

A woman with short blonde hair and glasses is sitting at a desk in a dimly lit office. She is wearing a green button-down shirt and is looking at a computer monitor. Her hands are on a keyboard. The background is dark and out of focus. A large blue circle is on the left side of the image, containing the main text. A yellow triangle is on the left side of the blue circle.

The Construction Finance Professional's Guide to Data-Driven Business Decisions

5 Reasons and 25+ Stats on Why You Should be Leading the Digital and Data Transformation Charge at Your Company



VIEWPOINT
A TRIMBLE COMPANY

©2020 Viewpoint, Inc. All Rights Reserved.

Finance leaders, you have one of the toughest jobs in the construction industry — keeping the doors to your business open and the company's bottom line in the black at all times.

It is a daily struggle, especially in an industry notorious for its already razor-thin profit margins, productivity and material waste challenges, costly conflicts, potential litigation and expensive capital assets like labor, equipment and materials to manage.





The past two decades have shown us that business disruptions — whether financial crises, natural disasters, data breaches, global pandemics or others — are becoming the norm rather than the exception.

For your construction organization, that means adapting to new processes and workflows that ensure workers health and safety, implementing new technologies to meet modern business demands and working differently to foster greater productivity and efficiency.

If your company isn't scaling now to meet these and future needs to ensure long-term business continuity, you may be stacking the deck against yourself.

Here's a little exercise:

Check each of the following challenges your organization has had to deal with over the past 24 months:

- Had a project run over budget and/or beyond the expected timeline without being able to get a clear answer on what was driving costs and schedule delays
- Suffered from significant productivity issues that slowed work or created issues on the jobsite
- Had trouble pulling together current project data for reports to owners or other project stakeholders
- Misunderstood or misallocated project costs
- Had to cover a major, unplanned capital expenditure like replacing a piece of equipment or a server
- Seen unnecessary material waste or costly project errors that ate into your bottom line
- Experienced a business disruption that forced you/your company to have to cut costs in areas to keep your business running effectively
- Had a communication breakdown between project teams or other subcontractors due to a lack of accurate project data
- Endured a conflict or litigation over work or responsibilities on one of your projects
- Struggled with billing to keep cash flow fluid and/or ensuring your own bills are paid on time
- Lost money on a project that wound up not being worth the hassle

▶ If you've experienced one or more from the list above, it is worth your time to revisit modernizing your construction software to improve job outcomes.



Not Modernizing Could Cost You More Than You Realize

The world around us is changing — and digitizing — at a rapid pace. Even for contractors that know they need to modernize and want to move forward with digital and data transformations, there have been roadblocks. According to the [*JBKnowledge 2019 Construction Technology Report*](#), lack of staff to support new technology listed as number one limiting factor [38.2%] to tech adoption, while employee hesitance to change was listed as number two [35.9%].

If your company has yet to make the move, you could soon find it harder to meet modern project demands and compete with more digitized, data-driven contractors.

“

More than half of contractors that moved to the cloud cited the ability to access data in real time from virtually anywhere.

- 2018 Study: "Improving Performance with Project Data"



5 *key reasons why
it makes sense to
modernize today
[and 25 stats you should know]*

1 //////////////

You Need to be Operating in Real Time

Let's face it, manual processes and disconnected data just aren't going to cut it anymore in today's highly-digitized business environment. Waiting days, weeks, sometimes even months for the latest data on your projects' financial health can significantly hamstring your ability to provide a clear picture of how well your business is doing.

Furthermore, having data flowing into the back office from multiple disconnected software systems is likely further straining your accounting and financial



▶ *2.5 Quintillion Bytes*

Humans create 2.5 quintillion bytes of data every day, and 90% of the world's entire data was created within the past two to three years.¹

▶ *94% Cloud-Based by 2021*

By 2021, 94% of all workloads will be run in some form of cloud environment.²

▶ *70% Want Better Data Access*

In construction, more than 70 percent of contractors that moved to the cloud listed the ability to access and work with real-time data from anywhere as one of their top priorities.³

▶ *82% Seek Collaboration*

82% of owners feel they need more collaboration with their contractors.⁴

▶ *80%+ Using Mobile Devices*

82% of general and heavy highway contractors and 72% of specialty contractors are using mobile devices and/or web applications to collect jobsite data from the field.³

management teams. They have to spend hours reentering and reconciling the data into a singular source of truth for reporting purposes, and run the risk of erroneous or missing information skewing your true results.

