

How to Leverage Industry Trends To Improve Business Results





Welcome -

There are many trends impacting the fueling, construction and transportation infrastructure industries. Some help the industries improve productivity and profitability, while others create headwinds that hinder business success. Over the last year, we published four articles that detailed the key trends we believe will have the most significant impact on our industries. This eBook is a consolidation of those four articles. In each article, we discuss the key trend and how it will impact businesses, and importantly, we provide advice as to how your company can take full advantage of the trend or reduce its negative impact.

The four articles in this eBook are:

- Are You Ready For the Tsunami of New Construction Technology?
- · Mission Possible: Zero Job Site Accidents
- How to Win the Battle for Top Talent
- Preventative Maintenance How Benjamin Franklin's Advice Can Help You Grow Your Profits

We hope you find these articles interesting and useful.

Section 1

Are You Ready For the Tsunami of New Construction Technology?

The business environment is in a constant state of change. Technological advancements are the primary drivers of this change. In the construction industry, companies that are willing to embrace these new technologies will be the most successful. Selecting the right technologies for your company can be challenging given the incredible number of options to choose from. This article provides an overview of some of the most impactful new technologies that are transforming the construction industry.

Section 2

Mission Possible: Zero Job Site Accidents

Construction is one of the most dangerous industries. Fortunately, advancements in technology, training, and safety procedures have led to a dramatic reduction in accidents. What can companies do to improve worker safety? A successful safety program starts with the right culture, mindset, and behaviors. In this article, we discuss the current state of job site safety and explore ways to improve it. We also included excerpts from an interview with Mike Mizicko, Western Pump's VP of Field Operations, who shares insights about how Western Pump maintains a near-perfect safety record.

Section 3

How to Win the Battle for Top Talent

In this third article, we discuss how to attract and retain talent in a very challenging labor market. According to a recent survey from the Associated General Contractors of America (AGC) and Autodesk, 80 percent of construction firms say they are having a hard time filling key positions on their construction teams. How can your company win the battle for top talent? This article details what job seekers want besides a well-paying job and how top companies are coping with the tight labor market. We have included excerpts from an interview with Lori Duncan, Western Pump's HR Manager, who shares insights about how Western Pump attracts and retains top talent.

Section 4

Preventative Maintenance - Benjamin Franklin's Advice Can Help You Grow Your Profits

This last article explains why more and more business owners are realizing the financial benefits of moving from a reactive to a preventative maintenance plan. As Benjamin Franklin said almost 300 years ago, an ounce of prevention is worth a pound of cure. Preventative maintenance can help avoid unexpected business disruptions, improve employee safety, reduce operating costs, and extend the life of your expensive assets. Given the uncertain business environment today, preventative maintenance is uniquely important for essential businesses, like those that support our country's transportation infrastructure.



Construction Materials

Sustainability, safety, and cost reduction have been the main drivers of technological advancement in construction materials. Water-conserving plumbing fixtures, recycled materials, high-efficiency pumps and motors, LED lighting, and energy-efficient paints and coatings are just a few examples of "green" materials that can minimize the impact of construction on the surrounding environment and reduce utility bills. While brick, mortar, concrete, and steel remain staples of the construction industry, technology is changing how these essential materials are manufactured and used: selfhealing concrete repairs its cracks and lasts nearly 200 years; bricks made of wool and seaweed are stronger and more energy-efficient than traditional bricks; alternatives to glass, such as translucent wood, increase material strength while using biodegradable compounds; prefabricated walls, frames, and structures reduce costs and improve sustainability with less waste. Cutting edge building materials that can generate clean energy are also becoming increasingly prevalent. Scientists in Canada are developing a material to spray on concrete that increases its strength. The developers claim that concrete treated with this material could withstand a 9.1 magnitude earthquake. It also reduces the amount of concrete used by over 50 percent. Considering the amount of carbon dioxide released during the cement production process, this would drastically boost sustainability.

