The new Nowhere Land? A research and practice agenda for the "Always on Culture"

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The new Nowhere Land? A research and practice agenda for the “Always on Culture”

Purpose: Rapid developments in the field of information communication technology (ICT) mean that e-working has become increasingly common and prolonged – the “always-on-culture” potential to enhance work-life balance via increased flexibility in terms of time and location, as well as posing the risk of being ‘always on’ has been identified with potentially serious implications for the health and performance of employees. We identify a research agenda and review current organizational practice.

Approach: We discuss current technological developments as well as prevalent research frameworks and terminology in the domain of work-life balance and beyond to evaluate their fitness for purpose. We also report findings from a survey of 374 employees working within UK businesses about current organisational practice.

Findings: Over half of the organisations sampled do not have clear guidance regarding work-life balance and supporting employees with regards to ICT enabled working. Key challenges are the sheer volume of email traffic, lack of training and infrastructure and an absence of appropriate support.

Practical implications: Organisations need to develop clear policies regarding the psychosocial aspects of technology use and provide evidence-based guidance to managers and employees.

Social implications: Managers and individuals require support to engage with technology in a healthy and sustainable way.

Research implications: The paper draws upon paradigms relevant to the work-home interface to question the assumptions made about flexible working in work-family conflict and work-family border theory. Research frameworks need to pay more attention to the socio-technological context and acknowledge the digital terrain.

Original/value: This is one of the first papers to survey organizational practice and support on the topic.

Key words: work-life balance, always-on-culture, information-and-communication-technology, organizational policy, remote working, e-working
Introduction
The observation that increasingly complex and rapidly-developing socio-technological systems are dramatically changing the nature of work is not new. Digital technologies facilitate agile working and enable flexibility, but can also make work omnipresent in people’s lives, blurring boundaries between work and non-work domains (Park, Frist and Jex, 2011). Phones, tablets and other gadgets have become so powerful and sophisticated that they can accomplish wide-ranging and complex tasks that historically would have required a desk-based computer and indeed a human personal assistant or a team of support workers. It is a common expectation that employees will use information and communication technology to undertake routine and more complex work tasks throughout the day and to engage in instant communication with others. This can enable multi-tasking that can improve output, but the risks of rapidly switching between tasks for performance and wellbeing have been identified (Appelbaum, Marchionni and Fernandez, 2008).

A heavy reliance on technology and the need for rapid responsiveness has fuelled the ‘always on’ culture, whereby people find it difficult to switch off. Whether being always on helps or hinders organizational effectiveness, individual performance and wellbeing is an issue for debate and critical enquiry. Recent rapid changes in when and how work is being done, along with growing knowledge about how technology use can increase work-related stress and conflict between life domains, raise fundamental questions about who is responsible for developing policies and practices to help people manage digital work and communications in a healthy and sustainable way. It is also crucial to consider the effectiveness of existing research frameworks to guide future research and practice to help organisations and individuals cope more effectively with technology. This is particularly relevant for organisations that have introduced flexible and agile working, where individuals have some discretion over where, when and how they work facilitated by supportive work structures such as the availability of non-traditional work schedules, home or remote working...
This provides the focus for our position paper. It is our contention that current organisational practices do not adequately address the need for guidance on how to manage these complex changes to their working lives, leaving it to individuals to craft their own solutions, with varying degrees of success and failure. We further contend that, as yet, there is little research evidence to underpin the development of policies and practices to help people manage the challenges posed by technology.

An evaluation of relevant research theories and models serves as our starting point, which critiques assumptions about life domains and agency within prevalent frameworks. As our focus is on human factors and the potential for technology to blur boundaries between the personal and the professional, we focus on existing paradigms relevant to the work-home interface to question some fundamental assumptions of popular theories such as work-family conflict (Greenhaus & Beutell, 1985) and work-family border theory (Clark, 2000) to question some assumptions about flexible working. We then present some findings from a recent UK-based practitioner survey to contextualise our observations and formulate a research agenda. We locate our observations in the UK context but, being aware of the legislative differences between countries, we consider the implications of our findings and recommendations to other contexts.

