Overcoming Construction’s immediate challenges in the face of COVID-19
A note from our leadership

COVID-19 has disrupted our industry and is threatening everything from supply chains to cash flows. While there will be numerous challenges on our path forward, let’s focus on the keys to getting through this crisis: our ability to learn quickly from one another, our capability to focus on what we can actually control, and our capacity to prioritize and take decisive action.

We’ve sprung into action to do our part to support the construction industry at large, and we’ve compiled this playbook to help you tackle some specific problems that you may already be facing, with some help from technology. These steps will help you get a grip on the situation in the lead up to any potential shutdown of activity, and help you to restart seamlessly where you left off when the dust starts to settle.

At Disperse, we’ve adopted a companywide mantra of asking “how can we help?” because we’re in a unique position to do just that. We can readily provide solutions including facilitation of remote work, production analysis and protection against fraudulent claims, and we’re consulting every day with our customers, some of Europe’s and America’s top contractors, housebuilders and owners, to understand how they’re addressing unprecedented challenges.

Winston Churchill once said: “I like a man who grins when he fights.” Let’s put on our grins, roll up our sleeves and get ready to fight this battle, together.

Felix Neufeld,
CEO at Disperse
Executive summary

In the face of the unfolding global crisis and industry response around COVID-19, new uncertainties have developed for construction. In consultation with our customers, some of Europe’s and America’s top contractors, housebuilders and owners, we’ve identified three critical challenges from the field that can be immediately overcome by reconfiguring processes, changing organizational structures and leveraging technology. These challenges are:

→ Information from the field is ambiguous and incomplete: making quick decisions and answering critical questions from the field depends largely on completeness and accuracy of data. Currently, most builders are relying on information that is not as good or exhaustive as it could be.

→ Some construction management now must be done remotely: for the first time in the history of construction, builders are going to be required to work in lockstep and manage construction from dozens of disparate physical locations.

→ Claims can make or break cash flow: the immediate implications of incoming financial disruptions will create a tangled web of transactions to account for against actual work completed, and all parties will benefit from an exhaustive and complete record of project activities.

To address these acute challenges, we’ve developed a tactical guide for general contractors, housebuilders and owners on how to best weather the storm and emerge from this crisis positioned for success. Our recommendations incorporate a mix of people and process solutions, made viable and enhanced by using technology. This document explains how to:

→ Collect and structure data from the field to assess the situation quickly and thoroughly.

→ Reorganize your teams and leverage digital to facilitate remote coordination and business continuity.

→ Create an indisputable record of works to protect against cash-flow chaos.

→ Take a page from tech: adapt to working remotely.
Here’s what you’re likely to see, if you haven’t already.

We’re actively working with our customers to identify specific areas where the COVID-19 pandemic is threatening their production flows and creating new challenges around implementing physical distancing guidelines. In this section we cover three specific groups of hurdles to overcome ahead, namely:

1. Information from the field is ambiguous and incomplete;
2. Some construction management now must be done remotely;
3. Claims can make or break cash flow.
Information from the field is ambiguous and incomplete

In any disaster response, company leadership will conduct a threat assessment to understand where the biggest and most urgent vulnerabilities lie. Leadership’s decision-making capabilities can only be as strong as the quality and completeness of their available information. With limited visibility into where a supply chain might come under stress, they’re already on the back foot.

Ambiguity is the enemy of good decision making. The questions may start to come from board level, and you’ll want to quickly and accurately answer questions like: what is our actual progress on specific sites, and what’s most likely to derail work immediately? Where are our biggest potential labor shortages across the portfolio, and how should we prioritize resources? What material requirements do we have, and which claims can we expect in the coming weeks and months?

It’s important to know whether an issue needs to be escalated, and if so, to whom. Ask yourself:

When the questions start pouring in, how quickly will you be able to source accurate answers from the field?

And, how will you source answers if you can’t send anyone into the field? You won’t have all the answers at once, but you’ll need an approach to arrive at them quickly.

Some construction management now must be done remotely

This is an unprecedented challenge for the building industry. Site teams have always managed construction on site, and it’s counterintuitive to imagine the majority of project management being done remotely. But today the risk of an outbreak shutting down a site is real, and remote construction management has become an imperative.

Distancing laborers and equipping them with PPE during regular work is doable, but site management is now challenged to eliminate hours spent in cramped site offices and canteens, and to proactively think around physical bottlenecks in spaces like lifts or security checkpoints.

