

# Digital Communication

## Editorial

As the end of 2023 approaches, we're wrapping up projects and reflecting on the year that was. Like most, this is usually the time I start thinking about my goals for the new year and how I plan to achieve them. Building on an activity I started early on in my career to boost my efficiency and improve the quality of my communications, I'm motivated to expand and optimise my digital workspace by learning new tools. After all, it's difficult to succeed in the digital era without being tech-savvy. However,

I have to admit that the rapidly evolving technology and digital landscapes make it difficult to keep up with the latest and greatest. So, I'm left somewhat confused about which tools to tackle next and whether the effort is worth leaving my old faithfuls behind. Federica Angius is a freelance medical writer who enjoys keeping up with the latest developments and tools suitable for medical writing, not to mention everything else it takes to succeed as a business owner. In her article, she shares what her digital workspace looks like, highlighting tools

## SECTION EDITOR



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she uses every day – some familiar to many of you and others you've probably never heard of. Hopefully, you're inspired to broaden your horizons and expand your digital toolkit to take your medical writing to the next level in 2024. Happy holidays!

Best, Nicole

## From the well-known to the cutting-edge: Tools to revolutionise your digital workspace in 2024

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In today's digital era, we're more connected than ever, with endless opportunities at our fingertips. Yet, it was the sudden global pandemic that truly thrust us into the heart of this digital transformation. As medical writers, we found ourselves at an interesting intersection: our profession, rooted in evidence and detail, meets the ever-evolving world of digital tools.

Three years since the pandemic began, it's time to ponder: How has our digital work environment changed? How have we adapted, grown, and maybe even thrived in this new setting? While many of us smoothly transitioned into the digital world, some faced a steep learning curve, diving into unfamiliar tools and technologies. As 2024 nears, an important question remains: How can we optimise our digital workspaces? We need to ensure we're not just equipped with the basics but also with the latest innovations suited for our profession and work-life interface.

Chasing productivity is a tricky path. Think about it: If we add up all the hours, we spend nearly a decade of our lives working. So, it's

natural for us to want to make every moment count. But sometimes, our desire to be ultra-productive can lead us astray, especially when we're lured by the siren call of "productivity porn" – that endless stream of hacks and tips promising to turn us into efficiency machines.

But here's the catch: this constant chase for the ultimate productivity hack can set us up for disappointment. It's like we're being sold a dream of endless energy and focus, often by self-styled experts who say they've cracked the code. Yet, many of these "miracle" methods don't hold up in the real world. They play on our hopes, making us chase after goals that might not even be right for us. And in a twist of irony, our quest for productivity can become a distraction in itself, keeping us from our actual work.

Being medical writers, we value truth, evidence, and authenticity. We can't be swayed by every new trend that promises the moon. What we need is mindful productivity – a thoughtful approach that addresses our real challenges and encourages self-awareness. It's about knowing our strengths and weaknesses, being smart about what advice we take, and, most importantly, enjoying the journey rather than just fixating on the destination.

This article dives deep into the digital tools that have become a staple in my workspace

between the well-known and the cutting-edge. These tools are handpicked to boost my efficiency and speed as a freelance medical writer. Let's journey through this digital exploration, always remembering that when it comes to personal productivity, we are our best guides.

### Project management and collaboration

Every morning, as the world is just waking up, I sift through my emails, scanning for any overnight updates. This ritual sets the tone for the day, giving me a clear view of immediate tasks.

Then, **ToDoist** jumps in.<sup>1</sup> It's not just a task manager; it feels like having a personal aide. Whenever I set a task, ToDoist sends gentle reminders, ensuring I stay on top of the day's priorities. While I use calendars for specific appointments or meetings, ToDoist serves as a repository for my thoughts, both personal and work-related. Tasks range from "read 8 literature papers for project X" to simple reminders

like "water the plants." Each morning, I tackle the highest-priority tasks, gradually moving to those with lower priorities.

Mornings are also reserved for client meetings. The platform you use can set the mood, be it the ever-present **Zoom**, **Google Meet** with its smooth integration of Google tools, or

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# THE DIGITAL WORKSPACE of a Medical Writer

**Microsoft Teams**, which many businesses prefer for its robust security and teamwork features. Sometimes, if the meeting is a more demanding one, I use **Descript** to capture every word, pause, and nuance, ensuring I don't miss out on valuable insights.<sup>2</sup> It does more than just transcribe; it allows for structured playback, letting me revisit any part with precision. This ensures that when I weave these discussions into my work, the essence remains pure.

