

Building the foundations of the future, now

The digitization landscape in the construction industry

Survey created in conjunction with  **CONSTRUCTION DIVE**



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Executive summary

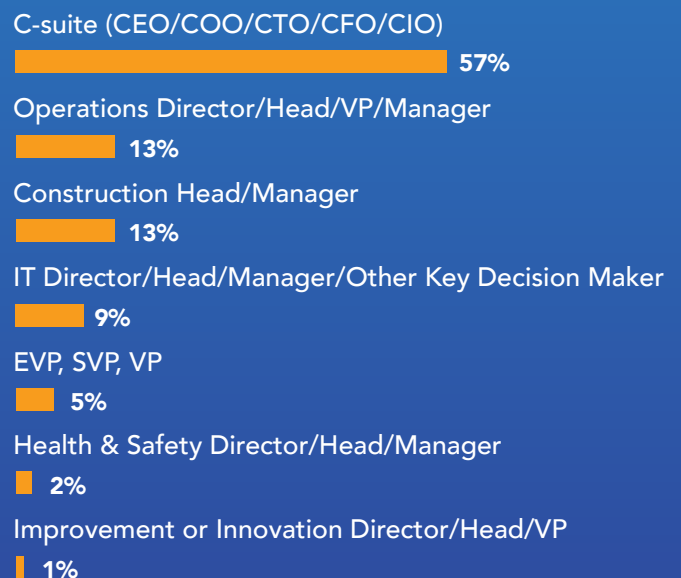
Digital transformation has risen on the agenda for many construction firms, becoming a high priority initiative to maintain competitiveness in a tough market. Executives are aware of the benefits of digitization, and most firms have digital solutions in place – at some level.

Despite this, the process automation landscape in the construction industry is not where it should be. Construction Dive, in partnership with FlowForma, has conducted a survey about the state of digitization in the industry, with a focus on workflows and business processes.

A hallmark of the construction industry has been a residual dependence on outdated processes. While other industries have deployed digital solutions quickly, especially in light of the COVID-19 pandemic, the specific adoption challenges within construction, including affordability, low IT capacity, and a lack of internal champions for digital transformation, have stalled the digitization process.

Results of Construction Dive's survey show that, while there is still a reliance on outdated processes, digitization is beginning to take hold within the industry. Construction firms might be at an early stage of digital transformation compared to other sectors, but there is a new readiness to get digital cogs turning.

Survey respondent by job title



Key takeaways

In their survey, Construction Dive found that:

63%



Digitization is a top priority for 63% of construction executives and managers.

87%



87% believe that digitization gives construction firms a competitive advantage.

47%



Just under half (47%) rate their firms at either a beginner or intermediate stage in their digital capabilities.

90%



A clear majority (90%) still use outdated methods (email/Excel/paper forms) for 25-100 percent of their business processes.

74%



74% of construction executives are forward-looking, expecting 51-100 percent of business processes to be digital within the next 18 months.



Digital transformation: what does it mean for construction?

Digital transformation is the integration of digital tools to optimize construction processes and make them more efficient. It has been proven to create significant value for construction firms, with a swift ROI and uptick in productivity.

Despite its value to construction businesses, executives and managers still view “digital transformation” as associated with sophisticated, technologically innovative, and highly disciplined firms.

Transformation: one brick at a time

The term “digital transformation” might be misleading for construction executives, suggestive of a complete overhaul. However, the integration of digital tools doesn’t have to be extensive. There are stages to digital transformation: changes can be incremental, and processes can be digitized easily, and at minimal cost.

