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The Cost of Doing Nothing: 5 reasons contractors need to modernize their operations to stay competitive — and profitable

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Georgia-based Precision Concrete Construction ranks among the top specialty contractors in the United States. But like many contractors, Precision was stuck using outdated construction-management systems.

The firm was having trouble connecting to and managing its on-premise servers, which strained its IT resources. Time-consuming manual processes and redundant workflows were necessary to bridge the gap between apps that didn't integrate. And expensive licensing and vendor contracts elevated software costs, eating into profits.

Since modernizing by moving to a connected, cloud-based construction management suite, however, the company **has experienced a powerful increase in business efficiency.** Precision's IT team can now concentrate on high-value activities, rather than trying to manage cumbersome servers. Mobile tools have replaced time-wasting spreadsheets and manual processes. And a single, connected system uses real-time digital information and workflows for seamless accounting and operations.

As a result of all these efficiencies, the company expects cost savings in the six-figure range, while unlocking further gains with self-serve financial reporting and analytics.

As Precision discovered, turning a profit on today's complex projects requires construction firms to be more data-driven, analytical and responsive than ever before. That means putting real-time data, automated workflows and collaborative tools in the hands of all project stakeholders.

Even still, many firms try to make do with legacy systems. Understanding the steep costs of sticking with the status quo can help construction firms create a business case for replacing their current software and processes with digital and cloud-based solutions. Those costs include:

Lost productivity.	Duplicate data entry **rates of 10% to 30%** are not uncommon among many firms.
Missed opportunities.	Digital transformation can increase productivity by 14% to 15% and lower costs by 4% to 6%, **according to the McKinsey Global Institute.**
Costly data security gaps.	The average total cost of a data breach in 2024 is $4.88 million, **according to IBM.**
Expensive upkeep.	Maintaining on-premise servers adds up. A single IT manager costs around $150,000 per year. The cost of cybersecurity compliance raises the price by an additional $200,000, according to Ryan Johnson, director of security for Trimble Viewpoint.
People management headaches.	Manual and disconnected processes cost human resources staff huge amounts of time handling the needs of tens, hundreds or even thousands of employees.

Often contractors have a perception of, 'It's just too hard to move. And it's too costly.' But the truth is, the costs of staying where you are are too high.

LAWRENCE SMITH
Vice president and category general manager
Trimble Viewpoint

What are those costs? A lack of real-time data and connected workflows means construction workflows are disconnected, causing inefficiencies, errors, delays, and productivity and profitability challenges.

On the labor and equipment side, these problems lead to uncontrolled resources and unpredictability, which ultimately results in profit fade. In this e-book, we'll look at five hidden costs of staying with spreadsheets or outdated construction management systems and how you can avoid them.

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5 Hidden Costs of Not Updating Outdated Construction-Management Systems

1. Lost productivity.

Nothing creates profit fade faster than lost productivity. To maximize production — and profits — contractors must get the most from their people, processes and equipment. One way to do that is by ensuring all project stakeholders are working on the right tasks at the right time. That means closely tracking workflows, getting timely reporting on job costs and project progress, and watching for early warning signals of issues or potential delays.

New construction management suites deliver the real-time data and workflow automation that are critical to achieving that level of oversight. Without these modern tools, contractors lack a single source of truth on which to base key business and project decisions, and to make accurate projections for future jobs.

Jobs are often delayed because data must be gathered from multiple systems and entered and evaluated manually. This can take days, weeks or even months. Meanwhile, work continues before issues are spotted and the fixes become more costly.

Modern construction management systems change that dynamic dramatically. Contractors using such systems have seen the following savings, Trimble data show:

- **80% reduction in rework**
- **30% reduction in errors**
- **50% increase in field productivity**

"It's the connectivity that gets these efficiencies between all the phases of construction — from preconstruction to the actual shovel in the ground to the managing of finances and profitability," Smith said. "There's an opportunity to improve profitability because we connected it."

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2. Missed opportunities.

