How to solve employees' digital exhaustion created by the acceleration of digital transformation and hybrid working

White Paper
by Bob Barker

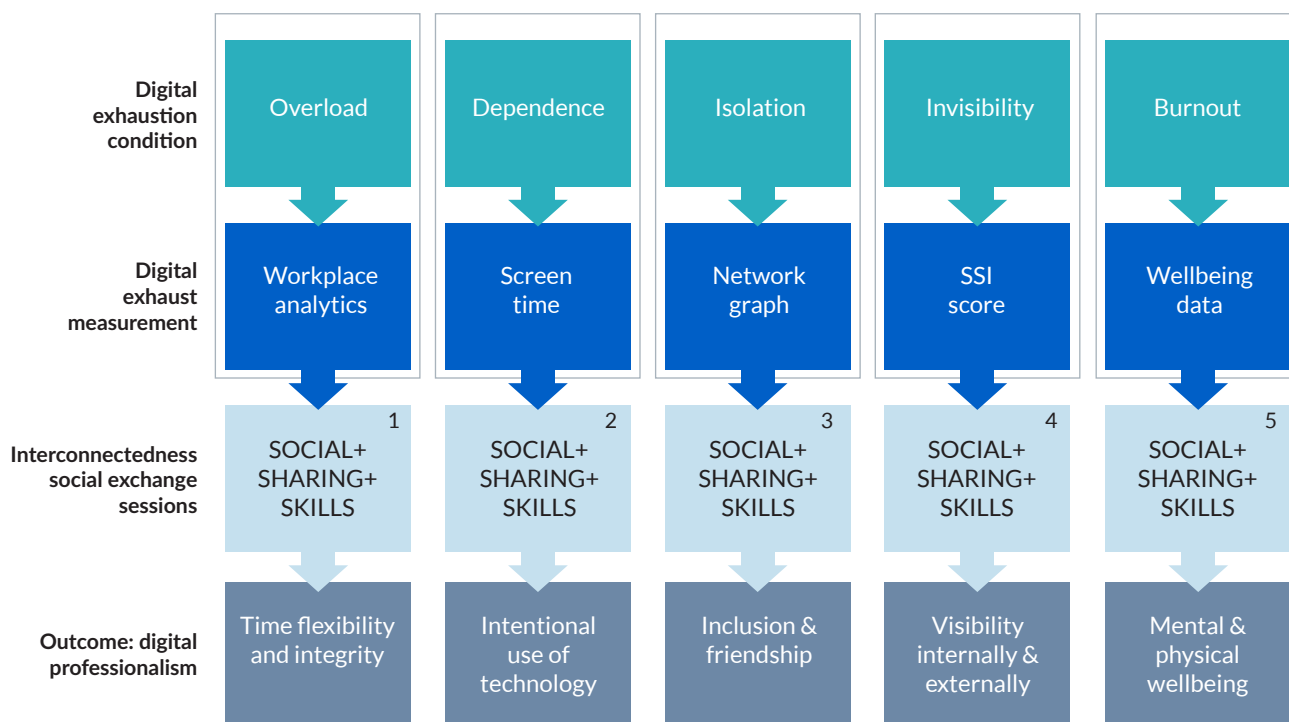October 2021

BEFORE

AFTER

Educated
Change

Summary

During Covid, the digital transformation of firms accelerated by anything from two to ten years. It's natural to assume this is positive, but there have also been significant detrimental effects that digital technology has had on the way we work. According to the latest figures from Microsoft in its report 'The Next Great Disruption is Hybrid Work – Are We Ready?', 54% of the workforce feel overworked, 39% feel exhausted and up to 41% of employees are considering leaving their organizations. We call the result digital exhaustion.

This paper explains the conditions that create digital exhaustion, ways to measure their detrimental effects, their underlying causes, the programmes you can put in place to address them and the outcomes that can be achieved (see diagram below).

The antidote to digital exhaustion is digital competence or professionalism, and the change programme required to achieve it is at its heart very simple. It is based on employees learning from each other, because so often the 'wisdom is in the room' (or today perhaps 'on the call'). We learn best from being shown what works for other people – people we know, like and trust, and in particular the people we work with every day, who work with the same systems and technology that we do.

At Educated Change we created our own change programme which we called *Interconnectedness* as it combines the connectedness we have with each other both through social/water cooler moments, and in how we all operate and live our lives as a result of digital transformation, Covid and having to spend more time online, and adapting to the emerging hybrid workplace. This paper provides a summary of that programme and the impact it has had on our own organisation.