Project Design

Several studies have estimated that material waste and rework account for one-third of construction expenses. Simultaneously, the sheer mass of data and information generated during a construction project is dramatically increasing project complexity. Given these factors, efficiency, accountability, and effective project planning are critical for the financial success of construction projects. New technologies that streamline the project management process reduce waste, improve productivity, and clarify roles and responsibilities. These tools improve resource scheduling, performance

tracking, equipment maintenance, data management, and reporting. Collaboration software significantly improve the productivity of large project teams. Building information modeling (BIM) is leading the way in this area. Connecting BIM models to wireless mobile devices ensures that everyone has access to missioncritical information. The field of predictive analytics has improved immensely with advancements in artificial intelligence (AI) and machine learning. Predictive technologies help companies reduce risk by optimizing project management at all levels. Virtual reality devices are quickly becoming a vital part of the preconstruction process as they help construction teams visualize potential outcomes and make necessary adjustments before committing to investments in materials and labor. Furthermore, these tools allow designers to be more creative and experimental without increasing project cost or complexity.

The Build Process

New technologies that improve productivity and safety on the job site, ranging from wearable technology to drones, are plentiful. Drones can perform job site surveys, assess project progress, and take aerial images and videos. There is a wide array of wearables, from hard hat attachments that improve safety by detecting worker fatigue, to visual accessories that capture and transmit visual images for remote viewers. Wearables not only boost worker safety and productivity, they also connect site workers with technical and supervisory team members to improve coordination and communication, allowing workers to have their hands free as they work through issues with remote coworkers. Sharing work environment information in real time enhances training, instruction, and verification of practices and materials. Exoskeletons increase worker strength and stamina while limiting strain on the body. Most wearables feed data to customizable dashboards. This allows project leaders to evaluate performance quickly and take proactive steps to reduce cost, avoid delays, and minimize the potential

Construction Technology Trends, Continued

for accidents and injuries.

The list of new construction technologies is extensive. Below is a short list of high-impact technologies to monitor and consider incorporating into your construction toolbox.

Virtual Reality and Augmented Reality (VR/AR)

What is it? Virtual reality and augmented reality are rising technology trends in the construction industry. Augmented reality is a form of virtual reality in which a real-world environment has overlaid virtual elements. Using advanced cameras and sensor technology, VR/AR software digitally creates a simulated real-world experience. The technology is widely used in video games but is quickly becoming a mainstay in the construction industry due to its ability to improve efficiency, accuracy, and job site safety. VR/AR technology continues to evolve and mature, and as the adoption rate in construction increases, it has the potential to dramatically change the future of the industry. What Is It?

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Why is it important? There are dozens of applications for virtual/augmented reality in the construction space. Many companies are developing VR/AR tools for both the planning process and project site. The technology provides a low-cost way to visualize a completed project and make critical changes before substantial



investments are made. VR/AR prevents problems before construction begins and fosters greater creativity during design phases. VR/AR technology improves almost every aspect of the construction process, including:

- Project planning: Using VR/AR software combined with 3D modeling and building information modeling (BIM), companies produce detailed, interactive models of projects during the planning phase.
- Automated measures: Workers on the job site wearing VR/AR accessories use them to measure workspaces and structures.
- Project modifications: Using a headset or mobile device, workers can view virtual construction plans and make modifications.
- Onsite information: Pipes, outlets, switches, ventilation, and other structures can be seen on VR/AR headsets or mobile devices.
- Team collaboration: The technology enables users to collect and share construction site information, including notes, pictures, and videos, in real-time with remote team members.
- Safety and training: VR/AR software enables employees to go through virtual drills, procedural instructions, and safety scenarios.

Below is a link to an article detailing how VR/AR technology is benefiting the construction industry: https://www.bigrentz.com/blog/augmented-reality-construction

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Construction Technology Trends, Continued

Building Information Modeling (BIM)

What is it? Building Information Modeling (BIM) is the process of creating 3D models that can be used for document management, project coordination, and simulated work-flows throughout the entire life cycle of a project. BIM is used to design and document every detail of a building's structure. BIM models are used to assess different design options and create visualizations that help align project stakeholders during the project approval process.

