Shaun Budnik, KPMG National Audit Innovation Leader

March 2017

Why You May Soon See Flying Auditors!

It's possible that you watched this year's Super Bowl game but one month later, can't remember who won (unless you live in New England!). But it is highly unlikely any of you have already forgotten <u>Lady Gaga's attention-grabbing halftime show, branded by its 300 flying drones.</u> Although it was the drones' first ever Super Bowl appearance, they sure had no problem winning fans, along with a ton of headlines.

So what exactly are drones? In short, they are unmanned aircraft systems controlled from the ground or used in an autonomous mode with a pre-programmed flight. Drones have become popular in several industries where outdoor monitoring and surveillance is desired, such as transportation, security, media, insurance, and photography.

With so many industries capitalizing on drones' special powers, can auditors join the excitement?

The answer is yes! The Federal Aviation Administration (FAA)'s <u>new rules on drone usage</u>, stating that auditors can obtain a license to fly a drone machine for business purposes by passing a 60-question FAA-administered test <u>significantly opens</u> <u>up the potential for drone operations and lowers the cost of entry for CPA firms looking to adapt their audit and inspection processes</u>.

Rutgers University Ph.D. candidate <u>Deniz Appelbaum</u> and Oakland University Ph.D. candidate Robert Nehmer have explored the possibilities for drones in various audit environments in their publication, <u>"Using Drones in Internal and External Audits."</u> They point to the promise drones hold in two areas of audit evidence collection: **Physical Inspections** and **Observations**. These are the areas where drones may easily augment auditor tasks with minimal disruption and infrastructure development...so check it out!

Not only can drones contribute to a faster and more efficient inventory assessment, they may also lead to safer inventory methods. Auditors might one day say goodbye to challenging site visits requiring climbing a ladder, or approaching a storage tank containing dangerous contents.

According to the Appelbaum and Nehmer's research, audit drones have the power to increase the amount (sufficiency) and quality (competence) of audit evidence by allowing for more types of observations and inspections which collect fuller sets of data. For example, a drone can record video streams of processes, usually risky from an auditor's point of view.

If you're already sold on how a drone can help your audit team but not sure where to start, Appelbaum and Nehmer suggest purchasing or renting a limited number of drones for use in a small, segregated portion of a warehouse. Or, maybe it makes sense for you to contract a drone consultant to pilot the drones in a segregated fashion. If these trials are successful, your next step might be to devote additional resources to your drone program.

Remember, drones are a rapidly growing technology. The United States Department of Transportation and the Federal Aeronautics Administration are regularly updating rules regarding the commercial use of small drones. It's worth keeping an eye on these developments so that your audit team's competitors don't **fly** right by you.

Just think, one day drones might be able to open objects and move inventory around. Or, drones could be scaled down to the size of a bee, easily buzzing around between boxes to scan inventory (<u>Banker, Drones and Robots in the Warehouse</u>, Forbes).

If anything was possible, how else could the audit profession benefit from the use of drones?

Thanks again to Rutgers University Ph.D. candidate <u>Deniz Appelbaum</u> and Oakland University Ph.D. candidate Robert Nehmer for the invaluable drones in audit information included in their article, <u>"Using Drones in Internal and External Audits."</u>