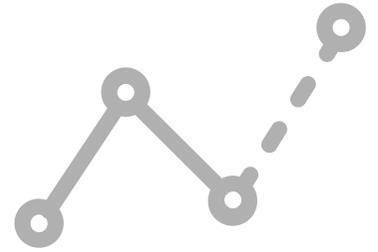




Engaging Frontline Employees



Selecting and integrating the appropriate software and technology for your organization is foundational to effective EHS program management. NAEM's March research report, "Trends in Emerging Tech for EHS&S: What's Really Happening Inside Companies," documented the state of emerging technologies to help EHS leaders make informed decisions as they adopt new technology. As a follow-up, NAEM discussed emerging technology and software with subject-matter experts at several leading software and technology firms. This article presents highlights from those discussions, including useful tips on selection and integration of emerging technology and use cases that shed light on the applicability of a wide range of technologies. By sharing the perspective of these technologists, we hope to provide additional tools to help EHS&S decisionmakers evaluate the ever-evolving technology and software market.





Q&A Highlights

An interview with Jenny Yu, Gensuite's Leader of Strategic Development and Innovation on how to improve safety by engaging frontline employees with emerging technologies

This article presents highlights from a discussion with Jenny Yu, Leader of Strategic Development and Innovation at Gensuite – a leading EHSQ software solutions provider, in order to give EHS&S decisionmakers additional tools to evaluate the ever-evolving technology and software market. Gensuite's emerging technology strategy is driven by a couple of key themes – (1) the need for EHS organizations to engage the frontline more effectively and more creatively and (2) the need for interoperability across an organization where the EHS function's success hinges on integration with the operations of the company, including emerging systems and ecosystem of connected equipment and assets.

According to Yu, Gensuite has integrated a wide variety of technologies into its mobile application platform. Just to name a few, BLE beacons, geolocation services, QR codes, biometric user authentication, and Artificial Intelligence-powered virtual assistant are available technologies and features in the Gensuite Mobile App. In addition, Gensuite has been actively exploring and experimenting with other frontier technologies, such as augmented reality, image recognition, wearable sensors, smart glasses, etc.

The following Q&A highlights show how Gensuite is integrating emerging technologies with existing systems, shepherding clients through the technology adoption process, and the lessons they've learned along the way.

About the Expert

Wei Jenny Yu is the Leader for Strategic Development and Innovation at Gensuite LLC, cloud-based compliance and management software solution provider, responsible for frontier technology projects and Gensuite software roadmap management. She joined Gensuite in 2009 and was the General Manager of its China subsidiary in Shanghai before moving to the US in 2015 for her MBA. Jenny has led teams in China and the US to provide Gensuite software solutions and services to companies, especially in the domains of auditing, incident reporting, permit management, waste management, product compliance, and mobile and technology solutions. Most recently, Jenny has led the team to develop and pilot Gensuite's Virtual Assistant Genny®, EHS Proximity Beacons, and the Smart Glasses App. She received her Bachelor's degree in Mathematics from Fudan University in China and received her MBA from The Johns Hopkins University – Carey Business School in 2017.



Q&A Highlights



What is your advice for companies hoping to integrate new technology with existing IT and EHS software systems?

We suggest companies start small and start with a problem. Too often we see organizations latch onto a new, shiny technology looking for a problem. In addition, organizations fail to include the front-line user at the table early in the process and then are surprised that the technology does not fit or fails to address the fundamental needs of the end user. Similar to how our emerging technology strategy is based on a solid foundation of mobile capability, we recommend that organizations build from a unifying platform of communication and employee engagement. Direct feedback from end users for the minimal viable product would be critical for you to refine and iterate, and then grow the scope to finalize the new technology implementation.