Labor, equipment and materials are three of the largest cost centers for contractors, and they represent some of the biggest risks. Using the latest construction management solutions optimizes these areas with streamlined workflows and timely, accurate insights into how best to use these assets. Modern systems also help contractors ensure their workforce is compliant with prevailing wage laws, licensing and bonding, and more, enabling them to avoid penalties for noncompliance. At the same time, using the latest cloud technologies is a proven way to attract and retain top-tier talent.

Continuing to use legacy systems, meanwhile, means you have limited insight into current projects and future work. That's because contractors can't get meaningful data points on key aspects, such as job costing and work-in-progress, without a lot of extra manual work.

A connected construction management suite makes tracking projects easy, with real-time data and workflows, along with the analytics and business information capabilities that make more advanced data analysis possible. With these tools, contractors can:

- **Forecast how future projects will fare**
- **Know which projects to bid on and which to avoid**
- **Set and work toward the right goals and benchmarks**
- **Move to a controlled assembly line approach, with prefabricated and modular building processes**
- **Reduce material waste by 70%, according to Trimble data**

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Quincy, Wash.-based **Stetner Electric** achieved significant time savings and at least $30,000 in cost savings from administrative overhead and credit card payment rebates when it switched to a connected construction-management suite that included an automated accounts payable solution that streamlined payments through credit card processing. Moving its operations to the cloud allowed the company to work with **accurate, timely data and workflows.**

"It's crazy, the growth we've experienced; and part of it has been hanging on by the seat of our pants and going for it. But we've embraced the concept that we're constantly going to be changing, we're constantly going to need to improve," said Stetner's chief financial officer at the time, Travis Wittman. "From a staff perspective, that's the mindset we've decided we're going to operate. Now, when change happens, we can pivot and there's not a lot of pushback or resistance about it."

3. Costly data security gaps.

Construction is **one of the most heavily targeted industries** for ransomware attacks. And those attacks are just the tip of the iceberg when it comes to the security costs associated with legacy systems. **Consider:**

- Around 12% of construction firms experienced a data breach in 2021, according to the **2021 JBKnowledge Construction Technology Report.** Ryan Johnson, director of security for Trimble Viewpoint, says reports come in monthly of construction firms falling victim to ransomware attacks. A **separate survey** by Sophos put the number of construction firms getting hit with a ransomware attack at 31%.
- The average cost of a ransomware attack, including downtime, ransom paid, and labor and network costs, was $2.73 million in 2023, the Sophos survey found. The interruption to business caused by ransomware attacks **averaged 20 days** in the fourth quarter of 2021.
- In some cases, data breaches can also mean companies are running afoul of big data privacy laws, such as the California Consumer Privacy Act and the European Union's General Data Protection Regulation. These laws require businesses to ensure that any sensitive data they process, store or transmit has the consent of the individual, with big fines for being out of compliance.

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Many contractors think they're secure enough when they're really not. They just don't know how bad it is out there.

RYAN JOHNSON
Director of security
Trimble Viewpoint

A majority of cyber attacks tend to be directed at contractors with on-premise servers and multiple software solutions, which provide more potential entry points for potential breaches to occur. Johnson said most breaches were a result of accidentally allowing unauthorized access to sensitive data because firms don't have the IT resources for proper protection or training. Cybersecurity compliance, while helpful should an attack occur, can cost up to $1 million per year, he said, including the costs of compliance, third-party security reports and operations.

"The biggest cost of ensuring cybersecurity with an on-premise service is the human cost of having someone install it and ensuring the operations and maintenance on it, including properly configuring firewalls and installing the latest security patches," Johnson said.