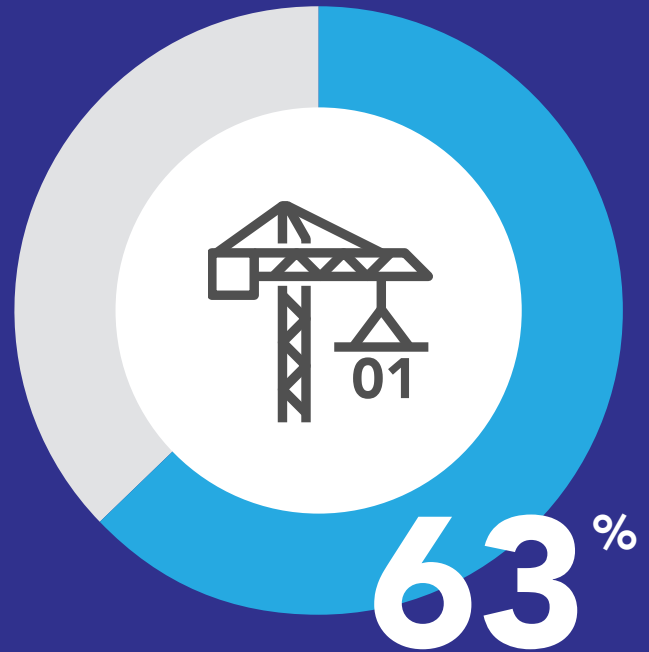
Construction firms, compared to other industries, still have a significant reliance on paper-based and outdated processes. The reality is that these methods are outdated and require a refresh with new technology and processes. Digital transformation is the means by which to do this.

Digitization can mean different things to different construction firms, especially those with specialized services. However, at the heart of digital transformation is a modernization of processes, for greater efficiency and increase in ROI. For an industry with a residual dependence on paper-based processes (as many as 46%), automating processes and workflows is transformative. Process automation tools are typically easy to deploy, especially no code tools that require minimal IT skill or support. Digital transformation might be the final frontier for construction companies, but it is imperative to compete in the digital age.



Digitization is a top priority

Despite some misconceptions around digital transformation, **digitization is a "top priority" for executives and managers within the construction industry.** 63% of survey respondents heavily prioritize digitization of processes, and a further 30% believe in its importance.



In terms of business processes within the construction industry, the following are viewed as a high priority for optimization and automation:

59%



Health & safety

57%



Purchasing and procurement

55%



Contractor onboarding

Other processes ripe for automation include:



Subcontractor submittals



Compliance



Checklists and approvals



Fleet management



Bid management



Project controls



The business outcomes construction executives care about most

When implementing digital initiatives, business outcomes must be taken on board. The priorities for construction executives are unique to this industry, and digital solutions must meet the specific needs of construction firms. The following business outcomes are a priority for survey respondents:

94%

Health & safety

An overwhelming majority (94%) of construction executives and managers want to improve worker safety. The industry has unique safety requirements, given the nature of the job, and negligence of health & safety regulations can be costly to a construction firm. For Health & Safety Managers within the construction sector, risk assessment plays an important part. Potential hazards on a construction site require critical examination and careful documentation – and manual administration can lead to human error.

Automation of inspections, risk assessments, and follow-ups fortifies the documentation process for health & safety. It removes the risks posed by manual documentation and allows Health & Safety Managers to focus on what matters. Misplaced reports or overlooked hazards is not a possibility with process automation. Once a hazard is identified and documented via process automation, the follow-up process is streamlined, alerts can be generated, and reports automatically sent to managers and business executives.

“FlowForma has given us the ability to create solutions that help us work safer, more efficiently, and plan and communicate better with our sub-contractors and designers.”

Construction Company, via G2



[Read our G2 reviews](#)

87%

Operational efficiency

A majority also view operational efficiency on construction projects as a priority. 87% of construction executives and managers view an increase in operational efficiency as either very important or absolutely required. A high level of operational efficiency means that construction firms avoid overruns and complete projects on time and to budget.

Automating processes provides an uptick in the efficiency of operations and construction projects. Replacing manual processes with automated workflows streamlines and fast-tracks business operations. Automation removes, or at least mitigates, human error, which, on a construction project, makes planning and operation stages more efficient.

Automated workflows also create transparency across the project lifecycle, enabling the workforce to coordinate and collaborate more easily. Transparency of processes allows everyone involved to see progress and spot irregularities before they result in issues, reducing operational risk.

“We’re doing more at the front end, like uploading site photographs straight into FlowForma’s automation solution. This creates huge time-savings, which leads to cost savings, and that allows us to take on almost twice as many deliverables as we normally would.”

