FUTURE OF PROJECT MANAGEMENT

SINGAPORE

ARCADIS

As we peer through the fog of unprecedented uncertainty that the built environment sector is facing amidst the initial wave of COVID-19 pandemic, it appears that we are once again reminded of a crisis that is bringing to sharper focus as to where the industry ought to be in our transformation journey.

In the wake of the Covid-19 pandemic, almost every sector has been impacted by digital transformation in attempts to mitigate the fallouts from business disruptions, from retail to logistics and even education. In our efforts to transform the built environment industry in recent years and to address inherent challenges, many in our industry have come to recognise the need to digitalise, and have embarked on this journey to a varying extent with the implementation of Building Information Modelling (BIM), mechanisation, drones, 3D printing, robotics, artificial intelligence and other digital solutions.

However, the impacts of the coronavirus outbreak had shone a spotlight on the projects we undertake, the businesses they serve, and more critically, the way we are delivering our projects.

Projects still ultimately exist to execute changes needed by businesses, for example, in the development of new real estate or to implement smart building initiatives to meet business objectives.

As businesses evolve in the latest wave of global and local disruptions, there is also a need for a paradigm shift in how we manage our projects in the markets they are instituted to serve. In other words, as businesses build up their resilience to adapt to the ever-evolving circumstances and disruptions faced, so must the projects.

BUILDING PROJECT RESILIENCE

Resilience is the ability to more than just adapt, but to also master challenges despite an adverse event, change or shock. It is the ability to acquire new capabilities and emerge stronger from a crisis. In an increasingly complex project environment within an even more volatile global economy, internal and external challenges have put project management tools, methodologies, and project teams to the test.

Even with robust project management plans and processes in place, projects are still susceptible to a myriad of risks and pressures. Such uncertainties can often be traced to a lack of timely information or data shared amongst stakeholders or the absence of a coordinated effort to tackle impending changing circumstances.

Projects are often run with information which is out of date or with schedules reported retrospectively, either due to complexities or inadequate transparency. Additionally, many project stakeholders still work in silos with minimal cross-sharing of accurate timely information and in a project environment, that does not facilitate collaboration.

It is thus imperative to consider how we can enhance the resilience competencies in project management. Here, we offer two key considerations in building up project resilience.

"While most other industries have undergone tremendous changes over the last few decades, and have reaped the benefits of process and product innovations, the Engineering & Construction sector has been hesitant about fully embracing the latest technological opportunities, and its labour productivity has stagnated accordingly.

This unimpressive track record can be attributed to various internal and external challenges: the persistent fragmentation of the industry, inadequate collaboration with suppliers and contractors, the difficulties in recruiting a talented workforce, and insufficient knowledge transfer from project to project, to name just a few"

- The World Economic Forum report in 2016 on Shaping the Future of Construction.

RESILIENCE WITH
DIGITAL EMBRACED

Although the uptake of technology has gained momentum over the recent years and some immediate benefits are already being reaped, the changes and integration of technology need to happen in a more collective and dynamic way than merely being disruptive and adopted in isolation.

Essentially, digitalisation in project delivery and construction, needs to be as far reaching and as deeply embedded throughout all project development processes in order to be truly transformative and to allow project management to respond to the project challenges in a more agile way.

We need to build a common data environment where we can have a handle on all available and meaningful data, the metrics and the insights that we can get. Technology has now enabled data from many sources and stages of the project to be collected, processed, and analysed to provide greater visibility and enhanced insights into the project.

Through data analytics and applied artificial intelligence, project management leaders will be able to support timely decision-making processes with data-driven insights and benefit from predictive and prescriptive analytics, modelling and optimisation.

Additionally, updated information from the supply chain, project activities and progress can now be managed from the same common data environment and visualised through a customised dashboard so that trends, early warning indicators and progress can be more closely and meaningfully monitored and analysed, allowing decisions to be made earlier to mitigate impacts.

Moreover, with technology, repetitive processes and administrative tasks can be automated to free up resources leading to more meaningful work for the individual and equally benefiting the project in terms of productivity and resource constraints. In doing so, project management can be more aligned with the business needs and more focused around the delivery of the strategy.

Therein lies the need for project management to make a step change in embracing the new possibilities brought about by technology and to play the strategic role of not only building resilience into the project team and project delivery, but also creating the collaborative environment that is conducive to drive project delivery performance.

COLLABORATION
THROUGH PEOPLE

A cornerstone of resilience is the people - the project stakeholders. Projects are after all executed by people for people. The resilience of a project is only as strong as the most vulnerable project stakeholder.

Looking back, our industry probably started with collaboration as a hallmark of itself with many different stakeholders along the construction value-chain working together to bring an imagination to reality. However, through time and amidst increasing complexities and commercial agreements, we have grown to be fragmented and adversarial in many projects.

Working collaboratively in a project can be brought about by clear leadership, a procurement and contract framework that embraces collaboration and new technologies, and a collaborative mindset that is built on trust and transparency.

- We must strive to culturally transform and address the deep-seated distrust within the industry that is permeated with information silos, unfair contract clauses and risk allocation.

- We ought to correct the blame and claim culture, and incentivise the supply chain to proactively help coordinate logistics and schedule.

- We must empower project stakeholders and set up projects at the outset for collaboration with all parties incentivised, in an integrated and interactive way, to provide real value and improve margins throughout the value chain.

This has to be a whole of project effort that could and should be catalysed by project management leadership. With the endorsement from the client or project sponsor, project management leadership would be in a strategic position to effect this change, and digitalisation holds a critical key to drive transparency and accountability needed to ensure effective communication and information sharing, while facilitating collaborative working. Moreover,

collaboration will also further promote innovation and accelerate automation as part of digitalisation, and in so doing, create new opportunities and place ourselves in a more agile position for the future.

Ultimately, what the pandemic has taught us is that we are more interconnected than we think we are and we can collectively be stronger together and certainly more resilient.

WHERE DO WE
SEE OURSELVES?

It is time to reimagine our future. It is time to reinvent ourselves by disrupting ourselves.

The future of project management lies in how well-positioned project management is in this sea of disruption and transformation, and how we build up project resilience.

Project management is well-placed to take the leadership role and be the systems integrator, to step in the gap to aggregate the adoption of technology,

harness the collective transformative potential of digitalisation and the positive human spirit, and to bring about the metamorphosis that is required to truly transform the industry.

Talk to us at Arcadis about how we can help you fulfil your business objectives through achieving resilient and sustainable outcomes for your projects.

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