaming

Steve Webb, Director, Global Publisher Sales & Operations

Suzy Hay, Business Product Marketing Lead

Vivek Sharma, VP Product Management

FACEBOOK COMPANY

01

App Monetization: Current State



DISRUPTION FOR APP BUSINESSES

Before talking about the future, let's look at the current state. Most app businesses have had to adjust significantly to ad tech changes in the past year. Personalized ads, measurement and user acquisition as we once knew them were significantly restricted with Apple's iOS 14.5, leaving in flux the way businesses market, monetize and measure their apps.

Personalized ads on iOS are now limited to those who at least opt-in to Apple's App Tracking Transparency (ATT) prompt, which can impact the relevancy of ads for players, as well as eCPMs and measurement for developers. The rate of ATT implementation — close to 50% at time of this report publication — is closely watched, with mobile publishers and developers considering how to adjust their business models in response.

Although a large portion of game developer revenue comes from in-app purchases, in-app ad monetization has been a focus point for more mobile gaming businesses in 2021.

44%

ATT implementation rate for gaming apps as of June 29, 2021 compared to 37% across all apps¹

"Publishers can no longer rely on a few huge users to monetize, since their user acquisition relies on very, very targeted measurement."

Michail Katkoff, Founder, Deconstructor of Fun

"As we shift from user-level to data that's more anonymized, businesses need to figure out how to function in the new world."

Meera Krishna, Privacy & Ecosystem Lead, Facebook Audience Network

¹ Source: [AppsFlyer's iOS 14 ATT Dashboard](#), June 29, 2021

DISRUPTION AS A CATALYST FOR INNOVATION

We believe publishers and developers can use these changes to position themselves for growth ahead. Many we interviewed agreed, pointing out that game developers are adept at embracing change and using it to their advantage.



"A pain point is the element that drives good people to find good solutions."

Gal Brill, General Manager, AppsFlyer

"Deprecation of the IDFA is an inflection point. Sure, it's a chaos grenade. But it's also driving innovation."

David Simon, CRO and Global Head of Revenue Operations, Fyber

"Change leads to new opportunities – it just depends on how much your business is willing to embrace that change and find new ways to build competitive advantage."

Becky Ann Hughes, SVP Growth, Glu Mobile

"We're seeing an evolution of app business models to account for current market forces."

Suzy Hay, Business Product Marketing Lead, Facebook Audience Network

MOBILE KEEPS GROWING, ESPECIALLY FOR GAMING

Despite the major shifts in the mobile ecosystem, mobile revenue keeps growing. Going into 2021 and accounting for IDFA loss, research firm Omdia still predicted a rise of 21.3% for in-app ad revenue in games. Industry analysts agree on sizable growth by 2025, despite short-term fluctuations.¹

According to eMarketer's recent report [Time Spent with Mobile 2021](#)², time spent on mobile games increased by 9 minutes per day per U.S. adult in 2020 — and most of those gains will hold into 2022.

21.3%

rise in in-app ad revenue
in games in 2021
forecast by research
firm Omdia.¹

“Players are spending more time on mobile games and engaging more with ads that offer a free way to progress in the game. The result is often increased player retention and higher revenue paid to publishers.”

Steve Webb, Director, Global
Publisher Sales & Operations,
Facebook

Also in 2021, more people are using apps daily, with the increasing sophistication of app-based games and entertainment in all regions. People spent an average of 4.2 hours daily in mobile apps in 2020, while demand for new apps and games grew 7% YoY in 2020, according to the report: App Annie State of Mobile 2021, January 2021.

1. Source: Omdia App Ecosystems Forecast, December 24, 2020.

2. Source: eMarketer US Time Spent with Mobile 2021, June 2, 2021

BIDDING HAS MOVED FROM A PRIORITY TO AN IMPERATIVE

For game publishers, the accelerated shifts to bidding and hybrid monetization that [we predicted in 2020](#) are playing out globally and across platforms. We've seen more than [a dozen publishers share their results](#) for increased revenue as well as time savings when moving from the waterfall to bidding.