Why is it important? Increased stakeholder alignment, efficient work-flows, 3D visualizations, and improved project outcomes are some of the benefits of BIM processes. A recent study by Autodesk, a leading provider of BIM software, showed that the technology benefits construction companies and their clients in the following ways:

- Reduced document errors and omissions by over 60 percent.
- Reduced task repetition by nearly 40 percent.
- Reduced construction cost by over 25 percent.
- Reduced project duration by over 20 percent.
- Reduced claims and litigation by nearly 20 percent.

Due to the substantial benefits of BIM technology, industry analysts estimate that over 70% of construction companies have already acquired the technology (source: BIM Community). If you have not yet incorporated BIM into your company processes, you should consider doing so.

Below is a link to an article with more details on the benefits of BIM technology: https://www.autodesk.com/redshift/building-information-modeling-top-11-benefits-of-bim/

Drone Technology

What is it? Drones, also known as unmanned aerial vehicles (UAV), are aircrafts without a human pilot. Drones can operate via remote control or autonomously

through an on-board computer. Drones have become mainstays on construction sites due to their ability to efficiently collect aerial imagery. They significantly lower project cost and save time by enabling workers to more easily develop construction plans, track the progress of a project, and identify issues that may arise during the building process.

Why is it important? Due to the relative ease of integrating drone technology into the construction process and its substantial benefits, drones are now operating on most construction sites. Construction companies should take full advantage of the extensive benefits brought about by drone technology. Here are several ways drone technology can improve profit margins:

- Increase sales through marketing drone photography is an invaluable sales tool, and a strong drone program can set a company apart from its competition.
- Improve stakeholder visibility and increase client confidence – drone footage helps stakeholders view progress and visualize the final project.
- Expedite the project planning phase drone surveys help put virtual designs in the context of real conditions.
- Improve asset and material management drones help monitor the job site for suspicious activity and can be used to ensure there are adequate material supplies.
- Improve quality and minimize task repetition drones dramatically improve the ability to complete quality inspections. Frequent aerial reviews catch mistakes before they happen.
- Improve safety drones can perform inspections in dangerous areas and identify potential hazards before they cause harm.
- Mitigate litigation drones improve project documentation and in turn reduce the chance of litigation while improving defensibility.

Below is a link to a guide to starting and optimizing a drone program:

https://connect.bim360.autodesk.com/drones-for-construction-management

Construction Technology Trends, Continued

Blockchain

The following technologies could be transformational soon but are not yet ready for widespread adoption.

What is it? Blockchain technology is among the most disruptive technologies of the past decade. Its power to record, enable, and secure an immense quantity and variety of transactional information offers tremendous organizational opportunities to the construction industry. It allows for better execution of large projects in a costconscious, risk-adverse sector that includes large teams of contractors and subcontractors as well as a complicated maze of building codes, safety regulations, and building standards. Blockchain is a distributed ledger technology that creates a history of digital transactions in a highly transparent and permanent manner. A simple analogy to blockchain technology is Google Docs. When a Doc is created and shared with a group of people, the document is distributed, not copied or transferred. Everyone has constant access to the document. Modifications are captured and secured in real-time, and all updates are decentralized and completely transparent. Blockchain is essentially a super-charged version of Google Docs.

Why is it important? Blockchain technology will eventually have an enormous impact on project management technology. Some examples of its application include:

- A reputation ledger that tracks subcontractor performance in order to identify reliable subcontractors for a project.
- Smart contracts that define tasks and trigger milestone-based payments.
- Aggregation of data into a shared project dashboard to improve work-flow management.
- Maintenance of a shared with an end-to-end record of the construction process including all inputs and assets, including warranties and maintenance checkpoints.
- Streamlined inspections with automated material tracking, testing, and code-compliance monitoring.