	Overload	Dependence	Isolation	Invisibility	Burnout
Digital exhaustion condition	Overload	Dependence	Isolation	Invisibility	Burnout
Digital exhaust measurement	Workplace analytics	Screen time	Network graph	SSI score	Wellbeing data
Interconnectedness social exchange sessions	1 SOCIAL+ SHARING+ SKILLS	2 SOCIAL+ SHARING+ SKILLS	3 SOCIAL+ SHARING+ SKILLS	4 SOCIAL+ SHARING+ SKILLS	5 SOCIAL+ SHARING+ SKILLS
Outcome: digital professionalism	Time flexibility and integrity	Intentional use of technology	Inclusion & friendship	Visibility internally & externally	Mental & physical wellbeing

What causes digital exhaustion

Several conditions compound with each other to create digital exhaustion. How many of us haven't had a day on Teams or Zoom calls and eventually stepped away from the computer feeling tired? Or felt overwhelmed by a full inbox, 100 messages to read, a calendar full of meetings, no time for breaks, no time to catch up with people and work commitments that will mean we will miss some part of our precious home/family life? Here are the main conditions that create the condition of 'digital exhaustion' and the questions they raise:

1. **Digital overload** – In the move to more online working it is not surprising that the number of emails, messages and chat has increased, the number of meetings both scheduled and unscheduled has gone up, and there has been an increase in out-of-hours working. But through lockdown, workers have accommodated this increase through increased productivity due working at home and because of the circumstances of crisis, survival, and 'all hands to the pump'. This has masked that many of the workforce are feeling overwhelmed, even exhausted. *How should employees operate to achieve the right balance and reduce overload? How should they optimise their time? What are the best ways of working that fit around the way the company operates? What systems could be improved?*

2. **Digital dependence and distraction** – We are becoming more dependent than ever before on our devices, particularly our phones. We spend between three and four hours a day on average on our phones, and that does not include time on a desktop or watching TV. The phone has also become one of the main sources of distraction as we look for any excuse to stop focusing on our work or wanting to get that hit of dopamine from looking at some new content, or message or offer online. *What approaches do people take to manage the balance of the phone being an integral tool for their working and social lives and spending too long/becoming too dependent on their devices?*

3. **Digital isolation** – It is easy to see how we can soon slip into feeling more remote from work when we are working remotely. But feeling isolated at work can affect our productivity by as much as 70%.
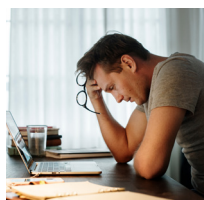
Reduced connection also affects the levels of idea sharing and innovation, meaning silos can grow in the company if this is not addressed. We may be very close to the immediate team we work with, but the rest of the company has become a distant cousin. Coming back to work will help address this, but you need to maintain equality of participation for those who for whatever reason are still that day operating remotely. *How do people build relationships (a core part of everyone's job) and friendships at work? How do you collaborate effectively so everyone feels included/in the loop?*

4. **Digital invisibility** – If the shift to digital means employees' visibility online is very low, they risk becoming invisible to the organisation, customers and prospects. This won't help their career prospects, nor the organisation to find new business opportunities, resulting in millions being spent (wasted) on digital advertising to get attention. Most people are not trained on building their personal brand or operating effectively on LinkedIn, which often means people waste huge amounts of time on the platform getting nowhere. *How do people make themselves visible? What is their routine for sharing and connecting with people?*

5. **Digital burnout** – If we don't spend time on our wellness we will be forced to spend time on our illness. Stress at work builds up gradually, but when it reaches crisis point there can be huge health implications which can cost the firm a fortune in days off as well as all the associated issues of having people operating below par. Sitting for long sessions at a computer isn't good for us, but are we being taught about ergonomics? Taking a range of small preventative measures (such as making sure one takes breaks and fitting proper exercise into the working day) can help reduce stress and make people feel productive. *How do people find time for exercise in their working day? What do they do to reduce their stress? How is their office set up for optimal work efficiency?*

How to measure digital exhaustion

Digital exhaustion can easily be measured by looking at the personal *digital* exhaust data we are all emitting in each one of these areas. This data can be used by the organisation to highlight that problems with overworking, ineffective costing meetings, hierarchical bottlenecks, etc.; or by the individual, who can look at their own data on their mobile phone or wearable to understand their habits and prompt a change in behaviour.

1. **Workforce analytics to measure digital overload** – Workplace analytics look at the data generated from all the workplace platforms, such as the amount of email, meetings, chats, calendars, and use of shared systems. Microsoft has been very visible in this space for a few years, providing insights for the individual through MyAnalytics (now Viva Insights), and for the organisation through its Workplace Analytics tools. It's important to note that at the organisational level this is confidential, so employees do not feel they are being spied on. The whole point of these tools/the AI is to support people in time management, because it's hard. If you are not on a Microsoft platform there are other apps that help collect this data (such as RescueTime) or ask people to estimate how long they spend on email or in meetings.
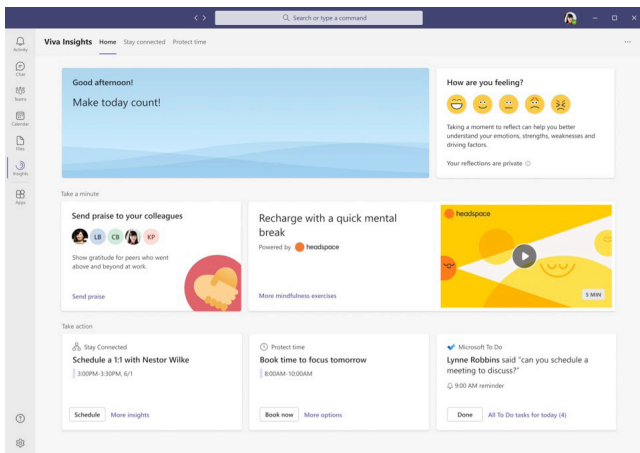
Microsoft Viva Insights personal dashboard

