



New Horizons: A New Virtual Landscape



by Foresight Research Team

Highlight

Working and learning from home was adopted without preparation, highlighting some initial areas of improvement. We explore some of the challenges and look into what kind of business opportunities which have emerged.

- Covid-19 is fast-tracking the establishment, use, and adaptation of work from home technologies and while highlighting the current gaps in the work from home infrastructure.
- Many businesses are turning to 3rd-party video conferencing services for communication. Cisco, one such service hosted over 5.5 billion meeting minutes and peaked at 3.2 million meetings in one day.





- A wider path has been cleared for businesses focusing on VR, AR, and XR technologies to expand to and/or further develop their business meeting platforms.
- Supplemental education is arriving through videos and apps, and even on TV, as is the case in China.
- EdTech and Learning Management Systems (LMS) companies are enjoying a similar surge in user base. Mass implementation of current technologies is allowing for companies such as Moodle and Google to quickly identify areas of improvement

Thanks to Covid-19's highly infectious nature, businesses worldwide are compelling their employees to, if possible, work from home. In some industries, such as marketing or IT support, working from home is already a common practice, whereas in others, such as consulting or manufacturing, current technological limitations restrict or prohibit efficiency and output when away from the workplace. Prepared or not, the Covid-19 crisis is fast-tracking the establishment, use, and adaptation of work from home technologies, giving a peek into the near-future and highlighting the current gaps in the work from home infrastructure.

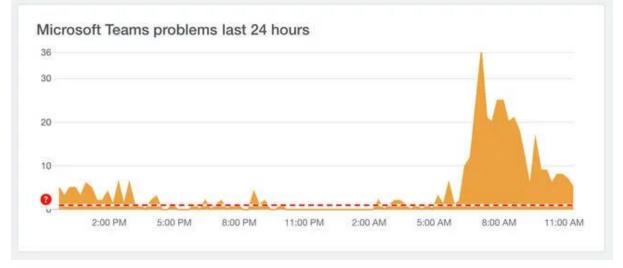
Following a similar trend is the education industry, where mass school closures are prompting students and educators to shift to learning online. What was once typically reserved for higher education learning, live video and online interaction with students is now utilized across all levels of education. On a public level, 120 million Chinese are receiving access to learning materials through live television broadcasts. It is here we see that in the face of crisis, basic daily routines like business and education are utilizing technology to minimize disruption.

Potential for a Virtual Workspace

As businesses attempt to maintain some degree of workflow despite offices being closed, many are turning to 3rd-party video conferencing services for communication. Cisco, one such service, released that from March 1st-11th, they hosted over 5.5 billion meeting minutes and peaked at 3.2 million meetings of three or more people hosted in one day.



Cisco is not alone. <u>Google and Microsoft</u>, two major tech companies hosting web-based meetings as a supplementary business activity, and Zoom, a platform only for web conferencing, all saw huge spikes in their user base and have had a record number of meetings held since the Covid-19 outbreak. Microsoft has seen an 37% increase in meetings held, while Zoom tops the download charts in the US and India for recent downloads



Source: https://www.theregister.co.uk/2020/03/12/remote_work_struggles/

Covid-19 is accelerating the adoption of work from home policies and technologies, which was a major hurdle for companies in this space. Zoom addressed feedback from users and took an opportunity to improve upon their software to better fit their clients' needs. They eliminated the time limit on their meetings and even offered their system for free to primary education schools. By getting their product in the hands of a large set of users trying virtual meeting software for the first time, Zoom is setting an example of how companies can adapt and react quickly and grow their business. Their software and the mass adoption of it is proof in concept for a more location-independent work culture.

In addition, a more broad adoption of work from home technologies and business practices could allow for many who lost their jobs as a result of this crisis to rejoin the workforce immediately. In China, around 5 million people have lost their jobs, and in the US, a record 3.5 million Americans, roughly 10% of the population, have applied for unemployment benefits. The US estimates up to 20% of people will lose their jobs.



It is here that a wider path has been cleared for businesses focusing on VR, AR, and XR technologies to expand to and/or further develop their business meeting platforms. To prevent any major setbacks from happening, should a disruptive event of this magnitude happen again, companies will be looking to have advanced technology at the ready, or even have their own proprietary, secure software, thus increasing the demand for such software. Companies focused on VR, such as Meetingroom.io and Rumii, already have VR meeting services available, should users also have the requisite hardware.

