42GEARS

Drive Business Value from EMM Data using Mobile Analytics

By 42Gears Team

42GEARS

Contents

Mobile Analytics and EMM are two important pillars of today's enterprise mobility. These tools have been serving companies independently for years. Growing challenges related to security, privacy and mobility management are forcing EMM and Analytics vendors to think beyond conventional ways. The Mobile Analytics System currently deployed in enterprises mainly revolves around security (via SIEM tools like Splunk) and In-App analytics. This paper attempts to assess the impact EMM solutions can make, if thoughtfully integrated with existing Analytics sub-system. When paired, these two powerful engines can provide better outcomes, lead to better decisions and give more insight into data. Moreover, this combination could help enhance business value by reducing costs and increasing work efficiency.

INTRODUCTION

Analytics refers to the collection, modeling and analysis of data from various sources and generating useful insights and conclusions based on patterns, prediction and data correlation. While Analytics has its application in a wide variety of areas, this paper primarily refers to Analytics as required and used by Enterprise IT departments internally. Analytics helps business decision-makers around areas such as security, privacy, worker productivity and costs.

While these analytics systems are already in place, one of the obvious question that comes to mind is about its accuracy and effectiveness. Is analytics taking into account all the relevant data? Are the systems sufficiently integrated with one another to allow optimum data correlation?

This paper makes an effort to draw readers attention towards issues such as under-utilized EMM data, lack of coherence between EMM and Analytics system, wrong inferences and decisions due to lack of integration in the analytics system.

Let's begin with, **Enterprise Mobile Analytics**, a tool that helps businesses get key insights on mobile devices and apps usage within an organization, giving them the

ability to evaluate strengths and weaknesses, measure overall performance, and develop a strategy to manage enterprise mobile infrastructure.

As per a recent report by Gartner "Analytics has become increasingly strategic to businesses and central to most business roles, every business is an analytics business, every business process is an analytics process and every person is an analytics user." Also, Gartner predicts, "Business Intelligence and analytics market revenue is expected to reach $18.3 billion by 2017". Also, by the end of 2020, the market is forecast to grow to $22.8 billion.

SIEM and IAM are two important components of Enterprise IT and play a crucial role in the system integration for enterprise mobile analytics.

Security Infrastructure and Event Management (SIEM)

Security Information and Event Management (SIEM) systems, monitor and analyze network and hardware activities inside enterprise environment. They generate patterns and reports for security and privacy breaches. In-app analytics from Enterprise applications gives insight about worker productivity and adoption. In addition to these, EMM solutions also come with inbuilt reports that give basic insights around mobile deployment like security compliances, data usage, device health, etc.

SIEM is used by companies for security purposes. It monitors unusual incidents and traces back the originating device. Being an important part of organization's security system, SIEM can contribute and work with Analytics and EMM.

Identity Access Management (IAM)

Identity and access management (IAM) refers to a framework of policies and technologies that ensure secure access to appropriate resources to proper people in the enterprise. Being a crucial part of IT security, it's an option to bring value in Analytics ecosystem.

BENEFITS OF MOBILE ANALYTICS

Measuring or analyzing apps with in-app analytics sdk:

With the help of in-app analytics SDK, IT can measure and highlight the behavior of business apps. It allows businesses to understand how effectively the applications are being utilized, while tracking what type of devices, OSs and carriers are most popular. Moreover, in-app analytics helps enterprises find out popular apps as well as frequently used features of a particular app.

Inferring causes of common deployment issues:

Analytics engines can churn through huge blocks of data and come up with insightful conclusions and patterns. For example, excessive battery consumption or data consumption is a bane for any enterprise mobility deployment. It can render employees unproductive on the field or can cost company huge cellular data bills. What if analytics can connect the dots and point to a particular software update or application that might have triggered high data consumption/battery consumption. Such information can be very valuable for businesses.

Realizing trends and patterns:

In any business environment, enterprises generate and deal with large amount of data. Drawing a meaningful inference from this data is quite a Herculean task. Custom and dynamic reports from analytics engines help to bring together relevant information. These reports can be presented in the form of informative visuals to depict trends and patterns.

