

How the construction industry is tackling disruption

5 critical areas executives
are focusing on



WIPFLI

Demand for construction services is strong...

...But busy doesn't always mean profitable.

Elevated labor and materials costs are eroding profit margins. Competition for jobs is fierce — and often focused on the lowest bidder. Every project detail — estimating, scheduling and even things out of contractors' control like the weather — has to be executed perfectly for construction firms to hold onto their hard-earned dollars.

This isn't new. But some contractors aren't taking it as "business as usual." Instead of riding the waves, they're shifting their business models and processes — doing everything from changing where parts are being constructed, to finding new ways to increase cashflow, to adopting new technology.

In this e-book, we explore these top ways construction firms are tackling disruption and ensuring the longevity of their businesses. In depth, we cover how construction executives are tackling:

- Margin disruption
- Evolving technology
- Rising construction costs
- The labor shortage
- Business longevity

Read on to learn how your business can build on your short- and long-term strategy to ensure a successful future.



Can prefab preserve construction margins?

With prefabrication and modular construction, building components or entire buildings are constructed in a shop or warehouse, then delivered to the job site. (Some assembly required)

Shifting the location — and environment — where construction occurs gives contractors more control over essential elements that affect performance and profitability.

Quality and safety: It's often easier to manage quality and safety under controlled shop conditions. Templates and jigs that might not be feasible in the field help create consistent quality. Further safety protocols are just easier to follow when in the controlled shop space, and PPE is close at hand, so it really takes excuses away.

Labor: Your labor needs change with prefabrication and modular construction. Fewer people are needed onsite, since a portion of the work can be completed in the shop. Some firms find it easier to retain workers when travel is reduced or eliminated from the job. The skills mix is different, too. Modular construction, when done right, can rely on standardization, which may reduce the need for highly skilled tradesmen with many years of experience.

Material costs: These costs are the same for modular/prefab builders, but you can leverage warehouse space to stockpile inputs when prices are good, instead of being at the mercy of pricing fluctuations and availability. Materials may be more secure when they aren't stored on the yard, too. Tighter quality control can also reduce scrap, waste and rework.

80% of contractors are using offsite construction methods, including prefab and modularization.

\$130 billion is how much the modular construction industry is predicted to grow to in the U.S. and Europe by 2030.

20-30% of a project's costs can be reduced by using modular construction.

Productivity: Productivity increases when projects aren't weather-dependent or restricted by other site work. Builders can schedule labor, materials and tools to maximize usage and efficiency and avoid costly downtime. Additionally, the shop may have specialized and full-size tools that contribute to productivity more so than their portable counterparts.

Time to completion: Your time to completion is faster. By some estimates, modular construction can cut construction schedules in half. Even small-time savings add up, since they free workers and warehouse space for the next job.

All of these five factors can preserve margins — and help construction firms win business and maintain profit margins. Cost and risk mitigation aren't just favorable inside the firm; they build stability that contractors and clients value, too.

Weigh the options

Modular construction and prefabrication don't eliminate all of the day-to-day challenges contractors face — and do come with some tradeoffs. Before shifting to modular or prefabrication operations, contractors need to critically review their existing and incoming projects. If the work fits neatly into a niche or has a lot of standard components, it may convert to modular construction fairly easily. If every construction job is custom or specialized, prefab probably won't cut it.

To experience the benefits of modular construction, you may need specialized tools, heavy equipment and more space to work and store construction products — all of which require big upfront investments. Tax credits and deductions such as enterprise zone credits and bonus depreciation can help firms overcome these barriers to entry, as long as the longer-term numbers make sense.

Transportation and logistics are an added cost in modular construction. Components are easier to make, but they have to be shipped to the final job site. Oversized shipping and insurance costs need to be accounted for. Logistically, prefabricators must adhere to schedules religiously. Planners and schedulers need materials coming and going in the exact right order, on accurate timetables in order to be successful.

Compared to other industries, construction can be slow to innovate or implement new technologies. It might be time to pick up the pace. Efficiency, quality and cost predictability can help construction companies preserve margins. A shift toward modular construction may give companies a foundation to improve performance and build value in the organization.

Navigating change and disruption with tech

Construction firms haven't hit digital transformation at full speed yet. As an industry, it's teetering somewhere around Industry 2.0, whereas manufacturers and retailers are playing with Industry 4.0 plans and beyond.

On the bright side, that means technologies and use cases have been fully developed and tested. Now, construction firms can dive right into the right technologies.

Within construction, these innovations show the most promising returns:

Blockchain: Put simply, blockchain is a system for recording information. It's best-known for tracking cryptocurrency transactions, but every industry and business can benefit from having a secure, immutable "source of truth." Construction firms can leverage blockchain to ensure project information is always accurate, accessible and protected, and that every superintendent, subcontractor and tradesperson is working from the same game plan.