The effects of the COVID-19 outbreak will be felt long beyond the next business quarter, with some estimates that social disruption will last for more than a year. Businesses must now hedge against further disruption and mitigate total losses of productivity, in large part by facilitating remote site management where possible.

How will your teams manage your project sites when only small groups of your people can be on site at once due to risk of an infection, whether that’s now or in 3 months?
Claims can make or break cash flow

Production has been impacted on projects already, and it’s critical that general contractors build a firewall of evidence to support or refute claims as necessary. When making payments or submitting claims, it’s critical to protect your cash flow by verifying work completed with certainty. We’ve divided claims into four buckets, outlined below:

1. **Claims by subcontractors**
   Smaller businesses will be the hardest hit by a disruption of cash flow, so it’s critical that laborers continue to be paid for the work they’re doing on site. It’s equally critical that all parties operate on an objective system to determine which claims are fair and accurate, and which are inaccurate.

2. **Claims by general contractors**
   General contractors and their clients will have to sort out who absorbs risks from specific delays caused by COVID-19. When requesting any extensions, the imperative is to back up your claims with evidence where possible. There will be force majeure considerations to be taken into account, but they will vary from contract to contract, and they’ll all be contingent on proving your current progress. A general contractor’s challenge is to prove what’s been delivered beyond a shadow of a doubt.

3. **Claims against insurance**
   Insurers will collect evidence in their own ways. Whether you want to file a claim or defend against one, you’re best protected by creating your own verified chain of evidence.

The clock is ticking to take a snapshot of what’s actually been delivered before timelines need extending, and evidence should be cataloged in a way that’s transparent, objective and reliable.
Getting tactical:

Steps to overcoming new challenges

Step 1

Collect and structure data from the field to assess the situation quickly and thoroughly

You’ll want a clear picture of what’s happening on the ground. The immediate priority is to take stock of the situation and decide how to proceed, and general contractors, housebuilders and owners will need to move quickly to get answers from the field. The imperative is to capture an exhaustive and objective dataset of project works that can be referred back to at any time. You may not have the luxury of sending teams to sites for large stretches of time during this crisis, but decisions will still need to be made quickly. We recommend prioritizing the following data collection:

→ **Visual Data**
Teams will need to refer to site works virtually at any time and keep processes precisely coordinated. This means having a set of universally comprehensible and easily accessible data to drive decision making.

→ **Measurable data**
Data is most valuable when presented in context, and the general contractor is the most likely party to take responsibility for untangling webs of deliverables against plans. Clients will request data to justify unlocking funds. Everybody should be prepared to examine building against existing plans, and understanding material needs will have to be based on completion of project tasks.

→ **Accurate data**
There will be inevitable discrepancies in the field, so all parties need to agree that the information fueling decisions is accurate.
→ Exhaustive data
Seemingly minor details can end up being relevant to all levels of business, from the boardroom to the project site. The best course of action is to capture as much granular data as possible in the shortest amount of time.

We recommend gathering, structuring and sharing data with your teams in an easy-to-understand way, because they’ll need to be able to pull quick answers from a project site, even when they’re scattered across dozens of locations. From consulting with our customers we’ve come to understand that the quickest and best decision making happens when operating from a single source of truth, and that means having an accelerated flow of accurate information across teams.

Critical data capture, data structuring and processing and digital twin site navigation are core components of our solution offering at Disperse.

We’re ready to move quickly to help where needed, and we encourage you to learn more on our website.

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Step 2

Reorganize your teams and leverage digital to facilitate remote coordination and business continuity

The new reality is that site shutdowns are much more unpredictable. Governmental guidelines will shift weekly or daily, and levels of activity will vary widely. Over the coming months we expect to observe a V-shaped slowdown and ramp up in site activity. At most points in that process you will be forced to seriously consider social distancing as a new and unavoidable phenomenon, and the “divide and conquer” strategy is the most viable here.

Realistically, teams could become infected by one another and it’s now a top priority to break up and insulate anyone who is not absolutely required to be on site at once. There are teams, including management and trade laborers, who will always need to be on site at the same time while activity is allowed, but even then it’s absolutely critical to understand physical site bottlenecks in order to plan proactively for distancing.