RescueTime weekly report

2. **Screen time to measure digital dependence** – Individuals can measure their digital dependence by monitoring their Screen Time (Apple) or Digital Wellbeing (Android) data each week. This reveals a lot about how long people are spending on their phones, on which apps, as well as habitual data like how many pick-ups per day. The worst I have seen so far is a businesswoman whose seven-day average was 9 hours 23 minutes a day on her mobile. Staggering! Her app usage data was then able to tell a story about her sleep problem, and overuse of some gaming and messaging apps, to the point where her dependence was creating social isolation.
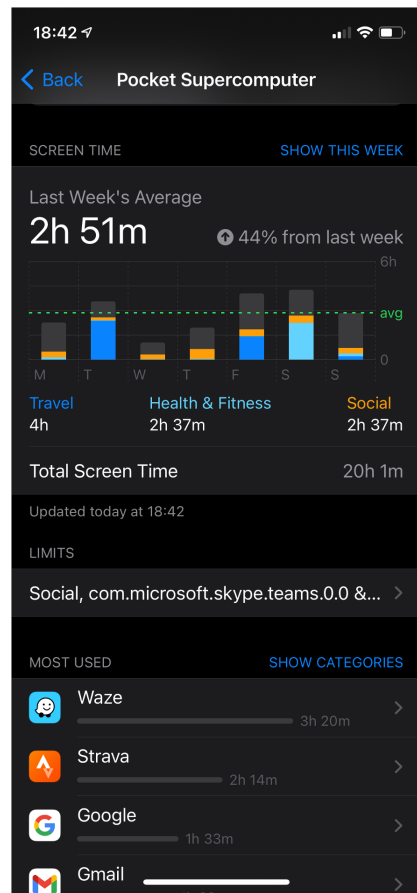
Apple Screen Time weekly summary
(NB: 'Pocket Supercomputer' is Bob Barker's name for his iPhone)

3. **The network graph to measure isolation and inclusion** – How people are collaborating in the organisation can also be measured using tools within Microsoft Teams or third-party tools such as Collaboration.AI. From a group perspective these can identify silos, bottlenecks, and blockers. From an individual perspective you can explore your own network and your 'personal power' score. One could also use as a raw measure the number of connections in an individual's LinkedIn network.
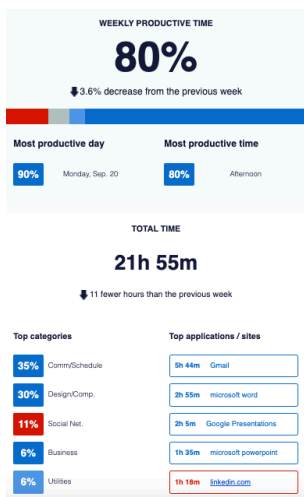
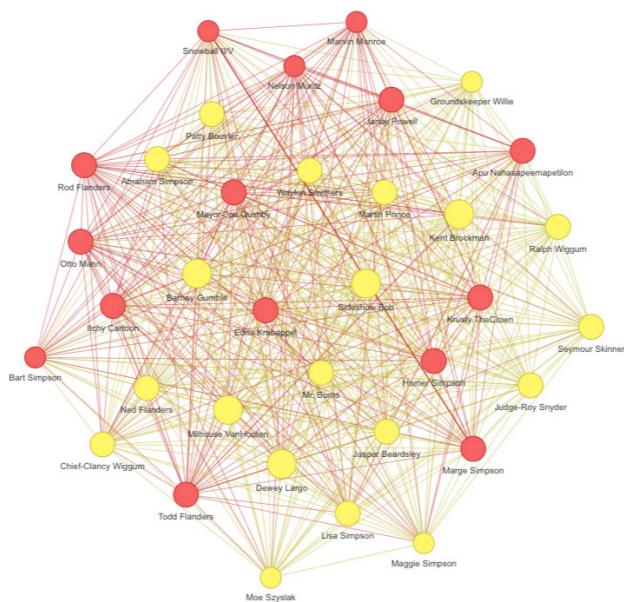From: Group base line showing silos (colours) & some people outside the network
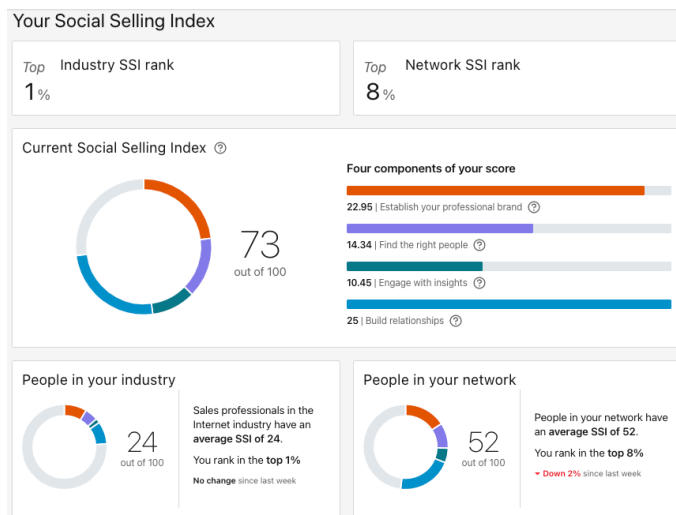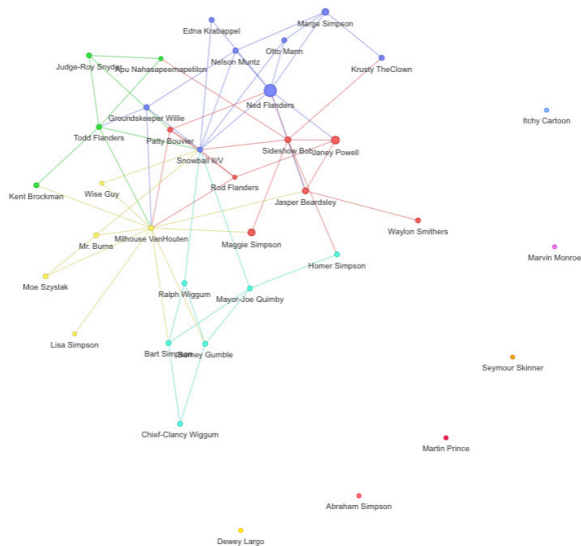
Social Selling Index from LinkedIn

