



Managing projects takes a wide range of skills and abilities. Here's some advice from PEs who have been there.

BY DANIELLE BOYKIN

HOW MANAGERS DELIVER PROJECT SUCCESS

If an engineering professional wants to be the quintessential project manager, he or she will need more than just top-notch technical expertise and the ability to manage budgets and schedules. Increasingly, successful project management requires that professionals ramp up their communications, relationship building, and leadership skills. Engineers Julie Labonte, director of program management for the Americas at MWH Global, and Ron Lemons, chief operating officer at Freese and Nichols, shared with *PE* their experiences and advice on effective project management.

No Magic Formula

Julie Labonte, P.E., joined MWH Global's program management group in January where she is responsible for fostering client relationships and supporting delivery of the firm's program management services. She brings to her new role critical project management lessons learned while serving as director of the San Francisco Public Utility Commission's Hetch Hetchy Water System Improvement Program. The program, which marked its 10 year anniversary, is a \$4.6 billion program aimed at improving the supply, delivery, and seismic reliability of the water system. The program (made up of more than 80 individual projects) is more than 80% complete. "It is now seen as one of

the most successful capital programs in the nation and is being used as a model by other programs in the country," she says. "Other cities and localities working on similar projects all want to hear what our magic formula was to managing the program."

There is no magic formula for successful project and program management, says Labonte. The Quebec, Canada, native initially honed her project management and soft skills when she began her career with the utility in 1995 as a water quality engineer in the Water Quality Bureau. She was involved in a highly controversial and political project to carry out a new state regulation requiring that all public water systems be fluoridated. The year-long

project required Labonte to engage with the agency's wholesale customers, elected officials, and other stakeholders throughout the San Francisco Bay Area. The project gave her the opportunity to engage more with higher level executives while forcing her to go beyond her primary engineering duties as she took on a more public role and became "the face" of the agency. "I grew tremendously and developed soft skills that as young engineering graduates we don't always have right out of school," she recalls.

As Labonte gained a solid professional reputation based on her growing leadership and interpersonal skills, she was given more politically sensitive assignments. The last one involved the multibillion-dollar water system improvement program. She initially took on the role of deputy director in 2005 while the agency engaged in the recruitment of a director to oversee the program. Six months later, management believed that Labonte was capable to serve as the program's director. "I was excited, but at the same time I was being pushed totally outside of my comfort zone," she recalls. "The amount of work that went into this program was amazing."

Lessons Learned

There are many lessons that Labonte learned about program management from this mega capital improvement program that she believes engineers can use whether they are taking the lead on public or private sector projects. The first essential lesson is understanding that managing programs and projects is all about the people. "Our ability to recruit incredibly talented staff, many of whom had experience with larger programs in the private sector, was certainly key," she says. "We were also smart about how we integrated consultants at all levels in a very unified team. They gave us some of the resources and expertise needed to deliver."

Labonte's first job as director was to gain and maintain the trust of all stakeholders. In particular, the relationship with the

agency's wholesale customers was "at an all-time low," she describes. Although, the water system is owned by the city, more than two-thirds of the water is delivered to customers throughout the Bay Area, who had very little confidence in the city's ability to deliver on such a large undertaking. This lack of trust led to state legisla-



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tion requiring the city establish a program with specific reporting requirements and deadlines. "If the city of San Francisco had failed to deliver the program, one could argue that these customers would have a very strong argument to try to gain more control of the operation of the system," she says. "The system has been in the control of the city since the early 1900s. There was a lot at stake."

Project managers often face pressure to show progress right away, and often without a thoughtful strategy in place, says Labonte; however they shouldn't cave into this pressure. Effective project management involves adopting thoughtful implementation strategies that will provide alignment and direction throughout the program, including establishing quality assurance directives and a governance structure. Some key questions to answer prior to setting the direction of the project may include the following: How are we going to break down the work?; What is going to be our contracting strategy?; Are we going to let out three mega-projects or are we going to break this down into 83 smaller projects?; and What are the drivers behind those decisions?"

It's critical to clearly define the scope of the program or project and establish specific goals early in order to adequately

manage expectations of all stakeholders. "When there were attempts to add to our program, we went back to those goals and asked if the additions would contribute to meeting our goals to avoid scope creep," Labonte says. "It's very tempting on huge programs with big budgets to want to accommodate the client's new desire. You

need to have a system that will allow you to determine if the requests are beyond the scope of the program."

