

Latest Project Management Trends and Challenges with COVID-19

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Abstract. Since the COVID-19 crisis struck, organizations in vulnerable sectors worldwide have seen their revenues drop substantially in a matter of weeks — in some cases, dwindling to almost nothing. Countless companies have taken reactive and efficient steps to ward off major losses, such as establishing remote work arrangements, securing supply chains, reducing employee workload, cutting costs, and applying for government support. However, as the COVID-19 continues its disruption, the livelihood of many entrepreneurs and small business owners continues to remain threatened.

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On top of that, many of them have employees that they're trying to protect and reassure—a monumental task when they themselves are struggling with burnout. Moreover, newly remote knowledge workers are struggling to adapt to their new workplace reality. Collaboration can be especially problematic for those who've been working remotely for less than a month. They're more likely to report slow, inefficient processes and communication, which can hinder operational speed and productivity. These challenges often ladder up to bigger issues that negatively affect workers' sense of belonging and overall work satisfaction.

So, how does this virus and the movement to work remotely affect projects starting up or that are in process? If you're a project manager or project centric organization, you know full well that risk planning is critical. If you haven't already been sent home to work, let's consider what the overall affect to tech projects and project managers and teams will be in project centric organizations today.

For one, there's no doubt that project opportunities will dwindle and therefore tech revenues will dwindle. Organizations are going to have to look hard at finding ways to grow more projects into new business and extended opportunities for more projects from existing clients. Additionally, other factors to consider are the fact that remote work will now become the necessary norm, leading to virtual teams being the most productive parts of the workforce. As such, organizational leadership will also be affected as great communicators and experienced decision makers will now be needed in place to lead teams and projects instead of a simple senior leadership system.

All this results in organizations having to move from a reactive to a proactive approach to dealing with COVID-19, they are forced to address new challenges and ask themselves the following three questions:

- **First**, can we offer a version of our products and/or services through an online channel? As online access is at this point in time the only viable way to constructively conduct business.

- **Second**, can we use offer services that are in demand and/or our existing infrastructure to produce products? This question is especially important for companies experiencing reduced consumer demand. Many businesses have begun allocating infrastructure to produce goods and services in the fight against the corona-virus. However, some strategic companies are thinking beyond the crisis to future changes in consumer needs.

- **Third**, how can we rapidly increase our capacity to produce and distribute products and/or services? This question is most relevant for organizations that are struggling to keep up with virus-fueled demand. Turning to partnerships with other companies can boost capacity in a crunch

To address such increasing concerns and changes, businesses have now been forced to adopt some new project management response strategies to help facilitate productivity and match organizational infrastructure with emerging market trends. These include:

1. The expansion of Artificial Intelligence (AI) & Automation

With rise of COVID-19 and the need for remote working, many companies have already started using AI in project management to perform their daily tasks that require human effort through task automation. Project managers can use automation to perform complex tasks ranging from scheduling to data visualization and make informed decisions based on the captured insights. For example, there is automated chat bots designed specifically to fulfill functions like assigning tasks, getting status updates, providing warning signals of potential roadblocks etc. Such tools have now become even more vital than ever with everyone stuck at home and unable to go to their offices. As such, several companies already have this type of solution, both with the goal of making project management impeccable and to better organize each team's work remotely.

2. Agile Approach

Agile is one of the latest approaches in project management and primarily impacts project workflow. It is a process by which a team can manage a project by breaking it up into several stages and involving constant collaboration with stakeholders and continuous improvement and iteration at every stage. It begins with clients describing how the end product will be used and what exactly it is that it solves. This clarifies the customer's expectations to the project team. Once the work begins, teams cycle through a process of planning, executing, and evaluating — which might just change the final deliverable to fit the customer's needs better.

Continuous collaboration is necessary, both among team members and with project managers, to make fully informed decisions. In fact, according to industry research, some of the top benefits organizations that use an agile approach enjoy includes:

- Better ability to manage changing priorities**
- Project visibility**
- Faster delivery speed/time to market**

Moreover, this brings us back to the use of AI as a tool, as teams using Agile methods can take advantage of a chatbot that can assist in task selection, ask the team members daily what their current tasks are and what tasks are completed etc. At the end of a sprint, bots can create reports that can be distributed to all stakeholders involved in the project.

