



Context is Everything:  
Embrace the Benefits of Mobility,  
Without Sweating the Risks

# Introduction

## What is Contextual Mobility Management?

The potential benefits of enhanced mobility in the workplace are becoming more and more clear, from streamlined communications to significant boosts in overall productivity. But for many organizations, the anticipated risks to employee safety and data security posed by mobile device usage can often slow the overall digital transformation of the business. This understandable reluctance raises an important question: What if these risks could be reliably mitigated through the situation-based management of mobile devices, providing organizations with the confidence and reassurance necessary to embrace mobility to the fullest?

Contextual Mobility Management (CMM) is the next evolution in how mobility is leveraged in the workplace, enhancing traditional management solutions, eliminating costly risks, and transforming how employee device usage is managed at different times and in different environments.

When we hear the phrase “context is everything,” it’s often in relation to the use of language. But the sentiment is equally true when talking about the use of specific tools or objects in unique situations. The appropriate context for using a hammer and a nail, for example, might be to hang up a painting or to build a dresser. And in most cases, we have a general, and even intuitive, understanding of how to utilize the right solution in the right context.

With that in mind, consider how mobile devices have become the ultimate toolkits, containing a virtually limitless supply of applications aimed at solving different problems. However, our desires and impulses seem to have a natural tendency to impede our better judgment when it comes to the use of our phones and tablets. Most of us are well aware that driving a car is not an appropriate context for texting our friends, and yet according to the NHTSA, nearly 30,000 people are injured each year in the U.S. alone<sup>1</sup> as a result of using a mobile phone while driving.







Similarly, there are a number of situations within the workplace in which the use of mobile devices, or specific applications, is not appropriate. Whether it's a safety concern related to the use of a device while operating heavy equipment on a job site or plant floor, a data security concern related to accessing sensitive information via a lost or stolen device, or a productivity concern related to the use of distracting text or entertainment apps on company time, many employers feel they have no choice but to minimize mobility in the workplace or ignore it altogether.



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Again, this is a perfectly understandable reaction. The above risks are entirely real and can have devastating financial consequences or, in the worst cases, even result in catastrophic accidents. But this no longer has to be the case. Organizations are increasingly turning to a solution that helps them to embrace and optimize the use of mobile devices in the appropriate contexts.

CMM software allows employers to conceive and enforce unique mobile usage policies in the workplace, with incredible accuracy. By recognizing the context surrounding the use of a device in real time, CMM temporarily suspends the user's access to distracting or prohibited applications, enforcing relevant usage policies automatically. Just like that hammer and nail example described earlier, CMM enables companies to define acceptable use of mobile tools specific to the situation. For example, use an inventory management app while stationary, but not while operating a forklift, or use a tablet to access patient data on the hospital floor, but not from the parking garage. Whether it's a user's location, movement inside a vehicle or throughout a facility, work schedule, or workgroup, CMM will recognize the context and respond accordingly.

To provide a clearer picture of how the technology works, as well as its importance to the future of mobility, let's take a more in-depth look at CMM, the issues it can prevent, and how it can unlock an organization's ability to leverage the constantly evolving benefits of technological innovation in the workplace.

# CMM & MDM

Before we dive into its applications, it's important to first distinguish CMM from other widely-used solutions, specifically software categorized under the umbrella of Mobile Device Management (MDM).

MDM solutions are essential to an organization's overall mobility framework, but they are vastly different from CMM in terms of functionality. When we talk about MDM, we are referring to a broader variety of management software primarily used by IT. MDM tools are incredibly useful for organizations looking to remotely configure and support multiple devices on a network as well as to manage app deployment, access to data, and overall policy. But they are not designed, like CMM is, to dynamically change user profile access or policy enforcement in real time.

Another important point to keep in mind is that CMM is not a replacement for MDM, but a complementary tool that readily integrates with an organization's IT infrastructure and core technologies. The aim of CMM is to enhance existing management platforms and extend their capability with situation-based functional capabilities, including:

## Real Time Management

CMM takes an automated, proactive rather than a reactive approach to mobility management. Because the software lives on an employee's mobile device and is configured to enforce policy automatically as soon as a context is identified, organizations can avoid the need to intervene on device functionality after a policy has already been violated.

## Visibility and Policy Enforcement

Lack of visibility makes enforcing and evaluating mobile device policies difficult for employers and can be confusing for employees to keep track of what's considered acceptable use throughout their work day. CMM provides enhanced visibility for all involved parties, alerting employees when policies are active based on unique configurations that fit the employer's requirements.