Jimmy Monahan, Principle Consultant, Sullivan Engineering

96%

Real-time data analytics

Data is not just a commodity for business leaders. It's a real business asset and leveraged for business strategy and decision-making. In construction projects, the value chain is typically fragmented, which means that documents and data are heavily siloed. Digital tools, such as process automation and BIM solutions, join up fragments of the value chain, and create a more holistic data picture of a project.

According to survey results, real-time project analytics informs decision-making for 96% of construction executives and managers. And 92% consider data insights a high priority business outcome, rating it as either very important or absolutely required. Process automation and BIM tools enable real-time data access, high data quality, and allow users to access data when offline – useful on a construction site with limited online capabilities. Data is also available across all devices offline, including mobile, tablet, and desktop.

"In the past year we have saved at least 700 hours on repetitive tasks alone thanks to the FlowForma Process Automation tool."

Lampros Arvanitis, BIM Manager, CVB





88%

Integration with existing solutions

Construction employees across the value chain work with a range of digital solutions. 88% of construction executives and managers want seamless integration of multiple solutions. Integration of tools is necessary to create a holistic data picture, generate transparency across project lifecycles, and promote better collaboration between teams. According to survey results, construction executives and managers would like a workflow tool to integrate with the following:

- Finance systems
- Project management software
- Document management software
- CRM systems
- ERP systems

Process automation tools like FlowForma's are able to seamlessly integrate with thousands of systems and applications, including Salesforce and Procore. For a digital landscape in which multiple applications are used simultaneously, it's important that systems talk to one another, feed through data, and promote collaboration across the value chain.



“FlowForma integrates with a wide range of commonly used business applications and data stores such as MS SQL Server. This integration is through specific connectors incorporated via our easily configured REST API. It means processes can be triggered by other applications and can update these applications to deliver a seamless experience for the end user.”

Gerard Newman, CTO, FlowForma



Roadblocks to digitization in construction

Implementing a digital strategy can seem a difficult task for construction business leaders, especially those with little management support or engagement. Very few construction firms have fully digitized their processes, and construction remains one of the least digitized industries. According to survey results, the biggest obstacles to digital transformation are:

47%



Satisfaction with current processes

50% of construction executives and managers claimed to be satisfied with current processes. However, a high percentage (90%) still use outdated methods (email/Excel/paper forms) for 25-100% of their business processes, and 47% of respondents rated their firms at either a beginner or intermediate stage in their digital capabilities.

Construction business leaders should be wary of a complacent view of business processes. Those construction executives which continually review, revise, and optimize processes will see a high ROI long-term, as well as short-term gains in productivity and operational efficiency. Construction is one of the least digitized industries, but a reliance on paper-based or outdated methods is no longer competitive.

“With FlowForma’s no code approach, processes can be digitized, and changes can be easily implemented by the process owners without long drawn-out implementation projects. We find that this power to quickly implement improvements enables a cycle of continuous process improvement.”

Shay O’Connor, VP of Solutions, FlowForma



26%



A lack of IT support

A major roadblock to digital transformation is the perceived burden on IT staff. Many construction executives believe that digital transformation cannot be supported as a strategy without the IT team behind it, or that a lack of IT talent prevents the necessary change.

However, the rise of citizen developers and no code tools has promoted a new wave of IT independence, and benefits organizations with a lack of IT talent in-house. Solutions like FlowForma's no code process automation tool empowers construction firms to rapidly digitize processes 5-10x faster than any other tool. Solutions like this are intuitive, contain free workflow templates, and don't require any coding or IT skill.



"The democratization of development is accelerating. To meet the massive need for new software and better digital experiences, enterprises are empowering non-IT workers to develop applications through citizen developer strategies."

Forrester Report: 'The democratization of development is accelerating'

53%

Security concerns with remote data access

According to survey results, 53% of respondents see security concerns rising from remote data access as a challenge for their company. Remote access can expose a construction business to cyberattacks and malicious actors, given its lack of physical security controls and potential unauthorized access to systems. Security is a major concern for executives wanting to implement new digital solutions.