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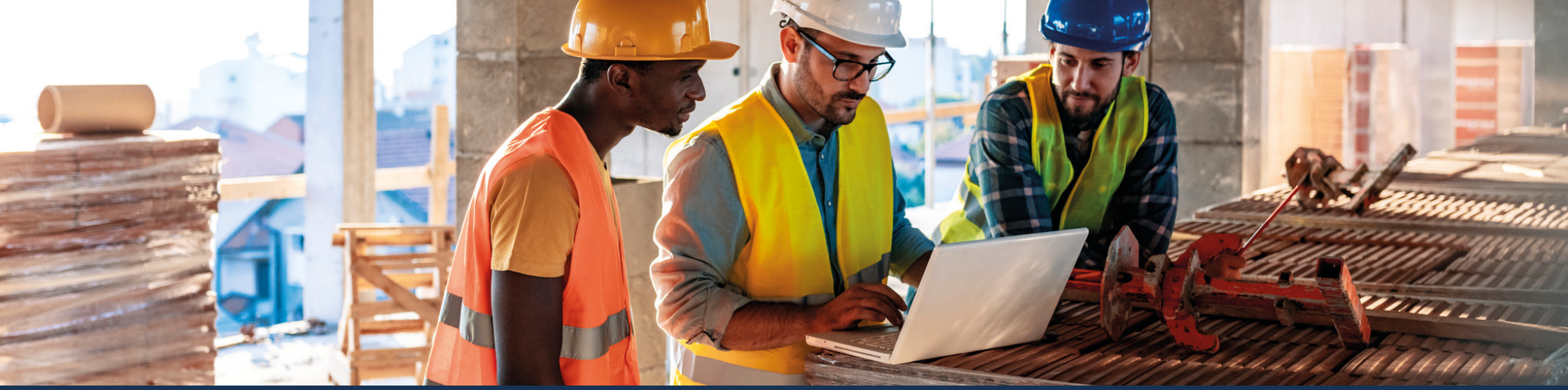

4. Expensive upkeep.

The use of on-premise servers and multiple, disconnected software programs, also bring hidden costs from server downtime, upgrades and supporting IT staff. Consider:

- The average cost of an on-premises configuration is $1,476 a month, accounting for upgrades every four years and a $61,000 annual salary for a system administrator or technical employee. That compares to $314 a month for a cloud server with the same configuration — saving an average of 79% each month.
- Those costs don't include the hidden expenses that come with the use of on-premise servers. Disconnected, siloed data often requires manual processes to use, tacking on duplicated workflows, the potential for human error and more labor costs.
- When you figure in capital cost expenditures — such as hardware, maintenance, IT and additional software licensing — on-premise software incurs a much greater cost over time compared to their original purchase price.

Savings gained from productivity spikes and reduced or redirected labor make upgrading to the latest construction software and services a more cost-effective technology initiative. Doing so also means you won't have to fret about software updates, data backups or dealing with time-consuming (and costly) server maintenance on your own. Most cloud-based software vendors take care of this for you. That means your IT team can focus its resources on helping to grow your bottom line.

You want to focus your core on executing on construction projects. Updating to modern, connected solutions allows companies to be more focused on their business.