Revolutionizing Concern Reporting with Mobile Incident Management

A multi-national conglomerate with 11 businesses in agribusiness, logistics and energy sectors was looking to establish a proactive approach to incident management for 115 worksites. A solution was needed to report Near Misses and concerns for 15,000 employees and provide a flexible and effective training strategy. Additional mobile-specific EHS/IT needs required easy and unhindered access to concern reporting, contractor-specific access, as well as the ability to report anonymous concerns.

For implementation, Gensuite used its "Train the Trainer" strategy, training site leads through one-on-one sessions, webinars, and in-person meetings, to have employees fully trained in 3 months. QR code posters were created for sites to post throughout the facilities, including detailed instruction for how to easily report concerns through the Concern Reporting application and use QR code functionality. Contractors were enabled to log reports without log-in credentials for improved system security.

Gensuite's mobile app solution increased employee engagement across all sites, providing a significant increase in productivity. Leadership is now able to be notified for concern reporting follow-up and escalation and identify systematic trends to address immediate opportunities using mobile charting and reporting features. The solution resulted in 2,800 trained Gensuite Mobile users, 5,000+ concern reports logged in 4 months and 3,000 corrective actions taken and closed.



Q&A Highlights



As you were attempting to optimize concern reporting through the development of a mobile app, what challenges did you face and how did you overcome these challenges?

As one of the main goals of revolutionizing Concern Reporting to drive employee engagement and increase employee's EHS awareness, the company wanted the process or tool to be as simple and as intuitive as possible for employees to report a concern during their day-to-day busy work. One solution would be to install the Mobile App in an employee's mobile device, and then an employee could open the app, login and open the EHS Concern form to report. Although this process sounds straightforward enough, during actual deployment onsite with employees, it wouldn't be quickly and effectively adopted. Employees might not want to install a new app, and it'd be an extra step to remember a login password, then remember where to find the EHS Concern page. To solve this challenge and maximize deployment, Gensuite helped the company deploy an alternative and fast way for employees to access the EHS Concern form to report a near miss or concern anywhere, anytime – via encrypted QR codes.

Facilities posted their encrypted QR code – which can be generated from the Gensuite system, so employees could easily scan the QR code using their mobile device and open the EHS Concern form without a tedious login process. Employees didn't even need the Gensuite mobile app, as the EHS Concern form is directly accessible on browsers like Safari and Chrome. This simplified the process and was welcomed by facility employees.



What technologies do you see as the most broadly applicable and effective in the EHS and sustainability space? What are you most excited about seeing our field embrace and why? Do you steer companies away from any particular types of technologies? Why?

Mobile apps along with extended capabilities using location technologies such as BLE beacons for proximity, RFID tags for in-facility location tracking, geo-location for campus fencing, all have great potential to ride the IoT wave of increased deployment on site for improved EHS management and increased productivity.



Q&A Highlights



How do you help EHS leaders make the cases for adopting emerging technology? What do you think are the most compelling reasons companies should think hard about investing in these new technologies?

Significant incidents and fatalities have at best plateaued, despite advancements made across industry in terms of process improvements and EHS program sophistication. This calls for new, creative ways for organizations to engage their front line workers where the action happens.

Beyond this, EHS organizations continue to be challenged by reduced resources and growing business and regulatory complexities. Emerging technologies can help address these challenges by:

- Engaging operational teams and systems in the work of safety and compliance
- Increasing effectiveness and efficiency of EHS management system and processes
- Giving employees smarter tools to get their job done safer, easier, and faster
- Driving employee engagement and increasing EHS awareness (especially for tech-savvy younger generations)
- Generating valuable insights through integration of safety, operational, and behavioral data



Trends in Emerging Tech for EHS&S
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MARCH 2020

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Trends in Emerging Tech for EHS&S

Smart sensors, drones, mobile applications and more are all revolutionizing EHS&S data collection, program design and operations in real time. Based on quantitative benchmarking data and insights from EHS&S technology leaders, this report documents which emerging technologies are really being adopted and why, and how companies budget for new tech and software. Download the report today at: naem.org/tech-trends