Digital process automation tools ensure that construction firms meet regulatory requirements around security and compliance. Credentials are provided to selected individuals that require access, which is suitable for projects with multiple stakeholders, partners, and vendors across the value chain. Secure access allows construction firms to run FlowForma Process Automation in an external environment with no impact on the internal IT infrastructure, which minimizes security risks.

“Secure access allows construction firms to run FlowForma Process Automation in an external environment with no impact on the internal IT infrastructure, which minimizes security risks.”

Gerard Newman, CTO, FlowForma





85%



Infrastructure Improvement and Jobs Act

The Infrastructure Improvement and Jobs Act will funnel around \$1.2 trillion into United States construction projects, including the nation's roads, water systems, and bridges. The bill is expected to create more projects for construction firms that specialize in infrastructure and provide an uptick in construction activity. 85% of construction executives and managers think the Infrastructure Improvement and Jobs Act will have an impact on project pipelines.

Given the construction labor shortage, filling job openings to meet project demands will be a challenge for construction businesses. So will executing and managing an influx of new projects in the pipeline. Digital capabilities like process automation and BIM solutions have been proven to fast-track activities across the construction lifecycle and get projects to completion faster. For businesses worried about managing their pipeline, process automation creates a high turnaround for projects and allows construction firms to take on more.

"The digital workflow built with FlowForma has helped bring automation into the recruitment onboarding process, taking what was a giant excel spreadsheet with endless data entry that had outgrown its capabilities and combined it into a process flow that is very intuitive to use."

Carolynne McCaughey, Director of Corporate, Morgan Construction & Environmental LTD



Digital transformation in construction: on an upswing

Digitization is taking hold within the construction industry, with industry leaders increasingly aware of its benefits. In Construction Dive's survey, respondents are typically forward-looking, with most expecting to expand digitization efforts over the next 18 months. The value of digitization is clearly understood, with **87% of construction executives and managers accepting that it gives construction firms a competitive advantage.**

Despite this, just under half of construction firms are still at a beginner or intermediate stage of their digital capabilities. And a clear majority still use outdated methods (email/Excel/paper forms) for 25-100% of their business processes. These businesses must adapt, or risk being pushed out of the market by more technologically advanced and innovative firms.

87%



87% of construction executives and managers believe that digitization gives construction firms a competitive advantage.

74%



74% of construction executives are forward-looking, expecting 51-100 percent of business processes to be digital within the next 18 months.

The construction industry is ripe for digitization. As businesses adapt to new technologies and modernize processes, the competitive landscape will begin to shift. The trajectory points toward digitization, and it's vital that construction businesses continue to optimize and modernize processes to stay competitive. Organizations, at whatever stage in their digital transformation journey, must continue this upward trajectory, or risk being left behind.

Book A Call With Us - Let Us Support You

Book a call with our expert team at FlowForma Process Automation with any process questions you may have about digital transformation.

About FlowForma

FlowForma is a leading provider of enterprise-class, no code business process management and automation tools that empower businesspeople to rapidly digitize a wide range of processes.

The company is committed to empowering businesspeople to digitize business processes in-house, without writing any software code.

Customers are live with digital processes, empowered and self-sufficient within 4 weeks of onboarding. Users rapidly reap ROI, resilience, and innovation. FlowForma Process Automation is making waves in the automation space with its process accelerators, external stakeholder engagement & offline capability.

FlowForma is a Microsoft Gold Partner, with over 200,000 global users. The company is headquartered in Ireland with offices in Boston and London, and is motivated by its values to innovate, evolve, and achieve with employees, customers, and partners.

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About Construction Dive

Construction Dive provides in-depth journalism and insight into the most impactful news and trends shaping the construction and building industry. The daily email newsletter and website cover topics such as commercial building, residential building, green building, design, deals, regulations and more. Construction Dive is a leading industry publication operated by Industry Dive. Our business journalists spark ideas and shape agendas for 10+ million decision makers in the most competitive industries.

Did you know: FlowForma Process Automation uniquely combines forms, workflow, and document generation all in one place?