Successful project management is also about not making commitments that you're not able to deliver on and dealing realistically with changing landscapes, says Labonte. The agency faced the challenge of being able to deliver on the program projects while maintaining service to 2.6 million customers. In a normal year, says Labonte, the city shuts down parts of its system five times for preventive maintenance and repairs. In a five-year period alone, the system was shut down 180 times to connect the new improvements to the existing system. "We often could finish a project faster than we could connect it to the system. We had to take on a full assessment of our delivery capabilities," she says. "We sometimes determined that a project had to be delayed a year or two because it couldn't fit in the system shutdown schedule at a certain time."

Transparency and accountability go hand in hand with the idea of gaining and maintaining trust. Accountability and transparency must be priorities, particularly on projects using public funds, says Labonte. "We put in place a huge communication program that said we are an open book," she says. "We purposely shared

with all of our stakeholders and anyone interested in our program, the good and the bad. There was nothing to hide.”

Leading the Way

When Ron Lemons, P.E., started his career at Freese and Nichols, he learned the art of project management by what he described as the “old school way,” simply learning under the guidance of his supervisor. Headquartered in Fort Worth, Texas, the firm has since formalized its project management training through Freese and Nichols University. Lemons believes that it's essential that promising young engineering professionals are given the tools and the opportunities to show they can be successful project leaders.

F and N employees are not permitted to take on project management roles until they have passed a series of courses, which includes leadership classes. The university offers both an assistant project manager and project manager tracks. The assistant project manager track was added to the university offerings to provide less experienced professionals more opportunities to hone their skills. “When you have really great young professionals, you need to get them involved early, but you don't want



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them to be thrown into the water to either sink or swim,” says Lemons.

There are seven actions that F and N professionals learn are vital to being a highly effective project manager:

1. **Developing** clear and concise proposals, scopes, budgets, schedules, fees, and contracts.
2. **Owning and leading** all aspects of project performance, which includes quality, scope, budget, schedule, and client satisfaction.
3. **Understanding** the needs and expectations of the client, project team, and firm management.
4. **Communicating** based on this understanding of the needs and expectations.
5. **Creating** innovative solutions to overcome project challenges and obstacles.

6. **Building** cooperation and mutual respect with all involved in the project and serves as their coach and mentor.

7. **Identifying** future client needs and finds ways to help the client.

The ability of a project manager to take full responsibility of the project—both the good and the bad—is a critical component of being a good leader. “A project manager may say, ‘I'm the project manager, but I'm not responsible for this piece of it.’ No, you own the whole thing,” says Lemons. “It's a mindset that you need to have. Our very best project managers naturally feel that responsibility and they take to it like ducks to water.”

Good communication skills are essential to successful project management since they're a part of understanding the needs of the client and establishing clear project goals and expectations. “Once you understand everyone's needs and expectations then you can build cooperation. For example, you may have owner clients that doesn't trust contractors, but they are part of the team. You have to try to understand their point of view.”

Lemons adds, “A big part of communications is listening, but you also need to have those brutally honest conversations with your team members and clients. You better have them or you're going to regret it later.”

As young professionals take on project management duties and more seasoned professionals strive to get better, Lemons believes they should learn from their mistakes and shouldn't be afraid to take reasonable risks. “There are going to be challenges and obstacles on every single project,” he says. “Don't get frustrated, just go ahead and tackle whatever comes your way and get it solved.” **PE**

14 Project Management Take-Aways

- There's no magic formula.
- Work on leadership and interpersonal skills.
- Managing programs and projects is all about people.
- Gain the trust of all stakeholders.
- Understand client needs and expectations.
- Clearly define the project scope.
- Adopt thoughtful implementation strategies.
- Establish a system to determine if requests fit into the scope.
- Deliver on commitments.
- Be realistic about change.
- Make accountability and transparency priorities.
- Give young engineers the tools and opportunities to prove they can be successful project leaders.
- Good project managers take ownership of the whole project—the good and the bad.
- Learn from mistakes and don't be afraid of taking reasonable risks.