Below is a link to a Harvard Business Review article about blockchain's future impact on the construction industry: https://hbr.org/2019/07/how-blockchain-willchange-construction

Humanoid Robots

What is it? Robots designed for construction work are currently being developed. In response to the labor shortage in the construction industry, researchers in several countries are designing robots capable of performing basic construction tasks. Some of these robots are intended to work alongside human workers and improve productivity by carrying out tasks that would typically be considered busywork. Other researchers are developing prototypes of humanoid robots capable of completing more complicated tasks, which could, in theory, replace human workers.

Below is a link to an article about a Japanese prototype https://www.theverge. development: com/2018/10/1/17923442/aist-japan-humanoid-robotdrywall-hrp-5p-construction

Why it is important? Robots are already used extensively away from the job site for simple tasks, such as building prefabricated walls, components, and structures. The use of robots on the job site could significantly reduce costs, improve productivity, and increase safety. It could also help address the ongoing challenge of finding and retaining qualified construction workers.

This article began by discussing the importance of adapting in today's fast-paced, ever-changing, business environment. Construction companies that are willing to embrace new technologies will be the most successful. Picking the right technologies for your company can be challenging. The first step in meeting that challenge is to broaden your awareness of new and emerging technologies. Hopefully this article has helped in that regard.



Each new year, individuals and companies alike set ambitious goals for the coming year. In the construction industry, most companies set annual goals for workplace safety. Is zero accidents a reasonable goal? Perhaps it is a bridge too far for the largest companies in the industry—for many firms, however, the goal is achievable and should be diligently pursued.

Construction is one of the most dangerous industries. One in five private-sector employee fatalities is in construction. Workers in the industry are also involved in many non-fatal injuries each year that, aside from costing companies millions of dollars each year, constitute an unnecessary and avoidable burden for those affected. Fortunately, advancements in technology, training, and safety procedures have led to a dramatic reduction in the number of accidents per year. According to the Bureau of Labor Statistics, illnesses and injuries among construction workers are down from 11 incidents per 100 workers in 1972 to under 3 per 100 workers in 2018. While the improvements in worker safety over the last 50 years are significant, three incidents per 100 workers is still too high. While larger construction companies may appear to be the likely culprits, companies with ten or fewer employees account for nearly half of all deaths on construction sites [Construction Data Company].

There are significant financial incentives for construction companies to enhance worker safety. Construction site injuries account for 6–9 percent of project costs [CPWR]; companies can save an average of \$32,000 with each injury they avoid [National Safety Council]. Additionally, a safe workplace can lead to other benefits, including a positive company reputation, heightened employee engagement and morale, and a stronger ability to attract and retain the best talent.

When construction companies make safety a priority, everyone wins. What can companies do to improve worker safety? A successful safety program starts with the right culture, mindset, and behaviors. Culture and mindset are important because workers must be motivated and disciplined to always follow safety procedures; training is critical to turn these procedures into natural behaviors.

An increasingly important element of successful safety programs is proper equipment. Hard hats, safety glasses, and harnesses are staples on construction sites already, but new technology can materially improve worker safety. Companies that are serious about safety are moving quickly to take advantage of these tools. Exoskeletons help construction workers lift objects without fatigue and dramatically reduce the incidence of work-related musculoskeletal disorders. Wearables track the vitals and location of workers, allowing supervisors to warn them of problems before they arise. Site sensors detect unsafe conditions ranging from asbestos and other toxins to temperature readings and air moisture to prevent fires. Drones can be used to monitor the job site for hazards and eliminate the need for workers to conduct high-risk inspections. Virtual and augmented reality devices provide immersive safety training and help find faults in construction plans before work begins.

At Western Pump, we are committed to creating the safest work environment possible for our employees and job site partners. Despite the rapid growth of our business, which has created more opportunities for accidents, our goal for 2020 is to have zero job site accidents. Continue reading to see highlights from an interview with Mike Mizicko, our VP of Field Operations. Mike talks about the culture of safety at Western Pump and how we plan to achieve our goal.

