




Construction Technology and Its Role in **Operations Excellence**



THE SITUATION



From 2014 to 2019, investors put a \$25 billion bet on construction technology. Today, there are thousands of technology companies focused on building technology for the construction industry. Technology sales professionals inundate contractors with sales calls that pitch how these technology applications can help contractors do better, safer, and more efficient work. There is no doubt that this new wave of technology will take the construction industry into the future, but the options can be overwhelming. Many contractors are just trying to win and execute work and don't have time or money to take advantage of those technologies that could make a big impact to their business.

So, when it comes to building a technology ecosystem for their organization, where do contractors start? If a contractor has to pick and choose, which technologies will give the contractor the most lift towards operational excellence and ultimately financial health? This challenge spurred greater interest by FMI, MindForge, and IRMI to find an answer to the question:

What technology should companies use to achieve maximum operations excellence?

OUR APPROACH

FMI developed and distributed a survey that was completed by 111 industry experts across the field and office, leadership and non-leadership, general contractors and trade contractors to understand and assess the drivers of best-in-class field performance and technology's role as a catalyst for operations excellence. Industry interviews were also conducted to further contextualize survey insights. The below information was informed by these interviewees.

Survey respondents:

58%

Field Workers

42%

Office Workers

86%

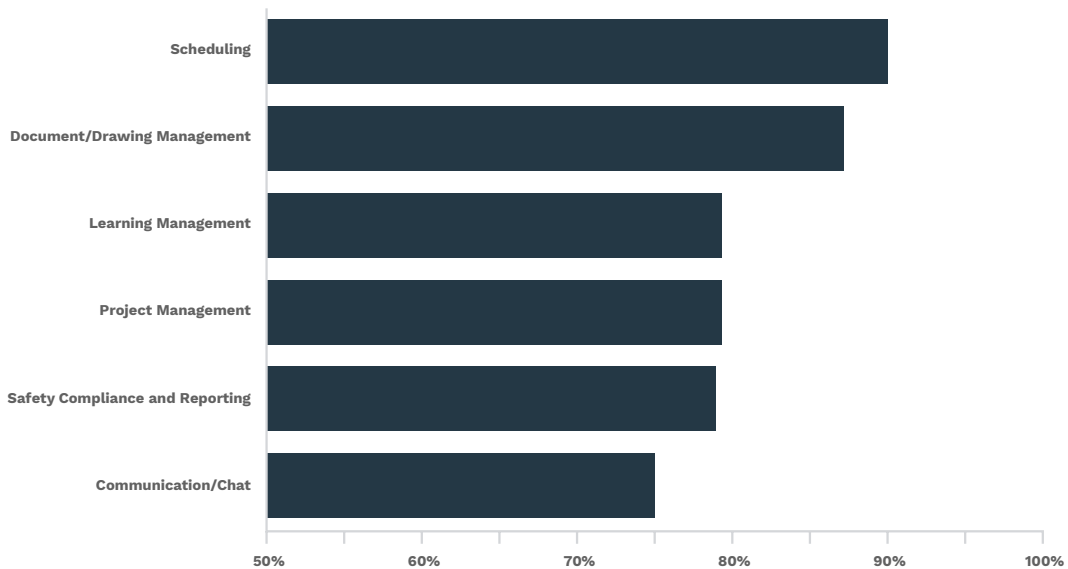
Non-Leadership Positions



KEY FINDINGS

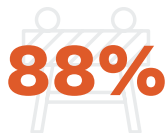
Most important technologies for contractors

Based on our research, contractors rated these technologies as being most important to the success of the highest performing companies:



Key aspects of operational excellence

Participants identified the top three aspects for driving operations excellence in the field:



Safety Training & Compliance



Team Communication & Collaboration



Teamwork & Morale

Despite contractors rating these aspects most important, **they only claimed to be effective in safety training and compliance.**

*Percentages represent the number of survey participants who rated the technologies “very important” or “most important” out of everyone surveyed.

Contractor areas of expertise and **opportunities for improvement**

There are three common aspects of operations where contractors feel they are:



Survey participants identified technology as equally important for safety training and compliance, team communication and collaboration.

“The most recognized reason for low marks in teamwork and morale and team communication is poor processes and ineffective communication from supervision and management.”

Technology’s greatest **challenges** for contractors

The greatest challenges respondents identified when it comes to utilizing technology include:

- ✔ **Struggling to maximize user adoption of technology**
- ✔ **Data management**
- ✔ **Unfamiliarity with technology**
- ✔ **Calculating the ROI on technology costs**

Technology’s greatest **benefits** for contractors

Consistent themes explaining why the technology was impactful included:

- ✔ **Creating project efficiency**
- ✔ **Improving accuracy**
- ✔ **Identifying areas of risk**
- ✔ **Increasing profitability**

CONCLUSION


Technology has the opportunity to improve nearly every part of a business, from maximizing the performance of safety training and team communication to boosting employee engagement and quality of execution. It's been long known that technology is the key catalyst for improving safety training, project and budget management and other quantitative metrics of a jobsite. But this research shows that technology extends its value by boosting employee engagement and quality of execution through improved communication. A majority of contractors identified teamwork and morale and communication as a key to success, but most also reported that they don't do these things well and recognize technology as an important tool to help them improve communication.

These findings suggest that adopting technology to encourage open communication across your jobs creates a space where everyone can access jobsite information and ultimately, helps to establish a solid culture.




 mindforge.live

 [@MindForge LLC](https://www.linkedin.com/company/mindforge-llc)

 [@mindforgeinc](https://www.facebook.com/mindforgeinc)




 [irmi.com](https://www.irmi.com)

 [@Internal Risk Management Institute](https://www.linkedin.com/company/internal-risk-management-institute)

 [@IRMIowl](https://www.facebook.com/IRMIowl)



 [FMI.net.com](https://www.fminet.com)

 [@FMI](https://www.linkedin.com/company/fmi)

 [@FMIcorp](https://www.facebook.com/FMIcorp)