## Workaround Prevention

CMM contains multiple safeguards against user tampering, preventing the ability to disable functionality without the support of an IT professional. Put simply, CMM works when it's supposed to, automatically, on any device and independent of network access.

## Enterprise Level Oversight

CMM provides a centralized approach for business leaders and authorized personnel to actively manage mobile device policies and individual compliance. CMM can also be integrated with an existing MDM platform, further simplifying the ability to enforce compliance across large workforces and locations.

The critical take-away here is that CMM is neither in opposition to conventional mobility management and maintenance solutions, nor should it be considered just another novelty app among a sea of useful, yet ultimately negligible, emerging mobile technologies. CMM was conceived on the notion that context should be integral to how mobile devices operate and are managed in the workplace. It was purpose-built for the realities of how mobile technology today is used on the job and across the workplace, ways that are a far cry from how desktop and laptop computers have been used.



# CMM & Employee Safety

One of the most common barriers to embracing mobility is a company's need to ensure employee safety at all times. The hard truth is that in addition to being incredibly useful and convenient, mobile devices can, at the wrong time, also be incredibly distracting.



of all workplace fatalities are accounted for by transportation incidents maintained by the U.S. Bureau of Labor Statistics<sup>2</sup>

Take the increasingly troubling example of distracted driving. What was once a mere cause for concern in the early days of mobile devices has become a full-blown global crisis in recent years, with distracted driving being named the leading cause of crashes by the National Safety Council (NSC). And if that designation isn't alarming enough, the U.S. Bureau of Labor Statistics maintains that transportation incidents account for 40 percent of all workplace fatalities.<sup>2</sup> Such an urgent crisis demands an equally immediate solution, and it probably goes without saying that eliminating transportation in the workforce is out of the question.

Of course, employee safety goes far beyond the issue of distracted driving. In reality, there are a number of situations in which the inappropriate use of a mobile

device could result in a serious injury. For example, many employees spend long hours in high-risk or heavy equipment work zones, such as a warehouse or construction site. Throughout the day, these workers are bound to be confronted with tasks that require their undivided attention, and CMM helps facilitate this by recognizing the context in real time and enforcing the appropriate restriction. The context might be as simple as the location of the employee, or as complex and specific as the individual's movements.

Over the years we've seen a number of approaches to addressing the problem, the majority of which fall considerably short of being effective. But it isn't that the strategies themselves aren't practical or beneficial on some level, it's that they each suffer functional limitations that hinder their ability to prevent the risks of mobile device distraction in certain situations on a more notable scale.

The introduction of context-based functionality is incredibly effective at solving for many of these limitations, and CMM could very well turn out to be the missing link at the heart of these well-meaning approaches. On the following page, we've identified the limitations of a few common methods as well as how they might be overcome by context-based solutions.





## Mobile Device Use Policies

### Limitations

Having policies in place about appropriate mobile device use is essential, and no company should be without them, but the primary limitation of this approach is fairly obvious: Enforcement. Without highly accurate software and a foolproof system for keeping track of when policies are violated, it can be almost impossible to enforce these rules, especially across large organizations.

### CMM Solution

CMM uses prevention as a means of enforcement by restricting access to certain applications in specific contexts designated by the policy itself. It provides the visibility component that is missing from the original approach, allowing employees to constantly be aware of their context-based usage policies, and employers to communicate policy updates in real time as well as monitor compliance across highly-populated workforces.



## Monitoring Solutions (Telematics, Cameras, AI)

### Limitations

While there have been staggering advancements in the performance of monitoring and tracking solutions designed to report on employee behavior, these tools leave a lot to be desired in the way of actual prevention. In other words, employers might be able to tell exactly what went wrong in the event of an accident, but they have little to no control over the employee's mobile usage, which could actually prevent an accident caused by mobile-device distraction from happening in the first place.

### CMM Solution

CMM focuses on preventing mobile misuse rather than monitoring or recording it. Whether it's a delivery truck driver on a cross-country excursion, or a forklift operator navigating a crowded port, CMM allows employers to configure mobile usage policies based on either context.

The addition of CMM functionality to any existing monitoring solutions would be a significant improvement of the technology, increasing its chances of being a viable long-term solution.



## In-House or Bespoke Solutions

### Limitations

While there is no shortage of apps on the market designed to lock up a user's phone to prevent distraction while driving or working on a task, most of the mobile usage restrictions offered by these apps end up being self-imposed. Essentially, appropriate mobile use ends up being the choice of the user who can easily opt out of using the app or even delete it from their device. Similar apps developed in-house for enterprise use offer little improvement in enforcement and no real ability to support dynamic policies based on varying work environments.