Now, bidding is not just a priority, but an imperative for publishers to monetize efficiently and effectively beyond 2021.

"We expect to see real time bidding become the new standard for app ad monetization. Developers are getting the highest value for every impression in a given moment, rather than relying on historic CPM data. That's a game changer."

Ali Pasha, Group Product Manager, AdMob

"As developers deal with the uncertainties of how we operate within iOS 14.5... moving from waterfall to bidding will save them time and complexity."

Nikhil Mishra,
SVP of Product, Chartboost

"With bidding, we're now able to build better strategies on our performance data than before."

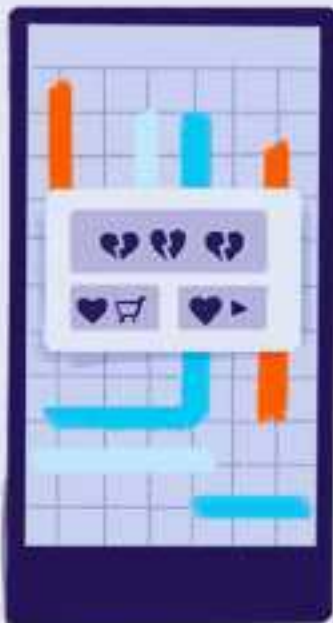
Scott Koenigsberg,
Chief Product Officer, Zynga

"Facebook deciding to stop serving waterfall by the end of 2021 is great. As the industry shifts, rewarded video will be even more efficient and valuable."

Ben Chen, EVP of Global Developer Relations, Tapjoy

A BALANCED MONETIZATION MIX IS A MUST

The value of balancing in-app purchases with in-app ads is now widely accepted. Through [success stories](#) from every genre, game publishers and developers affirm positive results on retention and revenue when they build ads into their game from the start. Gaming industry analysts recognize the shift, now recommending a hybrid IAP+IAA model for all games.



“Combining IAA and IAP has been prevalent already but it’s definitely the way things are going for the future.”

Guillermo Escofeto, Principal Analyst, Omdia

“It’s important to diversify monetization models, otherwise you could limit the global impact of your game. The best hybrid implementations have thought about different monetization streams as part of the game design itself.”

Candice Mudrick, Head of Market Analysis, Newzoo

“In the past monetization was viewed as something you tack on to your content but monetization really should be considered as part of the content. It IS the content.”

Becky Ann Hughes, SVP Growth, Glu Mobile



To summarize the current state, yes — there’s disruption from app ecosystem changes, but opportunity abounds. There’s ongoing growth in mobile, an accelerated shift to app bidding, and an increasing acceptance of a player-friendly monetization mix that includes ads. Plus, there’s a growth spurt of innovation as game developers aim to create the future they want to see.

02

App Monetization: Future – 2022



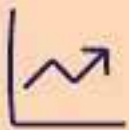
Looking to 2022, innovation is driving greater value across the ecosystem. For example:

- We'll see more quality ads, as businesses are incentivized to provide positive ad experiences for players.
- Games will get more social, as developers build more live ops features into their games on mobile and cloud.
- Players will continue to find value in ad experiences like rewarded video.
- Publishers are likely to see greater efficiency and returns with app bidding.
- Gaming marketers will see industry advancements in measurement and creatives.

Revenue for publishers and developers will continue to grow, according to industry analysts.

\$43.9B

2022 mobile in-app, in-game
ad revenue forecast by IDC¹



17%

Compound Annual Growth
Rate (2020-2024)



¹ Source: IDC Worldwide Mobile In-App and In-Game Advertising Forecast, 2020-2024, December 2020

A BETTER EXPERIENCE WITH 'INSTANT' GAMING AS WE MOVE FROM MOBILE TO CLOUD

One significant area of innovation for 2022 is the mobile-to-cloud evolution. Publishers and developers already build Instant Games on the Facebook platform, for example, which are no-download and low friction-to-play games. These types of games aid the evolution to cloud gaming, allowing more people to play deeper and more graphically rich games “instantly.” This shift enables highly social and interactive app-based experiences across multiple platforms, along with the potential for integration of in-game rewards and purchases across both cloud and mobile. As native app, HTML5 and cloud games converge, consider the possibilities this shift enables for players and developers:



“Imagine you can see and try all games right from the same cloud platform — then download only those you want on your phone. You’d probably play more and spend more in those few games.”