Blockchain can eliminate questions about who's working on what, when. And it retains project records and final documentation.

Building information modeling (BIM) and the Internet of Things (IoT): 3D and 4D modeling can help construction firms anticipate challenges and stay on track, both budget- and timewise. A "digital twin" of the physical site can capture and store virtual design during construction and retain information throughout a facility's lifecycle for future review, analysis and walkthrough.

BIM can be paired with IoT enabled systems and can be leveraged in service and maintenance work, creating potential new revenue streams. For example, IoT solutions can track wear and tear on building systems (e.g., HVAC, electrical or elevators), so maintenance tasks can be activated based on actual usage trends or safety and service-related data points. By deploying smart, data-based predictive and preventive maintenance, construction firms can prevent costly downtime and repairs for their customers – and collect monthly service revenues.





Drones: Camera-equipped drones can improve mapping and surveying, job site surveillance and even security. Drones can monitor sites and equipment to support progress reports and inspections, but from safer or off-site locations. And those hard-to-reach nooks and crannies? A digital twin can show you what something should look like or how something should be performing (as noted above); a drone may be able to show you real time what's going on in those hard-to-reach places.

Mobile technology: With mobile applications, construction companies can move business processes out of the office and into the field. Workers save time (and money) when they can punch in, check in and close out projects without coming back to an office. Smart, location-based dispatching can get materials and crews to sites sooner. Scanners can help crew leaders track time and material usage more accurately. And automated invoicing tools can help the firm collect cash sooner and with less effort.

Wearables: Construction workers are accustomed to PPE. Now, it can work harder (and smarter) to keep them safe. Smart boots, hard hats and gloves can warn workers when they're at risk of injury, either from fatigue, temperature or incoming equipment. In warehouse or manufacturing's settings, wearable sensors can also identify opportunities to improve efficiency. Eliminating the number of steps — or minutes — to get materials and tools can add up.



Picking the right tool for the job

It's easy to get caught up in shiny, new technologies. But not every innovation is a good investment for your firm. Every construction business needs a technology roadmap, just like it needs building plans, detail lists and schedules. Digital transformation plans should align to the company's overall strategic direction and goals.

So, what's your goal? Are you trying to maximize margins? Create new revenue streams? Increase employee retention or safety? Once you have a handle on your biggest business needs, it's easy to find and evaluate the right tools. List your company's projects, then tie them to the most-productive tools.

Managing change

Each technology solution should have a business leader attached to it — not just an IT person. That keeps the solution aligned to the business case and other metrics of success, like cost and internal controls. A strong business case — and strong business leaders — can also support change management and user adoption.

Pull together “proof of concept” groups to assist with the rollouts. Recruit tech-savvy employees, plus outliers, like veteran workers or those who are frustrated with the status quo.

Communicate the benefits workers and users will experience, not just the business. Employees need to understand how the technology will improve their work lives — and feel like it's worth it.

Building stability when prices are skyrocketing

Prefab and new technology can really help construction firms navigate a new normal, but what about costs? Everything costs more right now, from lumber to labor. In some areas, costs are so high, they're outrunning construction bids and pushing hard-at-work firms into the red.

Since prices are up across the board, construction firms don't have any sweet spots (or lofty margins) to lean on. And materials aren't just expensive, they're hard to find and challenging to deliver on time. Many construction firms are stuck in cycles of uncertainty each time they open a bid: What will materials cost? When will they arrive? Will there be enough workers, at the right times?

Everyone knows it takes money to make money. Construction firms need cash on-hand to mobilize projects and teams at exactly the right times. Otherwise, they risk falling behind and setting off a series of costly delays.

Renegotiate: "Business as usual" is long gone, so some of your business practices might need to be, too. Make sure your terms and conditions are serving your firm's needs, right now. Negotiate for reimbursement policies that pay for materials upfront, or at least earlier in the project. Likewise, ask for longer payment terms with suppliers. Spread out the costs of bigger purchases, or finance at a low rate. Try to get as much cash in the door as quickly as possible, and hold onto it as long as possible.

Make it easier to bill and collect: Stay on top of billing processes and remove barriers, even if they seem like simple tasks (e.g., printing and mailing invoices or depositing checks at the bank). Digital invoices go out faster, and electronic payments help cash come in quicker.

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Shop around: Explore new vendors and sources, especially if you haven't shopped around in a while. Local vendors may be more competitive now, since freight and transportation costs have risen, or more predictable for scheduling.

Plan big: Try to combine companywide orders and buy in bulk to negotiate better pricing. If warehouse space is available, you can stock up on commonly used materials when prices are good. Warehousing can also help firms avoid scheduling delays, should availability change.

