

## MTD vs MDM vs MAM

Mobile Threat Defense | Mobile Device Management | Mobile App Management

With employees accessing sensitive business data from mobile devices many organizations deploy MDM and MAM with the belief that these solutions will protect enterprises in the cloud from cybersecurity threats.

## Organizations increasingly adopt MTD

**MTD** 

"By 2020, 30% of organizations will have MTD in place, an increase from less than 10% in 2018."2 (An increase of 200%)

**MDM** 

"Organizations looking to deploy MDM in conjunction with EMM will decrease by approximately 30% in the next 12-18 months."1 **MAM** 

"Organizations looking to deploy MAM and MCM in conjunction with EMM will decrease by approximately 10% in the next 12-18 months."1

## Guide to Identifying Security Gaps in Mobile Management

This guide compares the cybersecurity capabilities of MTD, MDM, and MAM relative to the spectrum of mobile risk. Security gaps in mobile management are emphasized to highlight potential system vulnerabilities that organizations should address to strengthen their mobile security posture.

Component of Risk

**Web & Content Threats** 

Malicious URLs opened from email, SMS, browsers, and social apps. These can direct users to websites that purport to be official login pages.

Other websites may not encrypt login credentials or can leak data.

MEETS REQUIREMENTS

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protection across email, SMS,

browser, and apps. Lookout

connections made from the

mobile device at the network

inspects all outbound

level in real-time.

Lookout provides phishing

**MTD** 

With a data corpus of more than 70 million applications, Lookout identifies "leaky" apps (meaning apps that can put enterprise data at risk) and malicious apps, through reputation scanning and code analysis.

**MDM** 

MDM has no ability to detect malicious or vulnerable apps.

NO SOLUTION

**NO SOLUTION** 

MDM does not provide any

phishing protection.

**MAM** 

MAM does not provide any phishing protection.

**NO SOLUTION** 

**NO SOLUTION** 

MAM has no ability to detect

malicious or vulnerable apps.

**App Threats** 

Malicious apps that can steal information, leak data, gain unauthorized remote access to other systems, and even damage devices.

This includes non-malicious apps

that have inherent vulnerabilities

such as the ability to leak contact lists.

**Device Threats** 

MEETS REQUIREMENTS

To protect against

jailbroken/rooted devices, outdated OS, and risky device configurations, Lookout leverages behavioral anomaly detection by tracking expected and acceptable use patterns.

**PARTIAL SOLUTION** MDMs cannot detect

root/jailbreaks in real-time. Instead they push software updates to handle the threat. This leaves a vulnerability window for attack.

NO SOLUTION

MAM has no ability to detect device threats.

vulnerability window between OS-level upgrades and patches. Additionally, sideloaded apps can introduce device threats.

Threats that exploit the operating system to gain heightened

permissions. Such attacks can

be especially effective during the

Network threats that take advantage of weakness in how

cellular, or other networks.

web sites or applications estab-

lish TLS/SSL sessions over Wi-Fi,

**Network Threats** 

**MEETS REQUIREMENTS** 

Lookout can detect risky

networks and protect against man-in-the-middle, certificate impersonation, TLS/SSL stripping, or TLS/ SSL cipher suite downgrades. **NO SOLUTION** 

MDM has no ability to detect network threats.

**NO SOLUTION** MAM has no ability to detect

network threats.

**Threat Remediation** 

on the mobile device to ensure continued safe mobile operation and access to corporate resources.

*Immediate threat remediation* 

**MEETS REQUIREMENTS** Upon detection of a threat,

Lookout provides user instruction for self-remediation.

95% of threats are user-remediated.

No threat detection or

self-remediation. However,

MDM can wipe the device to mitigate risk of a threat.

Requires input from MTD to identify threats.

No threat detection or

restrict/remove an application

remediation. MAM can

if identified as infected.

Requires input from MTD to receive application risk level.

**Conditional Access** High-risk mobile devices

attempt to access corporate resources. Devices containing viruses, malware, vulnerabilities, or that have been rooted are typically considered high-risk.

MEETS REQUIREMENTS **Lookout Continuous** 

Conditional Access monitors device health, assigns a risk-level, and provides this information to the organization as a factor of authentication.

**PARTIAL SOLUTION** With MTD input, MDM can enact policies to prevent

MDM can prevent access based on outdated OS and

authentication.

can enforce a passcode on the device.

NO SOLUTION

employers monitor all device

PARTIAL SOLUTION With input from an MTD,

MAM can enact policies to

prevent authentication to

mam-protected apps.

MAM can also prevent

access based n out-of-date app versions.

**User Privacy** Protection of user privacy and

tions across various industries.

adherence with privacy regula-

MEETS REQUIREMENTS Lookout only requires email address for setup and does

Lookout also provides an advanced privacy mode to

not require GPS location.

suppress additional user information.

activity – including personal calls and web traffic - at any given time.

Many MDM tools let

No privacy mode is available.

PARTIAL SOLUTION As a stand-alone solution, MAM manages only those

applications required by employer and limits use of

user's information.

Many MAM solutions, however, are deployed with MDM.

**NO SOLUTION** 

Continuous monitoring for cybersecurity events and

**Threat Notification** 

notification of these events.

Upon detection of a mobile cybersecurity event, Lookout immediately notifies

MEETS REQUIREMENTS

administrator and designated recipients of event.

**NO SOLUTION** Cannot detect mobile cybersecurity events.

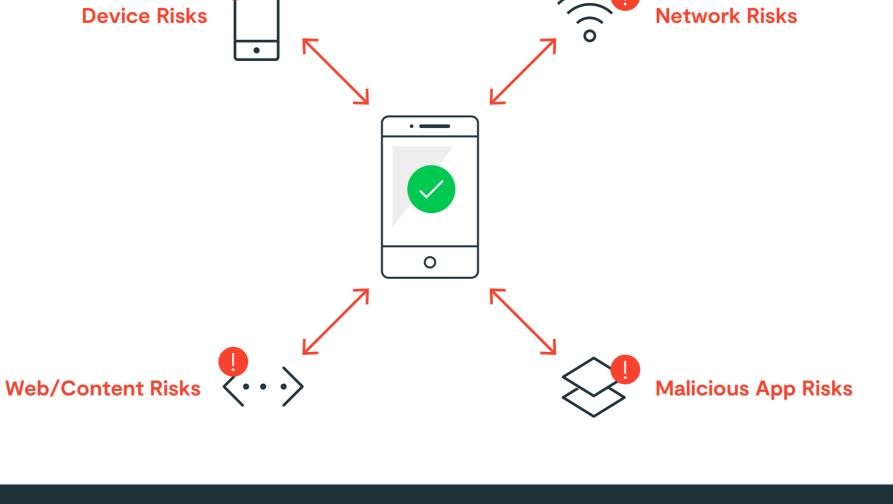
Cannot detect mobile cybersecurity events.

## MDM and MAM solutions provide no detection or protection against cybersecurity threats and user behaviors. Rather these

are 'management' tools that can apply policies and procedures for the administration and governance of mobile devices

MTD protects organizations from multiple cybersecurity events

used within an organization. For protection against mobile cybersecurity attacks, a MTD solution is required so that threats can be detected and blocked to protect the organization. Integrating a MTD with an existing MDM and/or MAM solution, however, is a sound strategy and will enable these management tools to apply policies based on threat information.



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