Tell us a little about yourself. What is your role at Western Pump, and what is your responsibility in the area of employee safety?

"My name is Mike Mizicko and I'm the Vice President of Field Operations. I've been at Western Pump for 23 years now. I started in 1993 as a technician in the field working in the trenches. I worked my way up into becoming a service manager and eventually (a) vice president. I love the industry. It is a dangerous industry, though. I am one of the biggest advocates (for) our safety program—I want to make sure our field technicians are safe."

Zero Job Site Accidents, Continued

Describe Western Pump's approach to maximizing employee safety?

"Make the employees (safety) advocates. Empower them to make the right decisions. Let them (decide) when it's not safe and the work must stop. Years ago, (the) attitude used to be 'I've got to get this done,' 'I've got to jump into this hole,' or 'do this or do that to get it done.' Today, that mindset doesn't work. In the construction industry, injuries do happen. We try to take those things and learn from the lessons. Our employees are very important to what we do at Western Pump. They are important to their communities and their families, so we want to make sure they get home safe every day. I never want to have to make a phone call to someone's wife or husband and say, 'hey, here's what happened."

What do you think is the most significant safety challenge facing the construction industry?

"I think the biggest safety challenge in our industry is complacency. When things are going well and there have not been any accidents for a while, that's when people relax and let their guard down. That creates an ideal environment for accidents."

What other key safety challenges impact the construction industry?

"Customers will always drive you to do things faster and better; they want things to be done now. They can be a driving influence of workers taking shortcuts. The same standard (of safety) needs to apply to customers and employees. If the customer doesn't like it, we explain to them that safety is not something we will ever compromise on. That is how we operate because we care about their safety as much as (that of) our employees.

Having multiple subcontractors on the same job site is

another safety challenge. We have many projects with subcontractors working on site with our employees. How do we get them to work with us? First off, we have meetings with our subcontractors every morning to go through the safety protocols. We never assume that we have had our talk, and everything is good. We make sure (that) the site superintendent and other supervisors are patrolling the worksite and keeping a close watch on things. And, of course, we continuously make our subcontractors aware of our expectations and how we operate."

Why is there so much focus on safety today even though the accident rates have dropped dramatically over the last 40 years?

"It goes back to complacency. If that high level of awareness and vigilance drops, the rates will immediately increase. An ongoing high level of focus is what is driving the low rates, so it needs to continue. And now that there are fewer accidents, there is much more focus on that one accident that does happen. Then we ask, 'what can we learn from it? How can we avoid that accident (in the future) and get to no incidents?"

What are Western Pump's 2020 employee safety goals? How will the company achieve them?

"Western Pump's safety goals for 2020 are zero accidents, zero incidents, and zero lost days. To get there, we plan to put rewards in place to recognize the right safety behaviors. We need our field technicians to become peer advocates. We want them to protect and look out for each other. Call their colleagues out on the carpet and remind them that they need to follow the rules and procedures. We are continuously training our employees and we always try to learn new things. The management team will never say 'get that done really quickly, don't worry about cutting that corner.' We want our employees to always be aware of their safety responsibilities and the ramifications of their actions. We strive to create an

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Zero Job Site Accidents, Continued

environment that encourages their active involvement. We want and need them to be advocates for our safety program."

What is the one piece of advice that you would like to pass along to the construction industry?

"We need to be diligent and vigilant every day. Pay attention, always keep your guard up, and be aware of your environment. Create a culture of safety."

Do you have any final thoughts you'd like to share?

"Safety is more near and dear to me now than ever, not just (as) a supervisor, but also as a dad-now (I) have sons that work at Western Pump. I'm very protective of our employees. I have raised my (level of) safety focus and awareness even (higher) so that I can help protect everyone on the team as much as my sons. I look at the entire team's safety like I'm a dad; at Western Pump, we are one big family."