Moving the cloud with an integrated, multi-faceted construction management suite of solutions not only provides you an instant, accurate look at the data your projects are producing, but extends that ability beyond your desk to your entire project teams, helping them do their jobs better as well.

2 //////////////

Protect Your Business with Real Crisis Control Measures

The COVID-19 pandemic impacted virtually every contractor in some way, and in your role as a financial leader, you likely had to react quickly to implement technologies and processes to allow employees to work from home, take steps to limit project delays or stalled payments and other measures. Think about how much easier these challenges would have been to handle if you had a connected, cloud-based technology platform already in place.

Business disruptions — whether momentary or long-lasting — are here to stay. We've all heard the stories of a retailer, city government or, yes, even contractor, hit with a crippling data security breach that cost them tens or hundreds of thousands of dollars to correct. We've seen the devastation that natural disasters can



▶ *12% Saw Data Breaches*

Nearly 12% of contractors have reported a data security breach in the past 12 months.⁶

▶ *Only 62% Have a Crisis Plan*

62% of companies [in all sectors] have crisis management plans, though few companies practice them and it's unclear how many companies actively update those plans.⁵

▶ *Attacks up 148%*

Data security attacks like ransomware are up 148% since the COVID-19 pandemic in early 2020, but fewer of those attacks are successful thanks to heightened data security technologies.⁷

▶ *6+ Months for Return to Normal*

Amid the COVID-19 pandemic, 30% of contractors surveyed by the Associated General Contractors (AGC) in June 2020 said they didn't expect their business to return to normal for an additional six months or more.⁸

▶ *Only 6% Survive*

Multi-sector studies suggest that only 43% of companies with a major data loss reopen¹, and only 6% survive more than two years.⁹

cause to companies that didn't have their data properly backed up. You know how sudden economic downturns can hit and how much harder they are to survive without scaled plans for such events.

Moving to the cloud brings you the flexibility needed to address business disruptions and crises head on. Hosting your data with a cloud provider provides redundancy through automatic data backups so that when — not if — the next disruption occurs, your organization can still work effectively. Cloud vendors also provide the latest data security measures that on-premise software cannot without constant attention by dedicated [and costly] in-house or third-party IT resources.

3 //////////////

Eliminate Costly Barriers to Improving Profit Margins

As a financial professional, identifying cost savings and efficiencies is part of your job. Oftentimes though, cutting costs is a reactionary task. You've likely had a renewed focus on this during recent business disruptions, and while many of the steps you've recently taken are very likely in the best interest of your company, cutting costs should never be a one-off practice. Continually look for efficiencies through innovation.

Though implementing new technologies can seem like a daunting capital investment, the truth is, they can often save you money in other areas. Moving to a cloud-



▶ *1% or Less Tech Spend*

Nearly 50% of construction companies spend 1% or less on technology annually, and nearly 60% of construction companies are not investing in any new technologies.⁶

▶ *50%+ With In-House IT*

More than 50% of contractors have a dedicated IT department. But 30% of contractors outsource part of their IT responsibilities and 20% outsource all IT duties.⁶

▶ *18k Hours/Year Wasted*

The average construction employee wastes 90 minutes each day simply looking for information in a non-digitized construction environment, or 18,000 labor hours per year for a company with 50 employees.¹⁰

▶ *\$1T in Savings Possible*

Within 10 years, full-scale digitization could lead to savings between \$0.7-\$1.2 trillion (13-21%) in the Design & Engineering and Construction phases and \$0.3-0.5 trillion (10-17%) in the Operations phase.¹¹

▶ *10X Equipment Costs*

Running a piece of construction equipment to the point of failure could cost 10 times as much as a regular maintenance program would; and predictive maintenance could save 8% to 12% in additional costs over preventative maintenance.¹²

based, integrated software suite, for instance, can free your company from costly overhead like management and maintenance of servers, third-party IT resources or data backups, paper-based costs and managing multiple software vendor contracts.

