



21st Century Leadership Webinar Interview Series

Technology Lens Panel Summary



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The University of Lincoln's - Lincoln International Business School (LIBS) continues to lead an impact agenda orientated towards actively contributing to a global world. Championed by the Pro-Vice Chancellor and Director Prof. Craig Marsh, the 'Resilient Lincolnshire – Global' initiative framed a series of 4 lenses 'for seeing more and seeing differently'. This initiative provided a solid foundation for cementing the work of the Centre of Organisational Resilience, Chaired by Prof. Dean Fathers. With the leadership and support of the Business Development team, Mrs Ruchi Aggarwal, Head of Business Development at LIBS, this next phase of work with 4 panel sessions was launched in November 2020. These panel sessions were designed to foster a global dialogue between industry practitioners, policy makers and academics, exploring tactical ways for navigating the Volatile, Uncertain, Complex and Ambiguous (VUCA) times we are all experiencing.

The last of four panel events was held on the 26th November 2020 attending to leadership through the Technology Lens. The panel members explored technical, business, and ethical implications of exponential technologies, such as AI, Cloud, and power of big data, at a time when digital disruption constantly creates new industry transferrable skills to ensure the unprecedented potential that enables organizations to advancing collaboratively in a VUCA world.

The panel was chaired by Dr Chris Headleand, Associate Professor in Computer Science, University of Lincoln (UK) and the panel members were:

- Dr Derek Foster, Associate Professor in Computer Science, University of Lincoln (UK)
- Professor Charmine Hartel, Distinguished Professor and Advisor to the Head for Department of Management, Monash University (Australia)
- Mr Muthu Kumar, Vice-President of Engineering, Juniper Networks (India)
- Mr Roman Lobus, Agile Coach, Consultant and Trainer (Singapore), and
- Ms Genevieve Mannel, Head of IT and Business Intelligence, CIPLA (South Africa).

The Technology Lens panel provided the opportunity to explore individual and organisational leadership in relation to developing an agile and digital savvy mindset and pivoting the business through a transformative digital vision. This focus was guided the discussion in this panel in addressing the following five themes and related questions:

1. The transition toward technology-supported working and learning environment;
2. How technology is enabling people to work together;
3. The biggest impact that technology has had on the panel speakers' fields;
4. The use of technology in educating leadership;
5. How technology affects human interaction and wellbeing.

1. Transitioning to technology-supported working and learning environment

Dr Foster admitted that his students and fellow academics in the School of Computer Science, at University of Lincoln have had an easier process of transitioning than other departments, being more 'fluent' in the use of Teams, Blackboard Collaborate which the

students really enjoyed. One challenge they found at the School of Computer Science was to mimic the tangible aspects (use of keyboards, etc.) with the digital service platforms to perform peer coding together, but this was resolved through good cooperation between students and academics and a willingness on both sides to be innovative.

Mr Roman Lobus, commenting on corporate agility in moving work online, found three aspects challenging and a source of lower productivity during the first months of the Covid-19 pandemic:

1. to create a new default way to uniting workers in the digital space, from individual separate office spaces and from sporadic use of communicative tools like Jaber, Skype, etc.;
2. to using some more collaborative digital tools such as video and visual collaboration software, e.g. Miro boards;
3. the commute time as a divider between rest and work – a time which is used nowadays for additional work compared with the previous schedule, is an invisible change which can lead to burnout, defined in agility as a ‘non-sustainable pace of development’.

From the perspective, recognising the impact of technology on people management, Prof. Charmine Hartel outlined an emerging recognition that the new modes of working now enable employees who would otherwise be introverts and would have considered traditional work situations very stressful, now better placed to perform by working remotely and online. The reverse was also accounted for where extroverts thrive on social contact and hence, the absence of any physical interaction has been a catalyst for rebuilding social connections. A positive outcome of the Covid-19 pandemic is that organisations have become more conscious of the need to addressing the wellbeing of their employees and putting real attention on managing issues, from burnout to ensuring social support and connection.