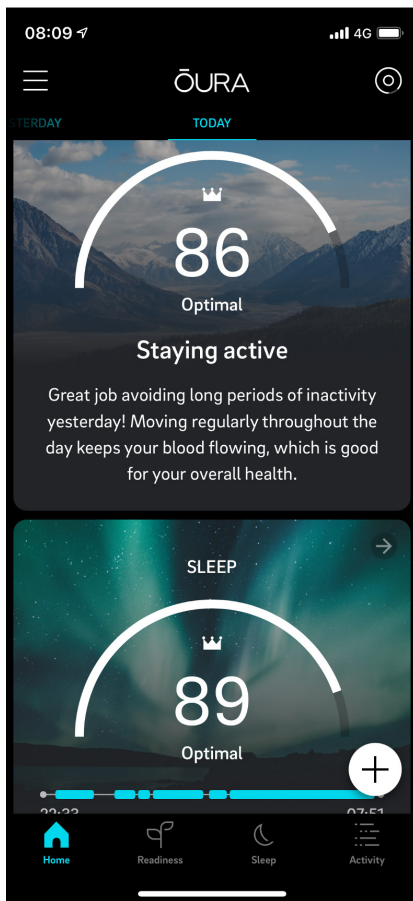To: 96% connectivity with now only two distinct groups

Network graph showing strength of internal networks

4. **The LinkedIn SSI score to measure visibility** – One way of measuring the exhaust from LinkedIn is to look at the individual's SSI score (Social Selling Index). This is primarily a tool for sales professionals but one could argue that everyone's role includes selling the company. The SSI score looks at four areas: *establishing your brand, finding the right people, engaging with insights and building relationships*. The other exhaust created on LinkedIn is of course your activity in terms of sharing posts and creating articles. This can tell people a lot about your commitment to a market and thought leadership in that area. Other social platforms also create a lot of data and one can measure time on Instagram and Facebook, for example. Various AI tools will also curate all this social exhaust data into a personality profile which could be used to decide

5. **Quantified Self data from wearables to measure** wellness – Either our mobile devices and or associated wearables such as the Apple Watch or Fitbit collect data on our exercise. Information about how much exercise we do, how many hours we sleep and what our stress levels are, is all valuable exhaust data that can be used to keep us on track towards an exercise goal, or motivate us to take action, or lower our health premiums.
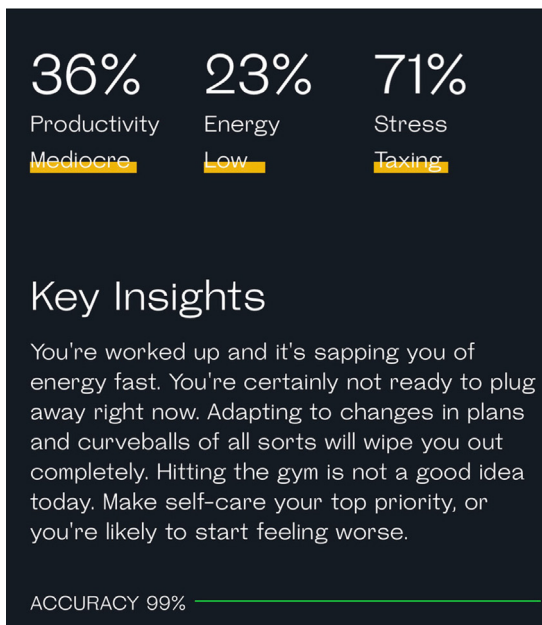
Examples of personal fitness data

Steps data from Apple Fitness

Sleep data from the Oura Ring

Stress data from the Welltory app

Including this data in conversations about how to improve, even if it's just comparing numbers (because everyone likes a score), is a great way to start the discussion about digital exhaustion and track future progress.

Why digital exhaustion persists

Before moving to the solutions and outcomes, we first need to consider what stops people from addressing some of these issues and where the organisation needs to help support employees to make sure the change programme succeeds.

