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ENABLING SUSTAINABILITY:

Storing Data is ‘Costing the Earth’

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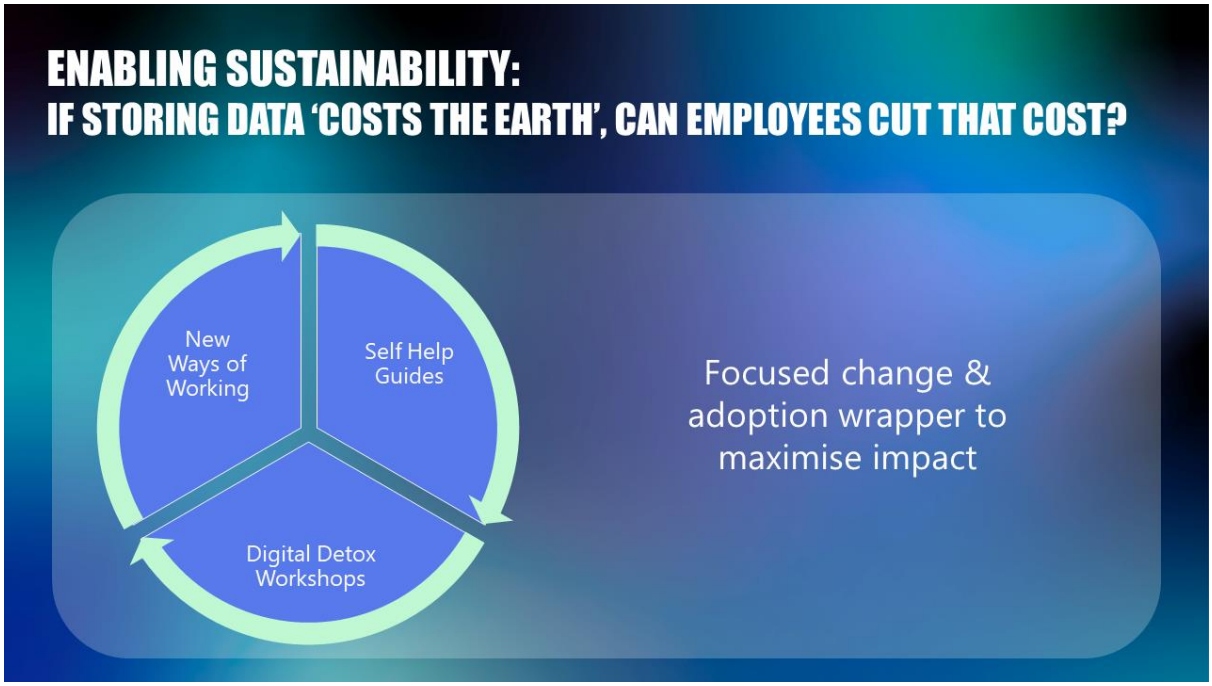

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Introduction

Whilst many organisations 'do their bit' for the environment through things like reducing travel and increasing recycling, the idea of sustainability in and of digital technology is still an afterthought at best. In particular, many corporate employees are still holding on to the mistaken idea that data storage is more or less unlimited and 'virtually' free.

The result? An enormous accumulation of redundant, outdated and trivial (ROT) data. Global data volumes are growing exponentially (supporting the misconception of unlimited storage), and the financial cost of storage may seem reasonable. However, the environmental impact is significant. Anthropologist Steven Gonzalez Monserrate[1] concluded that, by 2014, a typical data centre was consuming as much power as 50,000 homes each year. He also noted that The Cloud had a greater carbon footprint than the airline industry. In 2018, Google's data centres consumed 15.8 billion litres of water for cooling, a 38% rise on the previous year[2], and in the US most of this water was drinkable.

So why do employees store so much ROT? Having worked on this topic with many clients in recent years, we hear common themes:

- What if someone ruins my draft? Better save a copy.
- What if I have to justify a decision later? Better save all the emails.
- What if someone can't access the link? Better send it as an attachment.

