

**NEW  
SCHOOL**

**BECOMING A**

**NEXT-GEN**

**FACILITY MANAGER**

# NEW SCHOOL BECOMING A NEXT-GEN FACILITY MANAGER

**The strategic people, building management and technology skills necessary to run the school buildings of the future.**

## **INTRODUCTION**

Being a school district facility director in today's world is not for the faint of heart. Health and safety challenges are higher than they have ever been, long-tenured facility directors are retiring- leaving stacks of paper and poor documentation for successors to muddle through and figure out, budgets are only getting tighter, and managing and hiring staff is a constant challenge. But despite all of these hurdles, there's a new generation of facility directors that are stepping up and thriving; finding creative solutions to today's problems and leading teams across their district's buildings at a point in time when building maintenance is under a microscope in every community.

These facility professionals are what we call Next Generation Facility Managers (NGFM) and this paper examines the traits, tools, and strategies that these leaders use to push school facility management into the future.

## SECTION 1

# PEOPLE

## IT'S NO SECRET...

**that it is becoming increasingly difficult to find skilled tradespeople. This problem is particularly challenging when it comes to facilities management services.**

An increasing number of employees are aging out, and less new talent is coming in. While this means that facilities management departments need operators who possess higher-level skillsets, it also opens the door to a new generation of digital -savvy employees who may not previously have been interested in facilities management work. How do you hire good people with an open-mind and keep them motivated in their day to day work while also managing the folks that have been there? This section explores the people strategies you need to move your facilities to a next generation operation.

# PEOPLE



**I BELIEVE THAT YOU  
CAN TRAIN JUST  
ABOUT ANYONE...**

**...BUT YOU CAN'T  
CHANGE WORK  
ETHIC AND  
RELIABILITY.**

## HIRING

**“When I’m hiring, I’m looking for someone that wants to learn and has a drive. They’re open to training, learning new products, and are a team player,” explains Gordon Miller, Director of Facilities at Central Valley School District in Ilion, NY.**

“I look heavily at core values of potential hires. What are their core values? Hard work, dedication, loyalty, ability to get along with people are all values that I desire from potential employees.” states Joe Magliocca, Director of Facilities at Elmira City School District, in Elmira, NY. “I believe that you can train just about anyone, and you can provide professional development to enhance their skill set, but you can’t change work ethic and reliability. Either they have it or they don’t.”

Any facilities director knows that hiring the person Gordon and Joe described above is easier said than done. In fact, according to the Bureau of Labor Statistics, the median pay or building and groundskeeping staff in elementary and secondary schools is \$15.02/hour. <sup>[1]</sup> The wages are on the low side, the perception of the job is oftentimes poor and the work is physically demanding and under-appreciated. So how can you appeal to younger and eager workers? To Gordon, it’s simple, “If you can grow somebody, they’ll usually stay interested. You have to give someone a chance to grow and if you do, they will be a lifer.”

Showing people a career path, especially those newer in their profession, has tremendous value to the person. Offering training that will help grow a person’s own capabilities and hands on experience with new technologies and tools are extremely important to this new generation of workers. “I believe that as building systems become more complex, specific training and education are a factor that employers in our industry seek out,” explains Joe, “The candidate pool in facilities management and construction is diminishing, and it gets infinitely harder to find quality people, so candidates that have strong core values are most desirable, and if they have industry specific training it’s a bonus.”

The Next-Gen Facility Manager is aware that they are not just hiring for existing skills, but for the potential to grow and the hunger to learn. This does require that the NGFM have a more “hands on” approach to their management style and that they do take the time to invest in training their employees.

# PEOPLE



**YOU HAVE TO BE ON A CLOSER LEVEL WITH PEOPLE. YOU HAVE TO COACH THEM, BUILD THEM UP.**

## KEEPING GOOD PEOPLE

**The Top Workplaces survey cites from over 20 million employees across all industries, in 14 years worth of data that feeling valued at work motivates more than pay.<sup>[2]</sup>**

Without knowing this statistic, our Next Gen Facility Managers echoed this sentiment. “Management (style) as a whole has changed. You have to be on a closer level with people. You have to coach them, build them up. Everyone has a fulfillment and want, people need to feel like there’s a bigger purpose,” explains Gordon Miller. Being available to your staff, even though you’re balancing 100 things at once is a skill that goes a long way for today’s next generation facility manager. Lack of input solicited from the staff is a surefire way to kill morale and make your team feel like they are not valued.<sup>[3]</sup>

“I try really hard to have good positive relationships with staff, and work hard at earning their trust. I try to keep communication open, and always have an open-door policy. I work hard at helping people obtain their own goals, whether it be personal or professional whenever possible,” says Joe, “And of course, recognize those for the hard work that they do. A ‘pat’ on the back sometimes is all a person needs to be motivated to continue to do a good job.”