1. **People's relationship with their technology and the digital dilemma** – Most people suffer from what we call a *digital dilemma*: they know that being more digitally competent is important, since technology underpins most aspects of work and home life, but they always find an excuse, consciously or subconsciously, to put off doing something to improve. In a recent report on Digital Transformation in The Times, 68% of respondents said digital skills were essential for everyday life, but only 35% actively wanted to improve them. The usual excuse is "I don't have time", which is often code for "I actually don't know what to do, and I don't want to embarrass myself by asking." There is a lot of psychology affecting our relationship with technology and creating the digital dilemma:

   • **Digital frustratio**n – We all get frustrated by technology at various points, be that not being able to get onto the broadband, the computer running slow, losing a file, the printer not working – the list goes on. This means that when we come to tackle the problem we are already in a negative state, which may affect our ability to solve it and generate a huge waste of time as a result. There can also be digital frustration caused by the relationship with the designated tech expert in the household who is responsible for issues created by others, which can lead to tension and again inaction. The example I give is the person who said during lockdown that "at last he got his wife to fix his printer, it's only taken her eight years." The key here is asking being prepared to ask for help.

   • **Limiting digital beliefs** – If we regard ourselves as "a bit of a digital dinosaur" or a technophobe, then of course that is going affect our motivation to adopt new technology. If motivated, people will adopt new technology: the best example of this recently has been the use of Zoom during lockdown. If people didn't learn how to use Zoom, they were going to be socially isolated from friends, family and work, so there was enough of an incentive to ask someone how to use the system. In fact, people are fairly tech savvy already as they have learnt how to use Word, email, a smart phone, Zoom, online banking, etc. People are able to learn, but sometimes need extra encouragement by being shown, or supported. Attitudes can soon change, especially when the benefits can be shown to them.

- **Bad habits and muscle memory** – A tech adoption barrier if ever there was one: "This is the way I do something, it works and you want me to change? But I've been doing it this way for 5, 10, 20 years." It could be the switch from a hard drive to using a shared drive, or from email for all communications to messaging. Showing people the benefits and explaining that everyone is on the same journey goes a long way to helping them switch. The stick to this carrot is of course turning off the old system, which even Microsoft had to do when getting the whole organisation to adopt Teams.

- **Poorly written software and lack of support** – The tech industry could sometimes be accused of really only focusing on selling licences to the detriment of completed or well written software, extensively tested for the user experience. 'Support' is often only a webpage with some FAQs. I even had a response from Google the other day: "Your Google searches are as good as ours". We need to remind people it's not always their fault they can't do something, it's often the badly written software, hardware failure or a broadband supplier who has forgotten to tell us of its 'essential maintenance'. It's par for the course with technology and it will get better over time.

The relationship we all have with our technology will affect our motivation to upgrade ourselves and try new things to make us more digitally professional and reduce our digital exhaustion. The overall need is to encourage *digital curiosity* through asking others how to do something or how they operate. This is even more essential now, as digital is how work and life gets done. This can be on a 1:1 basis or in small groups. Our programmes are organised into small social groups where people feel comfortable sharing and motivating each other to improve.

2. **Using out-of-date technology or having a poor set up** – If employees do not have the most up-to-date technology for their roles, including in their remote working set up, this will add to their digital exhaustion and frustration:

- **Old technology** – Operating with an old phone or laptop costs us in terms of time (lots of small increments of time building on one another), is frustrating, and we look (and probably feel) out of date. Microsoft research into device-led digital transformation found that people who were given the latest technology felt more creative and that the company was investing in them, that people took pride in having a great device and it helped drive their motivation to be more productive. It's not just the speed of the processor, but also the speed of the wireless processor, the GPU (graphical processing unit), the battery life, the cameras and the functionality of advanced apps.

- **Properly supported home offices** – These days work space doesn't stop at the office. It is reported that 46% of companies during lockdown paid nothing towards people's expenses for setting up a home office. Others paid something but a gesture, not a realistic contribution or even advice about how to set up. We are talking proper ergonomic chairs, powered desks, second or third screens, lighting, blackout blinds. If we are expecting people to work from home, we should support them properly or pay the price in reduced productivity and days off for back pain.

3. **Paying lip service to learning** – This is the age of information, where ignorance is a choice. There is more information, courses, TED talks, videos online and out there than ever before. But do people have time for learning? Some firms say you should spend one percent of your time on learning, others say two hours a week – but then all they offer is a link to an online learning environment. Perhaps a little unfair, but in the new digital age, leaning needs to be part of the day-to-day and can be tailored to each employee's needs. Satya Nadella has said that productivity should include collaboration, learning and wellbeing, which is a good indication of where Microsoft and its systems are heading. Learning is an age-old challenge but an emerging area in terms of solutions. Online learning is another source of exhaust data – what people are learning can be tracked – so it's becoming easier to get smarter about learning. Organisations need to help people make time for learning, and it's part of the digital professionalism that people should be aiming for.

4. **Tolerating unproductive processes (repeating the mundane)** – There are plenty of economic theories about the root causes of low productivity, but what influences productivity the most is lethargy, in terms of companies and individuals tolerating unproductive processes. Making employees keep repeating unproductive mundane processes can also lead to digital exhaustion, yet companies would rather overstaff than fix the workflow issue. Excel is often a culprit with people transferring data from one system to a spreadsheet and back again. With the rise in process automation and its associated solutions, the identification of new solutions to solve the mundane and allow people to focus on high value work should be encouraged and supported.