Nobody is setting out to 'cost the earth' but too many employees are unaware of existing functionality, already bought and paid for, that should dispel these fears, and too few employers are investing in the adoption/training needed to fully exploit existing tools.

In our view, nobody is being deliberately 'naughty', but we are being a little thoughtless. The good news? Reducing an existing 'digital heap' and preventing the buildup of ROT data in the future is good for the organisation (financial, ESG, data security and general efficiency benefits), good for employees (aligned to the personal

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[1] Monserrate, S. G. (2014) *Inside the physical footprint of the Cloud.* Available at: https://www.popsci.com/environment/data-centers-environmental-impacts

[2] Mytton, D. Data centre water consumption. *npj Clean Water* 4, 11 (2021). https://doi.org/10.1038/s41545-021-00101-w

values of many, improving many aspects of modern working life), and good for the environment (cutting carbon emissions, reducing power and water consumption). And, it's easy to get started.

Getting started

Before focusing on human interventions, we acknowledge that technological solutions, alongside human supporters, would be a huge help in reducing ROT data. For example, an organisation might agree a set of criteria to identify data for automatic deletion and design an application to 'press the delete button'. However, technological solutions take time to build and test and they cost money. For now, let's look at three things most organisations can start immediately, achieve quickly, and deliver at minimal cost.

Identify and commit to new ways of working (WoW)

The new WoW should be:

- **Tailored to your organisation** (possibilities are endless – success requires focus).
- **Driven by your challenges** (someone else's "top ten tips for…" will not resonate).
- **Clear about what is required** (versus what is recommended).
- **Backed up by solid benefits** (with a focus on," What's in it for me?")

New WoW might include always sending project communications via the appropriate Teams or Slack channel and never by email; always using systems with automatic version control for documents and never creating separate drafts; or, always sending hyperlinks rather than using attachments.

Deploy 'Self-Help Guides' to more confident users

A simple assessment of digital literacy can identify employees with the confidence to quickly reduce their own ROT data. A set of quick reference guides could cover topics such as:

- **Automatically empty deleted emails** when exiting outlook.
- **Automatically delete duplicated content in** e-mail threads.
- **Delete outdated pictures/videos** and empty your recycling bin.

Deliver ‘Digital Detox’ workshops for those who need help

A proportion of employees will be nervous about deleting data or ‘doing the wrong thing’. Investing time to tell them why, show them how, and being there for questions, can help transform the nervous to the zealous.

Maximising the impact

McKinsey & Company’s often quoted research reminds us that 70% of change efforts fail, usually due to employee resistance and a lack of management support. For this reason, any organisation that is serious about delivering the changes outlined above will need to invest in a change and adoption ‘wrapper’ which might include the following:

- **A structured approach to the change** process, e.g., the Prosci ADKAR methodology.
- **Specific support and communication for people managers**.
- **A carefully selected, well supported community of ‘data champions’** setting an example, monitoring local progress, and providing local support.
- **Explicit benefits** at team and individual level, with clear metrics and the enthusiastic celebration of successes.

As accredited Prosci ADKAR Practitioners, FSP’s Change Consultants all subscribe to the ideas that organisational change happens one person at a time, and that line managers have the biggest influence on where individuals expend their efforts.

Conclusion

In summary, as many corporations work in some areas to support a positive environmental agenda, many are falling short in the area of digital sustainability, and in particular, data storage with huge volumes of ROT data accumulating globally. Whilst organisations should take a holistic view to sustainability and overall digital maturity, with little delay and minimal cost most organisations could deliver a meaningful reduction in their volumes of ROT data, with positive outcomes for the organisation, its employees and the environment. To maximise the chances of short term success and long-term results, a professional and structured approach to change and adoption is highly recommended.

Partnering with FSP for a Sustainable Future

If you would like to explore other enablers for achieving sustainable digital transformation, we invite you to check out our white paper which also contains pragmatic advice for digital leaders looking to find out more about sustainability and how it can benefit their transformation initiatives. Feel free to get in touch with us at sustainability@fsp.co to find out more about these topics and discuss how we can help your organisation thrive in the realm of sustainability.

References

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