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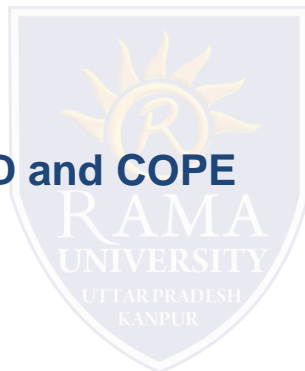
MOBILE SECURITY

LECTURE -34

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WHAT IS MOBILE DEVICE MANAGEMENT (MDM)?

MDM industry use cases

Healthcare

With most healthcare organizations moving towards electronic health records (EHRs), mobile device use is more popular than ever in the healthcare sector. But ensuring the personal health information (PHI) stored on mobile devices is secure and complying with regulatory standards like HIPAA can be a challenge. An MDM solution can help you meet compliance standards while also ensuring that PHI remains secure from unauthorized access.

Transportation

Now that many enterprises are embracing mobility, one market that can benefit greatly from the advantages of MDM is the transportation industry. MDM lets businesses track shipments and vehicle locations as well as maintain a history of locations traversed. It also lets you lock down corporate devices to specific apps and/or settings to prevent device misuse and ensure maximum productivity.

Education

The transition to the digital age has affected no industry more than the education sector. With more and more schools adopting tablet-based teaching methods, it's essential to manage these devices to ensure they're only used for learning. Granular restrictions let you disable basic device functionalities such as the camera, as well as restrict access to certain websites.

WHAT IS MOBILE DEVICE MANAGEMENT (MDM)?

MDM industry use cases

Retail

Thanks to features like digital signage, mPOS, and self-service checkouts, mobile devices have found their niche in the retail sector. Some enterprises in the retail industry use mobile devices built for a specific need, while others use a combination of in-house apps and certain policies on more standard devices like phones and tablets. Both specialized devices such as rugged devices and standard mobile devices such as smartphones can be managed using an MDM solution.

Service

With most organizations in the service industry leaning towards a mobile-only or mobile-first workforce, mobile devices—especially employee-owned devices—are being used more than ever. An MDM solution helps you seamlessly manage personal devices (BYOD management) and in-house apps while also ensuring those devices adhere to your enterprise's security standards.

WHAT IS MOBILE DEVICE MANAGEMENT (MDM)?

The MDM solution that can help

Mobile Device Manager Plus is the solution for any enterprise looking for a complete mobile device management tool. Let's look at some of the features Mobile Device Manager Plus has to offer:

Quicker onboarding

Mobile Device Manager Plus supports multiple methods for enrollment, irrespective of whether the device is with the user or still sitting in one of your business' storerooms. With Mobile Device Manager Plus, you can quickly and easily onboard devices in bulk with no user action required. It also helps with BYOD mobile device management i.e. mobile device management for personal devices, whereby you get to manage the workspace while having zero control over the personal space ensuring corporate data security without compromising on user privacy.

Efficient app management

Seamless policy management

Robust security management

Comprehensive post-deployment management

WHAT IS MOBILE DEVICE MANAGEMENT (MDM)?

BYOD

Bring your own device is a popular approach. In fact, research from Gartner indicates that 90 percent of organizations around the globe will leverage BYOD. According to Enterprise Mobility Exchange, the BYOD market value is expected to see a 22% CAGR now through 2023. In the BYOD model, employees are granted full responsibility for choosing and purchasing the devices they use, as the smartphones, tablets, and other gadgets are their own.

The key advantages of BYOD are lower hardware and service costs, higher user convenience and satisfaction, and little to no wireless carrier requirements for the organization. The main disadvantage of this approach is that security can be more difficult to enforce; therefore, having a well-defined mobile policy and security enforcement in place are critical. This approach also makes it more difficult to manage configurations, replacements, and repairs since employees own the devices.

WHAT IS MOBILE DEVICE MANAGEMENT (MDM)?

CYOD

In the CYOD model, companies provide employees with an approved set of devices from which to choose and will also cover the costs of the mobile plan. Devices are either paid for and owned by the employees, or the company will offer a renewable hardware stipend that allows the organization to retain possession following the termination or resignation of various users.

The main advantages of CYOD are that it can reduce hardware costs as compared to COPE. The end users are still in control of their own technology, but the support and procurement standards are more streamlined given the more homogenous pool of device options. The disadvantages include: user dissatisfaction with available options, hardware costs are not completely eliminated, and users may struggle to manage repairs and replacements. Of the three options, CYOD can be considered more “middle of the road”, as it comes with advantages and disadvantages of both the BYOD and COPE models.

WHAT IS MOBILE DEVICE MANAGEMENT (MDM)?

COPE

Larger enterprises are more likely to employ the COPE model, as it maximizes control over mobility in many ways. Employees are given smartphones that are paid for by the company, meaning the business retains ownership of the devices. There is some flexibility involved as well, as enterprises can still offer options to employees. COPE is a popular choice for financial institutions and health care providers due to their regulatory needs for compliance and security.

COPE offers organizations the most control and authority over all mobile devices, which results in lower security concerns than BYOD and CYOD. Repairs and replacements are more standardized and easier to execute. However, users may have less freedom with their devices, which may impact productivity. A COPE approach requires that the business take a very proactive and innovative approach to keeping up with technology, making sure to be forward thinking and vigilant.

WHAT IS MOBILE DEVICE MANAGEMENT (MDM)?

BYOD vs. CYOD vs. COPE

BYOD



No wireless carrier procurement required



Fast deployment time-frames



Employee owned device



Lower hardware & service costs

CYOD

Procurement standards are tighter than those of BYOD

Slower deployment time-frames

Employee owned device or Company owned device

Can reduce hardware costs compared to COPE (but still higher than BYOD)

COPE

Specific and tight procurement standards

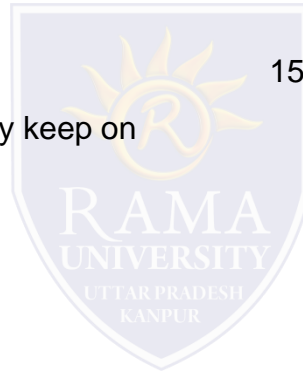
Slowest deployment time-frames

Company owned device

Highest hardware costs of the three options

MCQ

11. _____ infects the executables as well as the boot sectors.
- a) Non-resident virus
 - b) Boot Sector Virus
 - c) Polymorphic Virus
 - d) Multipartite Virus
12. _____ are difficult to identify as they keep on changing their type and signature.
- a) Non-resident virus
 - b) Boot Sector Virus
 - c) Polymorphic Virus
 - d) Multipartite Virus
13. _____ deletes all the files that it infects.
- a) Non-resident virus
 - b) Overwrite Virus
 - c) Polymorphic Virus
 - d) Multipartite Virus
14. _____ is also known as cavity virus.
- a) Non-resident virus
 - b) Overwrite Virus
 - c) Polymorphic Virus
 - d) Space-filler Virus
15. Which of the below-mentioned reasons do not satisfy the reason why people create a computer virus?
- a) Research purpose
 - b) Pranks
 - c) Identity theft
 - d) Protection



REFERENCES

- ❑ <https://www.calero.com/mobility-service-support/byod-vs-cyod-vs-cope-choose-right-enterprise-mobility-strategy/>
- ❑ <https://www.focus.net.nz/blog/category/general/cope-vs.-byod-vs.-cyod-whats-the-difference-and-how-can-you-protect-your->

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