### CMM Solution

Because employers are the ones writing the policies and designing the configurations, contextual mobility management can often feel proprietary to the company and their unique work environments. CMM offers companies intuitive, automatic, contextual enforcement of those policies without any limitation based on device type, operating system, or even environment.

## Bottom Line

In order for enhanced mobility to be viable in relation to employee safety, companies need the ability to leverage smarter mobile solutions, mitigating the potential of an accident, in addition to costly litigation, through the use of context-based policy enforcement of mobile device usage.

# CMM & Data Security

In their 2021 Mid-Year Data Breach QuickView Report, Risk Based Security tallied 1,767 data breaches for the first half of this year, leading to the exposure of 18.8 billion records.<sup>3</sup> Considering this only includes publicly reported breaches, it's safe to assume that the actual number is much higher. In any case, data security is a huge deal right now, and it's another common reason that companies need to address the challenges of mobile usage across the workplace.

After all, data breaches are costly, whether it's the forced monetary appeasement of a ransomware hacker, the attorney fees associated with lawsuits filed by compromised parties, or the reputational damage that comes with owning up to a lack of adequate safeguards against attackers. Understandably, no one wants to increase their exposure to these risks, if they can reasonably avoid it.



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But what many companies don't realize is that they actually can embrace mobility without compromising data security, and the same principles of contextual management described above can be applied to achieve this. How does it work? With context-based permissions.

Most of the concerns around data security related to mobility have to do with access to sensitive personal data or applications. This is even more of an issue when you consider the influx of remote and hybrid

work arrangements that have emerged as a result of the COVID-19 pandemic. How can a company ensure that an employee only has access to protected information at the appropriate time and for a legitimate reason?

In the same way that it prevents a forklift driver from checking a picklist while navigating the aisles of a warehouse, CMM utilizes context-based permissions to ensure that secure applications aren't accessed—intentionally or unintentionally—in the wrong environment, such as a dinner party, or by someone unknown, such as when a device is lost or stolen. And again, access permissions are customizable, configured by the company to reflect their unique policies around data and application security.

It works by allowing authorized parties to assign an automatic switch between an “always and never” state of access and permission on employee mobile devices, based on specific locations, times, and scheduled work hours. The software also responds to changes in any of these conditions in real time and responds accordingly by cutting off or allowing access based on the moment-to-moment activity of the user.

The pandemic left many organizations scrambling to accommodate for mobility with no experience and no means of addressing data security in relation to remote work. In a sense, without even realizing it, CMM had the solution they were looking for all along.

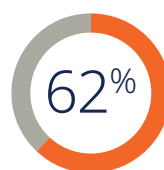




## Conclusion

# Fostering a More Productive Workforce

In the wake of the recent and ongoing pandemic, as well as the digitalization trends of the past decade, embracing mobility in the workplace is becoming less of a choice all the time. The good news, however, is that research spanning many industries and across international borders seems to point to mobility as a driver of positive outcomes. We have seen this firsthand, and in our own polling of 1,500 U.S.-based working adults, over a third claimed to be using mobile devices more often at work, and a notable majority (62%) also said mobile devices were instrumental in increasing their overall productivity.<sup>4</sup> And although more data is certainly needed to determine exactly where mobility in the workplace is headed, we do know that the most pervasive barriers to advancement are deeply rooted in issues of employee safety and data security.



of U.S. based working adults said mobile devices were instrumental in increasing their overall productivity<sup>4</sup>

But when we look at these valid concerns more carefully, as well as the long history of solutions in mobility management, we can see that what has largely been missing from the picture is the use of context-based solutions. The overall hope is that if we can begin to view CMM as integral to the management of mobile devices in the broadest sense, then we can begin to mine all the potential benefits of increased mobility, ultimately fostering a more safe, secure, and productive workforce.



# About TRUCE

At TRUCE®, we believe there's a better way to leverage all a mobile device has to offer in the workplace, while still protecting what's most important – your employees, your assets and your IP. TRUCE offers the first Contextual Mobility Management solution, providing flexible, situational enforcement of your mobile device policy, allowing companies to temporarily enable or suspend mobile apps based on the work being performed, the work location or even the user or workgroup. Our patented technology adds a layer of contextual intelligence to traditional mobile device management approaches and operates on both iOS and Android platforms.

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