

## The tech effects of Covid-19, and offices of the future

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Three IIM professors assess the first, second and third-order implications of the lockdown, which has forced companies to go digital. Many of these effects could be lasting, and change the way we live

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With the steady continuity in the global Covid-19 pandemic, we are advised to maintain social distancing, keeping safe, physical distance from other people, in order to reduce the risk of the coronavirus transmission. To ensure this, the primary measure taken by organisations is the work-from-home mandate.

\_RSS\_ All forms of office work has now shifted, almost all over the globe, to the digital space, wherever possible. Schools, colleges, universities and training institutes are all also shifting

instruction and examinations to the audio or video conferencing mode. Family members stranded in disparate locations are resorting to conversations over video.

As we shift to the digital embrace and adopt it in increasing measure, we are slowly segueing into habits that are likely to remain with us beyond the pandemic. It is well known in academic research that ways of life associated with technology take time to evolve, and often shift in unintended and unanticipated directions. This has to do with the technology itself, the functions and features in it and with how we change ourselves and our lives to adapt to these new ways.

The changes that technology has are often understood as first, second and third-order effects. First order effects are immediate and satisfy the need for which we adopted the technology; second order effects appear later, and have to do with changes within our work and everyday habits; and third order changes appear much later, where entire firms appear, or disappear, and industries and social practices change owing to our new preferences and habits. One can argue that first order changes are anticipated and desired, while second and third order changes may include unexpected and unintended positive or negative consequences.

We attempt, in this article, to understand some of the order changes that we can expect during and after the Covid-19 pandemic.

As the pandemic forces us to use audio and video teleconferencing, a direct first-order effect will be that organisations will enhance their capacities in terms of hardware, software and networks to manage this increased demand. The service providers, those who provide 3G, 4G and later 5G services, will also gear up and prepare to provide increased bandwidth. It is likely that in a few months, which will be the second order effect, organisations will increasingly adopt remote conferencing as a routine way of working, with all forms of meetings and discussions moving online, unless an exception exists.

The entire ecosystem of digital providers and support industries will then gear up to meet this demand. New forms of cloud-based services, apps and firms that manage such services, will emerge. A host of startups will offer meetings with better security, privacy controls, easier integration with organisational workflows, and easier access by different types of users in different countries.

The third order, more longer-term effects of this digital move, will be more interesting and possibly revolutionary. We speculate on a few, restricting our comments to urban workspaces:

- We expect that working people will get so used to the digital means of meeting and having discussions that the idea of going to office to work will become quaint. Those who will need to meet face-to-face will be a select few, possibly those who have to engage with physical things in the office space, or senior personnel who want to sit across from employees. Most others will interact only through technology.
- In traditional office spaces, work often includes discussions with teammates and lending a hand to colleagues during routine work. As the workforce shifts to the work-from-home culture, the concept of teammates will be reformed, with a distinct share of modular work, as received from the 'team leader'. The community team culture may fade away.
- We expect that in India, the need for IT professionals who can operate new cloud-based and internet-based infrastructures will grow, and skills needed for these will also grow. Indian IT services firms will then extend these skills all over the globe.
- Along with the convenience of work-from-home will arise, on the dark side, a permanently-at-work culture. The need of having to respond to a boss at all times, and all hours, will mean no demarcation between personal and professional life. The rise of IT in the workspace, in general, has already provided a basis for this phenomenon, and it is likely to grow immensely in future. Just as the eight-hour work day was demanded by workers of the Industrial revolution, it is likely that the worker-at-home of future will also demand laws restricting and normalising the work-life balance.
- The need for dashing off to different cities for meetings will also decline. As managers, executives and government officers become used to the digital space, the old grind of rushing to Delhi for a 45-minute meeting (and spending 12 hours on the journey from Bengaluru, as one of us has experienced), will disappear. This will entail a decline in demand for commercial travel.
- The need for office spaces, office buildings, and office equipment will also decline. Much will shift to the personal space—inside homes or in common, shared neighbourhood offices. This will also lead to reduced commuting and need for transportation facilities, leading to fewer traffic jams in urban areas. For a city like Bengaluru, which recently emerged as the worst city for losing time in traffic, this may come as a breather. Over the very long term, reduction in fossil-fuel based travel and urban congestion will have a positive impact on the air quality, energy consumption and overall environment of cities.
- As we begin to basically work from home, there will be a resurgence in the presence of women in the white-collar workforce. Where once women used to withdraw from professional offices to balance home and work lives, the new order will see an increase in their continued presence. We think this will be a positive game-changer for society.

- We do see this also as an advantage for firms that were historically well-equipped with work-from-home digital infrastructure. For those that did not have this infrastructure in place, such as small and medium size firms, the expenses for digitising their workforces may be expensive and hence a disadvantage.
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The post-pandemic future could therefore hold both positive and negative consequences. For many of us, this will mean changes that we will have to accept and adjust to.

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