

**A transdisciplinary approach to building e-resilience: managing technology**

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The benefits and drawbacks of technology use for the well-being of workers have become a key issue for society. Insight is required into the characteristics of individuals and organisations that are protective and those that can threaten well-being and job performance. The Switched on Culture Research Group (SOCRG) have recently introduced the term ‘e-resilience’, referring to the behaviours and environmental factors that help individuals engage with Information Communication Technology (ICT) in a healthy and sustainable way. This conference, which was sponsored by the Balance Network EPSRC, was to build on the work of the SOCRG and explore the emerging concept of e-resilience from a cross-disciplinary perspective. The conference was held on 21<sup>st</sup> April, 2016 at Birkbeck, University of London and was well attended by practitioners, academics and students, as well as members of the public. Contributions were provided by high-profile researchers, practitioners and industry experts from a range of disciplines, as well as members of the SOCRG. Some lively and engaging discussions emerged from these talks and the notion of ‘e-resilience’ was subject to extensive debate.

Topics covered during the day included: the future of work and the impact of the digital economy; technology usage that facilitates/hinders e-resilience; what organisations are doing to manage technology use (and what they need to be doing); the impact of personality factors and other individual differences; and the role played by demographics and person-environment fit. The ways in which ‘e-resilience’ could be defined and the characteristics and abilities of resilient individuals and organisations were also considered in some depth. It was clear that both individuals and organisations need to be flexible and equipped to respond to the challenges of constant technological change, and that carefully planned interventions at multiple levels are required to help us adapt our working practices to manage technology in a healthy and sustainable way. During the conference, we discussed different policies adopted by governments and organisations across Europe on handling technology use, and email use in particular. Although ‘one size fits all’ interventions, such as shutting down servers during evenings, weekends and holidays, can be attractive to organisations seeking a quick fix, the risks of failing to acknowledge individual differences and the work context were highlighted.

A short summary of each presentation is provided below and all presentations are available online via the SOCRG Blog: <https://alwaysonculture.wordpress.com/>

**David D'Souza (Head of London CIPD)**, the first keynote speaker, delivered a visual and highly engaging presentation on the future of work. He discussed how technology might shape work in the future and argued that organisations need to keep pace with technological change and manage it effectively, but be aware of the potential risks to health. David also referred to the 'Jurassic Park problem', arguing that technology can do amazing things but humans are still required to set the guiding moral principles. We should also consider the need for autonomy, personal choice and a well-rounded life when deciding how best to manage technology in order to support our well-being. He further argued that we may be developing 'digital amnesia'; for instance we may no longer remember the sheer number of contacts and information we are gathering. David described this digital community as 'uberconnectiveness', whereby technology provides us with an unprecedented opportunity to connect and learn from people, thus enhancing our range of knowledge and experiences. In conclusion, he highlighted the potential dangers inherent in becoming so agile and fluid that we lose our own identities. His parting words were, *'do not get locked into a mind-set...the future of work is deciding what you want'*.

**Jean-Francois Stich (Jeff), (University of Lancaster)**, provided a stimulating talk on virtual interactions at work, well-being and performance. Drawing on the findings of his research, Jeff emphasised the importance of individual differences in how we respond to email. He asked the question *'how many emails are too many?'* indicating that the extent to which engaging in *email* is considered stressful depends not only on the extent to which our own email communication preferences and behaviours are met by our working environment, but whether they are congruent with the preferences of our co-workers. For example, some people prefer not to use technology to work outside of 'traditional' hours and experience work-life conflict when this is required, whereas others actively seek out remote access and are more resistant to the negative effects of working outside standard hours. Personal preferences can, therefore, moderate and mitigate the negative effects of virtual interactions. In addition, we may not always be able to control the volume and pace of emails when using technology for work in order to accommodate our preferences. A key message from Jeff's research is that the majority of people appear to be unaware of the email management preferences of their colleagues and are, therefore, unable to appreciate how their own behaviours impacts on others. This research has clear implications on improving the quality

of working relationships as well as improving well-being. It seems important to raise awareness among email senders that colleagues may not share their preferences for volume and timing of email and they may be increasing their stress and work-life conflict. Jeff concluded that there was a potential need for empathy coaching and similar interventions to facilitate this process.