3. Increased remote working

Remote working is on the largely on the rise due to the need to practice social distancing during the COVID-19 pandemic. Led by business in response to calls from the World Health Organization, it is having a daily impact in helping manage the novel corona-virus. Remote working is another example of business transformation that works on multiple levels. It serves the needs of individual employees, it provides businesses with new resilient and adaptive ways to engage with their ecosystem and deliver economic value, and it serves the larger community by addressing public health needs. Plus, you get an opportunity to work a diverse talent pool.

However, this cannot function unless remote project teams must have access to the right cloud-based tools. Here are some of the things that online project management, conferencing, or work-collaboration tools necessary to keep the work force at home functioning:

- **Virtual meetings and video conferencing:** It takes deliberate effort to plan interactions with remote workers. Video conferencing & online chat tools allow workers to stay connected to each other, not just for projects. Also to deliberate on a number of company-wide topics and events. Some tools that offer such services include go to Meeting, Zoom Meetings, SKYPE and Cisco Webex.

- **File sharing and synchronization:** Sharing files online will become a necessity, and luckily this has never been easier or more affordable. Cloud-based tools like Google's G Suite, Box, Dropbox, OneDrive, NextCloud, Wimi, and Samepage, offer your teams peace of mind with access controls, audit trails, messaging, and collaboration. Added bonus features of such software can include security encryption, search filters, and workflow management. Your teams can share files and documents from anywhere around the globe in seconds.

- **Project status tracking and status reporting:** There are many cloud-based tools that give remote teams around the globe the ability to communicate, track, collaborate, report project status, share files, video chat, and more. Many project portfolio management (PPM) solutions like Change point, and project management tools including Trello, and Wrike, also offer apps to facilitate on-the-go activities to help remote teams get their projects completed on time from anywhere and from any device.

Additionally, it's important to note that working from home can actually put businesses at risk. As while some businesses have a good enough cyber and network security system in place, many are not aware of the risks involved in connecting remotely. Because of this it is important that businesses and firms conduct virtual training for team members to educate them on what to do in the event of a cyber-attack and what potential risks they should watch out for, such as suspicious emails, malware, phishing sites etc.

4. Emotional intelligence (EQ)

The impact & need of emotional intelligence especially in these times plays a vital role in project management. As managing projects is not just about defining the work, making deadlines, deciding the budget. Project managers must be able to manage their employees well and in a calm and understanding manner, as failing to understand team members' emotions could lead to a lot of negative emotional stress in a team, especially during such stressful times. This is because employees are highly likely to experience feelings of loneliness, isolation and disconnection while working remotely which beyond just from a human point of view, impacts productively significantly if it continues.

5. IoT (Internet of Things)

IoT is derived as the internet of things. It is nothing, but all the technologies are connected through the internet. It plays a very important and significant role in project management. It helps in monitoring and controlling the task assigned to an individual or team member. For instance, as a project manager, to run the status report on different desktops, it just needs a single click from your mobile. It helps in monitoring the resources with the help of sensors. The sensors get activated with the mouse click to find out whether the task assigned for any team member is in progress or not. Other case examples include:

- IoT helps in real-time productivity. For example, businesses can also use IoT connected factory solutions such as Azure IoT for management of industrial IoT devices. The connected cloud software can be populated with different resources that allow control of a range of devices without the need of workers being present.

- IoT technologies can also help in precise farming, which can result in optimized production. These applications can be used to help determine the best time to harvest plants, create fertilizer profiles based on the chemistry of soil, and sense soil nutrients and moisture levels. Some examples of such tools include Smart Elements, AllMETOE, and Pynco. These devices can analyze weather as well as other environmental data.

- IoT also has numerous applications in the healthcare industry. For instance, IoT medical devices can help in real-time monitoring of patients remotely. The devices can report an emergency like an asthma attack, heart failure, etc., immediately to a physician even when miles apart. This can help in potentially saving the lives of many individuals especially in such times where health is in major jeopardy.

In summary, paying attention to such trends and solutions is what's going to help project managers lead with success especially in such difficult times. Why is key however, is that while digital solutions can greatly help business leaders implement remote work policies to protect employees amid the corona-virus crisis, they must still do their part in understanding the needs of their staff. Ultimately, keeping staff members happy and satisfied even while at home motivates them to perform well even during such trying times.