Gordon also makes a concerted effort to be out in front of his staff. “I have 5 buildings. I make it to each building once a week. Most people lose touch with boots on the ground. I can’t do my job without them. Old school facility directors would sit in their office. Today’s employees want you to be more in touch with them. They want to know you can walk the walk, not just talk the talk.” says Gordon.

It’s also important to pay attention to the details. Having standardized procedures, equipment and even cleaning supplies goes a long way to reinforce that everything your staff does is important. Having your equipment well-maintained and clean is important. Providing training resources and building training plans or skills goals with your staff is another way to keep your team motivated and engaged.

# PEOPLE



**THERE ARE ALWAYS LEARNING CURVES, AND I DEDICATE TIME WHEN POSSIBLE TO WORKING ONE ON ONE WITH STAFF WHEN IT COMES TO NEW TECHNOLOGY.**

## MANAGING CHANGE

**Leadership author John C. Maxwell once stated “Change is inevitable, growth is optional.”**

These words ring true as Next Generation Facility Managers try to implement new systems and methods of operation onto staff that are resistant to change. The process of managing through change at work is a tall task, but necessary to transform your district’s facility management approach. Our NGFM’s believe the first step is to get your team to buy into you, before you make any changes. “Working side by side with employees, they see that I have the skills and that’s how I earn their respect. I’m not afraid to still turn a wrench,” says Gordon Miller. Working with your staff in the beginning and getting your hands dirty is actually really valuable. You not only earn their respect, but you will have a more acute idea of the issues and problems facing your buildings. This will lead to better decision making on what to change and what is a priority. And chances are, those ideas will be more aligned with your staff and you increase your chances of successfully changing things with less pushback. It’s also important to set aside specific time to learn the new technology with your team and start to use data to measure success. “There are always learning curves, and I dedicate time when possible to working one on one with staff when it comes to new technology. I think for the most part, people are open to technology because they recognize the benefit and how it’s actually less work for them”, explains Magliocca, “I share key performance indicators (data) that technology helps produce, and help them realize the value of an integrated workplace. I think for the most part, if I can get people to “try it,” the results are usually positive.”

### **SOME OTHER TIPS FOR CHANGE MANAGEMENT INCLUDE:**

- **Communicate regularly:** Talk to the team about what you want to do and why you want to do it. When everyone knows the big picture and what you want to achieve, they will buy into the process.
- **Start small:** Start in a single area or building and test. Follow through with your plans, but be flexible if the outcomes are different than what you expect.
- **Engage often:** Solicit feedback often. Don’t be afraid to invite employees in the problem solving process. And celebrate success but keep looking forward.<sup>[4]</sup>

## SECTION 2

# BUILDING STRATEGIES

## EVERY SCHOOL DISTRICT HAS A DIFFERENT STRATEGY...

when it comes to their buildings and their facility protocols. It's the role of the next generation facility manager to influence or create a forward looking strategy of the district's facilities to the superintendent and management.

Now, more than ever, building strategies are critical to school districts and their communities and the next generation of facility managers embrace the responsibility and are proactive and accountable in their approach.

BUILDING  
STRATEGIES

**A GREAT MANAGER ALWAYS WORKS TO DEVELOP THE SKILLS OF EMPLOYEES TO FOSTER PERSONAL AND CAREER GROWTH.**

## SUCCESSION PLANNING

**The loss of facility management knowledge when facilities professionals retire or move on to new positions is a huge obstacle.**

They take with them a tremendous amount of knowledge on the buildings and assets they worked on. Consider this: when a sink faucet needs to be repaired, would a future facility staff member know where a critical valve is located or what brand the faucets are? Succession planning, or lack thereof, is a common theme when speaking to next generation facility managers as a reason why they want to change the way “old school” facility managers ran things. “I’ve been in that situation before,” explains Miller, “when I got my first director’s job I was running around crawl spaces and roofs, figuring things out.” Leaving a school district without documentation and organization, puts the next person up in a tough situation. A key tenet to the Next Gen Facility Manager is documentation. Having a place to manage your facility records, drawings, warranties, notes, history of maintenance is a critical component to being future facing and putting your facilities first. There’s also the people component. Bringing up your staff to grow into more responsibility and continue the work when you have left your position is critical. And it’s an area that every NGFM brings up as a priority. “Succession planning is extremely important,” says Joe, “A great manager always works to develop the skills of employees to foster personal and career growth.”

