

Whitepaper

Technology and the Evolution of the One Call Industry

How emerging technologies will shape the future of damage prevention

Executive Summary

Technology is changing our entire world – and nearly every business on earth has been touched in some way by the evolution of technology. The one call industry is no different. Emerging technologies that are taking the world by storm are also shaping the future of the way our stakeholders send and receive information and perform their jobs.

This paper examines some of the leading trends that are shifting the one call industry toward increasing adoption of technology, and examines the technology trends that are changing the face of how one call operations will interact with their stakeholders in the future.

An Industry Ripe for Change

When they were first established in the 1960s and 1970s, one call centers were themselves revolutionary. Flowing all dig requests for a region to one centralized location that could process requests and handle all communications had never been done before. The one call operations made an enormous impact on reducing underground damages across the United States.

As with most industries, technologies began to emerge over the decade that made it possible for construction professionals and other stakeholders to communicate more efficiently, and that helped to drive down costs while allowing workers to do their jobs with more flexibility. Over the years, we have seen our industry move from pagers to fax machines to mobile phones and to file transfer applications in order to communicate quickly and cost-effectively.

Over the past few years, new technologies have rolled out at an unprecedented pace. Adoption

of these technologies is also happening much more rapidly than ever before. Progressively lower costs to manufacture and sell these products are one of the biggest reasons for their widespread adoption.

While the industries served by one call operations — largely construction and utility industries and the excavators who work within them — may lag behind these trends slightly, there are a few characteristics of these industries that make them ripe for technology adoption:

- **Age demographics.** The U.S. construction industry tends to be young: 40.7% of workers are ages 25-39. These “Generation Xers” are adopting technology faster than the Baby Boomers before them — and they are the workers who are beginning to take roles as managers or start their own businesses. Studies show that Gen Xers adopt technology, but typically only if it suits a given need. However, right on their heels are the “Generation Y” workers, who grew up knowing no alternative to technology, and will be ready to eagerly adopt technology in the workplace.
- **The “mobile” nature of the work.** Excavators in construction and utility industries spend the majority of their time in the field. The construction industry in particular struggles with lost time, high costs and quality challenges. In an industry where time is money, lost time because of poor communication can be damaging. Because they are mostly away from the office, where the information typically is, excavators need a way to access real-time information and transmit accurate information back, wherever they are.

Technology Innovation that Meets Stakeholders’ Challenges

Technology innovation for the one call industry has the ability to address many of the challenges faced by all stakeholders — from the excavators using the one call service to the board members operating the state one call center. Technology has the potential to bring:

- **Substantial time savings.** New technology can reduce the amount of time callers must spend on the phone and on hold. Dig requests can be submitted quickly, any time of day or night. From the one call center’s perspective, technology can help to reduce the amount of processing time, thus creating better efficiencies and helping to optimize resources.
- **Cost savings.** One call centers can save tens of thousands of dollars a year in telecommunications costs by using Internet technologies, plus substantial labor savings by

using technology to partially or fully receive and process dig requests.

- **Real-time and accurate information.** Excavators and call center representatives can easily work with the most up-to-date information and more accurately share information in order to prevent damages and save time.
- **Better tracking and reporting.** Managers and owners can better track their requests and manage their workflows with real-time reporting. Automated responses and confirmations create better peace of mind that requests have been received and processed.

Technologies that Are Changing the Game

Following is a look at the technologies that have begun to change one call operations — and a look at what is coming around the bend.

Internet Applications

Internet-based dig requests have revolutionized the one call industry. One of the state one call centers working with One Call Concepts saved 80% on its monthly telecommunications costs by offering online ticket submission.

Research and analysis conducted by One Call Concepts in 2010, reveals that a large percentage of excavators said they enjoyed the independence and accuracy of information that online ticketing provided. Specifically, they liked:

- The independence of being able to map their own locates online rather than trying to describe the area to a person over the phone (53%)
- The 24-hour access that online ticketing provides (43%)
- Time savings from not having to speak on the phone to a representative (43%)
- Receiving email confirmations and updates (51%)

Internet applications are also becoming useful for robust, real-time reporting and tracking of tickets and workflow. Stakeholders can log in from anywhere to check status, run custom reports, and trade notes and communications — enabling them to stay up-to-date on the latest information that helps them do their jobs more effectively.

Smartphones and Tablets

Nationwide adoption of mobile technology has exploded. A study by the Pew Internet Project in 2011 showed that 83% of all Americans own cell phones, and 42% of those people have smartphones — which means 35% of Americans now have a smartphone. These smartphone owners span many different demographic groups, and a quarter of them say they primarily use their phone, not a computer, to go online.

Considering that the “smartphone” as we know it has only been around for a few years, this rate of adoption is astounding, and is only expected to grow. Additionally, 8% of Americans also now own a tablet computer, a high percentage considering that the modern tablet was only introduced in 2010.

More excavators and other stakeholders in the field will likely be relying on smartphones and tablets to do their work in the coming years. As the mobile industry introduces new technology to create widespread connectivity with smaller antennas instead of cell phone towers, the “dead zone” in mobile coverage in rural locations will start to be a thing of the past. The development of mobile apps and websites that can serve as a fast, reliable, easy-to-use interface between excavators using these devices and the one call center will need to be an essential focus for the one call industry in the future.

GPS

One of the most useful benefits of mobile devices is the ability to map locations accurately and in real time using built-in global positioning systems (GPS). The use of GPS has extended to thousands of location-based applications, from price comparison shopping to package tracking to disaster preparedness software.

In the one call industry, excavators in the field have the ability to map in real time their location, which is useful especially for stakeholders who find themselves working in rural places. Adding value to this, One Call Concepts call centers are able to interface their own detailed street maps with GPS information, enabling representatives to pinpoint the location of the dig request with the utmost accuracy. As more stakeholders adopt mobile, GPS-enabled devices, this capability will enable both excavators and call center representatives to save considerable time and achieve higher accuracy.

Video Chat

Research conducted by One Call Concepts showed that while excavators appreciated the benefits that Internet applications provided, about one-quarter of them preferred the personal touch of a phone call. The emergence of two-way video chats, using Skype and other video technologies, in one call centers creates opportunities to bring together the best of both worlds. Call center representatives and excavators can talk face-to-face, reducing miscommunication and helping callers feel increased comfort with the transmission of their information.

Conclusion

As technology evolves, the one call industry has many opportunities to improve efficiency, lower costs and increase the accuracy and quality of damage prevention efforts by embracing new innovations that change the way our stakeholders work. Over the next several years, our industry will begin to see new technologies emerge that will increase the effectiveness of damage prevention and take our industry into the next era

Endnotes

i Sweet, Stephen, PhD and Marcie Pitt-Catsouphes, PhD. Talent Pressures and the Aging Workforce: Responsive Action Steps for the Construction Sector. The Sloan Center on Aging & Work at Boston College, July 2010.

ii Smith, Aaron. Smartphone Adoption and Usage. Pew Internet Project, July 2011.