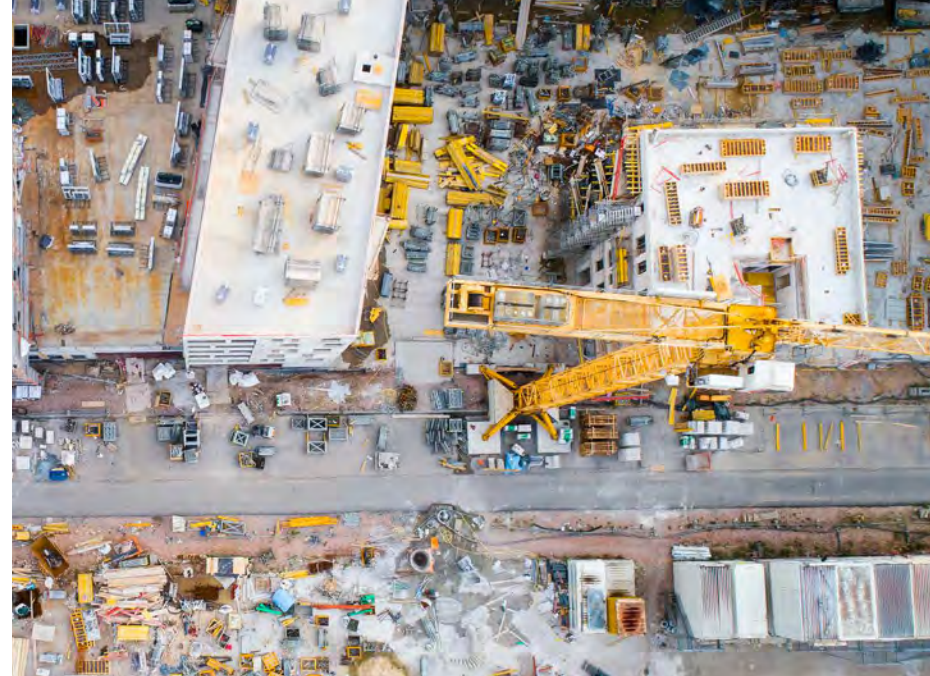
Implementing modern processes and technologies can also significantly boost productivity, better spot potential costly errors or issues to get ahead of them, bill and get paid faster, maximize value for equipment usage, better control jobsite waste and free up staff time and reduce labor overhead costs — all of which increase profit margin.

4 //////////////

Automate Workflows with a Truly Integrated Software Suite

Moving to the cloud is just one part of your digital and data transformation. To best position your company for future success, you need one unified system of record — designed specifically for construction — to work from. Why is having a single source of truth so important?

Think about the countless hours your organization spends trying to reconcile data between multiple, disparate software systems, and the delays this can cause for your projects or reporting. Even if these systems are all in the cloud, odds are they don't integrate well together. Or, if they are integrated, they're dependent on unreliable APIs and other connectors that need constant



▶ *\$1.6T in Gained Productivity*

As much as \$1.63 trillion could be saved annually from infrastructure productivity changes.¹⁵

▶ *2.2 Billion Tons of Waste*

The volume of annual construction waste is expected to double by 2025 to nearly 2.2 billion tons worldwide.¹⁶

▶ *Only 11% Efficiency*

Only 11% of contractors consider jobsites to be very efficient.¹³

▶ *30% Rework*

Approx. 30% of the work performed by construction companies is actually rework.¹⁴

▶ *\$33M per Average Dispute*

The global average value of construction disputes in 2018 was \$33 million and the average length to resolve disputes was 17 months; the costliest handled was a \$2 billion dispute.¹⁷

updating. Consider too, the risks for missing or erroneous data collected between different systems or processes, as well as lack of clear and concise information audit trails. These can lead to costly delays, rework, conflicts and litigation.