5. **Lack of personal digital organisation** – It sounds so obvious, but we all get digitally untidy. As Marie Kondo says in her book 'Joy at Work' (not the sock rolling, cupboard cleaning, home focus one) "Messy conditions cost us far more than we could ever imagine

in multiple ways – top reasons in a survey are lowering productivity, a negative mindset, reduced motivation and diminished happiness." But does anyone ever get coached on their personal digital organization? The two areas which impact both the organisation and the individual the most are security and filing:

- **Security** – "81% of data breaches in organisations are due to poor passwords" (Verizon) and "in the UK and US we waste 16 billion hours a year hunting for passwords" (Openwave Mobility). Setting up a password manager is not a small task so it would be good to have champions who help people.

- **Filing and general tidiness** – a messy digital environment taxes the brain. Guidelines for filing local and shared documents protect against chaos.

Microsoft is trying to solve this with its work on Microsoft Graph (part of the Azure Cosmos globally distributed, multi-model database technology) under which every time you open a document or file, it is tracked, and the advanced AI in Graph (Project Cortex) then makes the connections between people, places and knowledge associated with that entity. So, in Viva Topics (part of Microsoft Teams), when a key word appears (underlined as in Wikipedia) you get a pop-up card related to that topic, listing the most important people related to that topic, the latest documents and some context. It's trying to take the responsibility for knowledge management away from humans and give it to AI. This helps makes sense of the knowledge an organization has which is all locked up in millions of Word, Excel and PowerPoint files.
But before that all arrives and gets more embedded into corporate systems, being responsible for our own filing and creating guidelines for our teams is a good place to start so that we don't waste time and get frustrated.

These five points show there are some deep psychological and behavioural reasons, in many cases built up over many years, which certainly add to digital exhaustion and should be considered if when embarking on a change programme. In our Interconnectedness programme we have added the digital dilemma as a condition of exhaustion measured by

technology and tool adoption, because hearing how others use a tool or approach to improve their digital set up helps prompt an upgrade in approach.

The Interconnectedness Social, Sharing and Skills Programme

We believe the way people learn about digital competence/literacy/skills in the workplace is through learning from others in the workplace. This is because they have a common cultural bond, values and friendships, but also because of the way technology is set up in the organisation and the unique way in which each company is organized and operates.

Educated Change's Interconnectedness programme starts with a survey to establish degrees of digital professionalism and the state of the network that exists within the cohort. This aids the process of allocating the cohort into groups of four, because this is the size that is small enough for people to share with others. Any bigger and as with a fifth member in a social gathering, the group may split into two conversations or into participants and listeners. This is based on psychologist Robin Dunbar's latest book 'Friends: Understanding the Power of Our Most Important Relationships'. Dunbar became famous for 'Dunbar's number' – 150, the suggested cognitive limit to the number of people with whom one can maintain stable social relationships.

The initial programme will normally be six months long with one social call/water cooler moment or meeting and one skills session every month. These can of course be physical or virtual sessions. As the chart below shows, each session focuses on one of the core five conditions of exhaustion and one on the causes.

The social sessions enable everyone can get to know each other better, before going on to digital competence sharing and exchange. In the social sessions, people share a little about themselves or about their life or ask questions of the group – like what are you watching or reading?

Month 1	Month 2	Month 3	Month 4	Month 5	Month 6
Social sharing session	Social sharing session	Social sharing session	Social sharing session	Social sharing session	Social sharing session
Digital dependence skills & sharing	Digital overload skills & sharing	Digital isolation skills & sharing	Digital invisibility skills & sharing	Digital dilemma sharing	Digital burnout skills & sharing

In a skills week, each person will be asked in turn to share something about how they operate or that they have found that really works for them, as well as (if they feel comfortable with it) their digital exhaust data for that session. As good practices and ideas are generated, these are shared with the wider group and a knowledge base of content is created.

The programme is augmented with short overview videos to explain the scope of each session, spark ideas and to go through models of best practice such as:

- **The Personal Branding Pyramid** – The various levels of personal branding as they relate to LinkedIn.

- **The Collaboration Cake** – The core areas of collaboration and what to consider when allocating your time to each.

- **The Productivity Wheel** – How the multiple aspects of productivity work together based on your objectives.

- **The Stress Resilience Plan** – How to build a plan to build up your resilience to stress in the workplace.

After the skills session there is the opportunity to ask questions of an expert and attend the coaching session for that topic where all the questions are answered. This can be hosted by a digital champion appointed by the firm as well as an Educated Change subject matter expert.

Outcomes for the individual: digital professionalism, the antidote to digital exhaustion

Simply put, the more digitally professional employees become, the less likely they are to become digitally exhausted at work because they are operating more effectively in terms of their knowledge, discipline, time optimisation, emotional intelligence, dexterity, and fluency in digital technology.