“Further, you might access in-app purchases in the same game on both the cloud platform and in-app. And for developers, monetization goes up because they get more dollars for every dollar spent.”

Jason Rubin, VP, Play, Facebook

One reason the mobile-to-cloud shift is becoming reality for 2022 is because of the large infrastructure investments some businesses are making to support cloud gaming and to help drive the industry toward frictionless game play across mobile, instant and cloud gaming platforms. Also driving us toward the future are increasingly sophisticated developer tools. For instance, Facebook’s suite of developer tools enable social features that connect players and games across multiple platforms.

PUBLISHERS CAN INCREASE THEIR MASTERY OF AD STRATEGY

In 2022, we'll continue to see app publishers gain time back from the efficiency gains of app bidding. Instead of spending time checking price floors across multiple countries to maintain waterfalls, publishers can now see every placement that applies to every country and every user. With the time they save, developers can focus on strategy: testing new formats and ad frequency, while mastering use of rewarded video placements to drive engagement.

While most successful gaming businesses already understand the value of building a balanced app economy into their game, more businesses will shift their teams to combine user acquisition, monetization and development into a single process.

Gone are the days of build, then monetize. Monetization is now a factor from the beginning. And with that, we'll see more effective use of every form of monetization — from ads and IAP to subscriptions and paywalls — as well as new formats.

“When studios, of all sizes, can turn on bidding rather than manually managing a waterfall, they can place more focus on improving their ad strategy.”

Sandra Schneider, VP Strategic Partnerships, ironSource

“I expect more new formats to come to the market. The format I find very cool is native in-game ads, used mostly by brand titles who show real ads on billboards — it's non-interruptive for the players because they don't need to click.”

Dmitry Kovalenko,
Monetization Director, Mail.ru

“We'll see developers move monetization strategies more toward those that are perceived to be generous and that drive intent and engagement, like battle passes.”

Michail Katkoff, Founder,
Deconstructor of Fun

BETTER CREATIVES AND MEASUREMENT ADVANCEMENTS WILL HELP WITH ACQUISITION

Also by 2022, we'll see more opportunities for gaming marketers. We expect to see a greater focus on creatives, user acquisition, measurement and Media Mix Modeling. As marketers explore and grow in their understanding of player motivations, for example, they can leverage creative to connect with new, diverse audiences.



“We’ll see more emphasis on ad creatives, diversifying the channels (e.g. into web), and diversifying marketing away from pure digital into a more mixed model.”

Candice Mudrick, Head of Market Analysis, Newzoo

“Advertisers need to tap into the motivations of why people play games, and what experience they want inside the game. We’ll also continue to see advancements in measurement, knowing it’s important for advertisers to be able to understand how much time the user spends with the ad, who the viewers and players are, how to scale user acquisition and how to drive more profitable ad viewership.”

Rick Kelley, VP, Global Gaming, Facebook

“Gaming businesses should start thinking about ways to measure incrementality across their marketing channels — we’re going to have to move away from last click.”

Annie Coonan, Product Marketing Lead, App Solutions, Facebook

03

App Monetization: Future – 2025



THE FUTURE IS IMMERSIVE

Looking further ahead, the opportunities get even more exciting. We can expect people to have highly personal engagement with brands and publishers in virtual reality environments that incorporate gaming, entertainment, commerce and social experiences. At Facebook, we're now exploring new ways for developers to generate revenue on the Oculus platform and in the Oculus mobile app, as well as exploring new ad formats that are unique to VR. Consider what's possible in the metaverse:

Virtual and augmented reality

"We expect more games to use augmented reality in the future, along with more interactive gaming experiences that impact monetization strategies – such as more in-app subscriptions."