In today's construction environments, having a seamless data flow across all facets of your projects is vital to boosting productivity and accuracy. And, streamlined workflows mean your company is much better prepared to change on the fly when you need to — like adopting new health and safety procedures in the midst of a pandemic for instance.

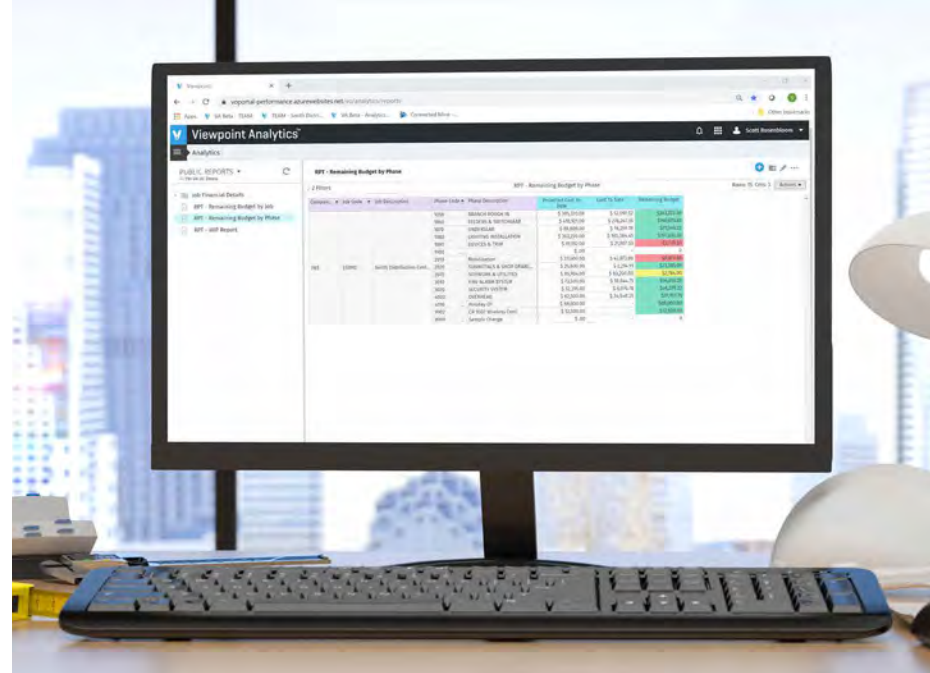
If your current processes still involve paper, remember that in the 'new construction normal,' many employees are less willing to handle and share paper forms. Digital workflows and real-time data collection are no longer the wave of the future. They are the here and now.

5 //

Become a Data-Driven Contractor

Your construction projects produce mountains of data — but how well are you really using that data? Sure, there's your standard industry reports like job costs, WIP, progress, labor costs and more, and you're probably doing an ok job of pulling these figures when you need them. But are they really timely? Is your data accessible enough to give anyone not in IT or with technical report writing capabilities the chance to solve problems on their own? Can a project manager in your organization easily get real-time insight into how your projects are actually faring? How detailed are you getting in your analysis of project data, or do you have the proper amount of time and resources to dedicate to these crucial projects?

With a connected, cloud-based suite of solutions comes the ability to truly transform your approach to construction data. Closely analyze those key



▶ **64% Data Improvement**

64% of contractors reported improvements in their ability to gather and analyze data in the past several years thanks to improved technology.³

▶ **12% of Cloud Moves Driven by Analytics**

12% of contractors listed ability to run advanced data analytics as a top reason for moving to the cloud.³

▶ *96% of Current Data Unused*

96% of all data captured goes unused in the Engineering and Construction industry.¹⁸

▶ *55% Want Predictive Data*

More than half of contractors [55%] surveyed are looking at data in predictive models, leveraging information to help them better understand when and where future events or triggers will occur and how to better plan for them.³

▶ *21% Using Predictive Analytics*

21% of contractors are already using some form of predictive analytics to help improve their ability to forecast future work.³

metrics like productivity, job progress, profit fade in real time, and quickly make actionable decisions to adjust project workflows as they're happening rather than enduring costly rework. Identify key trends and use data to identify issues before they occur and further streamline how work is done. Better understand how your projects compare with industry-wide benchmarks, and set internal benchmarks of your own. Use modern predictive modeling and analysis to project how future projects might fare — and understand which projects are worth taking on, and which aren't.