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According to a recent survey from the Associated General Contractors of America (AGC) and Autodesk, 80 percent of construction firms say they are having difficulty filling key positions on their construction teams. While the industry itself is growing rapidly as the demand for new infrastructure projects increases, the skilled workforce needed for these projects has dwindled. According to the U.S. Bureau of Labor Statistics, there are currently 300,000 open positions in the construction industry. That number is expected to swell to nearly 750,000 by 2026. The impact of this labor shortage has been significant; half of the firms surveyed believe it is increasing costs and causing project delays.

What caused the shortage?

Several factors contribute to the construction labor shortage. During the recession, skilled workers who were unable to find work joined new industries. Baby boomers are beginning to retire in record numbers and are leaving all industries, including construction. Those entering the labor market today have unrelated degrees and little interest in the construction field. Tech-savvy millennials aren't flocking to careers in construction as past generations have, which causes issues for firms trying to meet the ever-increasing demand. The lack of diversity and the uncertainty of immigration reform will only make matters worse.

How are companies coping?

Companies are taking proactive steps to mitigate the impacts of the tight construction labor market. Many firms have done a good job creating in-house training and apprenticeship programs. Others collaborate with state and local governments to create programs designed to attract and train new talent for careers in construction.

Improving labor productivity is another way construction companies are handling the shortage. Unlike other industries, construction has seen little improvement in productivity. A study by McKinsey & Co. found that, while many U.S. sectors increased productivity 10 to 15 times since the 1950s, construction has remained

stagnant for 80 years—leading companies are working diligently to improve this. Methods like design-build and lean construction, which require high levels of communication and collaboration among key players on a project, have been proven to enhance efficiency and productivity on projects. Technology such as building information modeling (BIM) and project management software are also being used to improve productivity.

Most importantly, construction companies are rethinking how to attract and retain talent in the modern job market. Job seekers today want more than a well-paying job. Here are some of the things they are looking for:

- Inspiring and strong leadership
- Career growth and professional development
- A noble purpose and an opportunity to give back
- The ability to think creatively and solve problems
- Recognition and rewards
- Teamwork and collaboration

At Western Pump, we work diligently to employ the best workers in the construction industry.

Continue reading to see highlights from an interview with Lori Duncan, our Manager of Human Resources. Lori discusses how Western Pump takes a comprehensive approach to attract and retain talent.

Tell us a little about yourself. What is your role at Western Pump?

"My name is Lori Duncan, and I am the Human Resource Manager at Western Pump. I hold an SPHR (Senior Professional in Human Resources) certification and a PHRca certification (Professional in Human Resources with an emphasis on the unique California HR environment). I have been working in the Human Resources field for about ten years. I'm pleased to be able to continue to contribute as the company grows. It's a joy to bring individuals on and see them do good work and become as passionate about their work at Western Pump as I am. It's really an exciting place to work for me."

Win the Battle for Top Talent, Continued

Why is it so difficult to find good talent in the construction industry?

"The construction industry, in the good economy that we've been enjoying, has experienced quite a bit of growth. There is a high demand for skilled and qualified construction talent on all levels. There's a considerable amount of knowledge required in our industry about the regulatory environment and the petroleum equipment with which we work, meaning our employees require a certain level of certification. Our employees need to love and understand the work that they do while at the same time having time to study and prepare for exams the state requires to work in this industry. Narrow that down enough, aside from the difficulties finding skilled and trained workers faced by the construction industry generally, our specialty has some particularly difficult challenges to overcome. Additionally, young people aren't entering the field as frequently as in times past. They may be encouraged to go in other directions. They may not be aware of the value-added in the construction industry—the satisfaction that our employees feel of a job well done when the task is completed, and they can say, I built that."

How does Western Pump keep its top talent?

Retaining good employees is a function of attention, recognition, and appreciation for the hard work that they do. Acknowledging and rewarding it is very important. At the same time, most employees need opportunities for growth, which can only happen if managers, foremen, and supervisors engage with the employees. It's important to discuss the next steps. How do we develop this employee? How do we offer them the training they want and need? How do we offer them challenges that keep them engaged without pushing harder than they are willing to go?