RYAN JOHNSON
Director of security
Trimble Viewpoint

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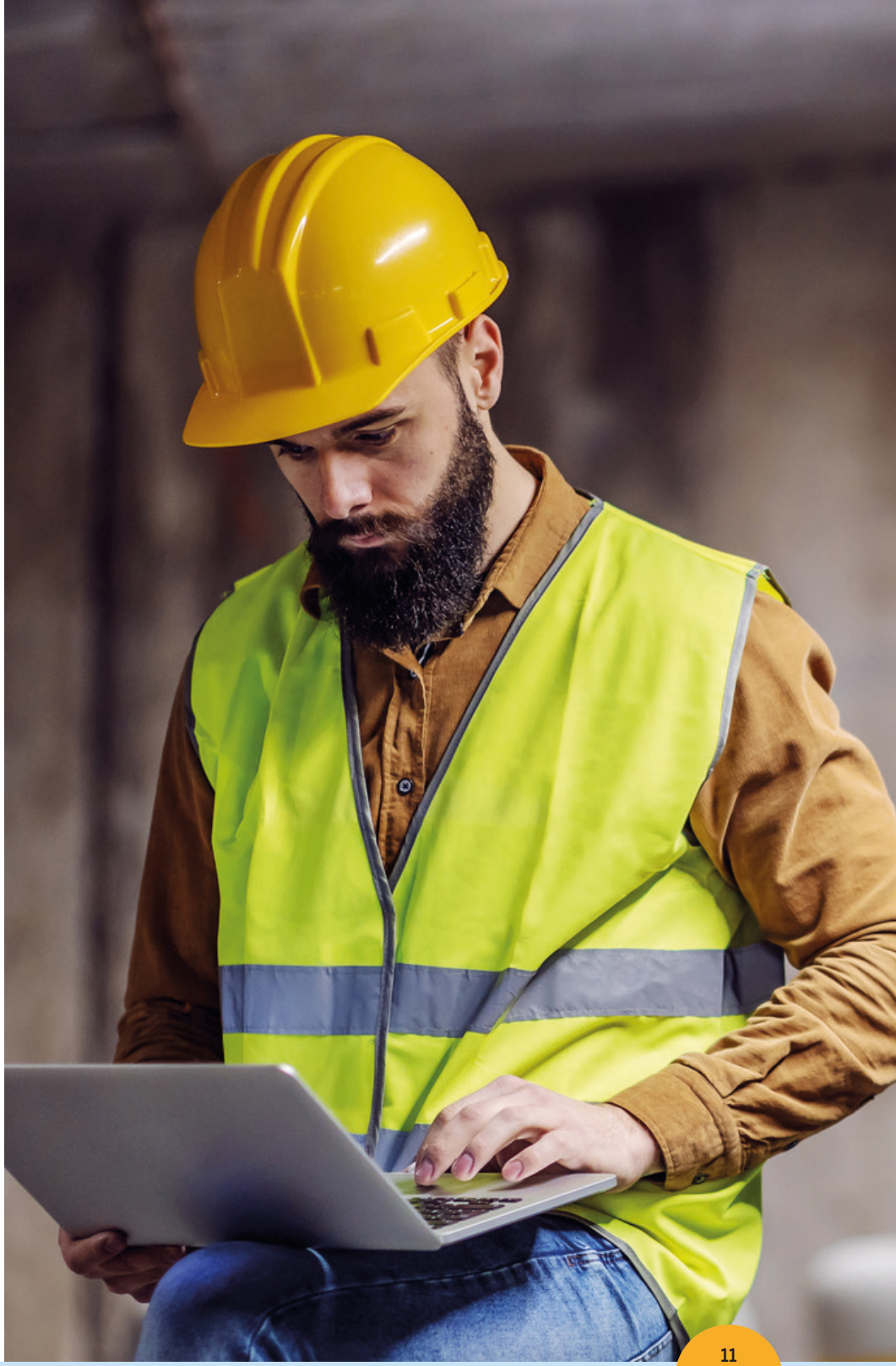