Manage small: Company-level performance is important, but right now, firms need to dial it in. Create projections for every project, and try to get each one cash-flow positive (without robbing one to pay the other). For every project, make sure you understand how much money is going out and coming in, and when. There will be dips. Plan for them. And, stay on top of change orders. Micro-managing the financials of every project will help the company avoid cash flow drains — or at least spot and manage them sooner.

Stay informed: The amount and speed of change is staggering. Make sure someone — either a senior leader or a trusted business advisor — is reviewing stimulus programs, tax credits and lending changes to see if you qualify for opportunities or relief.

Managing costs is top-of-mind right now, but the benefits will outlast this pricing crisis. Some costs aren't likely to decline, and the industry hasn't hit the peak of its labor crisis yet.

Sure, everyone is doing "more with less." But firms cannot continually delay building value, waiting for better times. Every firm can take steps, even small ones, to increase cash flow and build stability. How will you get started?



Where are the workers? Tackling the talent gap

According to the Home Builders Institute, the construction industry needs an additional 2.2 million workers between now and 2024 to keep up with construction expansion and worker replacement. News outlets have called the situation “staggering” and “desperate.” But nobody should be saying it’s a surprise — or temporary.

In the 2021 construction transition planning report issued by Wipfli, nearly 90% of construction leaders said they plan to start transitioning out of their companies in the next decade. Owners have been retiring and exiting the business in waves, taking a wealth of knowledge and skills with them.

Retirement is just one reason construction workers are walking away. Construction is tough, physical work. Sometimes, even dangerous.

Companies have struggled to find workers who enjoy and thrive in the environment.

It’s also hard to retain workers when wages and opportunities are plentiful outside the sector. The labor shortage is a ubiquitous problem, so construction firms are competing against “cushier” and “easier” career offers.

These three factors — ownership transitions, recruitment and retention — add up to a serious and perpetual problem for the industry, and one that time and market conditions won’t fix.

Here’s the hard truth: There will never be enough people to get the work done.

That’s not a cue to throw in the towel. Instead, to battle the construction labor shortage, it’s time to develop new strategies for talent acquisition and retention. Start with these seven strategies:

92% of construction executives are concerned about their business’s ability to find and retain staff.

61% named finding and retaining staff as one of their top business concerns.

64% are unsatisfied with the amount of time their organization spends on ownership and management development.

Learn more in Wipfli’s construction survey report.



Assess before you engage: According to the Society of Human Resource Management, on average, it takes \$4,129 and 42 days to fill an open position. Even then, there's no guarantee you've got the right person, or that they'll stay.

Pre-hiring assessments can help your firm shorten ramp-up time and shore up investments. Behavioral assessments like Predictive Index®, in particular, can “decode” candidates’ motivations and help place them on the right teams, right away.

Assessment-based hiring can guide interviewers toward the right questions and match new-hires with compatible managers and teams. A person’s motivation and drive – not just what they say during an interview – is an important indication of cultural fit. Assessments can also identify coaching tools and onboarding plans that are tailored toward individual needs.

Onboard during the interview process: It's never too early to get on the same page. Use the interview process to introduce your mission, vision and values, and to start conversations about career paths and aspirations. Younger generations, in particular, are interested in meaningful work that aligns with their personal values. And workers who are looking for long-term career paths, versus a job, need to understand whether they have a future with your company from the very beginning.

Diversify the talent pool: It's no secret: Construction is a male-dominated industry. Firms can expand their talent pools by recruiting more women and minorities into the field – and not just as token placements. In an equitable environment, more employees can enter the industry, impact outcomes and participate at the greatest level.

Construction firms also need to recruit new skillsets. Part of “doing more with less” is working more efficiently and with technology. Increasingly, employees will need technical and analytics tools, in addition to a skilled trade. Tomorrow’s leaders may not come from a job site.



Re-recruit your employees: “More people” isn’t a magic solution. Recruitment, onboarding and training are time-consuming and expensive. Firms can throw tons of money at recruitment and still lack the talent, skills and desire they need to deliver high-quality and consistent work.

The best HR investments are working for you right now. It’s your job to make sure people are in the right roles, given the right support and offered a longer-term career path.

Study your workforce: If you don’t pay attention to your best people, somebody else will. Get to know team members and what makes them “tick.” Find out why people stay, what’s challenging them, and what has them “hooked.” Encourage supervisors to lead strong and spend meaningful time with staff.

Actively listen: If you solicit employee feedback, ask with the intent to act. Expect tough messages, stay open to them and commit to action. If people are leaving, have an objective third-party find out why. It’s your responsibility to make the workplace better for the next person.

Invest in leaders: There’s a saying, “People don’t leave their companies; they leave their boss.” Supervisors have tremendous influence over job satisfaction and retention. Make sure managers, superintendents and project managers have the skills, tools and support to lead well. Keep in mind, being good at a trade doesn’t always translate into being a good leader. Supervisors may need ongoing and advanced soft-skills training.

