NowSecure™

GLOBAL ENTERTAINMENT BRAND

HOW A SINGLE ENGINEER LAUNCHED A MULTIBILLION-DOLLAR GLOBAL BRAND'S MOBILE APP SECURITY PROGRAM

As a multibillion-dollar media and entertainment company ramped up production of mobile apps, a savvy engineer set out to establish a program to make sure those apps were secure. Through documentation, developer training, and purpose-built mobile app security testing technology and collaboration across the enterprise, the engineer successfully created a consistent, measurable mobile app security program.

↑ 225%
AVG. ANNUAL GROWTH IN APP TESTING DEMANDS

100s
OF APPS IN THE APPLE APP STORE AND GOOGLE PLAY

↓ 50%
REDUCTION IN HOURS REQUIRED TO TEST AN APP

ABOUT:

As a global leader in high quality entertainment delivered through an array of channels, this brand harnessed the power of mobile technology early. Numerous business units build mobile apps to connect with fans and create new revenue streams. A sterling brand reputation is paramount to the company whose target demographics include families and children. The company possessed mature network and web application security programs, but an engineer identified a gap in its mobile app security expertise.

CHALLENGES:

1. Building a program from scratch

As the engineer built his own mobile app security skills through self study and attending a mobile penetration testing course, his eyes were opened. His independent research and development gave him what he needed to document mobile app security requirements to share with the wider company. But rapid developments in the mobile platforms made it challenging to keep the document current and find stable, up-to-date testing tools. “By the time we finished a draft specific to iOS 7, Apple released iOS 8,” he said. “We couldn’t keep up with the changes in iOS 8, 9, and 10 and also do the same for Android.”

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2. Keeping up with surging test demands

Developers and people all over the organization appreciated the guidance, and the document’s existence spread awareness that the engineer’s team was available to test mobile apps. As his team received more and more requests for testing, another obstacle presented itself. Learning how to use a number of different tools that weren’t always stable or weren’t capable of evaluating apps for the latest mobile threats or keeping pace with Android and iOS updates created a time sink. In addition, tools available at the time only included software, no hardware — which forced the engineer to build his own ad hoc testing environments. He realized his team couldn’t continue to expend valuable time trying to keep their testing rigs stable.

“I’d decompile an Android app and find that a tool I’d used in the past suddenly couldn’t recognize the files, and then I’d have to install another tool that also didn’t work,” he said. “Or on iOS I had to use my personal device, jailbreak it, and use it for testing. And I’d find that while Class-dump worked for me at one point, it unexplainably stopped working, and I would spend hours on Google trying to figure out why.”

3. Managing the finer points of compliance audits

Compliance requirements also require very specific reporting guidelines which also challenged the engineer and his team. A number of the brand’s mobile apps fall in scope for regulations such as the Payment Card Industry Data Security Standard (PCI DSS) and the Federal Trade Commission’s Children’s Online Privacy Protection Rule (“COPPA”).

SOLUTION:

Starting with just his original “hardening guide” for mobile apps, the engineer went on to build an entire mobile app security program. He started by contracting with NowSecure for services that provided consultation on the document and included continual updates to account for the latest threats and versions of Android and iOS.

The engineer also solicited feedback on the document and then worked with the corporate governance team to turn his guidance into mandated policies. The development team’s response to the final product was something the engineer didn’t expect.

"I was expecting a lot of negative feedback," he said. "So far, people are loving it, and more business units are reaching out to us for testing." Based on the document and common issues his team identifies in testing, the engineer also periodically hosts mobile app security clinics that are well attended by developers.

To provide developers consistent reporting that closely aligns with the document, the engineer and his team also started using NowSecure Lab Workstation. He no longer had to wrestle with an amalgam of out-of-date, unsupported, unstable testing tools. "With Lab Workstation installed, you don't have to worry about setting up anything," the engineer said. "You don't have to worry about the device or whether the jailbreak is going to work or whether you need to update or not."

RESULTS:

"I see fewer security issues, which indicates that the developers are actually paying attention and trying to make their applications more secure," the engineer said. Through the engineer's efforts to spread awareness and truly partner with the development team, developers are producing more secure mobile apps of their own volition.

In terms of testing time, the engineer has seen significant time savings. "Prior to our using Lab Workstation, a test might take 80 hours," he said. "That's cut in half. The amount of analysis time it's saved us is huge — just download the app on the device, run the tests, and I have a good picture of the security of the app." The efficiencies gained also allow the engineer and his team to do more re-testing of apps.

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The engineer also benefitted from the speed with which he can now perform mobile app penetration testing during a recent PCI DSS audit. "A mobile app was in scope for PCI and I was nervous because of the high visibility and depth of testing," he said. With Lab Workstation, he was able to deliver results a week ahead of schedule and the report provided the Qualified Security Assessor (QSA) with what they needed.

