

The Role of Construction Software Technology in Mitigating Risk



Conflicts and other project risks can delay work and negatively impact bottom lines.

If you do a little digging, you may notice that many industries utilise development and maintenance processes that are often repetitive and standardised across the scope of their operations. This may work for them. However, within the construction sector there are multiple aspects which require different approaches, meaning a one-size fits all approach is not appropriate. Each project requires a distinctive output, may be run by various departments, and may be undertaken under a unique set of circumstances. It is akin to a large machine with multiple moving parts and it is because of these multiple parts and unique approaches that there can be a tendency for miscommunication, teamwork issues, and conflicts.

Types of Clashes Experienced on the Field

As a general rule, conflicts come into being as a result of issues with comprehension, mixed messages, competitive processes and priorities. Sometimes there is little bearing on ongoing operations, but, depending on the nature of the conflict, these disputes can have serious ramifications which have the potential to cause brand damage, profitability issues or human resource issues. While the issues vary from one organisation to another, we've broken down the most common construction disputes into four main categories.

People Issues



Getting teams to work more collaboratively together can reduce conflicts.

The most common of all conflicts and one which people misunderstand as the easiest to resolve, involves miscommunication between employees; be it between an employee or a manager, between a manager and another manager, a supplier and a supervisor, or between employees themselves.

The cause could be differences in personalities, poor leadership, authority issues, lack of respect, differences of opinion, teamwork; and other similar issues. When not mitigated or resolved with effective people management strategies, these problems can lead to poor morale, drops in performance and even trigger industrial disputes affecting project profitability.

Process Issues



The more complex or confusing construction processes are, the bigger the changes of errors.

Process issues refer to anything that affects execution and delivery of a project. It can range from planning and estimates to time-line issues; poor organisation of manpower and processes; inefficient project management tools (such as field management software); lack of contingency plans for bottlenecks and project disruption; and perhaps most worrying, the use of undocumented or unsanctioned methodologies between teams.

Ironically, many of these issues can be avoided if all project stakeholders are given clear guidelines, communicated to clearly and given the project tools they need to undertake their roles efficiently.

Project Issues

Construction projects are large and complex, which is why issues on the jobsite are often the hardest to mitigate — mainly because when they do occur, they are due to circumstances outside the control of the organisation itself. Common reasons for project related problems include:

- Scope changes in the project

- Limited human resources
- Delayed delivery of construction materials
- Weather delays
- Budgetary issues

Technical and Legal and Compliance Issues



Lack of information, errors with materials or equipment, missing documentation and much more can bring work to a grinding halt.

Sadly, technical, legal issues and compliance issues are the most serious of all construction disputes as these usually require intervention from arbitrators, regulatory agencies and legal experts. The suite of problems which may arise may include contractual errors, technical issues, contract breaches, delayed payment, insurance and damage claims and obviously, non-compliance with legal requirements.

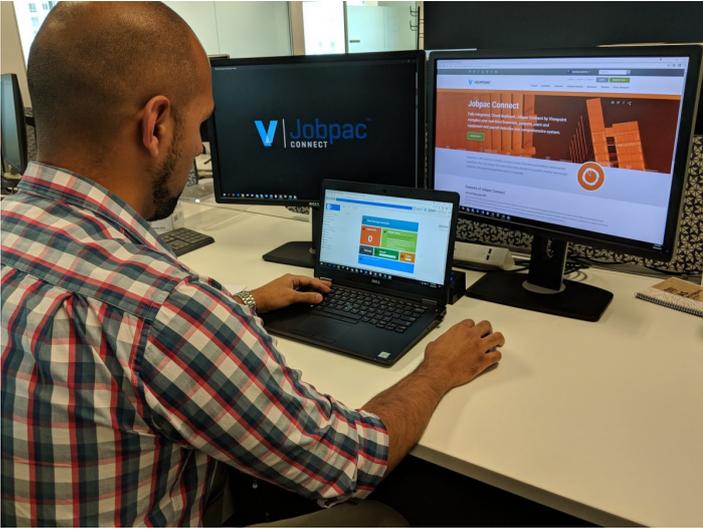
The Effect of On-Site Disputes

According to EC Harris, a global asset consultancy based in the United Kingdom, in its 2013 annual report, *Global Construction Disputes: A Longer Resolution*, the longer the dispute is left unresolved, the more money a company loses. In 2012 alone, it took an average of 12.8 months to fully resolve large construction disputes, which translated to an average cost of \$31.7 million.

Yet, despite the connotation that disputes are bad, the fact is disputes do not always have negative outcomes. Often, they can be the catalyst to help clarify goals and realign employees' expectations and actions, improve communication and promote teamwork, and of course, resolve problems in the field.

The reverse is also true though; if left unresolved, on-site conflicts can grow exponentially, causing major and ongoing ramifications for the project.

Introduction of Technology to Mitigate and Resolve Conflicts



Leading-edge technology, like Viewpoint's JobPac solution are helping contractors mitigate risks.

With the complexity of operations and the enormous sums of money involved in a construction venture, it is a given that a variety of issues will surface from time to time. Efforts should be made to avoid them at all cost or at least lessen their magnitude as they occur.

One effective way of controlling the effect of and preventing a conflict is to increase the transparency and communication between clients, management, contractors, field teams and administrative employees. Implementing a construction management platform that allows everyone to access key (and relevant to them) project data and manage information flows across the organisation can be the pivotal point that makes a difference. The right platform will open access and insight to project documents, reporting requests, maintenance information, manuals, workflow processes and other records.

Furthermore, with a construction management program in place, you can more easily address disputes by getting to the root of the issue faster as all project data is captured in detail, within the system. It gives those that need it the power to tackle issues, ask questions which generate clarification and thus settle the matter quickly — all because there is an availability to comprehensive information.

Furthermore, should issues of more financial nature arise, correctly implemented systems give you the ability to trace the activities involved with a particular sequence of events, allowing you to see where and why there are changes and/errors. The ability to generate reports and in-depth analyses gives you more power than ever.

Lastly, the advantage of procedural based construction tracking systems can also extend to human performance. More accurately than ever you can track your employees' time, labour, and productivity via a phone-enabled mobile field manager which ensures that all staff involved with the project are on track, trained correctly and performing as expected.

If you feel that there are issues or risks within your organisation which could be mitigated, perhaps, it is time to act to prevent serious ramifications for your business. Invest in an integrated project management system that allows you to manage all aspects of the project – ask a Viewpoint team member today about your options and how they can help you.

Posted By

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Nat is the marketing manager for Viewpoint's Australian office. With fifteen years of experience in the software industry and a passion for construction, she delivers the best solutions to the industry and helps builders get the tools to get the job done.