

FMJ



IFMA™

WWW.IFMA.ORG/FMJ | JULY/AUGUST 2021

inside

Building Resiliency in FM

Applying AI in FM

Prop Tech



FP
TECHNOLOGY

Features

- 014 Work Smarter, Not Harder**
Increasing efficiency & well-being
TC Lin & Ken Seelow
- 018 PropTech**
Using integration as the key
Maureen Ehrenberg & Colette Temmink
- 028 Keep it Simple**
Using AI-powered MEP design for FM
Greg Schnackel
- 032 All the Right Reasons**
Physical security needs digital transformation
Desmond Thorsson
- 036 A Cautionary Tale**
Applying AI in FM
Erik Jaspers & Singh Saini
- 040 Using Automation**
Rebuilding a better workplace
Jessica Horne & John Wang
- 044 Paradigm Shift**
Automation: Still a "Nice to have?"
Carolina Weidler
- 048 Breath of Fresh Air**
Using IAQ to create healthier schools
Danny White
- 052 Technology & Workplace Strategy**
Support the employee experience
Simon Davis, Martin Ruppe & David Slight
- 058 My Facility**
San Jose International Airport
Gene Frazier
- 062 Rapid Change**
Building resiliency in FM
Stuart Rich
- 066 Zero Energy Buildings**
Should we be satisfied?
Laurent Bataille
- 072 Are You Ready?**
Knowing what to do in a disaster
Bill Conley
- 076 Signed, Sealed, Delivered**
Performance takes center stage
Dr. Simon Pallin
- 084 IFMA's Accredited Degree Program**
Kennesaw State University
Kennesaw, Georgia, USA
- 088 Digital Twinning**
The future of engineering & design
Jason Pleski
- 092 Ready to Go**
Connecting the commercial restroom
Faye Badger
- 094 In Action**
Assessing asset management with VBIS
TK Wang

Sections

Editor's Column	006	Credential Recipients	070
Chair's Column	007	Corporate Sustaining Partners	080
President's Column	008	Behind the Brand	082
Industry News	010	Advertiser Index	098



IFMA is the world's largest, most widely recognized association for facility management professionals, supporting more than 20,000 members in 106 countries. Founded in 1980, IFMA's vision is to lead the future of the built environment to make the world a better place. A key contributor to the development of international FM standards, IFMA provides career resources, continuing education and three industry-respected credentials; maintains the largest repository of FM-related content on the web; and hosts year-round global events. Among the values that guide us, we believe in the benefit of global diversity, inclusion and social equity; and we recognize that sustainability, resilience and responsible environmental stewardship are paramount. For more information, visit ifma.org.

FMJ (ISSN 1059-3667) is published six times a year (January/February, March/April, May/June, July/August, September/October, November/December) by the International Facility Management Association, 800 Gessner Road, Suite 900, Houston, Texas, 77024-4257 USA. Periodicals postage paid at Houston, Texas and at additional mailing offices. One electronic copy of each issue is supplied to IFMA members. Printed copies are available to members at an additional US\$48 per year. Nonmembers can purchase a subscription for US\$84 per year. To receive a subscription, mail a check to FMJ, attn: Subscriptions; 800 Gessner Road, Ste. 900; Houston, Texas 77024-4257 USA or visit www.ifma.org/fmj/subscribe. For advertising rates call +1-281-974-5674 or email diana.maldonado@ifma.org. FMJ is printed in the United States. FMJ reserves the right to edit any articles received or solicited for publication. This right includes the discretion to select titles, artwork and layout. Opinions expressed in articles are those of the authors, not necessarily those of FMJ staff. © 2021 International Facility Management Association.

POSTMASTER Send address changes to: FMJ, 800 Gessner Road, Suite 900, Houston, Texas 77024-4257 USA.

PLEASE RECYCLE ♻️



With the goal of minimizing our carbon footprint, FMJ is printed by an FSC®-certified company.