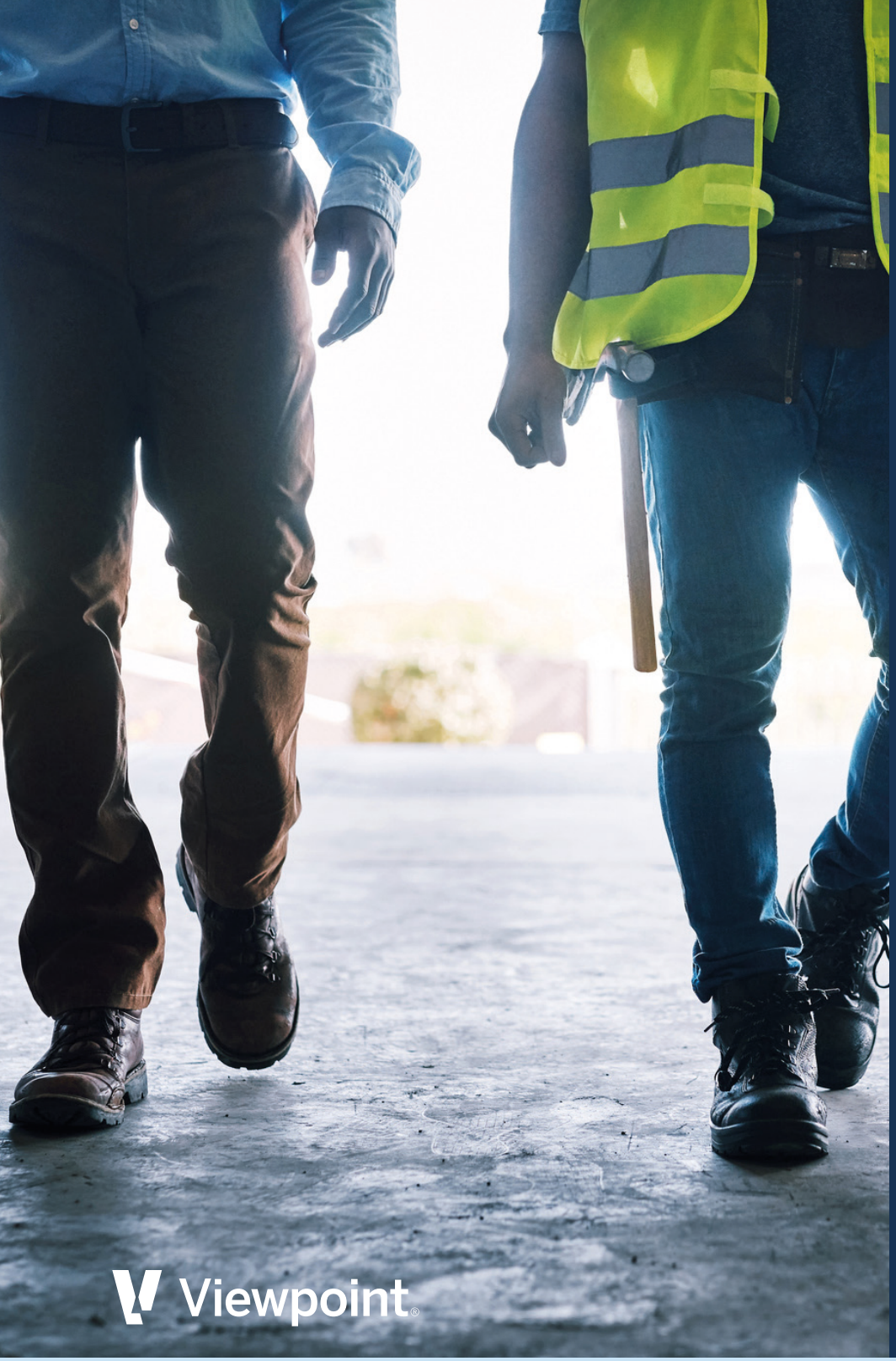

5. People management headaches.

Construction firms today also navigate the ongoing labor shortage. The longer it takes to find qualified workers, the more projects contractors have to turn down. Using up-to-date, streamlined systems and processes for onboarding, training and project workflows can help you recruit and retain talent. **Consider:**

- The lack of modern equipment and processes can be a turnoff to younger, tech-savvy professionals who expect their working environments to have features such as remote and mobile access to data and software.
- Manual and disconnected software and workflows can cost HR teams huge amounts of time handling employee needs (such as processing new hire paperwork, managing complicated payroll processes, or looking up benefits or tax withholdings information for employees).
- Additional burdens on HR staff stem from having no way for workers to self-serve their own employee needs, such as entering timecards and requesting time off.

Contrast those headaches with the speed and autonomy offered by today's connected construction software. For example, such systems can instantly connect mobile time card collection to payroll. New employees can get an onboarding invitation via email that includes a digital I-9 and other required forms that they can complete from any browser or device. Employee records can be updated automatically and payroll can be processed immediately to help meet project or seasonal hiring demands.