2. How is technology enabling people to work together?

Mr Muthu Kumar provided a comprehensive account of a range of technological developments that have enabled social connectivity given that the traditional personal interaction at work has now shifted due to social distancing measures to almost exclusively technology platforms. Particularly inspiring is the approach of Juniper Networks (India) who have invested considerably in a scalable VPN infrastructure and cloud-based collaboration software, associated cyber and endpoint security software even before the Covid-19 pandemic, in order to access talent nationwide and globally. However, this investment they also utilise currently as a means of ensuring that employees have good social network connectivity. Juniper Networks promote social network connectivity by also promoting having video turned on and using virtual whiteboards in meetings. They also note that this efficient infrastructure, enables them to run their data centres and info labs 24/7 and they enjoy a considerable increase in productivity, given that people in Bangalore can save at least 2-4 hours’ commute time.

Ms Genevieve Mannel shared a similar experience at CIPLA in South Africa, where leadership is focusing on team and group collaboration through Microsoft Teams, in view of

the fact that future office spaces will become a collaboration space, where people will come together with a design thinking approach, as opposed to the traditional presence-based capability used in their real estate so far.

3. The biggest impact that technology has had on the panel speakers' fields?

Ms Mannel, a practitioner in the pharmaceutical sector accounted for the impact of technology as one of enabling a blend of human and technological capabilities in designing future work: In a highly regulated industry, like pharmaceuticals, with intense documentation-based work, technology impacts work by:

1. Augmenting the human capability rather than replacing it. For example, machine learning text analytics capability permits high quantity data inputs to be processed a lot shorter, facilitating more efficient decision-making processes.
2. Expediting product handling and getting on to the market faster, helps patients (e.g. cancer/HIV patients) and fosters an organisational culture of human care and caring for life.,
3. In the supply chain level, robotics capability is greatly utilised to perform repetitive tasks releasing humans to focus on the softer side, the engagement and people skills.
4. Blockchain is used to liven up patient communities where they are sharing experiences and providing support during treatments.

Dr Foster observed an increased interest in training Computer Science students in the big skills of cognitive services, like machine learning, text analytics, phrase extraction and sentiment analysis, where conversational AI with text analytics, machine learning and cloud-support spots are the big areas of application. While these technologies have already been available, recently it is the incredible global scaling capabilities that are available online through endpoints.

At University of Lincoln, students learn how to build, train and deploy those models as well as understanding of the cloud infrastructure, so as to virtualise the resources from an on-premises data centre, the abstraction of coding in serverless computing. This is enabling students to work with different abstracted layers of computer science, where the desktop computer tower, 'the beige box under the desk' becomes obsolete. This tendency toward software as service (SAS) has pros and cons, but is vital for small businesses seeking to migrate the current hosted services onto the cloud.

To account for the impact of technology, Prof Charmine Hartel drew attention to the following issues:

- the sustainability of the higher workloads that threaten the work-life balance, already a problem in traditional work culture. Pushing humans to their limit has led to increasing research and the issue is surfacing more during the Covid-19 pandemic, when wellbeing maintenance is a hot topic in an attempt to help people to both work sustainably and have healthy lives outside the workplace;
- at the Monash OB Tech Lab (Monash University, Australia), they are conducting an initiative exploring the intersection of organisational behaviour and digital technologies. By integrating these more in the way that we work could help in monitoring a lot of

aspects of individual health and wellbeing by encouraging users to take potentially breaks that are also programmed;

- a mass migration from the cities to the regional areas in Australia has been noted signalling that people are unlikely to return to their pre-Covid workplaces. This raises the need to redress flourishing and opportunity for all.