Ayşegül Yildirim, COO, Admost

"Apps are not going away. But cloud and direct streaming are becoming more relevant. More immersive experiences are possible once technology allows us to do this at scale, and as more diversity in app distribution happens."

Annie Coonan, Product Marketing Lead,
App Solutions, Facebook

Personalized, interactive advertising

"Performance advertising really changes in the metaverse — instead of test driving the Corvette, you're putting on an Oculus headset to drive and then you can download an NFT as a reward."

Ben Chen, EVP of Global Developer Relationships, Tapjoy

Seamless monetization across platforms

“App, applet, cloud, and eventually VR will merge and people will be able to have deeply immersive experiences with radical interactivity. We’ll see the various forms of monetization converge across mobile and online platforms. For example, we now have stars for viewers to reward livestream gamers, and rewarded video ads for players to gain an in-game item while the publisher makes money, but why not have more options that reach across both?”

Vivek Sharma, VP Product Management, Facebook

To get to this future, we need to have technology that enables immersive experiences at scale — as well as more ways that players can access apps.



To summarize, the future of app monetization looks promising. In 2022, we’ll see higher quality ad experiences for players that deliver better returns for publishers. As app and cloud games converge, developers will include more social features that players will engage with across platforms. The shift to cloud will allow play across platforms and sharing across apps, bringing the power of viral distribution to native game apps and increasing engagement with new players and existing players alike.

By 2025, the metaverse will bring immersive experiences with cross-platform monetization and even greater interactivity between people, publishers and advertisers.

04

Recommendations for Mobile Game Businesses



Now that we've looked at the possibilities, let's dig into recommendations. What should all game businesses do to prepare for the future? How should these strategies differ for small-to-midsize versus large publishers and developers? For marketers? And in specific regions? Here are suggestions for mobile game businesses of all sizes, across all regions.

WHERE PUBLISHERS AND DEVELOPERS SHOULD FOCUS

While advice abounds, we recommend focusing on these three areas: optimize efficiency, build engagement with players and refine your ad strategy.



Optimize efficiency

- Test your SKAdNetwork implementations.
- Move to bidding instead of managing a complex waterfall.
- Remove as much friction as possible along the app install journey.
- Build industry partnerships for cross-platform efficiencies.



Increase player engagement

- Build trust by focusing on quality content.
- Use data to understand where players most want an in-game reward or purchase option.
- Include social features to build community with your audience beyond your game.
- Create for a diverse audience.
- Prioritize the player experience.



Refine your ad strategy

- Bring together monetization, acquisition and development plans.
- Build non-personalized ad experiences.
- Leverage format innovations.
- Diversify monetization across IAP, IAA and more.
- Measure everything, A/B test, and iterate.

SMALL-TO-MIDSIZE PUBLISHERS & DEVELOPERS

While the previous recommendations apply to all publishers and developers, here are a few specific tips for smaller developers:



Focus on quality content to grow your business



Optimize monetization and UA



Leverage the latest ad formats



Build strong partnerships

To hear it straight from industry leaders, here are their recommendations:

“Be more focused than ever on your game’s quality.”

Han Qiu, Partner, 89 Trillion

“Continue to focus on creating great content and build from day one with monetization and growth in mind.”

Dan Sack, VP of Platform, AppLovin

“Map your user journeys. Deliver value today, then build more experiences on that.”

Ben Chen, EVP of Global Developer Relations, Tapjoy

“Build ad experiences based on aggregated or anonymized data so you can continue to monetize even if you don’t have access to user-level data.”

Meera Krishna, Privacy & Ecosystem Lead, Facebook

LARGER PUBLISHERS & DEVELOPERS

Larger publishers can also think about building their own platforms, and other ways to gather their own first-party data. The theme of engaging with players is key: Show them the benefit of sharing their information with you, and you'll reach greater engagement.