Here are a few examples of best practices sourced from the field that can be made easier, several by using technology:

→ Analyze sites thoroughly to identify high-risk areas: it pays to analyze a site to identify inevitable pinch points like elevators and entryways, or frequently touched surfaces like biometric stations, and adapt your protocols to account for requisite distancing and hygiene. Even if the majority of work is performed with workers a safe distance apart, high-volume areas present the virus with opportunities to spre-
ad (consider places like elevators, hoists, laydown areas, mess areas, welfare, turnstiles, etc). Also take into consideration workers commuting to sites as public transport will run reduced services. Supplemental services, like chartered busses for construction workers, can reduce risk of infection and public pressure to close construction sites.

→ Encourage remote working when possible: site management can now be done effectively from afar because technology has advanced in a way that management can interact with a site digitally. Consider which staff spend the most time in a tightly-packed site office versus in the field; it’s easier and more effective to physically separate and properly equip personnel in the field than it is in a site office, and it’s easier to catch a virus in closer quarters than in a wide-open space.

→ Reduce group sizes and split teams with duplicate capabilities: talk to senior project managers to get an understanding of which teams absolutely need to be on site at specific times, and keep non-overlapping groups apart from one another as much as possible when planning a sequence of works. As a quick and easy practical example, consider scheduling canteen lunches into shifts limited to specific groups who are already working together to allow for more effective distancing and fewer interactions and hedge against potential infection.

→ Strategically slow work when you must: sometimes it pays to go slower than you want to if it’s to avoid an outbreak that could totally derail all progress on sites. Accepting selective slowdowns to create resilient ways of working is an investment in the overall project when all other options are off the table. One way to do this is to limit the number of trades working in a room to only one, and limiting the number of people carrying out an activity in each room. This will require reconfiguring sequences of work.

→ Adapt how work is carried out: Research by the Disperse team has identified common activities that are often carried out without respecting social distancing requirements. The activities we have observed being carried out with people close to each other include decoration, cleaning, unloading, testing of firestopping, boarding, taping and joining, wardrobe installation and electrical installation. Many of these activities could still progress with fewer people in each room. As with other initiatives, we recommend giving your planners access to the best possible data when reconfiguring sequences of work or developing new processes.

While decisions around reducing group sizes, restructuring teams and strategically slowing work are organizational decisions that only you can make, we encourage you to explore how our digital twin technology can facilitate remote work and help your teams monitor and manage your site from anywhere in the world.

You can read more in BIM+ about how our AI-powered technology is helping Mace manage sites from anywhere and make critical decisions quickly.
Step 3

Create an indisputable record of works to protect against cash-flow chaos

There will be financial untangling to do during and after a crisis. Business continuity is contingent on sorting out which milestones were met at which point in time, where things left off, which initiatives were prioritized and who’s owed what sums of money for works completed. There will be disorganization and human error, and the onus will fall largely on general contractors to provide a chain of evidence. To safeguard your organization against inconsistencies, consider the following steps:

→ Understand your financial priorities: understand claims that are likely to be submitted most immediately and verify completion of corresponding works. Take stock of factors like progress and quality sign-offs to support or refute incoming or outgoing payments, and provide a record of key milestones to support unlocking funds where appropriate

→ Anticipate the impact of disruption: get a forward-facing understanding of how delayed production or a weakened cash flow can impact your business, and develop a plan to remediate the financial impact of any disruption

→ Leverage an exhaustive record of works: disagreements around completion of works will lead to reexamining contract language, as well as drawings and schedules. Dispute settlements frequently call into question factors like contemporaneous notes, email exchanges and call records, but the best arbiter of truth is a clear, unambiguous and centralized record of work

Digital technology that captures what is happening on your construction site week to week and allows for virtual navigation of a project, like Disperse’s solution, can be a valuable financial safeguard during tough times. At Disperse, we know we deliver value to our customers, even in business-as-usual circumstances.

We’ve worked with our customers to validate a real-world return of 25 times of the price of deploying Disperse on your site, driven by savings on refuting erroneous claims, time overhead savings and accelerated delivery.

We encourage you to get in touch to understand more about what your savings could look like, and how to safeguard against cash-flow risks.
Step 4

Take a page from Tech: adapt to working remotely

At Disperse, we’re accustomed to working across offices in different time zones and locations, but we recognize that this distributed way of working is uncharted territory for a lot of our colleagues in construction. Here are some of the ways that we make ourselves successful when working from different places:

Trust your digital solutions: technology can be a key enabler for managing workflows.