The Changing Nature of Flexible and Digital Work

Increased work flexibility, or the choice over where and how people work, provides the first lens for this paper, due to its purported for employee wellbeing and performance. In 2014, the ‘evidence’ for its benefits prompted the UK Government to extend the right to work flexibly to all workers who have been with their organisation for more than six months (Flexible working, N.D.). Yet, alleged benefits do not necessarily equate to actual benefits. The jury is still out on the implications of flexible working for business and individual outcomes, given
that one large-scale systematic review failed to find a compelling business case (De Menezes and Kelliher, 2011) and another concluded there was no clear support for its positive health effects (Joyce, Kerry, Pabayo and Brambra, 2010). At the time of writing this paper, there is no comparable large-scale review or other integrated body of evidence that considers the impact of increasingly digitised and remotely accessed work on key work outcomes. Given that technology is a medium that is purported to enable flexibility, a firm evidence base for its effects on individuals, their workplaces and wider organisational metrics is required.

Theoretical considerations

One of the reasons for the absence of a large-scale review might be the lack of an overarching theoretical framework and the shortcomings of existing theories from the broad domains of work-life balance and technological change. In the context of workplace flexibility, much has been written about the potential of more fluid work practices to ‘unbind time’ and blend life domains (Tausig and Fenwick, 2001). Yet, the dominant paradigm in the field of work-life balance remains work-family conflict (Greenhaus & Beutell, 1985) which was developed over thirty years ago. This model identifies different types of conflict between the work and family domains, time-based, strain-based and behaviour-based, that have bidirectional effects. The model is arguably the most widely applied in work-family research and has guided many primary studies as well as subsequent meta-analyses. For instance, a review of 427 studies conducted by Amstad, Meier, Fasel Elfering and Semmer (2011) examined reciprocal effects of work interference with family and family interference with work on three categories of outcome: work-related (such as job satisfaction and absenteeism), family-related (such as marital satisfaction and family strain and domain-unspecific (such as mental and physical health problems and substance abuse). Both types of conflict were consistently related to all three outcomes. Time spent at work was a powerful moderator of the relationship between work to family conflict and family outcomes and family to work
conflict and domain-unspecific outcomes. effects on satisfaction with family life. Work hours also feature prominently in other studies of the work-home interface; control over work time seems to be an important buffer of the negative effects of hours worked and work-family balance (Valcour, 2007). Control, of course, is also a key feature of some of the most popular models of work stress (e.g. Karasek, 1978). Nonetheless, control does not feature in prominent models of work-life balance, despite growing evidence of its importance in determining the impact of flexible working practices (Kossek and Lautsch, 2008).

Appealing in their simplicity and descriptive nature, models of work-family conflict and balance seem in need of revision in the light of the challenges and opportunities provided by rapidly changing work practices. The original model does not capture that: (a) the duality of work and family is too simplistic and static to capture the fluidity of modern working life, which makes the notion of distinct work and home domains near redundant and the possibility of segmenting roles challenging; (b) that individuals may not invariably experience conflict, or may find that activities within each domain are mutually enriching (Voydanoff, 2005); and (c) that levels of conflict (and conversely balance) experienced by individuals are fluid and fluctuate sometimes on a daily basis (Butler, Grzywacz, Bass and Linney, 2005) and are thus highly contingent on circumstance and experience.

Later models of work-family balance endeavoured to capture such notions more fully. Work-family border theory (Clark, 2000), for example, acknowledges that the ‘borderland’ between work and personal life family is fluid, characterised by several features such as the permeability and flexibility of borders and subject to constant negotiation and re-negotiation. Overall, both the work-life conflict and border models take a rather ‘domain centric’ perspective which does not adequately recognise that the negotiation of borders takes place in a particular socio-temporal context. Clearly models need to be revised regularly to ensure that they reflect these contextual changes and adequately represent people’s everyday realities.
Most, if not all, professional work tasks are conducted within a virtual, digital domain which interfaces with the personal domain. Thus, there is a tri-partite distinction whereby the third, digital, domain is both a \textit{mechanism} through which work and private tasks are conducted and a distinct \textit{context} for personal experience. From a social psychological perspective, there is a growing body of research which concerns itself with technology use and social norms. For instance, daily smart phone use and work-home interference is moderated by the influence of social norms from the working environment including assumptions of availability from co-workers and supervisors (e.g. Derks, van Duin, Tims and Bakker, 2015). These findings imply that role models for technology use at work and supervisor expectations can have a powerful influence on employees’ engagement with technology and perceived obligation to make themselves available outside working hours. As yet, however, there is insufficient research evidence to confirm these effects and identify how such interactions and expectations can best be managed and facilitated to ensure that organizations support and get their best out of their employees.

