There Is No App for That

by JOE LASKY, JR., CSP, CHMM

HEN MY SON and his family came in for the holidays last year, he was wearing a t-shirt with a picture of a human brain on it. The caption below read "There is no app for that." As most of you know, an application or "app" is a specialized program that can be downloaded onto mobile devices such as iPads, iPhones, etc. That led me to think about how technology relates to safety in our everyday world.

A myriad of resources exist that include "apps" in the Safety, Health, Environmental, and Risk Management fields. Although these apps are no substitute for comprehensive safety and health policies and testing procedures, when used correctly, these technological tools can provide significant benefits and access to information. Certain apps that I have used and suggest you check out are the following (all of these are available in the iTunes and Google app stores for various prices, and many are free):

• OSHA Heat Stress – Allows workers and supervisors to calculate the heat index for their worksite, and displays a risk level to outdoor workers.

• NIOSH Ladder Safety – Uses visual and audio signals to make it easier for workers using extension ladders to check the "angle" the ladder is positioned at, and provides useful tips for using extension ladders safely.

• SKYPAW dB meter – One can use this app to turn your iPhone into a professional sound level meter in the field. I use this one frequently to measure random noise levels in the field.

• NIOSH Pocket Guide to Hazardous Chemicals – Provides immediate access to a comprehensive chemical hazards database.

Pocket First Aid – Provides the latest up-to-date emergency information from the American Heart Association – i.e. First Aid, CPR, etc.
Fall Clear Lite – Evaluates required clearances for several fall arrest scenarios that the user

identifies by selecting an applicable pictogram.

• Incident Cost Calculator – Determines the financial costs of a workplace incident by reviewing injury scenarios from a number of industries.

• I-Auditor – Used to build checklists, conduct inspections in the field, and manage report filing. An excellent app for supervisors/ foremen in the field for observations and assessments as they walk around the job.

• Nobels Riggers Reference – Allows you to look up Working Load Limits for various types of riggings (wire rope slings, chain slings, synthetic slings), check crane signals and whistles, and estimate the included angle of a lift. A few of our pipefitter supervisors have also told me they utilize the app for rigging and signaling, particularly for calculating load lifting requirements.

Admittedly, in today's connected society, there is not much need to memorize anything anymore. If I were to ask my grandkids or nieces to rattle off the U.S. presidents or state capitals, they would reach for their iPhone or iPad and Google the question or just ask Suri.

Yet of all the tools at our disposal – including those I just listed -- the one that we tend to use the least in life and the workplace is stored inside our skull: the human brain. When you think about it, there are critical tools that no app can replace. They are your own common sense, experience and general "know how." No digital link can replace them; they must be hard-wired in our own brains.

For example, at all of our refinery projects, craft personnel in the field are the first to encounter changed



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environmental conditions. Some of the facility processes have materials that are very odoriferous, and workers don't need the atmospheric technology (i.e. gas meters) to tell them to back away and move upwind. I can recall a specific project at a refinery in Philadelphia when the crew opened up a vault, and immediately smelled an odor that caused their eyes to water and made them sick to their stomachs. While they couldn't identify the specific named chemical right away, they nevertheless closed the vault and put on respiratory protection before going back in.

Additionally, our own safety procedures require drivers of company vehicles to do a "360 degree" walk around their vehicle before entering in lieu of using back up cameras or blind spot warning devices. We want them to rely on what they see, not what a piece of technology tells them.

I also remind people that if you cannot hear your co-worker talking to you, or if you have to shout to be heard when an arm's length away, you are at or over the OSHA Permissible Exposure Limit of 90 dbA. In other words, it is too noisy. You should not rely on an app to tell you to wear both ear plugs to protect your hearing.

Dangerous chemicals, heavy equipment and loud machines are common at worksites, but our experiences and common sense keep us safe.

Many years ago, a college professor of mine used to say "repetition is the heart of learning" which eventually leads to memorization. This idea supports our emphasis on regular safety refresher training in all areas of the industry. But we have to be careful. The human brain consumes huge amounts of energy, as much as 25 percent of our daily supply, and is always looking for the easy way out. Basically, it can slip into a kind of "complacency mode" which makes learning new ways of doing things difficult. So how do we adapt?

The human brain has a "habitbased system," but it also has an "intellectual system" that analyzes cognitive, rational, and logical ideas and changes. Unfortunately, our habit-based system is going to fight us every step of the way when meeting with the intellect side, especially when confronting changes to safety routines. With the help of technology – even certain apps – we can receive the necessary reminders to help integrate these new safe habits into our daily jobs.

There will never be an "app" that can duplicate the functions of the human brain – it's just too unique and complex. But technology can help us use our brains better, particularly when it comes to safety communication and training, both on and off the job.

So definitely take advantage of the great apps at your disposal. But don't forget to use your brain too – and have a safe day!



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