Proactively preventing problems:

Security information and event management (SIEM) are being used to ensure safe and secure operative environment . SIEM can monitor the trends, patterns, history

and trace an unusual circumstance to prevent any potential loss, malfunction and problems by providing immediate alerts. Analytics captures SIEM data and provide detailed insights on the current potential risks and the methods to prevent them. For example, analytics can show trends of increased traffic load from particular device(s) and alert the administrator about possible DOS attack from a rogue application. In this case, the problem is identified, so admin can take effective actions to prevent such loss.

Enabling better business decisions:

Business intelligence and analytics have become core components of businesses these days. Decisions-makers always refer to data while making decisions. Analytics can actively monitor and analyze which aspects of mobile infrastructure will result in high ROI and which will not. Admin can decide whether or not to remove the non-performing assets (devices, apps, workers) from the system and save costs.

A LOOK ON OTHER DATA SETS COLLECTED THROUGH EMM TOOL

As EMM has been playing an important role in managing different endpoints such as laptops, tablets, smartphones, IoT devices and wearables in the organizations for years. EMM systems collect tons of data from various endpoints such as device info, network, app, policies, identity and security. This data, when supplied to an analytics system, can prove very useful and drive more value for businesses. Let's have a look at few such important data heads and their significance:

Device Data:

By using device data extracted by EMM such as device location, OS version, serial number, battery level, use of memory, CPU, and storage, passcode enabled, OEM data and IMEI number, analytics can observe better co-relation and hence give more actionable reports.

Network Data:

With the help of information provided by EMM like data usage, telecom carrier info, IP address, roaming data usage, phone number and mac address, organizations (through analytics) can minimize the telecom expenses and find out anomalies that might cause high cellular and roaming bills. Also, data on these parameters help companies select better network plans.

App Info:

The info on an app such as app publisher, app version, data usage per app, app entitlement by the user and managed/unmanaged apps, help to analyze which apps are used/unused, updated and downloaded the most. This, in turn, helps the organization to better direct their roadmap and resources.

Policies:

EMM policies such as device restrictions, app restrictions, compliance policies, managing app configuration and network configuration are set up to protect against threats. With the knowledge of these EMM policies, analysis inferences can be more accurate.

Identity and Security:

Identity and security is crucial part of any EMM and analytics implementation. EMM includes various aspects on these such as active directory group name, conditional access policy, credential keys, user role, OS security patches, encryption, jailbroken and rooted.

EMM DATA AND MOBILE ANALYTICS: A MATCH MADE IN HEAVEN

Mobile analytics can collect and blend data from various sources including EMM, SIEM and IAM to provide deeper insight. Data extracted by EMM has been explored above. Now, let's try to understand how this data helps in providing more insights and bringing authenticity.

In-app analytics is being used as a tool by decision-makers to analyze the effectiveness and popularity of apps. If in-app analytics shows more downloads for a

particular app, it can be inferred that the app is popular and should be promoted to a wider audience. On the contrary, EMM can show that this particular app is a guzzling battery which is potentially leading to high device maintenance costs and depleted worker productivity. Therefore, in light of both the facts, decision-makers can decide either to remove the app or fix the bug.

For years, companies have been relying on **Security Infrastructure and event management (SIEM)** tools for security purposes such as auditing and incident response. This tool helps companies to monitor malicious traffic and figure out the originating device. So far, it was doing well with desktop PCs, laptops and company-owned mobile phones, but ever since BYOD was introduced, a large number of employee-owned devices enter the corporate network and it has become difficult to trace back the users of these devices. EMM system, being the backbone of BYOD deployment can easily assist SIEM analytics to trace malicious devices to their owners.