In the absence of such evidence, practitioners are adopting work practices and communication strategies that may, at best, be ahead of any research and, at worst, be at odds with emerging evidence. They may also be based on habit and unquestioning adoption of what might be considered ‘fads’. This, we argue, is a naïve and dangerous approach when dealing with rapid developments. While the work-life balance literature gives us broad information about how people negotiate the interface of work and non-work, as discussed above, we also need to consider the wider societal and technological landscape given the rapid pace of change. Socio-technological systems perspectives have identified that change trajectories can take diverse transformation pathways (Gels and Schot, 2007) and are influenced by the mobilisation of internal versus external resources and the level of coordination present between these. Through this lens, current development in organizations
may be considered emergent rather than purposive, as they are driven by technology and availability rather than pre-planned and strategic. To illustrate this with an example, many UK organisations have now adopted remote and flexible working enabled by increasingly portable technology yet have underestimated (or even ignored) the psychosocial aspects, such as the need to maintain team cohesion and provide opportunities for support from managers and colleagues. Little attention has also been placed given to the skills required for e-workers to work remotely in a healthy and effective way but some competencies have been identified (Grant, Wallace and Spurgeon, 2013). Overall, the work-life balance literature tends to underestimate the sociotechnical aspects, whereas sociotechnical research tends to underestimate the human elements. The nature and context of work is changing so rapidly that it requires a far more careful consideration of the ways in which people need to adapt to increasingly digital and portable work, as well as how changing work practices can be adapted to meet individuals’ needs. In other words, there is a need to understand how we can proactively manage transformation processes which are inevitable given the rate of technological change, rather than continue to allow technological change to lead the human element.

The notion of responsibility and agency is fundamental in this context and needs careful consideration if theories and models are to be fit for purpose. Work-family border theory (Clark, 2000), as described above, appears to imply (although this is not explicitly stated) that individuals possess agency, as well as the relevant knowledge and skills, to exert control over the degree of flexibility and permeability they experience between domains (Clark, 2000). Our own research has found that behavioural frameworks can help elucidate the knowledge, skills and attitudes required to negotiate work-life balance effectively and protect wellbeing in different working contexts (Kinman & Grant, 2014; McDowall & Lindsay, 2014). These frameworks are likely to be useful in identifying the competencies
required by employees and organisations to help them manage technology effectively and to help develop guidance and support that can subsequently be evaluated. The type of support that is likely to be most effective is an open question.

Legislation on technology use for work purposes has recently come into effect in Europe, as the French government has given employees the right to ‘disconnect’ (BBC, 2016). Organisations with more than 50 employees are now required to draw up a charter that sets out when employees are, and are not, required to send and answer emails. We contend that there are two issues raised by such approaches that require critical consideration. First, top-down regulatory legislation may be more acceptable in some cultural and professional contexts than others. Secondly, the French legislation only applies to larger organisations, whereas smaller companies may be at greater risk of being always on (Hiscox, 2011).

Thirdly, the legislation refers to the receiving and sending of emails only; there may be many less visible tasks that also require digital connectivity that are just as important and time consuming. These tasks have been referred to as ‘digital housekeeping’ and may include filing and storing electronic communication, synchronising applications across different devices, or installing software updates. The time taken to undertake such tasks is either not appreciated or is under-estimated (Whiting, Roby, Symon and Chamakiotis, 2015). Many organisations do not include the sending and receiving or email or digital housekeeping in workload models, job descriptions and other activities which makes it challenging to estimate their scope and the time commitment required.

Examples of organisational-level interventions to restrict out of hours working include the holding of emails on servers or other access policies and charters, as implemented by major car manufacturers, such as VW, Daimler, BMW and the Deutsche Telekom (German telecommunications provider) in Germany (die Welt, 2014). We also consider these mandates as being problematic in the absence of research evidence that corroborates their effectiveness.
First, such ‘one size fits all’ interventions tend to contradict long-established theories of good work design and work stress that emphasise the key role of worker involvement, choice and control such as the job demand-control (support) model (Van der Doef and Maes, 1999) and the elaborated job and work design frameworks (e.g. Parker, 2014). Such frameworks have long emphasized the motivational and relational aspects of managing work well, but we argue that these notions have not sufficiently penetrated organisational practice in general, and certainly not influenced the management of digital and flexible working.