Another interesting element about retaining top talent in the construction industry is technology as a tool for employees in the field. There is always a lot of paperwork involved with construction, a lot of required documentation. Mobile technology that helps them do their job more easily and accurately is significant in

keeping our employees motivated and engaged. This is especially true for our younger employees.

Essential to retaining our employees are good benefits and a fair wage. This an area where our employees can be tempted to change employers. If we are not competitive with our compensation package for our employees, we will lose them; this is especially true in the tight labor market.

When Dennis Rethmeier bought Western Pump in 1988, he realized early on that what mattered the most were the company's values. To that end, he wrote the original code of conduct and a shared values document that I still hand to employees today. Recently, we revisited this document. Our culture is key not only in terms of business and vendor relationships, but in what it means to be an employee at Western Pump and what we seek to do in our recruitment. I see this document as part of the reason why people want to come and work for us and why our current employees would refer individuals whom they see as a good fit. It is crucial for that constant striving toward who we seek to become and a standard to aim for in all our relationships. Our values define how we build our reputation as an employer and give us a benchmark for asking the question, "Is this the right person to bring on board to Western Pump?"

How does Western Pump find and attract top talent?

An excellent source for new hires is referrals from existing employees. There are things that we know already about our employees—what their values are and how they work together with Western Pump's values.

Another initiative that we focused on in 2019 and anticipate continuing to focus on this year is the recruitment of military veterans that have either left the military or will soon. Often, military veterans have desirable, transferable skill sets. There's also a certain rigor in their ability to study for and pass some of these examinations. In the past year, we have successfully hired two veterans and they have performed excellently.

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Having a preventative maintenance program for your critical equipment and systems makes good business sense. As Benjamin Franklin said almost 300 years ago, an ounce of prevention is worth a pound of cure. A carefully designed preventative maintenance program includes routine repairs and checks that can uncover looming problems before they manifest. Preventative maintenance can help avoid unexpected business disruptions, improve employee safety, reduce operating costs, and extend the life of your expensive assets. Given the uncertain business environment today, preventative maintenance is uniquely important for essential businesses, like those that support our country's transportation infrastructure.

The COVID-19 pandemic has had a substantial impact on our economy and will likely continue to materially affect businesses for the foreseeable future. Essential businesses must be ready to support their communities, regardless of the trials and tribulations that may lie ahead. During these challenging times, when cash flow presents difficulties for many companies, businesses cannot afford downtime as a result of equipment failures or system breakdowns. In addition, service personnel may not be as readily available if coronavirus cases spike. For all these reasons, proactive preventative maintenance is even more essential now.

Apart from the unique business environment created by the pandemic, a preventative maintenance program can deliver many significant ongoing benefits for your business, including:

- Improved employee safety;
- Decreased downtime;
- Reduced operating costs;
- Better business performance; and
- Extended asset life.

In short, a preventative maintenance program will improve your business's sales and profits.

Improved Employee Safety

Regular preventative maintenance can ensure that your equipment will operate safely. Equipment that is not in optimal working condition creates a hazardous working environment. With regular maintenance, potential equipment issues can be identified and addressed before they cause an employee to be injured. Injuries in the workplace can be a crippling expense for a business. Additionally, a company's safety record is an important consideration for job candidates evaluating employment opportunities. A strong safety record will also improve employee morale by offering workers peace of mind and the confidence that management has their best interests in mind. As a result, a strong safety record can help businesses attract and retain top talent. The bottom line is that improving employee safety can reduce costs and improve the quality and productivity of your workforce.

Decreased Downtime

While planned preventative maintenance takes time and money, that business impact pales in comparison to the costs, lost time, and lost revenue that result from extended downtime due to unexpected equipment or systems failures. Unplanned downtime can result in idle employees, missed deadlines, and long-term damage to the company's reputation. Because preventative maintenance is planned, you can schedule downtime to minimize business disruption. The costs are also predictable, and cash flow impacts can be planned and managed.