ALL THE RIGHT REASONS

Physical Security Teams Need Digital Transformation

BY DESMOND THORSSON



Planning, protocols, infrastructure and personnel are critical to facility and security management for commercial and institutional buildings, facilities and campuses. FM organizations, whether they oversee one building or an entire campus, must be well prepared to maintain safety in their everyday routines and in the face of unexpected scenarios.

Team communication and collaboration is a core component of having prepared physical security teams ready to address unexpected challenges. Traditionally, security teams relied on legacy technology like radios. However, leading security teams must augment their communications strategies with digital transformation.

Many FMs have experienced the low-quality audio and limited capabilities that radios offer compared to modern, digital solutions. After facing these challenges with radios, frustrated teams often migrate toward multidevice strategies mixing radios, smartphones, desktops and mobile applications to meet their full multimodal needs of voice, text and visual media. This often unsanctioned or unplanned mismatch requires security guards to switch back and forth between devices to communicate by voice or share video or photos, creating a communications method that is overburdensome, creates risk and stalls productivity.

Further, the hybrid mix of technology like radios and mobile phones does not offer the full breadth of intelligence security officers and professionals need to do their jobs. Leading security teams must move away from disorganized multidevice communications strategies that lack security and compliance with today's IT requirements and protocols.

So what is the alternative? Intelligent collaboration solutions unlock the full benefits of digital transformation, ultimately recasting how FM and security teams communicate and operate. By eliminating multiple device usage for people in the field, security teams open the door to a holistic approach to operations and a real-time security operations system of record.

Here are six ways physical security teams benefit from modern and intelligent collaboration technology:

No. 1: Operational control

FM and security leaders need centralized visibility and intelligence to improve management and decision making that enhances productivity and safety. Collaboration technology does this by providing security guard mapping and locations in real time, increasing visibility across operations. Team leads or dispatchers gain insights to improve decision making and accountability during routine operations and safety during emergencies or changing situations.

Managers communicate and coordinate 1:1 or with specific teams or groups, targeting conversations to only relevant personnel. Teams distributed across a campus or a network of campuses coordinate in real time with their security operations center (SOC) and dispatch, as well as local, regional or global teams. Physical security team leaders also communicate cross-departmentally during urgent or dynamic situations, directly updating distributed janitorial, utility, fleet, mechanical and electrical teams with relevant and timely information in an emergency.

Operational control dramatically improves response to dynamic events organization wide and productivity during routine activities.

No. 2: Improved situational intelligence with location-driven insights and analytics:

Security leaders must know where their personnel are at any given time, where they have been, and if they have completed the tasks or routes assigned to them. Intelligent collaboration tools with geolocation and heat mapping enable managers to



track guard locations, analyze low coverage zones and ensure that all teams perform at maximum efficiency.

Even in GPS-denied environments like indoors and subterranean areas, advanced collaboration software can maintain situational awareness and actionable mapping and location data. Managers optimize and gain insights into the day-to-day operations across security teams to maximize overall performance. In urgent or dynamic events, managers and team members are situationally aware of their teammates.

Collaboration platforms also capture 100 percent of the metadata for a message stream providing a complete picture of what happened, what is happening and potentially what will happen. This metadata creates the opportunity for unique analytics that increase situational intelligence for operations, compliance and safety. Recorded and archived information also supports incident reporting needs for compliance. In the event of an incident, teams know they have captured the information needed to complete reporting and assist with any investigations or evaluations. The actual content of messages is only available to users of the collaboration software and cannot be heard or retrieved by the platform provider.

Turning voice into data with collaboration technology creates rich analytics that measure and optimize security operations for continuous improvement. From the start of an urgent or emergency situation, collaboration technology records and archives all relevant information including locations, messages sent and response times. This intelligence informs decision making with pattern analysis and anomaly detection, enabling teams to continually evaluate performance for improvement and effectiveness.

No. 3: Increased productivity with process automation

Voice-automated processes optimize operations and help organizations reduce costs by promoting protocol compliance, documenting and archiving processes, and simplifying routine tasks. Process automation ensures security teams complete everyday tasks like safety checklists, assigned guard routes, and timely check-ins efficiently and effectively. Voice automating these processes promotes heads-up work and frees security personnel to focus on higher-value tasks.