Therefore, the focus for the empirical contribution of this paper is to investigate several issues: (a) who is currently managing the use of Information and Communication Technologies (ICTs) in UK organisations (is it employees, managers, other stakeholders or a joint responsibility?); (b) who should be responsible; (c) are policies (about work-life balance in general and technology-assisted working in particular) in existence; (d) what are considered to be the most pertinent challenges in managing ICT-enabled working, and (e) have organisations adopted any innovative practices?

**Survey Design and Data Collection**

We designed a bespoke mixed-methods online survey consisting of closed and open-ended items. This received ethical approval by the first researcher’s host institution and was piloted to ensure usability and the relevance of the question format. We used a snowballing method to encourage participation (which makes it impossible to identify a response rate) and offered a modest charitable donation as an incentive for completion. In total, 374 respondents from various professional UK contexts completed the survey. Education was the largest category at 33% of the total sample with a considerable proportion of respondents having academic (20%) or management roles (22%).
Results and Commentary

Almost half (47%) indicated that the world of work is generally unprepared for the continued use of ITCs; a key indicator of this was that over half of the respondents (54%) reported that their organisations had no work-life balance policy in place. Nearly 60% reported that their organisations provided no guidance to helping individuals manage their ICT use. When asked who should be responsible for helping employees manage ITC use for work tasks, 42% indicated that this should be up to the individual employee, 17% considered it to be the responsibility of line managers, 16% the responsibility of general information technology support functions, and 12% believed that it should be managed by human resource functions.

More than half of the sample (52%), however, thought that the responsibility of helping people manage ICT use should be shared 50/50 between employer and employee, whereas a sizeable minority (22%) thought that most (i.e. 70%) of the responsibility should fall to the employee. Interestingly, only 9% thought that the employer should shoulder most of the responsibility for this key issue. We also asked participants to identify potential positive and negative consequences of ICT use on key areas of work and their responses are outlined in Table 1.

*Note to editor: insert table 1 about here. *

These findings show that work communication is believed to be impacted by technology more negatively than positively, and that any potential benefits for communication, productivity, team work and customers (e.g. satisfaction) may be counteracted by the negative costs for wellbeing and workplace relationships. We content analysed the qualitative data to identify themes relating to the most pertinent challenges; 253 individuals provided narrative comments. These themes fall broadly into two overarching categories. The first category is about social norms and perceptions relating to: (a) highly explicit and implicit organizational expectations about the constant availability of workers;
(b) the absence of role models for managing technology well or ineffective role models exhibiting potentially counterproductive behaviours (e.g. engaging in obvious checking behaviours during meetings etc and sending emails during holiday periods.) and (c) a failure to acknowledge digital working, such as reading and sending emails, as 'work' due to it not being acknowledged as part of formal work agreements and arrangements. The following anonymised quote illustrates this collective denial vividly:

“We have a 'head-in-the-sand' approach to ICT management. There is a degree of masochism to being 'always available' which is a significant challenge to those who wish to acknowledge the damage that does to both the individual and the organisation”.

The second category refers to the infrastructure of work including: (d) an absence of targeted support for flexible and portable working relating to practical as well as psychosocial needs (e.g. organisations relying on individuals to purchase equipment; a lack of concern for personal wellbeing); (e) concerns about appropriate safeguarding procedures for data sharing and security in remote working; (f) most importantly, as nearly every respondent who provided narrative comments raised this issue, the sheer frequency and volume of emails that must be managed. One respondent outlined the wide-ranging negative consequences in their own environment where they had experienced mental health problems which they attributed mainly to the perceived obligation to be 'always on'. This suggests that people may internalise such perceived obligation, rather than question it. The following quote also illustrates that there might be other implications arising from such expectations, as email-focused working could curtail a wider strategic perspective:

“The expectations surrounding email – if you didn't respond you’re seen as lazy, incompetent, have poor time management skills. I would get around 150-300 emails an hour.
they can be a barrier to larger problem solving because it’s easier to fix something that concerns one person or group, rather than discovering the wider process and other pain points that could drive a business toward innovation and success, or equally so, it’s demise.

Highlighting the need for novel approaches to managing technology, few respondents indicated that their organisation used innovative practices to manage technology. Nonetheless, there was: (a) an awareness that other organisations had introduced email-free times, but this was not practiced in their own organisations; and (b) the use of alternative communication tools to email, such as Yammer, Skype or Slack.