“First party relationships with users will become even more valuable in a privacy-forward world. It's important to build trust with your user base.”

Ali Pasha, Group Project Manager, AdMob

“Leverage your own first party data in a world where it's becoming more scarce.”

Robin Wheeler, Global Head of MoPub,
a Twitter company

“Consider how you can offer value to the user so they willingly give you the information that helps you create more personalized experiences for them.”

Gal Brill, General Manager, AppsFlyer

GAME MARKETERS

As you grow your game into 2022, understanding player motivation can empower development of strong, insights-led creative to attract new audiences. Use of machine learning and automated systems can help your install ads deliver top-performing creative to the players you value. For mobile game measurement, continue to work with partners while also shoring up your own data analytics capabilities. And to reach new audiences with more intentional app installs, make use of playable ads – a compelling format with appeal to businesses beyond gaming.



“Instead of trying to guess the right placements and targeting, let Facebook do it for you. Automated App Ads are a way for games to grow users in a world with fewer identify signals.”

Rick Kelley, VP Global Gaming, Facebook

“The next era of app marketers need to have more capabilities — people who can work on data, for example.”

Meera Krishna, Privacy & Ecosystem Lead, Facebook

“Bring playable ads to all industries who want to put their products in the hands of potential customers.”

Karen Teo, VP, APAC Global Business Group, Facebook

REGION-SPECIFIC RECOMMENDATIONS

Gaming is truly a global market, and the growth potential of gaming motivates publishers to expand internationally. For success in new markets, it's critical to understand how your game will connect locally. Consider preferences in game types and player receptivity to ads in each region. For driving acquisition, find partners that can deliver the right ad within that geography.



"Games in Asia tend to have a strong social component."

Michail Katkoff, Founder, Deconstructor of Fun

"China is an especially large market for peer-to-peer tipping or gifting within apps."

Guillermo Escofeto, Principal Analyst, Digital Consumer Platforms, Omdia

"You have to find the best partners to deliver to that geo, who can do the right targeting and serve the right ad for their bandwidth."

