Today more than half of the devices employees use to access your organization’s data run iOS, Android and Chrome OS.

Traditional cybersecurity strategies have long been focused on protecting your fixed endpoints such as servers, laptops and desktops from cyberthreats. However, your security requirements have grown organically over time to include mobile endpoints too.

The problem is security on mobile devices is often overlooked, creating a gap in your security architecture. While mobile operating systems are considered to be more resilient, cyberattackers increasingly target them because mobile devices are at the intersection of our personal life and professional life. These devices have a treasure trove of data and attackers use them to attack your organization.

As you evaluate mobile security solutions to add to your architecture, you face a familiar challenge of choosing between a comprehensive platform or best of breed solution.

Mobile has opened new opportunities for cybercriminals

Securing mobile devices is completely different from securing desktops and laptops. While threats on mobile endpoints are very similar to desktops, the approach to protecting them is different. Consequently, there are new security requirements introduced by your mobile fleet that you need to address.
Mobile risks need modern endpoint protection

While mobile operating systems are more resilient, cyberattackers increasingly target them because they are at the intersection of our personal life and professional life. iOS, Android and Chrome OS devices have a treasure trove of data and attackers are targeting them as the initial intrusion into your business.

A common attack vector uses mobile malware which may include spyware, banking trojans, and rootkits. Malware can be delivered through any of the cellular, Wi-Fi and Bluetooth connections of mobile devices. Once the malware is executed, it undermines the overall safety of the mobile device.

Modern endpoint protection must detect threats in apps, the device and network connections. It must protect the user, the device and the company while respecting privacy. It must work equally well for employee-owned and company-owned devices.

"Mobile security has evolved from a tool for highly regulated industries and government agencies to an essential security solution for all organizations,“

- Phil Hochmuth, Program Vice President, Enterprise Mobility at IDC.

Don’t let mobile phishing be the attacker’s entry point

Using traditional anti-phishing approaches on mobile devices quickly becomes a privacy issue because they inspect email messages to block attacks. All mobile devices, even if company issued, are considered to be a personal device. Only inspecting email content would miss the other methods used for sending a phishing link to a mobile user.

Most anti-phishing solutions rely on a list of nefarious domains and web addresses. However, over 1.5 million mobile phishing sites are created every month. And most phishing sites are built and dismantled in a matter of hours or days. Relying on reputation-based methods to detect a mobile phishing attack alone is insufficient.

1 in 50 enterprise users are phished on mobile daily and 87% of mobile phishing attacks occur outside of email.

You need to know the right app and OS versions to patch successfully

Traditional vulnerability and patch management focused on servers, rather than endpoints. This was because desktops and laptops have been managed, use a common image and are regularly patched. Therefore, the primary vulnerability risk had been the unpatched server.

Today, it is only possible to ensure mobile devices run a minimum version of the operating system with mobile device management (MDM). But as employees increasingly use unmanaged personal smartphones and tablets for work, MDM cannot provide complete coverage. Traditional vulnerability management can’t fill this gap since it relies on devices attaching to the office network rather than home Wi-Fi or cellular networks.

Mobile needs to be included in your Zero Trust Network Architecture

The freedom that phones and tablets have given us comes with risks. Each of us now represent a remote office network that needs to be secure. As we continue to work outside the reach of legacy perimeter security, there’s no guarantee of who or what device you can trust.

Your mobile users are not using VPNs to connect to your organization’s data. They need access from wherever they are and you need to ensure they don’t put your sensitive

1. Srivastava, Mehul, Financial Times, ‘WhatsApp voice calls used to inject Israeli spyware on phones’, May 13, 2019
data at risk. Only low-risk devices should be permitted to access your organization’s resources.

“Trust is not absolute, binary or static. It is an indication of the relative level of strength of the assurance of the belief. Further, the level of trust is dynamic and changes over time. Thus, access to the capabilities should be adapted.”

Gain better visibility into apps to reduce risk

Most organizations have visibility into how their desktop and laptop applications are handling data, but not for mobile devices. Because of how iOS, Android and Chrome OS run their apps, it is challenging to inspect them. Without such insight, your security team will have no idea how these apps are handling your data.

With managed devices, you have visibility and controls over which apps employees use through mobile device management (MDM) or mobile app management (MAM). But they don’t provide you insight into real-time app permissions and data access controls. With personal unmanaged devices you will not even have the limited visibility you get from MDM and MAM.

Prevent breaches with tools to detect and respond to incidents

While many organizations have comprehensive activity monitoring for servers, desktop and laptop computers, what they lack is the same telemetry for iOS, Android and Chrome OS endpoints. As employees have increased their use of mobile devices for work, attacks on these devices have increased.

To be effective at stopping data breaches, security teams need the same comprehensive data for mobile endpoints that they have for servers, desktops and laptops. Because mobile operating systems never permitted kernel access and required apps to operate in isolation, it had been incorrectly assumed that collecting comprehensive telemetry was impossible.

By 2022, more than 75% of smartphones used in the enterprise will be bring your own device (BYOD), forcing a migration from device-centric management to app- and data-centric management.”

Mobile security must integrate with your broader security architecture

Some organizations manage their employees mobile devices with tools like mobile device management (MDM) or unified endpoint management (UEM). They also leverage Security Information and Event Management (SIEM) to aggregate threat intelligence. Prebuilt integrations with MDM/UEM and SIEM will enable you to maximize the immediate value from a mobile security solution.

“The mobile security market is all about partnerships, integrations, and ecosystems, rather than best-of-breed threat prevention and remediation (although these core capabilities are certainly important). Look to vendors that have strong partnerships with key channels, such as mobile operators, as well as strong integrations with EMM/SIEM platforms”

- Phil Hochmuth, Program Vice President, Enterprise Mobility at IDC.

2. Gartner “Zero trust is an initial step on the roadmap to CARTA,” Neil MacDonald, December 2018, Gartner
3. Gartner “Define BYOD Ownership and Support Expectations in Contracts to Ensure Successful Implementation,” DD Mishra, David Ackerman, 3 July 2019
A platform built for mobile from the ground up

The Lookout Security Platform is architected to address your ever-evolving mobile security requirements. The platform scales to hundreds of thousands of endpoints with cloud modules enabling you to customize our platform to your needs and is powered by the Lookout Security Graph.

Our Security Graph uses artificial intelligence to protect you from known and unknown threats. We have the largest mobile dataset from analyzing over 200 million devices and over 120 million apps. Our algorithms search the internet daily to find websites purpose-built for phishing and analyze countless apps via our API.

Whether you download apps with new malware or are the target of the latest ransomware or phishing scam, you are protected without lifting a finger. When a threat or an attack occurs, we provide you with step-by-step instructions to investigate what is happening and how to fix it.
About Lookout

Lookout is the leader in mobile security, protecting the device at the intersection of the personal you and the professional you. Our mission is to secure and empower our digital future in a privacy-focused world where mobile devices are essential to all we do for work and play. We enable consumers and employees to protect their data, and to securely stay connected without violating their privacy and trust.

For more information visit lookout.com

Request a demo at lookout.com/request-a-demo

A platform built for mobile from the ground up

Explore the Lookout Platform at lookout.com/platform