**What are the priorities for research and practice?**

Whilst we acknowledge the limitations of our practice-focused survey in terms of its pragmatic approach, non-representational sampling and the lack of availability of specific validated (outcome) measures, it has value as a starting point for further debate and scholarly enquiry. The findings are striking in that they highlight a common perception that managing modern ICT-enabled working should be an individual responsibility. The findings also show that organisational policies and training/development practices are notably absent and innovative approaches are rarely found. This lack of guidance means that technology use can threaten the wellbeing of employees and the quality of their relationships at work, even where there is a recognition that it simultaneously facilitates communication, productivity and teamwork and is beneficial for customers. One of the underlying reasons for our observations are unrealistic, and we would argue unreasonable, expectations, both explicit and implicit, on the part of organisations and employees. This is partly due to the fact that organisations do not seem to have any policies or clear guidelines for ‘healthy’ ICT use. In turn, such expectations fuel a culture that makes it difficult for individuals to effectively negotiate the borders between work and other domains and discourages them from switching off. While most respondents to our survey felt that solutions to manage ICTs more effectively and protect
work-life balance should be a joint responsibility, there was a notable absence in the qualitative data about how this might be achieved conveying a strong sense of resignation or even hopelessness. Although some respondents referred to imposed initiatives such as ‘email free Fridays’, these appear tokenistic, lack a clear evidence base, and are likely to have unintended negative consequences such as increased email traffic and resulting pressure on other days of the week. Initiatives that may be more effective, such as dedicated employee/line manager-led working or task-and-finish groups, were not mentioned.

We urgently need to address these issues in future research in order to develop evidence-based guidance for practice and identify priorities for future research. Whilst we would normally advocate a theory-led approach, given the prevalence of potentially useful frameworks, our brief discussion of relevant theories earlier in this paper indicates that they are outdated. They also pay insufficient attention to context-specific organisational level factors such as the infrastructure for remote working, including data sharing and security, as well as an overreliance on email as a means for electronic communication. There is growing evidence that email volume and management can lead to overload, stress and anxiety (Jerejian, Reid and Rees, 2013) that is likely to have serious long-term implications for the wellbeing and performance of employees. This lack of support is regrettable, as a considerable body of literature shows that organisational support is more likely to improve work-life balance if it is context-specific, i.e. precisely targeted to the interface between work and personal life, rather than more generalised (Kossek, Pichler, Bodner and Hammer, 2011). Therefore, there is an evident need to develop a clear but flexible framework to enable future research that identifies how organisations can best support their workforce and mitigate the risks associated with increasingly fluid, but also invisible ways of working. We argue that research needs to take a more practice-led and pragmatic perspective to identify: a) what organisations are currently doing; b) what employees needs are; c) the gaps in provision and
support and d) examples of best practice. Studies should include measures of productivity and effectiveness, both subjective and objective, as well as individual well-being, as our preliminary research demonstrates that the former may be enhanced to the cost of the latter. The findings of this research should then be deployed to evaluate the continued contribution of existing work-life balance paradigms, as we have started to do so in this paper, in order to question our fundamental assumptions about the conceptualisation of different work and non-work domains as well as the role of individual and collective agency. We outline a conceptual framework and iterative learning process in Figure 1.

*Note to editor – insert figure 1 about here*

In a pragmatic scientist practitioner tradition (Anderson, 2007), we advocate a problem- or ‘issue-centric’ approach’ given that practice appears to have advanced ahead of research and some catching up is clearly required. The prevalent theories for job design, work-life balance and socio-technological systems change all have valuable aspects but, as they stand, are unable to guide hypothesis-driven research that allows the full testing of assumptions about the increasingly digitised nature of professional work. Without adequate measures to capture this it is de facto impossible to conduct the large-scale research that is so urgently required in order to develop interventions that are fit for purpose.

A necessary first step is to use qualitative and quantitative methods to gauge what is currently happening in organisational practice, so that future research can deploy targeted but sufficiently broad measures. At present, based on our review of literature and practice, we conclude that there is insufficient ownership of, and guidance on, how organisations could and should manage ICT-enabled working. We contend that a contingency approach, rather than a ‘one size fits all’ perspective that overlooks the key role played by context, is necessary. A more refined understanding of social norms and role models within organisations and how they evolve to address change, as well as the infrastructure for how
work is being done, is a necessary stepping stone. It is a paradox that modern technologies are a potential enabler, not only for ways of working, but also for innovative research methods such as videos that aim to capture transitions across the different domains of people’s lives (e.g. Whiting, Symon, Roby and Chamakiotis, 2016) or customised phone applications. A particularly creative project is using technology to connect family members who are separated due to work to domestic rituals and events at home (Bichard et al. 2015). Nonetheless, researchers need to remain mindful that any studies should not ‘fuel’ potential over-reliance or addiction to technology.