Leadership takes time, too. There’re no shortcuts for building relationships, communicating and training.

The talent gap is our “new normal.” The good news is, construction firms can execute contracts, secure new business and increase company value with the people they already have. The key is to hire the right people, train them well and develop solid career paths for them to follow. When employees are engaged in the work, they can — and will — do more to move the company forward.

Securing the longevity of your business through transition planning

By investing in your talent and growing your leaders, you're helping to ensure your company is in good hands after you retire. You're also creating greater value for whoever buys your company, leading to a higher purchase price and a better retirement for you.

But transitioning out of a company at maximum value requires careful and continuous planning – and sometimes contingency planning, too. Here are six steps on when – and how – to develop a transition plan:

1. Start transition planning early

When owners are proactive and transparent about succession plans, they have more options. Decide what you'd like from a transition.

For example, do you want to spend less time in the office, or to completely walk away? Do you expect family members or employees to take over? What do they need to be ready?

Conversations about the future can be difficult, but it's critical that everyone be on the same page. Internal transitions require long-term coaching, skill-building and financial planning – not to mention desire.

Early planning helps you identify the best option for you, the business and its future leaders. Take the time to consult with financial advisors, attorneys and accountants to collect multiple perspectives. When appropriate, encourage successors to do the same.

Regular valuations can also serve as valuable “health checks” to identify strengths and weaknesses that impact succession planning and negotiations.

81% of construction businesses intend to transition ownership within the next 10 years.

93% of owners are looking to transfer their company to existing shareholders, family members or existing employees.

32% do not have written, actionable succession plans in place.

Learn more in Wipfli's construction survey report.

2. Drive value through stability

Companies increase in value when they're stable, sustainable and profitable. That means day-to-day operations and key relationships can't rely on a single person (i.e., the owner). Owners can increase company value by retaining and developing key employees.

A robust management team ensures continuity, which customers and investors both appreciate. And it can protect the company's value if a succession plan falls through or an ownership change is needed unexpectedly.

Gradually delegate responsibilities to future leaders, and start to spend more time coaching and driving strategy. Give employees opportunities to grow professionally – and increase the company's value.

3. Build succession into strategy

A good strategic plan is firm but flexible. There's a clear goal or end-state, but more than one way to get there. Similarly, succession planning should include some latitude to deviate from "plan A," without giving up on the goal altogether.

Succession considerations should account for a range of "what ifs" – from "what if" the intended successor changes their plans, to "what if" a transition happened tomorrow instead of two or 10 years from now. As with strategic planning, consider how internal and external pressures might affect the business.

Market shifts, legislation, tax incentives and labor availability have material impacts on how (and when) construction companies pursue, win and deliver business. Make sure your succession plan is aligned to the current strategic plan so you have the right people and skills lined up for the future you want for the company.

4. Document your intentions

In Wipfli's 2021 survey of construction owners and C-suite executives on their transition plans, only 65% of respondents showed to have documented and actionable succession plans – and 10% of those folks said their plans needed updating.

Many ownership changes are caused by unforeseen circumstances. When that happens, it can lower the value of the company and disrupt operations. To protect value and business continuity, succession and contingency plans need to be actionable, documented and accessible to future leaders. Starting early avoids additional surprises. Regularly revisiting plans keeps them aligned to the overall strategic plan.



5. Test run the transition

You don't have to leave until you're ready — and the team is too. In the transition planning survey, about a third (30%) of respondents said they want to stay active in the business after transitioning ownership. Another third said they intend to work part-time or consult in retirement.

Start handing off parts of running the business early, while you're still available to coach and mentor staff. And guess what? You can delegate tasks that you find tedious or unpleasant first.

As the team becomes more capable and confident, take bigger steps away from the business. Come into the office less or take an extended vacation. If everything is ship-shape when you return, the team might be ready.

6. Exercise your options

Construction workers have some of the best jobs in the world. At the end of the day, they can step back and say, "I made that." There's a real, tangible result from a hard day's work. But construction companies aren't just creating structures and roadways and vital infrastructure. They're also building value. Owners are building wealth to support their families into retirement (and beyond).

With planning and professional advice, you can create a transition strategy that maximizes company value and supports your personal goals. More time produces more viable transition options, whether you intend to gift the business to the next generation, sell to a third-party or transition to an ESOP structure.

Understand the pros and cons of each scenario, then make the best decision for the next phase of your life. You've worked hard to support the business. Make sure it supports the lifestyle you want in retirement.

Are you ready to tackle disruption?

Wipfli can help. Our professionals specialize in business strategy, labor planning, digital transformation, tax services, business transition planning and other critical operational services specifically for construction firms. Together, we can build a better future.

Discover more about how Wipfli can help you tackle disruption in your industry and ensure the longevity of your business.

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