Education

UNESCO estimates around 82.5% of students worldwide – 1.4 million across 156 countries – are out of school due to closures. In many cases, schools are mandating that both students and educators log into online classrooms for some form of education, such as in China, Italy, France, and Germany. Depending on the school, age, and region, there are varying policies about what is expected from students and teachers. Many schools are not teaching new content, teaching only enrichment material, whereas others have stopped education completely. Many, though, are attempting to avoid any setbacks by offering a full academic schedule through video lectures and activities. Yet, with only 60% of the world population having access to the internet, this isn't a catchall solution.

What seems to be clear, based on feedback from educators and students, is that current education technology is most effective for higher education learning, where content is taught through lectures or assignments. Grade school education, where classroom time is more interactive and education is more holistic than academic, is challenging to replicate via video call and online work. In addition, for elementary and intermediate school students, parents need to be present while their young child uses a computer, which causes additional limitations.

EdTech and Learning Management Systems (LMS) companies are enjoying a similar surge in user base and are receiving much more feedback about their service. Mass implementation of current technologies is allowing for companies such as Moodle and Google to quickly identify areas of improvement in order to be more practical and efficient.





It is expected that VR, AR, and XR technologies will be implemented into LMS software and will better serve the education industry, particularly for younger age learners.

What to Look Out For?

- How will a more developed and competitive virtual workspace offerings, focusing on AR and VR technologies simulate a location-independent work culture?
- How will parents juggle a work from home environment with tending to their family's needs?
- Will developers and designers rethink the home environment? How will they incorporate work from home infrastructure to new projects
- In what ways will companies ensure their staff are trained in work from home software and advanced internet security systems in the home in order to protect confidential information?
- Will secondary and higher education pivot towards using online/virtual learning with VR and XR technologies?
- Given the digital divide, how can we close the education inequality gaps?

Reference

https://en.unesco.org/themes/education-emergencies/coronavirus-school-closures https://content.govdelivery.com/attachments/VADOE/2020/03/23/file_attachments/1408958/%23077 20%20Guidance%20on%20Graduation%20Requirements.%20Awarding%20of%20Credits.%20and%20Co ntinuity%20of%20Learning.pdf https://meetingroom.io/virtual-meeting-rooms-for-small-and-medium-businesses-smb/ https://www.fool.com/investing/2020/03/17/more-than-5-billion-minutes-spent-in-virtual-meeti.aspx https://www.zdnet.com/article/covid-19-with-everyone-working-from-home-vpn-security-has-now-becomeparamount/ https://blogs.worldbank.org/education/managing-impact-covid-19-education-systems-around-world-howcountries-are-preparing https://www.weforum.org/agenda/2020/03/3-ways-coronavirus-is-reshaping-education-and-whatchanges-might-be-here-to-stay/ https://www.bbc.com/worklife/article/20200309-coronavirus-covid-19-advice-chinas-work-at-homeexperiment https://www.cnbc.com/2020/03/16/china-economy-millions-lose-their-jobs-asunemployment-spikes.html





https://www.weforum.org/agenda/2020/03/3-ways-coronavirus-is-reshaping-education-and-what-

changes-might-be-here-to-stay/

https://www.theguardian.com/business/2020/mar/26/us-unemployment-rate-coronavirus-business https://www.theregister.co.uk/2020/03/12/remote_work_struggles/

About FutureTales Lab by MQDC

FutureTales Lab by MQDC is the first research center in ASEAN specializing in future studies. We study, analyze, and compile information essential to identify solutions for the future well-being of humankind.

FutureTales Lab by MQDC has 8 core competencies: future of living, technology & robotics, future of healthcare, future of learning, climate crisis, biodiversity, global energy, and space exploration.

Researchers at FutureTales Lab by MQDC concentrate on data analysis, exploration, and future prediction, and creating platforms for local and international futurists from the government, private, and educational sectors as well as communities to cooperate and grow together.

Located at True Digital Park in Bangkok, FutureTales Lab acts as a center for the distribution of knowledge and fresh thinking in various areas such as design, policymaking, research, and infrastructure.

FutureTales Lab provides researchers, business partners, and the general public with open access to information and research works related to future studies.

For more information, visit <u>www.futuretaleslab.com.</u> Facebook: FutureTales Lab by MQDC Contact us: <u>contact@futuretaleslab.com</u>