Mr Roman Lobus, brought another perspective recognising the impact of the pandemic as a global event as a catalyst for the digital transformation and agility in organisations we are witnessing. In Singapore, some traditional professions are becoming extinct and are being replaced by digital alternatives, due to lockdown restrictions and social distancing. Additionally, he added that counter measures to avoid mental fatigue and burnout in the workplace will be emerging. Some measures which can be implemented digitally better than in traditional workplaces are the introduction of 'no-meetings' days and the restriction of work to strictly business hours. The education of leadership to cope with and manage the expectation to do and deliver more is deemed necessary, so as to reduce the pressure leading to anxiety and other problems amongst employees.

The unsustainable new levels of efficiency we are witnessing (irrespective of whether or when commuting reoccurs), prompted Dr Headland to voice his hope that we will carry on some of the efficiencies and smart work habits, advocating for better not more work.

Mr Muthu Kumar articulated a vision for the new normal in organisations being a hybrid model, instead of going back to pre-Covid times recognising that:

- some people will still be needed to be present at the local infrastructure;
- online work can be organised in dynamic flexible workspaces without assigned seats, on an enter-work-leave basis; and
- other people will continue to work from home during the pandemic crisis.

Ms Genevieve Mannel also noted that the 'digital citizenship' will start growing and the connecting time is going to be about ideas and collaboration rather than the traditional kind of meetings. The expectation in the new normal is that once online work is integrated well into one's working from home, we are going to have a much better workforce in the future. We need to ensure the flattening of the hierarchies, so that the work focus will be placed on the actual efficient skills brought to the table by the participants, rather than just having meetings for the sake of it. In relation to office-based work vs remote work, Ms Genevieve Mannel gave the example of the virtual offices called 'work spaces' available throughout Cape Town, where people can 'plug in and play' throughout the city. At CIPLA, while they still need people to work in their manufacturing areas until those become automated, the vision is that people will become 'digital nomads' in the future.

On the requirement for UX and UI for B2C and internal company systems, Mr Lobus confirmed this is correct, giving an example of a big retailer where they tried to enrich and improve customer experience by experimenting with phone apps, while being restricted to arrange focus groups in person, due to Covid restrictions.

Another impact discussed was about academics who have embraced technology and actually enjoyed it, whereas previously they resisted technology, even the change from chalkboard to whiteboard.

4. The use of technology in educating leadership

Focusing the discussion toward leadership, Prof Hartel shared emerging findings from a survey on leadership during the Covid-19 pandemic:

- the need to re-define leadership not as the point of command, monitor and control of the workforce, but rather as a collaborative, supportive and culture enabler team player;
- the need to increase leadership training so as to reduce technology-related fears but also to enable leaders to work and use tools in a very different way - e.g. in the digital environment leaders need to be more consciously aware and actively attending to the social needs of their staff, by planning and creating relevant opportunities;

The panel chair, Mr Headleand pointed to a misperception of burnout as a bottom-up problem, whereas a lot of leaders are equally suffering from stress and burnout, for having to take decisions without the necessary information, making it the role of the team to push the relevant information toward the decision makers, to facilitate better decisions for all.

Dr Foster advocated the creation of a hybrid approach in educating leadership through technology as part of the wider changes in the traditional university culture in the post-Covid society:

- a blend of online meetings with others to be held in person;
- teaching on remote servers and on the cloud, with browser-accessible curricula;
- computing labs can be kept open by appointment;
- reserving big live lectures as a teaching style to which we may return to in the future.

The chair, Dr Headleand observed that an important choice now, is how content can be accessed and consumed from various sources and in various forms, including the new medium of the chat function in Teams, which encourages considerably more engagement than the teacher-student dialogue in the classroom.

On the scope of shared leadership and agility not only to help collaborative work, relating and innovating, but also to define the 5th Industrial Revolution to advance humanity, Mr Roman Lobus offered the framework of the *agile mindset as human-centric*. What humans offer to an organisation is not only the redesign of the software development process, but actually humanizing the workplace, into a better place to work not just to maintain its function as a mere production line, since the taylorist mindset has already been debunked many times over. We don't just change the workplace, but also how people interact and collaborate and this is used as an HR brand advantage in many companies (e.g. 'work with us, not for us'). Thus, instead of leading from top down automatically, we should apply the concept of '*servant leadership*' and rely on *self-organisation*; we should be driven by a goal to create a thriving environment where people are naturally creative, resourceful and whole, therefore treat employees at any rank as equal.