“For me and my department, if I’m allowed to, my plan is to have a succession plan. Take a custodian and mold them and train them. Maintenance department train everyone,” states Miller



# BUILDING STRATEGIES



**BECAUSE OF THE PANDEMIC, WE ARE GOING THE EXTRA MILE. A CLEANING LOG IN EVERY ROOM. HIGH TOUCH POINTS BEING CLEANED ON THE HOUR. HVAC FILTERS ARE ALL MERV-13.**

## HEALTHY BUILDINGS

**A few years back, the Harvard School of Public Health published the 9 Foundations of Healthy Buildings. It was their desire to clearly spell out what makes a building healthy and they laid standards for future facility management.**

The 9 foundations include: Air quality, thermal health, moisture, dusts and pests, safety and security, water quality, noise, lighting and views, ventilation. The 9 Foundations was published well before the pandemic in 2020, but since the pandemic, protocols over COVID-19 are likely to accelerate these trends because of the heightened awareness. The focus is on buildings that fight disease and promote health. A separate, recent analysis of sick leave data for more than 3,000 workers across 40 buildings found that 57% of all sick leave was attributable to poor ventilation. It's no surprise, then, that an analysis of the big picture focus should be on de-densifying your buildings and maintaining social distancing (e.g., staying six feet apart)<sup>[5]</sup>. What does this mean for next generation facility managers?

“To me, a healthy building starts with three things - clean, well-lit and climate controlled environment,” explains Gordon, “Because of the pandemic, we are going the extra mile. A cleaning log in every room. High touch points being cleaned on the hour. HVAC filters are all MERV-13.”

Joe adds “A healthy building is a building that is clean and safe for building occupants. I think you could write an entire white paper on what a healthy building is, but I think it can be quickly summarized as; a building that has a solid foundation and envelop package, is clean and disinfected, has good working hvac and mechanical systems that are maintained at appropriate intervals, have appropriate ventilation levels and filtration, are vibrant in color and free from damage and markings, and most importantly are filled with happy, healthy people.”

Defining what a healthy building actually means for your district is a task well worth the effort. By putting a specific definition around it, you can benchmark where you are in that effort and what areas need to be improved or addressed. This will help prioritize and plan for future investments, while also positioning you as a leader to your district and community.

**BUILDING  
STRATEGIES**

**I THINK THAT PROPER EDUCATION ON THE VALUE THAT THE TECHNOLOGY PROVIDES TO THE BUSINESS OPERATIONS FORCES US TO VALUE THE IMPORTANCE IT HAS.**

## APPLYING DISTRICT TECHNOLOGY STANDARDS

**For facility technology, school districts as a whole tend to be at different levels of adoption. However, applying technology standards for facilities is a concept next generation facility managers are pushing.**

“I would say that all districts have a vision for the school of the future, regardless of our current dire situation we have with the pandemic. I think the value of the facilities department in these times garners a greater respect for the work we do,” explains Joe, “There is more emphasis now on cleaning and proper ventilation that greatly affects IAQ and the environment that our students learn in. This situation has forced everyone to better understand the importance of the facilities department in the educational field.”

“I think some people are there,” Miller points out, “Schools are about 20 years behind. Private sector has this stuff already. If you walk into a plant, they can’t afford to be down for an hour b/c it’s lost profit. You are always going to have funding in private. Here in the public sector, when you have lost service it’s not the same urgency.” Even with that, Miller states his school district doesn’t yet have a vision for the future of school buildings and the role the facilities department can play in it.

On the flipside, Magliocca believes his school district is embracing facility technology, even if they don’t understand all of it. “I believe that I’m fortunate enough that our district supports my enthusiasm for advanced facility technology, even if they don’t quite understand the value that facility technology provides. I think that proper education on the value that the technology provides to the business operations forces us to value the importance it has.”

Joe’s point is well taken. The more that facility leaders can educate their district on the importance of facility technology, the better chance they have to move things forward. Especially at a time when facilities are under a microscope. We think this is an area the NGFM can push forward and make a priority.