One organization that implemented Viewpoint's HR Management software recorded savings of more than $25,000 a year on printing and related overhead costs. Others have saved the equivalent of a whole full-time-employee or improved retention **by digitizing cumbersome manual tasks** and making day-to-day tasks easier on their workforces.

"We went from having a four-person team handling administrative functions to a three-person team with that fourth person now being utilized elsewhere in the company," said Michele Ramirez, business systems analyst at Texas-based KS Industries.

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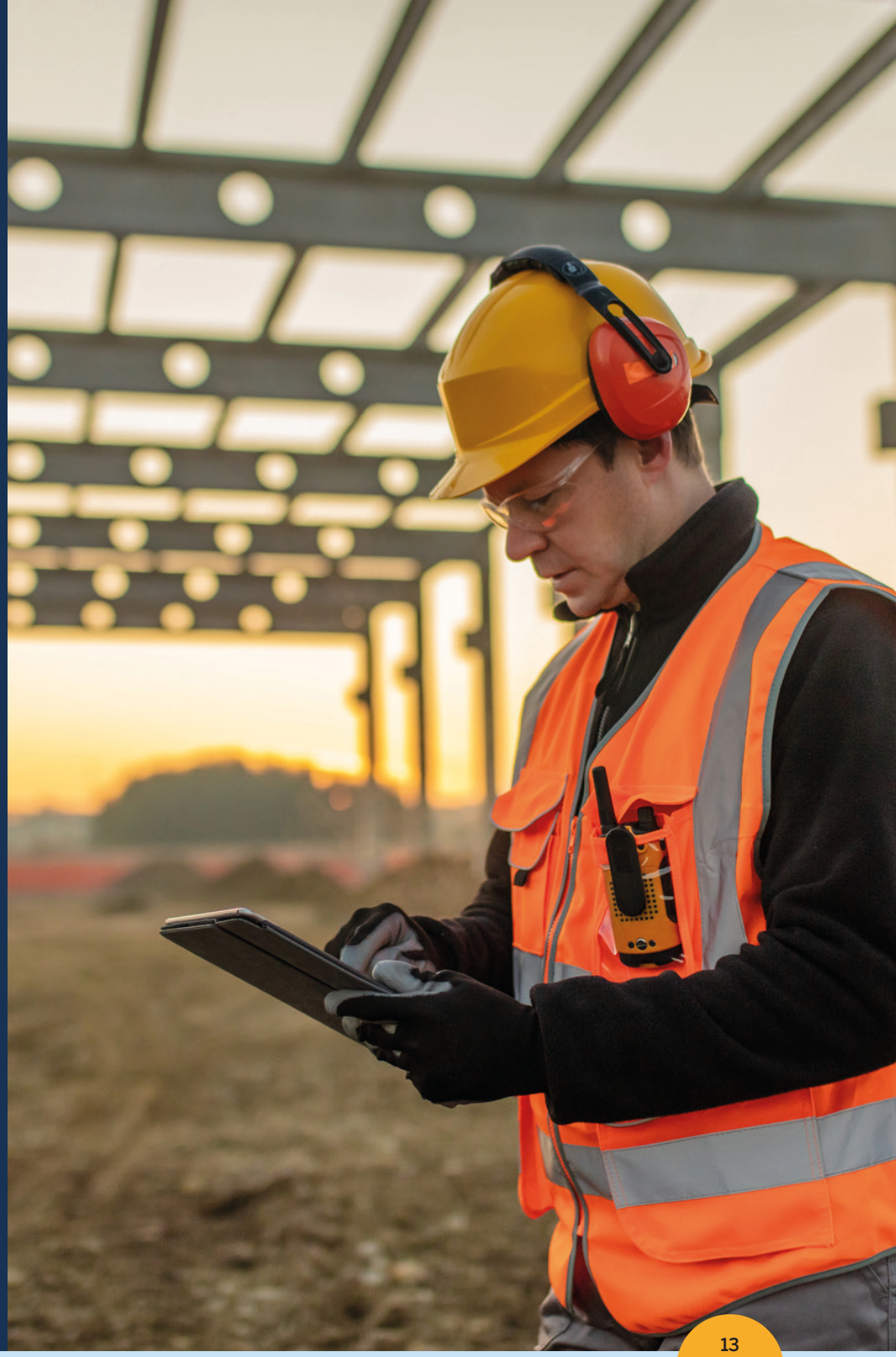