Reduced Operating Costs

Emergency repairs can be costly due to the need to pay technicians overtime as well as the premium for expediting the delivery of replacement parts. As mentioned before, unexpected downtime can also lead

Preventative Maintenance, Continued

to idle employees, which can be costly. Apart from the incremental costs associated with unexpected repairs, the minor fixes and proactive repairs that are completed during preventative maintenance can keep equipment and systems operating at maximum efficiency. While all equipment will experience wear and tear over time, ongoing maintenance can minimize the loss of equipment productivity during the aging process.

Better Business Performance

Preventative maintenance can help a company provide more reliable and better customer service. Customers count on businesses to deliver products and services on time and to their specifications. Unnecessary delays and lower service quality due to equipment failures hurt business performance and negatively impact the customer's experience. Repeat and referral customers are a company's most valuable customers. Providing reliable service to customers is critical for maximizing repeat and referral business.

Extended Asset Life

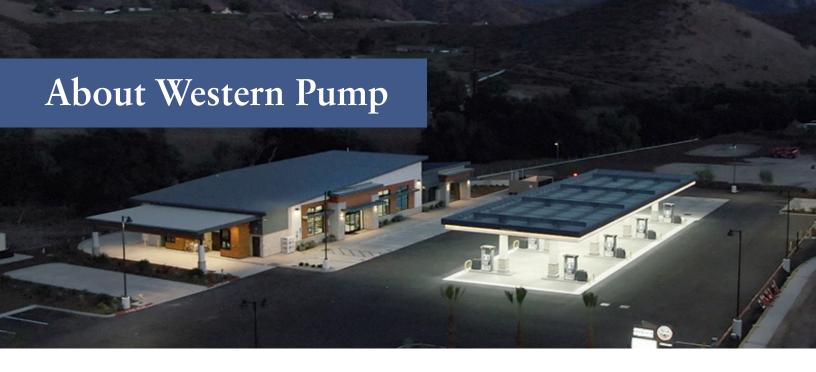
Regular maintenance extends the life of equipment and maximizes its lifetime value. Extending the life of equipment delays the need for expensive capital purchases, which reduces the amount of cash that must be set aside for new equipment purchases. The result is more free cash flow, which can be used to fuel business growth or can be distributed to the company's owners and employees.

More and more business owners are realizing the financial benefits of moving from a reactive to a preventative maintenance plan. In these uncertain economic times, a proactive maintenance plan is more important than ever. Essential businesses must be ready to serve their communities, even during these volatile times. In the long term, preventative maintenance is a highly sound

business strategy. Keeping employees safe and engaged and customers happy, while reducing operating costs and maximizing free cash flow, is a formula for sustained business success. A smart preventative maintenance program can help deliver that success.







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We are a general and specialty contractor serving the petroleum and transportation industries, as well as mission-critical infrastructure. Western Pump provides a wide range of construction, maintenance, and compliance services to private- and public-sector customers. We have completed work for government agencies, private developers, major oil companies, educational organizations, and general contractors.

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Construction

Wester Pump offers comprehensive construction services including, design, build, project management, permitting, and equipment installation. As a licensed contractor in California (#673853), Nevada (#0057569), and Arizona (#ROC200394), our engineering and construction experts specialize in creating facilities that meet stringent environmental and safety regulations.

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Service

Western Pump is committed to minimizing customer downtime. We offer a comprehensive suite of services designed to keep your business running. With our 24/7 service and fleet of over 50 trucks we service fuels systems, automotive equipment, and DC fast charging stations. Whether you require emergency repair services or you're interested in preventative maintenance we have you covered.

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Equipment

Western Pump is a full-line wholesale equipment supplier and installer. We offer parts and equipment sales to oil companies, retail service stations, dealers, contractors, fleet owners, and maintenance facilities.

- Fuel System Equipment
- Automotive Repair Equipment
- DC Fast Chargers
- Vehicle Wash Systems

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