Scott Koenigsberg, Chief Product Officer, Zynga

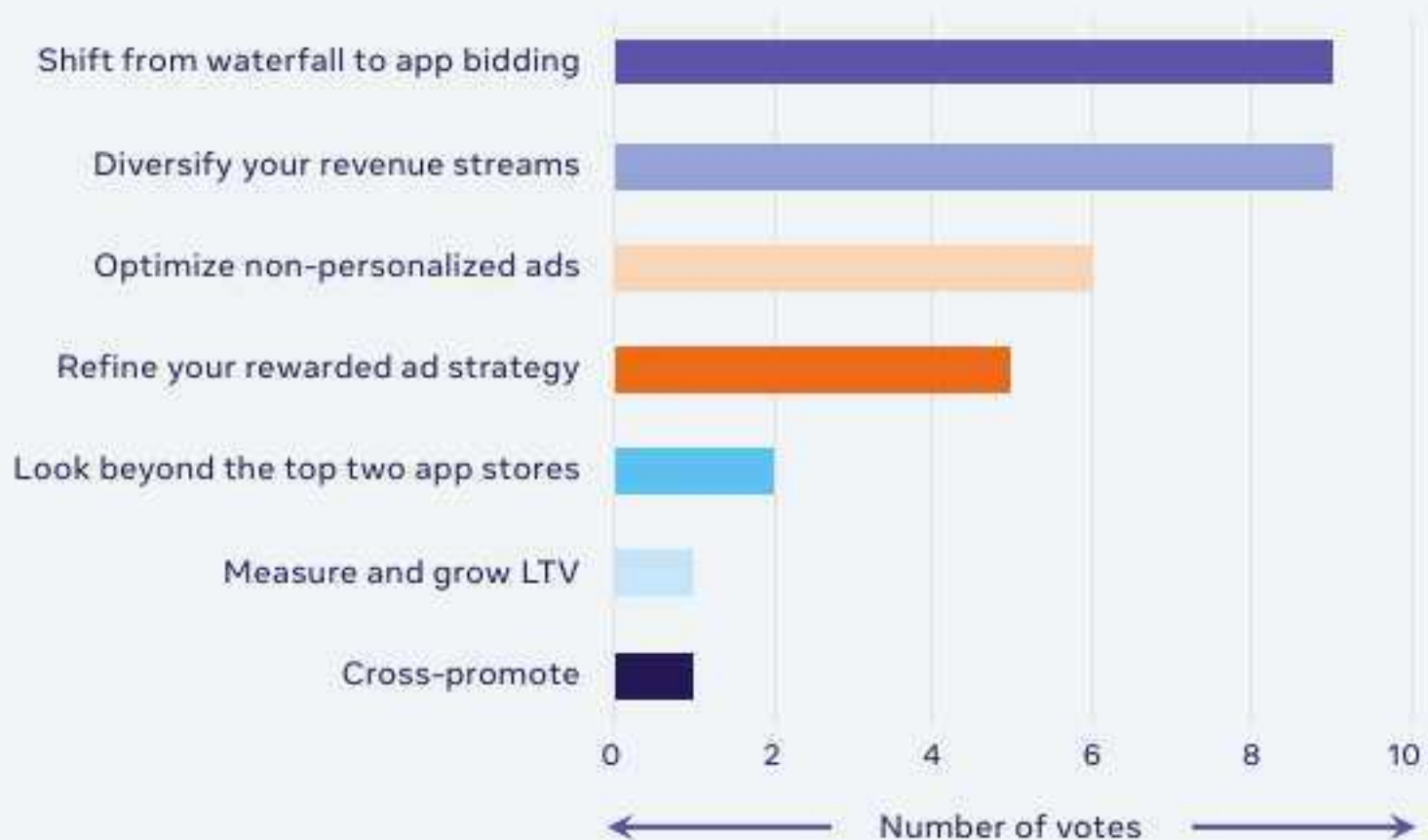


With all this advice, are you wondering what to focus on next?
Read on for guidance on the top two steps to take now.

WHICH STRATEGIES TO FOCUS ON NOW

Which strategies should all app publishers and developers focus on most before the end of 2021?

Of those interviewed for this report, here are the strategies highlighted, in priority order:*



*18 industry respondents outside of Facebook, each choosing 1-2 top strategies to recommend

FACEBOOK SOLUTIONS THAT SUPPORT THESE RECOMMENDATIONS

Facebook aims to provide an end-to-end set of solutions for gaming businesses looking to build, monetize and grow their games in a sustainable way that offers value across the full player/publisher/advertiser ecosystem. These solutions include:



Build

- **Instant Games** - Launch and grow HTML5 games that are playable on any device and available to a worldwide audience.
- **Cloud Games** - Build and distribute your free-to-play games on Facebook's cloud infrastructure to deliver high-fidelity game play across platforms in the U.S. and Europe.



Grow

- **Automated App Ads (AAA)** - Improve user acquisition with machine learning and automated systems that drive more results for your app install ads.
- **Cloud Playables** - Reach more qualified new players with cloud playable ads, a true try-before-you-install experience that developers can easily create from their native game versus rebuilding the ad using HTML5.



Monetize

- **In-App Ads** - Monetize your app with high-value ad formats like rewarded video and global Facebook demand.

NEXT STEPS

Here are next steps you can take with some of the above recommendations:

- Adapt to iOS 14.5+ - see Facebook's [guidance for developers](#)
- Scale bidding - visit [Get Started with Bidding](#)
- Integrate in-app ads - visit [Supercharge Your Game](#)
- Market and grow your game - visit [Facebook Gaming](#)

Facebook Audience Network empowers app developers and publishers to deliver a great user experience while growing a sustainable business. With Facebook demand from millions of diverse global advertisers, you can expand your app's reach, keep users engaged, and monetize globally.

Learn more about Facebook Audience Network at:
fb.com/audiencenetwork

