### **Smartphone Apps** Making Smart Job Site Decisions By Doug Gray

Let me start by saying that you may not want to use apps in your business. Disclaimers: 1) Using apps at many job sites is both distracting and common; 2) using apps when operating machinery is inherently unsafe and it is happening right now; 3) the use of safety-related apps is increasing rapidly, impossible to measure. Let me explain each of these points.

#### Definitions

An app is a specialized program that can be downloaded onto a mobile device, such as a smartphone. Apps can be downloaded at slight or no cost from an app store. Currently, more than 58% of the U.S. population owns a smartphone; 52% of those users in the U.S. own an Android, which is owned by Google, while 43% of those users in the U.S. own an iPhone, which is owned by Apple. Both Android and Apple have more than 800,000 apps on their platforms.

Globally, Android is more popular, but Apple makes more money from app downloads (74%) and is more profitable (72%) and is used more in business (62%). Blackberry, Windows and other operating systems are less significant. As you may recall, apps did not exist for public use prior to 2007, until Apple introduced the iPhone. So this revolutionary technology is only 7 years old.

The two types of apps are static and dynamic. Static apps may be defined as references, like a resource manual, used by service providers to describe their products or services. Commonly used static apps include OSHA Heat Safety Tool, American Red Cross First Aid, NIOSH Ladder Safety, Flashlight, RigIT and ProActSafety.

Apps can now be developed quickly at low cost. The functionality can be limited because as soon as they are produced, the information is dated. If your company selects an app provider to develop an app, and you need an update, then you should know that you have selected an app provider to provide content for multiple years. This is a new market with many vendors and variable quality. Dynamic apps have a higher degree of user interaction and are associated with a platform that may provide immediate response. Commonly used dynamic apps include Safety Meeting, iAuditor and proprietary apps such as Jacobs' Beyond Zero app.

Customization for your company is expensive—at least \$50K. Any technology provider will state that users rarely know what they need. So when a developer asks more questions or suggests more features, know in advance that each modification will be an additional expense.

Apps using a web-based template can now be developed in hours for use "with any device with a browser." A compelling tagline, right? These web-based platforms may have utility at your company if you have employees with personal smartphones. They are not hard to develop—even I have developed several of these web-based template apps.

#### **App Use: Productivity**

People text and drive. And, you probably know those injury statistics. Sadly, some people text and operate heavy machinery. One safety leader, a CSP, recently told me that while driving down a state highway he was astounded to see a construction crew operator texting while seated on a moving machine. The safety leader immediately pulled over and informed the foreman.

How often do you think such events occur without any intervention? You may be surprised to learn how often per hour people use smartphones to text, check Facebook or view an app. Some users average 5 hours during a 17-hour waking day. (Then 43% of smartphone users admit that they sleep with their phones, perhaps using a relaxing soundwave app.)

There is no way to accurately measure such distracting work habits. We can measure the effects of increased serotonin releases when people are using apps as compared to when they are not using apps. We can also measure the As app programming code becomes more available, the next generation of safety professionals graduating from college could be designing safety apps for us.

rates of app-related incidents for workers in offices, highways and manufacturing sites. Despite the abundance of productivity apps, most researchers conclude that app usage decreases productivity.

#### App Use: Popularity

Smartphone usage has increased in every age group and in every income group since 2007. Millennials and digital natives have taught people of all ages to expect immediate access to information. "Google it" is a verb phrase. Managers and leaders typically respond to this demand for instant information with a BYOD policy—bring your own device. They cannot stop employees from accessing digital data.

Good judgment must be modeled by smart safety leaders. Guidelines regarding app and social media usage can be written, but they will be difficult to enforce.

#### App Use: An Example

"Small and medium-sized companies are making their own apps for smartphones at a rapid rate," says Bryan Raughley, president of Consulting Safety Managers Inc. (CSM), an app developer. Raughley and his partners have helped companies specify and implement safety apps that use CSM's SafeTask System for pretasking, safety huddle content management, safety observations and safety inspections. "Executives and operations managers want real-time access to data and analytics about their business processes, just as FedEx or UPS when they track the status of a package in delivery," Raughley continues. "These companies generally have three options when it comes to apps. They can either 1) buy expensive analytical software to interface with process software; 2) subscribe to a cloud-based third-party app management service; or 3) develop their own apps."

He says, "We're seeing more and more companies realize that developing their own apps is easy and practical. The data can be easily stored and then transferred to spreadsheets or scoreboards, where managers can crunch the numbers. All it takes is the safety professional collaborating with the

Make sure that the data are useful for an immediate need, especially in operations, and you will have more support from all users.

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IT professional. IT professionals can develop homemade apps with excellent functionality and with the flexibility to make continuous improvements literally overnight. It's foreseeable that, as app programming code becomes more available, the next generation of safety professionals graduating from college could be designing safety apps for us."

Raughley offers two guidelines: "One: safety apps have to be fast and blame-free. If the apps are klunky or the data are used against employees, then the safety app initiative can backfire. Two: safety apps must solve a problem. Make sure that the data are useful for an immediate need, especially in operations, and you will have more support from all users."

#### The Bottom Line

1) Apps are here to stay.

2) Most safety apps are static and there are unclear market needs ahead for safety leaders.

3) All leaders need to make smart decisions about if, when and how to use any apps.

Call me if you have some examples of smart technology and leadership decisions that you or your company have implemented.

#### References

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