For example, a routine, daily checklist confirming doors and windows are secure at the close of business hours. Instead of documenting task completion on a paper clipboard, voice-activated workflows require verbal verification of each checkpoint while enabling guards to stay heads-up. Location data and voice answers are logged and recorded so no checkpoint is missed and a digital record is stored for future reference.

In another example, a security guard needs to create an incident report for an irregularity like property damage. Instead of taking time to manually enter information about the incident onto a paper form, the guard can take a picture, load it to the collaboration platform and record relevant information. The collaboration platform logs and documents that incident for retrieval or kicks off an automated workflow of next steps when needed.

Intelligent, voice collaboration solutions also manage tasks like building or campus patrol. Process automation tracks guard inactivity or lingering too long in one place. Workflows prompt the worker to respond and remind them to resume their activities without requiring managerial interaction or continuous monitoring.

No. 4: Emergency preparedness

Security teams must be prepared to handle unexpected threats. Intelligent collaboration tools provide the always-on ability to respond to emergencies and threats immediately, and security teams leverage process automation and intelligent collaboration to respond to incidents.

In emergencies, guards have the added support and safety of multifunction workflows like automated safety check-

Security teams that modernize and embrace the benefits of collaboration can truly achieve innovation and have confidence in providing best-in-class security operations.

ins, lone-worker protocols, incapacitation monitoring and location breach alerts. Words like “fire,” “man-down” or “help-help” trigger workflows that deploy back-up, alert managers or even escalate serious events to the police or fire departments.

For example, a building occupant is injured in an active shooter scenario. Security guards immediately trigger workflows and protocols by speaking designated words like “active shooter.” Bots without human intervention redirect guards in proximity to provide assistance to the event and emergency alerts deploy remaining resources according to building or campus protocols. Additional workflows inform managers and alert police faster and more efficiently.

In another example, a lone worker lingers too long in one area without responding to bot-driven voice prompts. Workflows redeploy the next nearest guard to investigate and notify management of a possible emergency.

No. 5: Reduced training time for new or contract workers

The physical security industry often undergoes high employee turnover. Every facility has its own unique and specific protocols that each new security personnel must learn. Intelligent collaboration tools immediately connect employees and contractors to the information, SMEs and systems that instantly amplify their ability to perform at maximum efficiency on day one.

Process automation ensures that the new security personnel never miss a protocol step or assigned task. Ultimately, this increases each employee’s effectiveness and reduces training costs for organizations.

No. 6: Data security & encryption

Radio systems and messaging apps do not offer message security or integrity by default, allowing bad actors to listen or even impersonate staff. When bad actors obtain access to a radio frequency, they can track all chatter to learn sensitive information to target people, property or assets. Messaging apps with weak encryption lack the strict IT security standards today’s enterprises require.

Intelligent collaboration software with end-to-end encryption (E2EE) offers unmatched privacy and security. E2EE eliminates security gaps and keeps an organization’s information secure — even from the platform provider.

A physical security operations system of record

Intelligent collaboration platforms create a security operations system of record that integrates operations and provides all the information workers need to perform their duties at their point of work. Security teams that modernize and embrace the benefits of collaboration can truly achieve innovation and have confidence in providing best-in-class security operations.

Constant innovation is necessary to improve productivity and increase the safety of people and assets. With digital transformation, FMs create effective, productive and safer physical security teams. **FMJ**



Desmond Thorsson, a

technologist at Orion, is an active U.S. Coast Guard auxiliary

with more than 15 years of training and operational experience in incident command, emergency management, homeland security and search-and-rescue roles. Prior to Orion, Thorsson served on the faculty of the School of Communications and Media Technologies at Academy of Art University. He spent over a decade in mass-market broadcasting and was one of the earliest employees at CNET (Now CBS Interactive). Hosting the shows, “Cool Tech,” “The New Edge” and “CNet Central,” he brought the latest exciting developments in technology and the internet to audiences over Sci-Fi and USA Networks.