What makes the engineer most proud about the program is the reputation for quality that his team is building. Management is hearing positive feedback from multiple business units and realizing that the team is helping the company develop higher quality apps. "There are a few other teams that do mobile, but we'll find issues that they do not," he said. "We're getting a reputation of, 'If you need something of high quality, send it to the red team.'"

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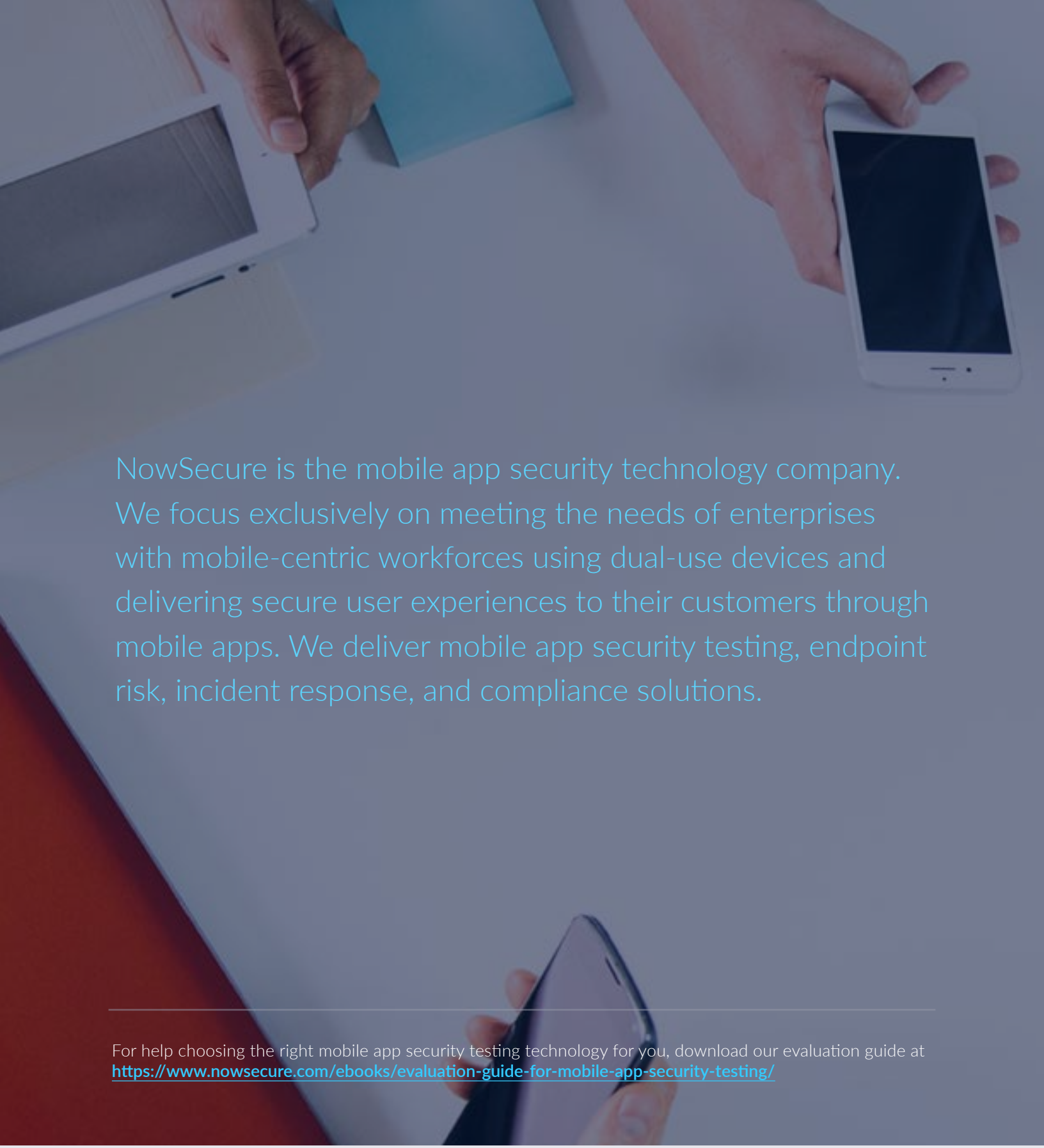

NowSecure is the mobile app security technology company. We focus exclusively on meeting the needs of enterprises with mobile-centric workforces using dual-use devices and delivering secure user experiences to their customers through mobile apps. We deliver mobile app security testing, endpoint risk, incident response, and compliance solutions.

For help choosing the right mobile app security testing technology for you, download our evaluation guide at **https://www.nowsecure.com/ebooks/evaluation-guide-for-mobile-app-security-testing/**

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