From digital exhaustion	To digital professionalism
Overload	Time flexibility & integrity
Dependence & distraction	Intentional use of technology
Isolation	Inclusion & friendship
Invisibility	Visibility internally & externally
Dilemma / putting off	Self organization & curiosity
Burnout	Mental & physical wellness

The overall effect is giving them the flexibility to spend more time on the people-centric side of their lives and less time online, as represented by the following simple diagrams:

24 hours in equal amounts

24 hours as reality - exhaustion

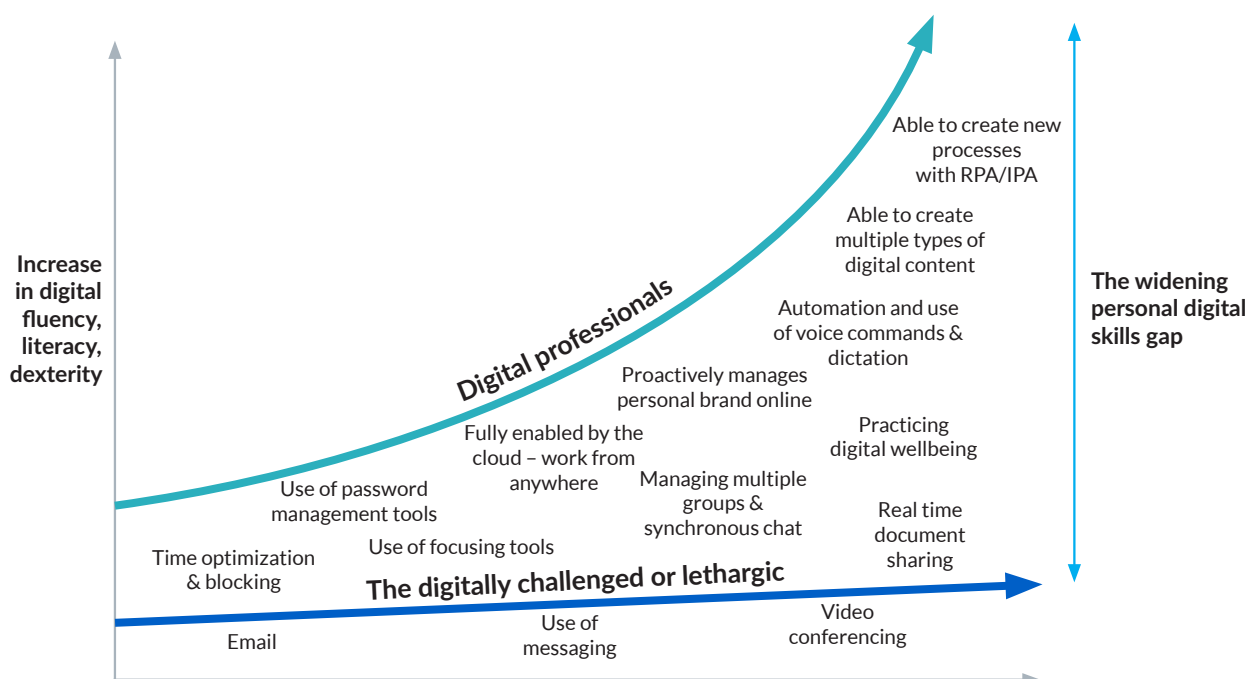### 24 hours of a digital professional
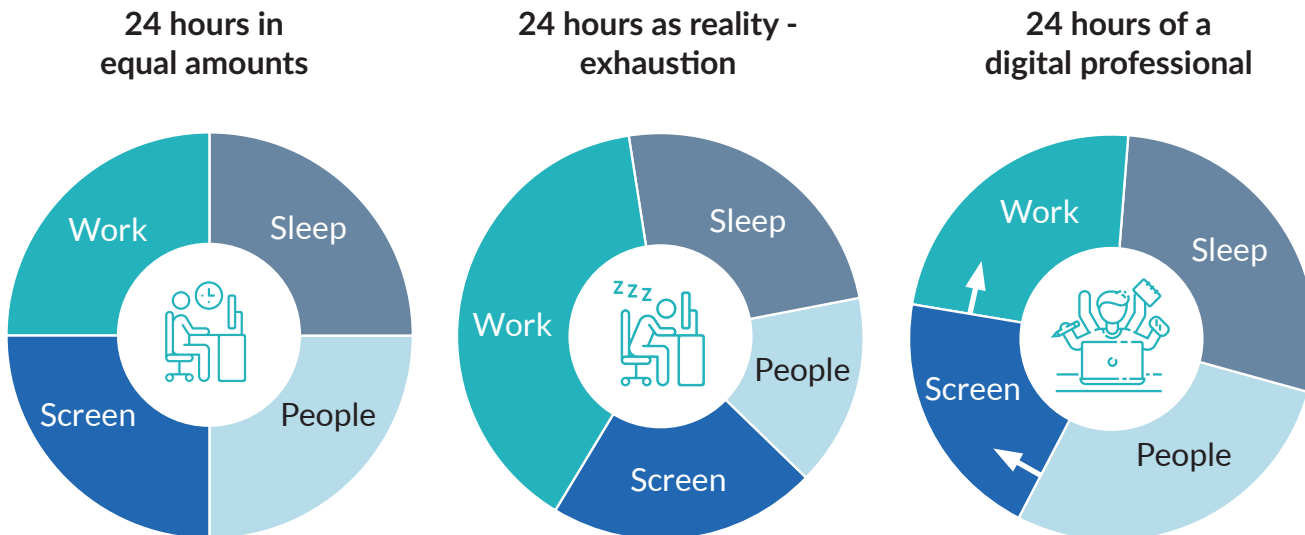
Employees are looking for that balance for the new hybrid workplace, and finding out from others how they prioritize, focus, find time to learn, keep up with people internally and externally, and organise their childcare or eldercare, is part of the reset of practices that is needed. From a psychological perspective, Brendon Burchard puts it like this: "In examining over 20 years of research, I've found that if you feel you are more productive, you are more likely to feel happier, more successful and more confident." You can't make anyone make a change, but if they can see others doing it and being successful, and get those others to help them to do the same, there is a much higher chance of socialised adoption.

