

# Leveraging Technology to Recession Proof Your Construction Company

Warren Buffett once remarked, “Only when the tide goes out do you discover who has been swimming naked”.

He was referring to the financial crises of 2008-2009 when many Wall Street firms appeared to be financially sound, but lacked internal discipline and operational control to weather an economic downturn. Contractors today are busy—are they positioned to weather a similar downturn today?

The US economy has been in growth mode since the Great Recession. Dodge Data & Analytics<sup>1</sup> recently released its 2020 Dodge Construction Outlook, a mainstay in construction industry forecasting and business planning. The report predicts an economic slowdown that will have a broad-based impact on total U.S. construction growth; predicting that total construction starts will slip to \$776 billion in 2020, a decline of 4% from the 2019 estimated level of activity.

***“The recovery in construction starts that began during 2010 in the aftermath of the Great Recession is coming to an end,” stated Richard Branch, Chief Economist for Dodge Data & Analytics. “Easing economic growth driven by mounting trade tensions and lack of skilled labor will lead to a broad based, but orderly pullback in construction starts in 2020. After increasing 3% in 2018 construction starts dipped an estimated 1% in 2019 and will fall 4% in 2020.”***

***“Next year, however, will not be a repeat of what the construction industry endured during the Great Recession. Economic growth is slowing but is not anticipated to contract next year. Construction starts, therefore, will decline but the level of activity will remain close to recent highs. By major construction sector, the dollar value of starts for residential buildings will be down 6%, while starts for both nonresidential buildings and nonbuilding construction will drop 3%.”***

While a repeat of the Great Recession is not on the horizon, we’re beginning to see signs of a slowdown ahead. Margins will continue to be squeezed and labor and material costs will continue to rise; however, work is available. Even when the business environment is robust and promising, good planning and preparation are the constant keys to success.

## Key Questions You Should be Asking

An FMI quarterly report was published earlier this year titled “How to Recession-Proof Your Business”. It argues that for a contractor to position their business for long-term success they should be fine-tuning the company’s operations, specifically around Project Performance, Project Controls, Labor and Equipment. The report asks some key questions that should be on every construction leader’s mind:

- 1 Project Performance:** Even if a project has an acceptable profit, did the project perform as estimated? Were there opportunities to potentially improve gross margin?
- 2 Project Controls:** Project controls must be repeatable and scalable, particularly as contractors grow and onboard new talent. Are your people consistently executing steady re-
- 3 Labor:** Project controls must be repeatable and scalable, particularly as contractors grow and onboard new talent. Are your people consistently executing steady results?
- 4 Equipment:** Tracking equipment hours and understanding utilization are critical for optimizing fleet performance and yielding a return on capital-intensive assets. For the millions of dollars you’ve invested in equipment, are you realizing an acceptable return?

The report concludes by saying “Contractors are often reluctant to focus their attention on internal improvements to their businesses in a robust market. However, now may be precisely the opportune time to take inventory of your company’s strengths and opportunities for improvement.”

Further, Construction Executive published an [article](#) in July of 2019 saying construction executives should plan ahead by “Assessing the company’s communication capabilities and consider making any necessary upgrades so the technology is in place long before a downturn should occur. The ability to communicate in real time and instantly make changes to work orders and jobs online instead of having to submit paperwork are proven to have significant benefits to a business. Be aware of what competitors are doing in this area because technology will be a differentiator sooner than later.”

## Leveraging Technology to Recession Proof Your Construction Company

Technology can increase project performance by putting in place project controls and measures to better manage labor progress and productivity and hit quantifiable production goals. A big part of increasing labor productivity is having a way to track progress. By tracking and monitoring progress early and consistently, contractors can reduce issues, forecast costs and identify any reduction the gross profit on a project earlier. By understanding what was done when, and how long did it take, will enable you to stand tall and confident, if and when the tide goes out.



## What to look for in technology to track construction progress.

In a recent article published on Marketwatch.com titled [The construction industry has a productivity problem — and here's how to solve it](#), the authors wrote, “Underinvestment in technology is one of the root cause of low productivity. There is robust evidence of the link between the level of digitization in a sector and its productivity growth. The U.S. construction industry has invested 1.5% of value-added on technology, compared with 3.3% in manufacturing, and an overall average in the economy of 3.6%. In the United States, construction is the second-least digitized sector after agriculture.”

Historically construction firms have delayed implementing technology. As the Marketwatch.com article pointed out, under investment in technology is directly tied to poor productivity.

### The following key elements are critical to consider when making a technology investment to track construction productivity:

- 1 Ease of use** – The single most important feature of construction software is ease of use. It facilitates user adoption, increases user satisfaction and most important increases productivity as happy people work harder.
- 2 Built for mobility** – The construction industry is entering the “Mobile Revolution,” in which apps are becoming an accepted means for workflows. Many workers have a mobile device and mobile apps are becoming a significant solution for the construction industry as they increase efficiency and save time.
- 3 Real-time reporting** – The ability to access and share project data in real time is invaluable to all project participants. It provides added productivity, better communication, and the ability to address project issues immediately as they arise.
- 4 Low cost of entry (startup costs)** – Most construction companies spend 1% or less of annual sales volume on IT. Having a low cost of entry is very important factor for technology budgets.
- 5 Leverages 3-D BIM technologies and a digitized work site** – In a McKinsey report, one study found that 75% of companies that have adopted BIM reported positive returns on their investment with shorter project life cycles and savings on paperwork and material costs. Further, in small specialty studies, BIM appears to be increasing productivity in labor. In a study involving a small contracting enterprise, the impact of BIM on labor productivity was quantified and findings demonstrated a 75% to 240% increase in labor productivity for modeled and prefabricated areas (Poirier, 2015)

Making wise technology investments to improve construction productivity makes sense and is essential in today's competitive environment. Technology investments are as important as good field tools to reduce project delays, adapt to project changes, improve operations cost control, safely complete tasks quicker and more efficient, and provide a quality project on time and on budget.

## ICT Tracker: A Tool Toward Increased Project Productivity

Innovative Construction Technology's ICT Tracker, provides job site productivity tracking and reporting using an augmented reality application. It's an easy-to-use solution enabling real-time monitoring of construction site progress which provide accurate installation status for scheduling, billing, and installation productivity data for project estimation.

The ICT Tracker mobile app replaces manual and inaccurate methods or expensive 3D scanning systems by digitizing the collection of data on site. Using patent pending technology, the user can view the actual 3D design model on an iPad and compare it against as-built systems onsite. This gives contractors real-time data to track, measure, and improve project installation productivity.

**With ICT Tracker, contractors can accurately track construction projects, control costs, and make better decisions based on detailed, real-time information from the job site.**

*"Here at Silicon Valley Mechanical, we are constantly looking at ways to improve our processes and are encouraged to discuss options, future tools, and new technology. We want to be prepared to address changes in the market. It is far easier to look at ways to improve our processes when we have the resources. When and if there is another downturn, we are prepared with **ICT Tracker** to survive and continue to take on projects with limited labor resources."*

**Don DeGuzman | Corporate BIM Director | Silicon Valley Mechanical**

### Sources:

Dodge Data & Analytics: "2020 Dodge Construction Outlook"

FMI quarterly report "How to Recession-Proof Your Business"

Construction Executive: How Construction Companies Can Prepare for a Potential Economic Downturn

Marketwatch.com "The construction industry has a productivity problem — and here's how to solve it"

