WHY LIVESTREAMING SHOULD BE PART OF YOUR MOBILE STRATEGY (AND HOW TO DO IT RIGHT)

The data is clear: livestreaming content is on the rise. As of June 2017, nearly half of US internet users surveyed said they watch livestreamed content at least once a week. Roughly one quarter said they watch livestreaming daily.¹ Live video is all over Facebook, Snapchat, Twitter and more.

Sports-related content is perfect for livestreaming. Right now, 17% of US internet users watch livestreams of sports games or matches,² a number that will only increase as the live video trend grows. Speaking of that growth, live content is no longer just about watching live feeds of traditional sports broadcasts. It can be streamed from locker rooms, sidelines and almost any place you can put a camera.

Sports + Livestreaming + Mobile = Win

At Phunware, we believe the sweet spot for livestreaming of sports content isn’t on social or even the web. It’s mobile.

Mobile livestreaming gives sports fans the most immediate “watch wherever / whenever” experience. Last summer, 77% of consumers surveyed said they were likely to watch the summer Olympics on mobile, with the majority of those viewers citing the ability to watch live coverage on mobile as their primary reason.³

In addition, mobile livestreaming apps can offer users a highly personalized experience—such as the ability to toggle between camera angles, select stat streams to layer on their video feed or talk trash via a social media integration within the video content. For sports fans, mobile livestreaming can offer the ideal blend of convenience and customization, so they can watch wherever, whenever and however they please.

How to Build Livestreaming into Your Mobile App

Whether you’re starting from scratch or adding livestreaming to an existing mobile app, you’re still working within the mobile app lifecycle. When it comes to livestreaming, the Strategize and Create phases of the lifecycle require some careful consideration to ensure maximum success.

---

¹ Magid Media Futures Study 2017, as cited by eMarketer.com on July 10, 2017
² Magid Media Futures Study 2017, as cited by eMarketer.com on July 6, 2017
³ Phunware National Survey, 2016
Phase 1: Strategize

Start by defining the type of mobile experience you want to provide and what it will take to get there.

If you plan to incorporate livestreaming into your app, you’ll need to get specific about the types of streaming content you want to deliver to users and identify the sources of that content. This is where it gets tricky, because each different type of live-stream content may come from a different vendor—such as media on demand, live replays, highlights, etc.

Each vendor will have different processes and levels of expertise, and that can affect the performance of your entire app (as well as your bottom line). Let’s look at the main issues below.

SCALABILITY

Most livestreaming vendors don’t have the expertise, architecture, resources or content delivery infrastructure necessary to support their videos at scale. In many cases, they’ve never actually done it before. Your app could be their first attempt—with no guarantee that they can handle it.

Plus, when you ask multiple vendors to scale for you, you pay multiple vendors to scale for you. Therefore, your costs spike exponentially. For example, let’s say your app home page features five different streams in a carousel. In this case, a simple “get home page” request translates to five different requests—one for each feed vendor. Multiply one million requests by five vendors and the cost per request, and your budget goes out the window.

FAULT TOLERANCE

You could be in for a big hassle anytime a vendor changes something in its code, such as the object structure or rules in a single replay stream. In fact, the app is likely to fail if such a code change is made. Handling the change successfully would require a change in the app’s code. Then you’d have to submit updates to the App Store and Google Play and probably force users to download the update to continue using the app—a last resort which generally irritates people. There is no built-in failsafe to prevent small issues from becoming big ones.

METADATA INCONSISTENCIES

Each vendor handles video metadata differently—there’s no standardization. Metadata inconsistencies are especially problematic in sports, as you may be working with complex and diverse data streams (such as sports statistics) and a user base that demands real-time updating with minimal latency. Addressing all of this variation demands a lot of client-side logic. That’s okay when you’re dealing with a multi-core personal computer or digital TV, but mobile devices are not designed for heavy logic processing. Performance will suffer.

CONTENT MANAGEABILITY

Each vendor has its own approach to content management, which means one change can be multiplied by the number of vendors you’ve got. For example, to edit the content within a home page carousel, you might have to log into each different vendor’s management interface, make changes and then make the related changes to your own content.

www.phunware.com/solutions/entertainment  |  info@phunware.com
All of these manual steps are exceedingly painful, time-consuming and inefficient. Your team has to be trained on every different interface and management approach, and they must remember what to do each time. Plus, the more steps involved, the more opportunities there are for someone to make a mistake.

Once you are clear about the scope of your livestreaming project (and the potential challenges), it’s time to move on.

**Phase 2: Create**

During the Create phase, you’ll either be building a new app or adding livestreaming capabilities to an existing app. The choices you made in Phase 1 should drive your decisions in Phase 2.

- If your plans include just a few livestream sources (or those sources are in-house), you may be able to handle the necessary development internally. Keep in mind, however, that your IT or engineering team may not have the experience, expertise or bandwidth to take on a project this complex.

- If your plans will involve multiple livestream vendors—and/or your internal teams do not have the necessary skillsets or bandwidth—look for a third-party development partner.

For maximum results (and minimum pain), here’s what to look for:

- Broad and deep experience in both livestreaming and mobile app development
- A cloud-based approach with an integration layer to normalize multiple vendor streams into a consistent, workable format
- Robust content delivery network (CDN) partnerships or integrations to optimize performance and ensure scalability (by minimizing latency when the now-integrated live video streams are hit with millions of requests from around the world)

Ask for proof (and preferably case studies) illustrating the following:

- Reliable and affordable scalability up to millions of parallel worldwide requests, including ability to handle “zero-to-100%” spikes in traffic
- Fault tolerance
- Minimal client-side burden
- Robust, user-friendly, centralized manageability

In 2016, mobile video traffic made up more than half of all mobile data traffic—and that percentage is predicted to rise to nearly 80% in the next five years.\(^4\) Now’s the time to develop a clear and comprehensive strategy for mobile livestreaming—so you won’t get left behind.

At Phunware, we’ve learned a lot from working with the world’s largest media and sports properties to deliver livestreaming on mobile at scale. If you’d like to learn more about our approach or our unique platform, contact info@phunware.com.

---

\(^4\) Cisco® Visual Networking Index, March 28, 2017