Another interesting example which demonstrates how lack of **integration between EMM and Analytics** can lead to a wrong decision- using EMM policies companies can blacklist apps, delete apps, grant or revoke permissions from an app. So, imagine an R&D division in a factory, where the use of the camera is prohibited and as per the EMM policy, device camera gets disabled on entering the premises. In-app analytics running on such devices might suggest something like 99% of app's features are doing well except 1% that makes use of the camera. So, analytics here could draw wrong inferences due to lack of knowledge about the EMM policy that disabled camera functionality.

So far, we have discussed how EMM data can help bring more insight in Analytics. Now, let's turn the table and see the other aspect as well. Let's check if Analytics can contribute in bringing improvements in EMM too.

FLIP THE COIN: ANALYTICS ENHANCES EMM CAPABILITIES

EMM approach is reactive when the problem has already occurred whereas, analytics enables users to act proactively and prevent the devices and system from failing. Few of the benefits are:

– Enterprise mobile analytics can optimize device population by way of redeployment of fully or partially unused devices. Organizations can avoid paying for unused hardware, software licenses and save costs.

– Analytics can help to determine best mobile data plan that can give maximum ROI based on actual data consumption.

– Analytics can help increase ROI on multiple aspects of enterprise mobility deployment. It can aid in the selection of optimum hardware, software for deployment according to the usage pattern. It can even help in planning mobile workforce hours.

So, what is the best approach to get the fullest out of EMM, Analytics, SIEM and IAM. There might be two aspects. First, we can get an integrated solution that can do all in one. Other, though not integrated into one, requires a strategy that can incorporate all by directing the data flow. A figure given here to help understand data flow:
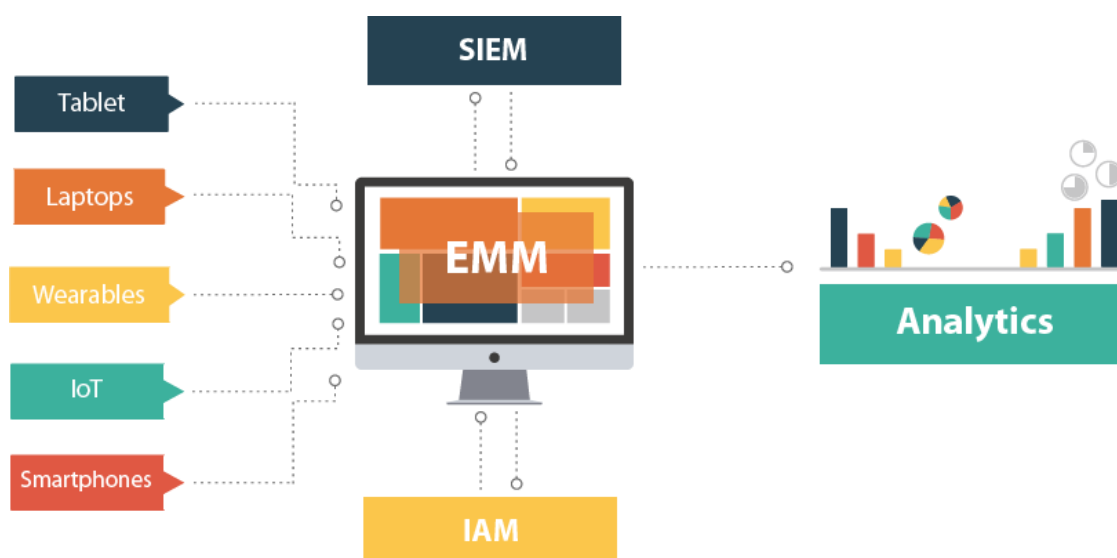
CONCLUSION

EMM and Mobile Analytics are two important components of every mobile infrastructure. These components have been contributing well independently, but together these can have a greater impact on the mobility ecosystem. The decision-makers can make informed and impactful decisions in the light of powerful data gathering and analytic tools.

Enterprises should explore solutions that use Mobile Analytics to convert Enterprise Mobility Management data into business value and get the most out of the mobility deployment.

42Gears help organizations leverage EMM analytics to optimize costs, enhance security and improve operational efficiency.

Have a query? *Leave your details* *to arrange a call back.*