Many companies (like Disperse!) have been reliant on technology to keep us productive since inception. It’s possible for teams to emulate the most important parts of working from the same place, and to operate as effectively as colocated teams. There are plenty of systems to choose from but here’s what has worked for us:

→ Video Conferencing: in high-pressure situations, remote working can make colleagues feel disconnected, which can lead to lost productivity. Video conferencing has come a long way in the past few years, and is now an effective substitute for a face-to-face chat. Seeing each other and understanding more than just voice cues creates focus, and overall quality is much better than a standard conference call. There are a variety of good platforms available, including Zoom, BlueJeans and Microsoft Teams

→ Messaging Platforms: in an office, teams gather informally to discuss issues or check in for clarifications. In remote working situations, email can feel too formal for a quick request, and can push people to work in silos. Messaging facilitates an office-like capacity to brainstorm solutions, resolve issues and align. Microsoft Teams and Slack are two good platforms that enable faster, lighter-touch communication

→ Collaboration Systems: solutions that drive digital collaboration come in all different varieties, but generally the objective of them is to keep teams aligned and focused on tasks, and remove risk by operating from one version of the truth and maintaining version control. Being able to iterate and work collaboratively in an efficient way is critical to staying effective as a distributed team. Lightweight solutions like Office365 and GSuite offer document collaboration, while more powerful reality capture and digital twin solutions (like Disperse) can serve as a single source of truth for anyone who touches or needs answers from project sites

Moving quickly to embrace this new way of working helps establish new routines, and gets you and your team closer to the productivity of life in the office and on site.

However, productivity can’t come from applications alone and managers are grappling with the challenge of how to keep teams motivated and working effectively. Here, we summarize some key steps you can consider to keep teams engaged and performing well during an extended period of
decentralized working:

→ **Communicate (a lot):** now more than ever, communication is critical. The loss of face-to-face meetings means that the rationale and context for decision making can often go unexplained. Context means everything, so don’t shy away from over-explaining things, and where possible require your teams to operate from the same basic sets of information (we can help with this!). Encourage frequent comms in and across teams, and make a conscious effort to share detailed thinking around data and decisions with colleagues.

→ **Establish routines:** routine is a key force in human psychology. We spend a lot of time working, thinking about work and traveling to and from work, and a disruption in this routine can present challenges beyond the obvious. It’s important to help your teams establish a new and comfortable routine, and we recommend discussing and setting new routines with team members. Encourage colleagues to start their day as if they’re going to work, and establish when the day ends. Create a workstation to stay productive, and guide colleagues to create the best possible work environment for them. For many, this is a clear workspace where home life stops and the work day begins. Continue or expand patterns of team working and maintain regular team meetings and one-to-one conversations with colleagues.

→ **Focus on output:** with schools closing and gathering places unavailable, colleagues will be juggling work and home life in new ways. Allow teams to set timelines on their own and focus on what gets produced rather than when exactly it gets produced. Provide the right tools, training, and support to help people manage their time.

→ **Stay sane and healthy:** the news cycle is unusually grim, and morale is likely down across the board. Help your colleagues maintain their health and well-being by making time for small talk, and be sure to check in on colleagues (and their families). Encourage regular breaks for teams and create social moments, like a virtual happy hour at the end of the week. If resources allow, share tips on health and well-being. And, most importantly, have faith in your colleagues and teams - you’re in this together, and you’ll need to rely on each other.

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**Final thoughts**

As we all move to new working conditions, it’s reassuring to see how communities across the world are adapting by embracing the suite of technology and team management tools that we have at our disposal. Bringing it all together will take time, effort and collective patience, but by treating this moment as an opportunity we can create new solutions and help our industry come out even stronger on the other side.

**Who is Disperse?**

Disperse is the global leader in construction solutions focused on visually capturing and digitally tracking production from the field, and enabling remote coordination. Our technology digitizes and processes visual data from construction portfolios and delivers actionable information that helps to optimize and transform construction delivery.

Using our solution, our customers have recorded return on investment to the tune of 25x
We are deployed across more than 14m square feet of construction in the UK and the US, and we’ve been selected as the solution of choice by executive leadership across industry-leading owners and general contractor portfolios including Aecom Tishman, Gilbane, Mount Sinai, Balfour Beatty, Mace, Brookfield Multiplex, and many more. We encourage you to learn more at www.disperse.io

How can we help?

Our company-wide mantra in the face of COVID-19 is “How can we help?” because we’re uniquely positioned to do that. We can quickly and effectively address the challenges covered above, and we’re standing ready to get started with your team. We encourage you to get in touch to better understand how we can work together, and what solutions we can provide!

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Get in touch!