5. How does technology affect human interaction and wellbeing?

The panel shared their experience with employee communications in large companies and the impact of digital literacy support during the Covid crisis:

- Dr Headleand brought up the academic perspective, where the communication channels are kept as widely open as possible by making available personal tutors and module coordinators as accessible nodes of communication rather than taking a top-down approach, in parallel to the readily available reference materials;
- Mr Muthu Kumar gave a few examples from Juniper Networks (India):
 - they have augmented the traditional internal email communications with proprietary cloud-based video streaming service for rich content delivered through screens in public places within the organisation. Managed from a centralised location, the system is capable to telecast this in 100 offices around the globe;
 - they also use internal collaboration software for bottom- up feedback and opinions, as well as quarterly feedback surveys;
 - with the internet being so versatile (offering ecommerce, social media, work spaces, entertainment), this makes relevant their mission at Juniper Networks for the last 2 decades to connect the planet and empower the people.
- Ms Genevieve Mannel added about CIPLA:
 - having built the back end of such vast systems and infrastructure, there is great scope now for designers to participate in building the UX at the front end, to make it intuitive, just like any other internal applications used by employees;
 - Addressing the fact that there is also technology fatigue and uncertainty, the need to stay connected with the employees was resolved at CIPLA by integrating transparency in communications and by supplementing technology-based communication with in-person conversations and team get-together sessions, for more optional human interaction.

The panel discussion ended with a potpourri of innovative ways to balance between technology and human interaction for the wellbeing of staff and leadership:

- the 'Borrel' tradition in the Netherlands, whereby the company sends cakes in a box to their employees and they have a coffee, cake and chat reunion online;
- at CIPLA, they have introduced fun collaborative breaks (e.g. at lunch time), such as cooking classes with a chef on board, live Zumba fitness classes, in their attempt to encourage a more balanced work-fun-family schedule, with a scheduled award evening reunion in similar style after the present panel discussion;
- in Singapore, they have virtual reunions for either of the three meals per day and also drinks parties;
- at Monash University they use informal social virtual open-door meetings every Friday, which helps toward a more authentic connection;
- at Juniper Networks, coffee/cake sessions, also yoga and cooking sessions are very well received;
- at University of Lincoln, similar sessions for drinks and live music on Mr Headleand's guitars are the usual, with additional video gaming sessions with students.

Key Lessons

The panel sessions were designed to show how the co-creation of actionable knowledge by connecting the voices and perspectives of multiple stakeholders can provide practical support. From this discussion, we distil the following key lessons:

1. The new default way to uniting workers in the digital space will not depend only on vast systems and infrastructure, but also on a change of mindset whereby the traditional presence-based work mode will be replaced by a design thinking approach in global partnerships, e.g. for project-based co-creation type of work.
2. The impact of technology is ubiquitous. Everybody is affected by technological developments both at work, socially, in health and well-being. This calls for investing in leadership development where new capabilities extend beyond technical literacy in the use of technology but new ways of using technology to remain socially connected.
3. While new technologies already support a pervasive mode of working and learning, which promises the potential to enable a design thinking approach for co-creation, through cloud-based collaboration software and cloud infrastructure, they can also be used for informal social sessions for a more balanced work-fun-family schedule.

We are delighted that at LIBS this learning agenda is now informing the launch of a series of Masterclasses to support Digital Leadership development. We invite you to explore this new program of work and join us and be part of delivering the impact of Digital Leadership through strong partnerships, renewed purpose, capitalising on the promise to continuously develop and adapt, while investing in a thriving environment where people are naturally creative, resourceful and whole.