Outcomes for the organisation

The negative effects of digital transformation, worker exhaustion, and the ever-increasing gap in digital skills are real, as is the unrest that exists in the workforce in terms of whether they continue to work for their current employers.

As Erik Brynjolfsson from MIT said back in 2013: "technology is advancing so fast that our skills and organisations are not keeping up." The diagram below illustrates the ever-increasing gap between those who have digital competence and those who don't. In his book 'Average is Over', the economist Tyler Cowen said: "average is over, the key divide is between the 10% to 20% of people who can manage computers, and everyone else."

Increase in digital fluency, literacy, dexterity

Digital professionals

The digitally challenged or lethargic

Able to create new processes with RPA/IPA

Able to create multiple types of digital content

Automation and use of voice commands & dictation

Proactively manages personal brand online

Fully enabled by the cloud – work from anywhere

Practicing digital wellbeing

Managing multiple groups & synchronous chat

Use of password management tools

Real time document sharing

Use of focusing tools

Time optimization & blocking

Email

Use of messaging

Video conferencing

The widening personal digital skills gap

The advancement of technology in the workplace driven by digital transformation & Covid19

Conversations about the lack of digital skills usually focus on coding skills, key technical skills such as AI and Blockchain, digital skills such as digital marketing, SEO keywords advertising, and social media. What gets ignored are the personal digital skills we discussed in this paper, which really affect the day-to-day exhaustion/wellness, productivity and time flexibility of the workforce. In the future, labour shortages and the aging population mean that 90% of future growth must come from productivity improvements. Where better to start than with an Interconnectedness programme?

What the Interconnectedness programme can do is simultaneously create a regular social dialogue at work and upgrade employees' digital professionalism and operational skills. This makes them feel more on top of their jobs and benefits the organisation in multiple ways: We believe that the Interconnectedness programme and its effect on digital professionalism is a rising tide strategy for the whole organization, as implementing it helps raise everyone's game in any number of different ways.

At Educated Change we have been running this programme from the beginning of lockdown and we credit it with being a major reason for our doubling in size in the last 18 months while losing only a couple of people during that time due to reasons not connected with the company itself.

Next steps

If you want to learn more about how you can run your own Interconnectedness programme, either with our stand-alone DIY Toolkit or with our fully supported programme providing the tools, content and coaching to help you make the programme a success, please get in touch at bbarker@educatedc.com.

Focus area	Organizational outcome	Individual outcome
Overall value	Increase in employee retention/talent, productivity increases, technology adoption, & innovation through stronger teams & better connections	Feeling invested in, part of the future of the firm, more professional, better equipped, increased career prospects
Digital learning	Developing the growth & learning mindsets of existing talent (smarter employees), new process & product innovation from employees	Confidence in the future, the feeling one is growing, digital curiosity
Digital mindset	Technology & systems adoption (maximizing investment in IT), more agile, reduced risk of cyber attacks.	In control of technology (not dependent), ability to self manage, better equipped for the workplace, better connected & social
Digital brand	Attract new business opportunities & new employees	Career visibility, trustability, powerful network
Digital productivity	Operational speed & better time management increasing value per employee	Feeling productive not overwhelmed – success-driven
Digital wellness	New ways of working using hybrid digital/physical workspace for greater organizational performance & team-based culture	Greater employee resilience (reduce absenteeism due to illness, stress)
Digital collaboration	New ways of working using hybrid digital/physical workspace for greater organizational performance & team-based culture	Flexible working, feeling more in-tune with the organization, in the loop

About the Author

Bob Barker has been researching and delivering digital competence programmes for over 10 years and has been in the technology industry for 35. He has written multiple papers and published two books on digital professionalism. The first, '*Digital Common Sense and how to get IT*', is based on running workshops and designing programmes for Fortune 500 companies where organisations wanted their employees to become "more digital". The challenge was always defining what that meant, which led to writing the book. His second book, '*The Digital Professionalism Checklist*', is a very practical book consisting of 30 checklists covering the key areas of digital literacy, and was written because short summaries were always asked for following a workshop. However, no matter how much content and advice is out there, Bob has discovered there is no better way of learning than from asking others and finding out what practically works for them in the context of their environment – hence the creation of the Interconnectedness programme. At Educated Change Bob acts as a change agent for digital professionalism in firms and also as a digital coach, personal brand advisor and trainer.

About Educated Change

Educated Change was founded in 2008 and has operations in Europe, Asia, and the Americas. It is focused on helping individual executives in some of the largest organizations in the world to run their social media influence programmes, by providing both the guidance and software to help create content, build network connections, and generate opportunities. It is also focused on the educated change of employees in terms of managing their digital exhaustion and social burnout through programmes in digital professionalism and wellness.