## SECTION 3

# TECHNOLOGY

## A NEXT GENERATION...

**Facility Manager absolutely needs to be fluent in building technologies and applications and is on the forefront of innovation.**

They don't resist technology, but instead are curious on how technology can help them. Next Gen Facility Managers view technology in a way that doesn't replace good people or processes - it makes those things better and more efficient.

"Eventually technology is the key player. When I first got here, it was figuring out staffing and personnel. Then it was the equipment and then the third key is tech. Without the people and equipment, the technology doesn't matter." states Gordon.

SECTION 3

# TECHNOLOGY

BUILDING AUTOMATION  
SYSTEMS

SYSTEM MANAGEMENT  
PLATFORMS

IT NETWORKS

PLANNING &  
MANAGEMENT SOFTWARE

## YOUR BUILDING'S TECH STACK

You may be asking yourself, what the heck is a tech stack? For facilities, a tech stack is the technology infrastructure or eco-system used to run a building.

It can be anything from building automation, to security systems to electronic facility records. In this section, we examine the categories of technology that are important for buildings and what the Next Generation Facility Managers view as critical in the stack.

### BUILDING AUTOMATION SYSTEMS

The automatic centralized control of a building's core systems. The objective is improved comfort, efficient operation of systems, reduction in energy consumption, reduced operating costs, historical performance documentation, remote access/control/operation, and improved lifecycle of equipment and utilities.<sup>[6]</sup>

Core systems include:

- HVAC
- Lighting
- Access Control
- Alarms

# TECHNOLOGY

## SYSTEM MANAGEMENT PLATFORMS

These are systems that are critical to building's day to day functioning, but are not automatic or on timers. Instead these help with inter-building communication and monitoring. NGFM's need to be aware of (if not familiar with) industry trends towards using the IP network to connect and manage more and more systems.

### These include:

- **Clock systems:** Clocks used to be hard-wired and voltage used to change the time or maybe hung on the wall with a battery and manually adjusted. Many clock systems now are battery-powered, but managed with a wireless signal.
- **Paging systems:** Paging speakers used to be organized by amplifiers and daisy-chained circuits. Now they are often directly wired and actually connected to a network port and often Powered over Ethernet (PoE).
- **Security Systems:** Video surveillance cameras also use the network for transporting and storing video on archivers, which are simply another server on the network.

## IT NETWORKS

A NGFM will need to have a working knowledge/familiarity with IT Networks. They also need to have a good working relationship with the staff members who provide these services. The NGFM is technically a customer of this service and should manage their relationship with the IT team with this lens. The analogy being, you don't need to know how to fix the car to drive it, but you do need to know some basic things like when to change the oil and rotate the tires. It's critical for the NGFM to become comfortable with accessing information on their network, In addition, they need to be able to organize digital information and understand how to search what they are looking for. The use of tags and keywords, for example, are more important than a strict filing convention of old.

### The two primary systems of the IT Network are:

- **Infrastructure:** The physical pathways, spaces and cabling
- **Network - wireless and wired:** These include the VLAN's, IP Addresses, MAC Addresses

# TECHNOLOGY



**I THINK AS TECHNOLOGY ADVANCES, IOT DEVICES WILL BECOME EVER MORE INTEGRAL TO OUR DAILY WORKPLACE.**

## PLANNING AND MANAGEMENT SOFTWARE.

Software helps NGFM's centralize all of their building information, to-do lists, routine preventative maintenance and future planning. Historically referred to as CMMS (computerized maintenance management system), the software systems available today go far beyond what a CMMS system can do. Software will allow you to see a virtual view of your buildings, allow for others to collaborate and share information, track depreciation and replacement costs of assets, plan for future investments and keep you focused on the key tasks at any given time.

### There is software to help you manage

- **Work order and asset management:** This system is critical in the day to day management of your building. It includes an online ticket system, preventative maintenance routines and reminders, inventory management and asset management.
- **Electronic facility records (EFR):** An EFR system is the source of truth for all of your facility drawings and information, as well as the place to store your asset records, warranties, manuals and documentation. Makes it easy to retrieve information about your building.
- **Digital floorplans:** A digital floorplan allows users to markup their building floor plans to identify and tag where assets and other important details are. You can add layers for different systems.
- **Capital planning:** Capital planning software allows users to look ahead years in advance and map out replacement and depreciation costs on assets, as well as an major facility updates. With planning software, you will be better prepared to speak to the needs of your facilities in the future and set expectations with senior staff on future needs.
- **Project and construction management:** Project management software helps users manage a specific construction project for your facility. It allows for timelines and 3rd parties to collaborate. You can manage deadlines, dependencies and budget with a project management tool.