Sound like a lot more work? Actually these modern technology tools make it dramatically easier for you by processing in mere minutes what is taking you long hours, nights and weekends to complete on your own now. They also expand the power of data possibilities for your organization. Visualize data in virtually any format you want, deploy the latest data science capabilities with ease and begin looking at new data to help shape the narrative of your company's business success.

Ready to Modernize? Then You're Ready for ViewpointOne™

Now that you're ready to become a modern, data-driven contractor, you should look for a technology partner you can trust will work with you every step of the way and is just committed to your success as you are. Viewpoint has been on the forefront of leading technologies for more than 40 years and built its [ViewpointOne suite of integrated, cloud-based solutions](#) from the ground up to meet the demands of today's modern contractors.

Unlike software that solves a single need for customers or compels them to work within the restraints of a larger, out-of-the-box ERP solution, ViewpointOne provides a complete, integrated software suite that seamlessly manages your people, projects and processes. The



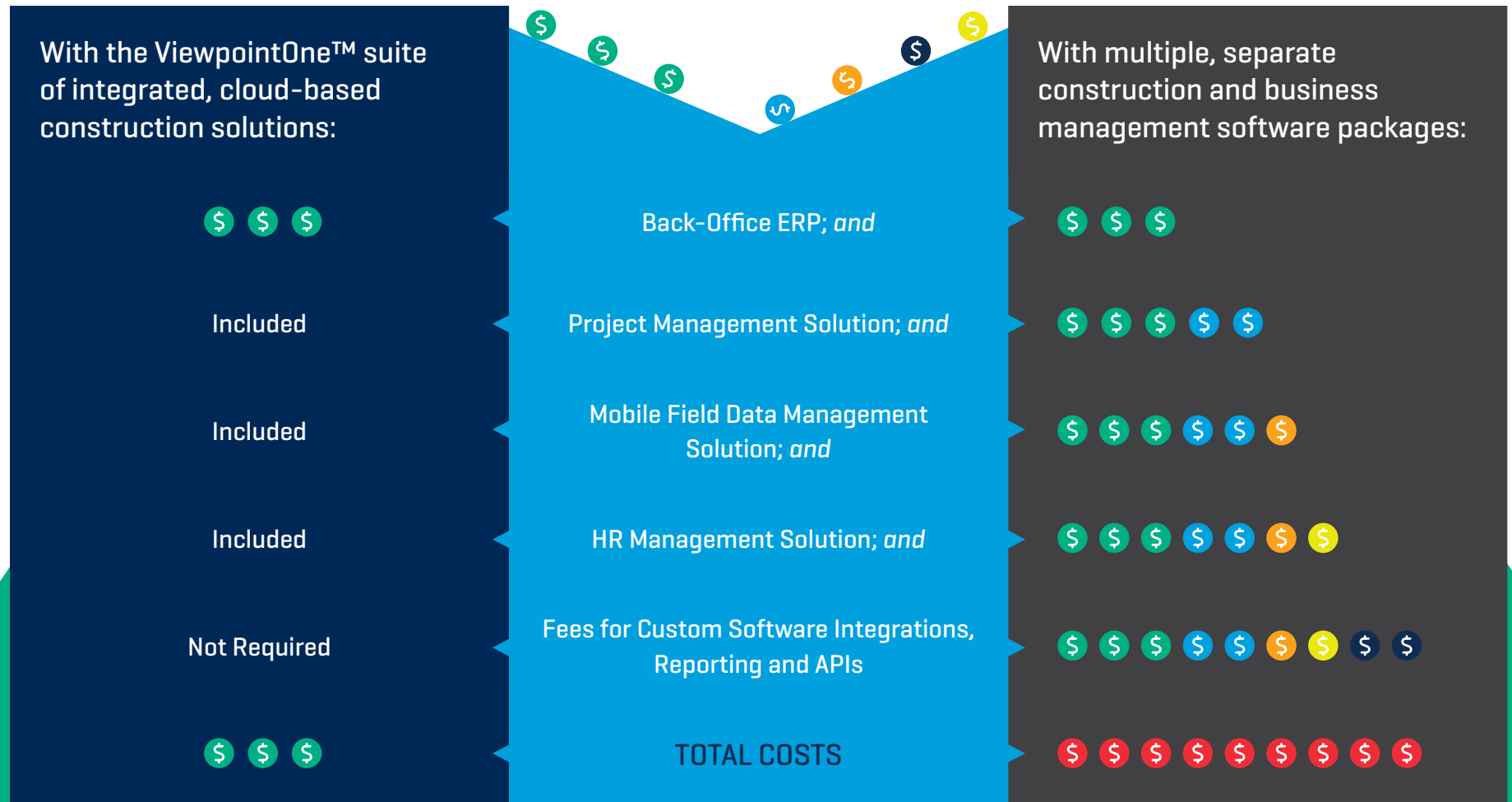
▶ [Click here to take your own tour of Viewpoint Analytics!](#)