**The next talk was given by Richard Mackinnon (Future Work Centre)** who approached e-resilience and technology use from a systems perspective. Richard has recently conducted research on ICT usage and emphasised the need to examine technology use within its evolving context and for organisations to take into account multiple perspectives of what is considered 'healthy' and 'unhealthy' use. As up to 62% of our working time is spent on email, and this is likely to increase, it is vital to gain more insight into healthy and efficient use. Richard outlined strategies that can be used to prevent overload, such as turning off notifications to avoid interruptions from other tasks, or switching email off entirely during busy periods or times dedicated to recovery. Similar to Jeff, Richard highlighted the importance of individual differences, such as personality, skills, behaviour and confidence, in underpinning healthy technology use. Richard also warned about the invasive nature of new technologies and how these may further encroach on our privacy, e.g., tracking devices on fitness monitors and performance tracking.

**Alison Maitland**, the second keynote speaker, considered the culture of organisations, leadership and trust and highlighted the importance of setting out general principles to help individuals to thrive in the digital world. She emphasised the need for agile/smart working arguing that, for many, work has become an activity rather than a place. Alison recommended some key skills for managers in order to promote agile working and healthy engagement with technology among their staff. These included being open to change, learning to trust, being a coach and supporter, as well as inspiring and motivating members of staff rather than seeking to control them. Alison advised that 'e-resilience' is relevant for everyone maintaining that individuals need to be accountable and seek feedback from others, as well as gaining awareness of the preferences of others and taking responsibility for their well-being. For example, fostering resilience in virtual teams means having cultural sensitivity regarding different time zones and rotating meeting times to be fair to all. Alison concluded her talk by highlighting the need for a '*virtual coffee machine*' with no fixed agenda to allow people to become connected on a more informal level in order to promote 'e-resilience', as this type of interaction may have been lost.

Finally, **Emma Russell (Kingston University)** discussed her most recent research into personality differences and their impact on the way we deal with email. She indicated that 70% of us reply to an email straight away, commenting that there is an addictive element to email; like opening an unknown parcel it triggers excitement as *'we just want to know what is in it!'*. Moreover, 64% will continue to check their email, even if they have an important deadline, and continue to keep alerts switched on. Highlighting the importance of individual differences, Emma concluded that, although some people can manage email effectively, this is not the case for all personality types. Traits such as conscientiousness and neuroticism may be potential risk factors for healthy engagement with technology and the ability to switch off from work effectively.

A further session contributed by members of the SOCRG group drew on our research by emphasising the potential for ICT engagement to intensify work and blur work-life boundaries as well as enhance flexibility. The pros and cons of existing strategies for managing technology and the implications of external (e.g. organisationally driven) and internal (e.g. job passion and involvement) factors in engaging with technology outside normal working hours were also discussed. The presentation drew on a survey recently conducted by the group with approximately 400 respondents across industries and organisations. The findings revealed that over half of organisations (57%) do not provide any guidance or training on how to switch off technology, but a similar proportion see managing ICT use as a shared responsibility between individuals and organisations. The findings indicated that improved communications and productivity were considered the key benefits of technology use, whereas reduced well-being and poor quality relationships at work were the most negative aspects. Tips and strategies were provided for individuals, supervisors and organisations that centred on better self-management, being mindful of others, and appropriate training and development.

The conference concluded that technology can both support and diminish well-being and that the outcomes depend on how individuals and organisations are able to embrace change. There were several recurring themes emerging from the day:

- Everyone has a responsibility to manage their 'e-resilience' to ensure sustainable health and optimum job performance;
- The need to be cautious about simplistic 'one size fits all' solutions;

- Organisations should utilise a systemic, rather than an individually-focused approach to ICT use in order to identify its risks and benefits;
- Managers and organisations need to provide support and evidence-informed guidance on healthy ICT engagement for e-workers;
- The person-environment fit should be considered, i.e., how individual differences and preferences can impact on effective e-working.

The conference provided an opportunity for researchers and practitioners to review current knowledge and practice and to stimulate new ideas in an area that is exceptionally fast-moving. Overall, the concept of 'e-resilience' seems to encompass the ability for individuals to be sufficiently self-aware, to self-manage their technology use and to be aware of the preferences of others. Nonetheless, there is a general expectation for organisations to take some responsibility for helping employees manage technology in a healthy and sustainable way. It was agreed that much more research from a range of disciplines is needed to identify the individual and organisational approaches that are most effective in developing e-resilience.

If you would like more information about this conference or the work of the SOCRG please contact: [Christine.grant@coventry.ac.uk](mailto:Christine.grant@coventry.ac.uk), [gail.kinman@beds.ac.uk](mailto:gail.kinman@beds.ac.uk) or [a.mcdowall@bbk.ac.uk](mailto:a.mcdowall@bbk.ac.uk)