Joe believes that as technology infrastructure for facilities continue to evolve, the Internet of Things will play a larger role. "I think as technology advances, IOT devices will become ever more integral to our daily workplace. Building automation and control continues to evolve, and are becoming even more critical as we continue to build out systems that analyze data to predict failures with mechanical and building systems. Life safety systems (fire, security, public address) are also critical systems to keeping our environment safe and sound for building occupants."

# TECHNOLOGY



**AS ANALYTICS BECOME MORE AND MORE COMMON, THE DATA COLLECTED FROM BUILDING SYSTEMS WILL HELP US BECOME BETTER AT WHAT WE DO.**

## THE BENEFITS OF EMBRACING TECHNOLOGY

**As this paper has mentioned throughout, technology by itself is not the answer. Managing people, processes and strategies to use technology is the key to success.**

Technology allows teams to do more with less, be more strategic and protect existing equipment longer. Gordon explains the value of his work order software- “I was able to punch in reminders in my work order system. It allowed me to stay synchronized with what was going on each month. Inspections due, service work, oil filter changes in the boilers. Things like that.” Magliocca has a similar take on value of technology in the day to day world of a facilities manager. “I think technology helps support the work I do everyday, and simplifies certain tasks in order to make quick decisions. For obvious reasons, I think technology helps with communication (email, capital project coordination, etc), work flow (work orders), facility documentation (EFR, record keeping, etc), time management (calendars, work orders, etc) and building automation (HVAC) to name a few. I think that the sky is the limit in the future, as we continue the use of these systems.”

The other benefit of technology is the data that starts to become available on their buildings that was never available before. This data helps NGFM's make better, more informed decisions. Joe explains “I think today's world is data driven. Making sound business decisions requires a thorough review of key performance indicators and historical data. As analytics become more and more common, the data collected from building systems will help us become better at what we do. Now, instead of replacing a mechanic unit or piece of equipment just because it's reached a certain age, we can use data and KPI's to make decisions about system replacements. With the mentality of do more with less requires us to be more strategic in our planning efforts, and technology allows us the opportunity to do this.”

## SECTION 4

# CONCLUSION

## THE NEXT GENERATION...

**Facility Managers see a future in facility management that is also hand in hand with technology management.**

“Obviously, technology plays a huge factor in the work that we do today, and into the future. Facility Managers are going to need to be able to keep up with technology and the internet of things in order to make competent business decisions in the future in regards to facilities management. Speaking of business decisions, a competent FM will need to have more understanding of the business side of things, and making important decisions on systems life cycle will impact business decisions down the road.”, explains Magliocca, “Our industry will need to evolve or we will end up outsourcing a lot of the work. Finding qualified mechanics for complex systems will continue to be a challenge we face. Automation will also change the industry, as labor shortages will require equipment to run autonomously. Additionally, I think that IOT will improve our preventative and predictive maintenance practices.”



# CONCLUSION

**“I think you’re gonna see technology overlap with facilities totally. Tech director and facility director could be the same role. Tech is going to drive facilities completely. Everything is going to be controlled it,” predicts Gordon.**

Lastly, Joe and Gordon also offer up advice to anyone looking to get into facilities management.

“Take everything you can. When I was 22, I sat on my first civil service test. I did very poorly,” laughs Gordon, “But that didn’t stop me. Be involved with the workers. Be hands on. Take all of the certifications. Just have the ambition.”

“My best piece of advice for someone wanting to become a facility manager would be to get an education. Then, put in your time doing the work (custodial/maintenance), and if you’re fortunate enough, spend some time in the construction and consulting industry (A/E),” states Joe, “It’s hard to do, but the best piece of advice I ever got from the Director of Facilities at The Catholic University of America early in my career was to spend some time working in the design industry, to truly understand the full life cycle of a building- Planning, Design, Build, Maintenance.

I’m fortunate enough to have taken his advice and planned out my career path to do exactly what he suggested.”

The Next-Gen Facility Manager needs to blend the people, strategic, and technology components of running building operations in today’s world. It’s about better decision making, people management and using technology strategically to keep your building stakeholders healthy and safe. To learn more and become a part of the growing community of NGFM’s, visit our website at [www.masterlibrary.com](http://www.masterlibrary.com).

# CONCLUSION

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