ViewpointOne solutions were designed specifically to help you take control of your construction data and better understand your projects — in the easiest ways possible.

Our integrated [Viewpoint Analytics](#) solution lets you smartly analyze your data in a centralized, secure cloud environment. Let your teams self-serve their own data needs by easily creating custom reports and dashboards, powerful data visualizations and much more with simple drag-and-drop features. Instantly share data analysis with others throughout your organization. Leverage your data analysis into direct action and processes in the field to realize greater productivity and profitability now and for the future.



▶ Yes, your digital and data transformation is an investment. So how does ViewpointOne stack up to other construction management software solutions? When you start to add up all the hidden costs to patch together those standalone systems to meet your business needs, you might be surprised.



Maintaining disconnected software solutions *could be costing you 3X the amount of money as ViewpointOne!* So, as a construction financial professional, doesn't it make sense to modernize the right way?



Sources

- 1 /// [How Much Data Do We Create Every Day? - Forbes 2018](#)
- 2 /// [Cisco Says Almost all Workloads will be Cloud Based Within 3 Years — Network World, 2018](#)
- 3 /// [Improving Performance with Project Data - Dodge Data & Analytics and Viewpoint 2019](#)
- 4 /// [KPMG Global Construction Survey 2015](#)
- 5 /// [CS&A International — 2019](#)
- 6 /// [JBKnowledge 2019 Construction Technology Report](#)
- 7 /// [VMWare Carbon Black - 2020](#)
- 8 /// [AGC Coronavirus Survey, June 9-17, 2020](#)
- 9 /// [Data Center Knowledge "Disaster Recovery is Not Business Continuity 2013 and Homeland Security News Wire 2010](#)
- 10 /// [How Much Time Wasted Looking for Stuff Costs Your Construction Company — For ConstructionPros 2015](#)
- 11 /// [World Economic Forum's Shaping the Future of Construction - 2016](#)
- 12 /// [Buildings.com - 2018 and Reliable Plant/U.S. Department of Energy — 2010](#)
- 13 /// [2017 Q4 Commercial Construction Index](#)
- 14 /// [MC SER](#)
- 15 /// [McKinsey Global Institute - Infrastructure Productivity: How to save \\$1 trillion a year - 2013](#)
- 16 /// [Construction Dive - 2019](#)
- 17 /// [Global Construction Disputes Report — Arcadis 2019](#)
- 18 /// [FMI - Big Data = Big Questions for the Engineering and Construction Industry](#)

Viewpoint clients are harnessing the power of the connected ViewpointOne suite of solutions.

Unlike software that solves a single need for customers, the cloud-based ViewpointOne products combine industry-leading construction job costing solutions built into enterprise resource planning (ERP) offerings. With powerful integrated solutions for the field and extended project teams, ViewpointOne gives customers an integrated and flexible system for managing operations, improving productivity and enabling better decision making.

Connect with Viewpoint to learn more about ViewpointOne today.