*Note to editor: insert Table 2 about here*

We conclude that the future research agenda is wide and offer the questions outlined in Table 2 as urgent priorities for research. It remains a necessary precondition, however, to refine our understanding of measurement and use creative methodologies to fully capture what is happening in the real world. Otherwise there is a real danger that technological advancement in the workplace will encourage organisations to take a reactive approach, rather than developing evidence-informed policies and practices to support the effective use of technology. As we outlined above, some of the fundamental concepts such as the notion of ‘boundaries’ between life domains and the traditional dichotomy between segmentation and integration, require fundamental re-examination. It is also crucial for organisations to take a strategic and proactive approach. As a fellow researcher commented in one of the first author’s previous projects: “There is an app [application] for most things now in the workplace. But there is no app for leadership and working with each other” (personal communication). We wholeheartedly agree with this view. Human capital remains organisations’ greatest asset; it is the joint responsibility of researchers and practitioners to help us better understand how ICTs are changing the nature of work, and how we can facilitate effective, conducive, healthy and sustainable working. We cannot put the genie
back in the bottle; technology is not going to go away, so we need to take an evidence-based approach to how we can work most effectively with it.

References


home interference: The moderating role of social norms and employee work engagement”,

Die Welt (2014), „Warum Arbeitgeber plötzlich die E-Mail ausbremsen“, Published 18th
February 2014. Available at
https://www.welt.de/wirtschaft/karriere/article124960587/Warum-Arbeitgeber-ploetzlich-die-
E-Mail-ausbremsen.html (accessed March 2017)

Flexible Working (N.D.). Published by the UK government at https://www.gov.uk/flexible-
working/overview (c) Crown Copyright. (Accessed March 2017)

Policy, 36, pp. 399–417

factors affecting remote e-worker's job effectiveness, well-being and work-life balance”,
Employee Relations, 35(5), pp.527-546.

Hiscox (2011), “At work or play? Small business owners are always on”, Available at
2017)

Greenhaus, J.H. and Beutell, N.J. (1985), „Sources of conflict between work and family

Joyce, K., Pabayo, R., Critchley, J.A. and Bambra, C., (2010). Flexible working conditions
and their effects on employee health and wellbeing, The Cochrane Library.

Karasek Jr, R. A. (1979), "Job demands, job decision latitude, and mental strain: Implications


https://familyrituals2-0.org.uk/ (Accessed May 2017)


Table 1: Positive and Negative Effects of ICT Use

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<td>Communication (24%)</td>
<td>Well Being (27%)</td>
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<tr>
<td>Productivity (24%)</td>
<td>Relationships (21%)</td>
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<tr>
<td>Team work (16%)</td>
<td>Communication (15%)</td>
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<td>Customers (15%)</td>
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Table 2: Priorities for research about ICT-enabled working

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<th>Research questions</th>
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<tr>
<td>Explicit organizational expectations</td>
<td>Who communicates these? How are they understood?</td>
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<tr>
<td>Implicit organizational expectations</td>
<td>Where do these originate? What are the cues in the social and organizational environment? How are these transmitted and interpreted?</td>
</tr>
<tr>
<td>Work and job design</td>
<td>To what extent are ICT enabled aspects of work acknowledged in job descriptions and other formal processes and documentations? How are workers supported, trained and developed?</td>
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<tr>
<td>Individual and organisational agency and responsibility</td>
<td>a) How are responsibilities developed and communicated?</td>
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<td></td>
<td>b) How clear are respective accountabilities?</td>
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<td></td>
<td>c) What is the role of formal policies? Does their existence make a difference?</td>
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Figure 1: a broad framework for future research

Practice-focused and pragmatic research:
- How is work changing?
- Who is responsible?
- What works? What does not work?
- What are the purported outcomes?

Enhanced knowledge on organizational practice:
- What are the respective responsibilities? Who 'owns' these?
- Who manages modern and flexible working? What are effective mechanisms for doing so? What are the challenges?
- What are the effects?

Critique of prevalent research paradigms:
- a) To what extent do these take a holistic perspective?
- b) What is prevalent in practice and under-addressed in research and vice versa?
- c) How can we refine theory?