

Workers return to print, as screen fatigue sets in

Epson Europe recently conducted an independent survey of over 2,400 employees from across EMEA on 'The State of Printing in the Workplace'. It found that screen fatigue is sending workers back to the printed page, with 73% of South Africans printing, on average, around 36 pages each day.



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With the rise of tablets, e-readers and smart phones, along with ever-increasing screen quality people are doing more with digital screens than ever before. This is especially true for 'screenagers', the younger generation of millennials who have grown up in a screen-based culture of social media and mobile devices.

However, even in our increasingly digital-reliant society, paper still plays a major part in how we work. Does this reliance on paper in the workplace mean a need for a break from staring at screens, or is there a more scientific explanation behind paper's longevity, and is it possible to process information on paper differently than we do on screen?

When it comes to 'skimming' over content or giving something a quick read, on-screen reading works better for some than others. However, people still turn to paper for thoughtful and careful reading, whether it is in schools or in an office environment.

Text heavy documents printed

In the workplace, the most popular printed items include invoices and letters, which employees say make up 48% and 46% respectively of all items they print in a typical day. These items are typically text heavy and are often the source of critical background or legal information, requiring a comprehensive understanding of the text, which would explain their prevalence in the office. Invoices and letters are also more likely to be edited and treated with extra attention than other items.

Research shows that the number of business emails sent and received per user, per day, reached an estimated 123 emails during 2016. This figure is expected to grow to an average of 126 messages sent and received per business user, per day, by the end of 2019. With these figures and predictions in mind, it is easy to see why email attachments account for 45% of all printed items, and 39% of these making up the total number of items printed.

Employees have also highlighted their biggest reasons for printing instead of screen reading, with 40% of respondents saying that they need hard copies of legal documentation and contracts. A further 38% of people print items out for the purposes of archiving or keeping items on file for future reference, while 36% prefer to print out proof of purchase from their banks and concert tickets, presumably because having hard copies provides peace of mind.

Paper still has a place

Scientific research, although in its early stages, creates a foundation for the ongoing argument of why paper will always have its place in most institutions, demonstrating that reading from print results in much higher levels of comprehension, learning, information retention and ease of use. This can be partially explained by the reader's ability to move through text in a non-linear fashion – the opposite of reading from a screen – and being able to flick through pages with ease.

Screen technology is currently unable to replicate this tactile experience, even with the advent of flipbooks on reading devices or flip page magazine PDFs online. Some scientists even argue that simply feeling the paper between our fingers also supports comprehension of text – known in a 2011 study by Gerlach and Buxmann as 'haptic dissonance', referring quite literally to 'grasping something'.

Screen reading is tiring

Furthermore, several other academic studies (Wastlund, Reinikka, Norlander and Archer) reveal that the brain is under much more stress when reading from a screen, becoming tired more rapidly, compared to reading from paper. Studies have shown that the brain can function for a much longer period when reading from paper, with screens draining more of the brain's resources during the reading experience, making the comprehension of information more difficult.

Moreover, reading on interactive devices requires more discipline, as it allows for multiple distractions. For instance, an email may appear while proofreading or one may be tempted to leave the document to browse the internet or social media. When working on paper, there is less opportunity for distraction and readers are less likely to multi-task.

In order to be productive, one must determine what works and in which instances working on-screen or off-screen is the best choice. However, in the words of futurist Jack Uldrich, "Every technology has unique and tangible benefits, and paper is no different. Arguably, paper is the greatest instrument ever invented for conveying, sharing and disseminating information."

On that basis, it is safe to say that paper-based documents will continue to be vital in terms of encouraging productivity and efficiency among employees.