Taking the Next Step

Outdated construction management systems cost contractors more than they realize in ongoing maintenance, security upgrades, people management, and lost productivity and opportunities. Yet, many contractors are still reliant on these tools, hesitant to modernize.

In fact, a large percentage of contractors still rely on spreadsheets for key workflows, according to the 2021 JBKnowledge Construction Technology Report:

- 60.9% Estimating
- 52% Accounting/ERP
- 42.6% Project management
- 34% Bid management
- 28.4% Project scheduling

However, as construction projects become larger and more complex, and project owners increasingly demand the latest technologies, real-time reporting and compliance measures, the days of manual and disconnected construction processes being an option may be numbered. Leading contractors are embracing connected, cloud technologies as a way to scale and future-proof their businesses.

These modern contractors can take advantage of the latest advancements, including construction business intelligence and advanced data analytics, machine learning, and artificial intelligence — innovations only available in the cloud.

"Connected construction management systems bring together project management, equipment management and human capital management. So you have hiring data, material costs, labor costs, equipment and production — all the key data points all in the same place," Smith' said. "You can only do that when you connect it all. And that's why it's important to update. **It's simply about data, and how well we can connect that data to help you make smarter business decisions."**

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Where to Start?

Contractors know they need to modernize in order to stay competitive in today's construction industry. Many are even itching to start their technology transformations. But where do they get started? And how do they avoid making the wrong long-term technology and software investments?

Out-of-the-box solutions that aren't tailored to the construction industry or don't integrate well with other software programs may not fit contractors' unique needs. Plus, if the solutions are not easy to use, their features and capabilities aren't flexible to meet specific company needs, or the implementation processes are clunky, end users won't easily adapt to them. Furthermore, if the technology vendor doesn't have a long-term technology strategy and/or commitment to their clients' success, contractors' modernization journeys could become stalled indefinitely.

Here are a few considerations for construction firms modernizing their workflows:

- Identify a technology advocate within the construction organization to shape and lead modernization efforts.
- Plan ahead by developing a technology strategy, soliciting input across the construction organization to understand needs, and developing a roadmap or timeline to follow.
- Develop a solid checklist of key needs, features, concerns, etc., to discuss with potential vendors.
- Do the homework to understand all of the technology options available — and the different vendors providing them.
- Communicate, communicate, communicate. Keep all teams and project stakeholders apprised of statuses, decisions and developments.
- Take the time to build out a data and implementation process that will ensure limited business disruptions or downtime.
- Make sure the cloud provider you work with takes data security seriously — and can prove it.

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Trimble Viewpoint provides a free e-book with more details on how contractors can optimize their own technology transformations, and what to look for when getting underway: A Practical Guide to Selecting Construction Software.

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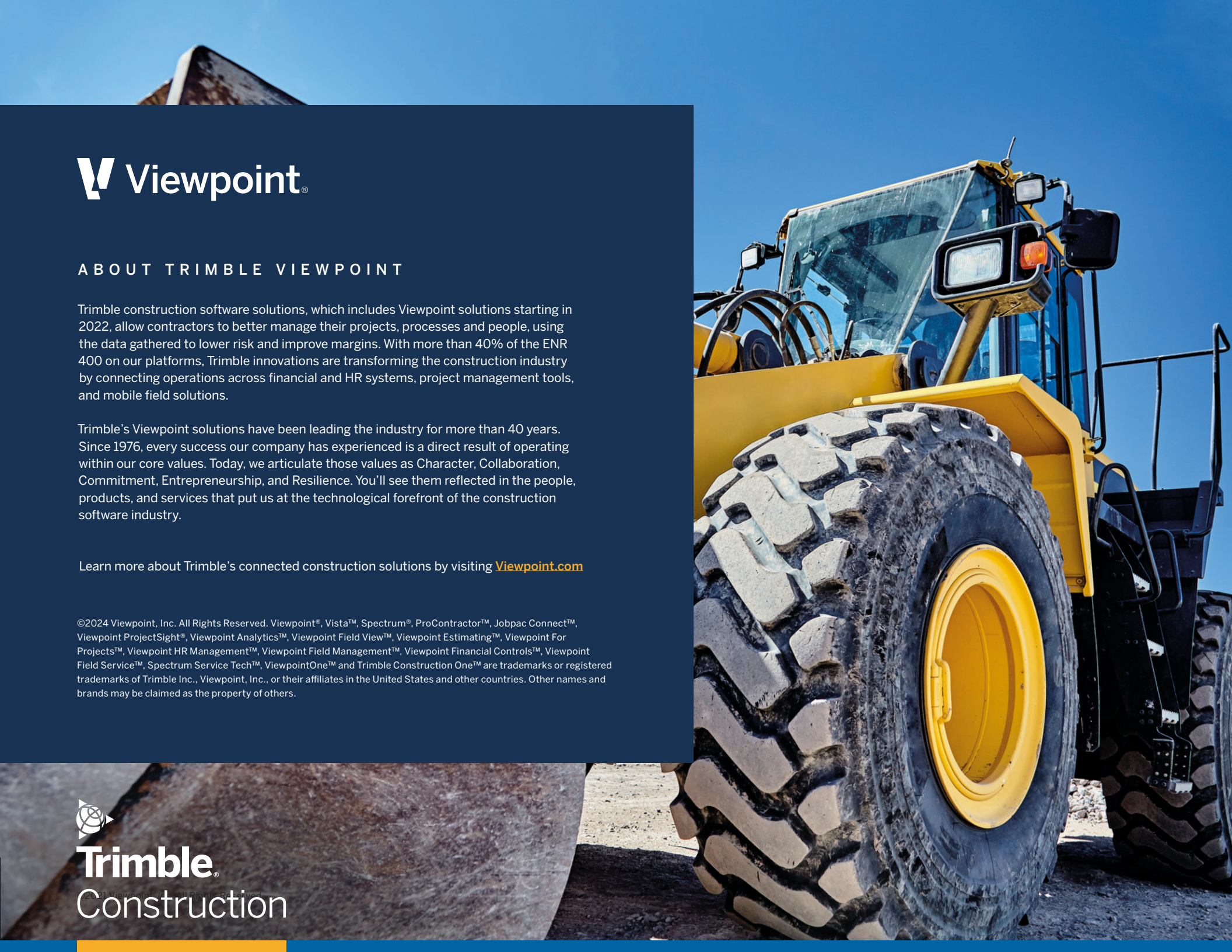
ABOUT TRIMBLE VIEWPOINT

Trimble construction software solutions, which includes Viewpoint solutions starting in 2022, allow contractors to better manage their projects, processes and people, using the data gathered to lower risk and improve margins. With more than 40% of the ENR 400 on our platforms, Trimble innovations are transforming the construction industry by connecting operations across financial and HR systems, project management tools, and mobile field solutions.

Trimble's Viewpoint solutions have been leading the industry for more than 40 years. Since 1976, every success our company has experienced is a direct result of operating within our core values. Today, we articulate those values as Character, Collaboration, Commitment, Entrepreneurship, and Resilience. You'll see them reflected in the people, products, and services that put us at the technological forefront of the construction software industry.

Learn more about Trimble's connected construction solutions by visiting Viewpoint.com



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