Previously, I juggled Calendar, **ToDoist**, and various meeting tools separately, which became tedious. That changed when I discovered **Fantastical**.<sup>3</sup> It integrates all these applications (apps) together, providing an overarching view of my day. Its intuitive design showcases my appointments, meetings, and reminders in a visually pleasing manner. Its ability to merge both personal and work calendars, along with Todoist, Zoom, Google Meet, and Teams, is invaluable. Whether it's a formal virtual meeting or a relaxed coffee chat, Fantastical keeps me on track, avoiding double bookings and ensuring I take those much-needed breaks.

**Cardhop** fits right in, acting as my digital address book.<sup>4</sup> Be it sending an email or joining a meeting, Cardhop ensures all my contacts are just a click away, proving more efficient than traditional address books, like those in Microsoft Excel.

For deeper collaboration, especially with colleagues abroad, **Google Drive** and **Notion Projects** are my go-to.<sup>5,6</sup> They're not just storage apps; they're dynamic platforms that foster collaboration. Google Drive allows for real-time document collaboration, while Notion Projects is where the magic of project management happens. Every project, no matter how complex, has its space, allowing for task breakdowns, role assignments, milestones, and even dedicated discussions. I found Notion Projects to be superior to **Trello** (another project management tool). While it retains Trello's board structure, it adds task dependencies, Gantt chart visualisations, artificial intelligence (AI)-generated summaries from simple bullet points, and project prioritisation. Its integration with other Notion templates streamlines my workflow. Depending on the project and client, I occasionally revert to Trello boards.<sup>7</sup> They're visually engaging, interactive, and super flexible. Each card represents a task or a sub-project, moving fluidly across columns, marking its journey from idea to completion.

At the end of the day, **Clockify** acts as a mirror, showing me how I've spent my time, offering insights into my time management, and highlighting areas for improvement.<sup>8</sup> It was my first time tracking app, and it remains user-friendly. I activate it daily, allocating every minute to distinct projects. Its year-end breakdown proves invaluable for client interactions and freelance business management.

As a project winds down, **Zoho Invoice** takes over the financial side of things.<sup>9</sup> Its ability to integrate with platforms already part of my digital workplace, like



## MANAGE & COLLABORATE

- ToDoist\*
- Fantastical
- Cardhop
- Google Drive\*
- Notion Projects\*
- Trello\*
- Descript
- Zoom
- Microsoft Teams
- Google Meet\*
- Clockify\*
- Zoho Invoice\*



## DIVE DEEP INTO RESEARCH

- Zotero\*
- Scite
- Pubmed\*
- Google Scholar\*
- MEDLINE\*
- Microsoft Excel



## DRAFT & REFINE

- Microsoft Word
- Google Docs\*
- Scrivener
- ChatGPT-4



## VISUALISE

- Microsoft PowerPoint
- Keynote\*
- Canva\*
- Biorender\*
- Visme

\*The primary features of this app are available free of charge.

Google Drive, ensures all my invoices, expense reports, and financial documents are neatly organised and ready for any audits. What endears me to this app is its exceptional value, especially given its free status.

## Deep dives into research

When it's time for in-depth research, everything changes. The room feels calmer, my coffee stronger, and my digital tools become more specialised. **Zotero** has been my trusty sidekick, making referencing easy with its vast library and citation features.<sup>10</sup> Every piece of information I gather from sources like **Pubmed**, **Google Scholar**, or **MEDLINE** is neatly organised and tagged. Zotero stands out for its simple collection of references from websites. It often allows PDF downloads alongside references, streamlining access to full texts. I value its feature of saving webpage snapshots with references, preserving original content that might change. It's compatible with many word processors, such as **Microsoft Word**, **Libre Office**, and **Google Docs**, which is handy for collaborations. Despite Zotero's 300 MB free storage seeming limited, it's straightforward without needing special memberships. Additionally, its citation style language (CSL) visual editor is intuitive, even for those new to such formats.

But research is an ever-evolving field. Recently, **Scite** has piqued my interest.<sup>11</sup> It bridges the gap between old-school citation and modern analysis using AI to determine whether articles mention, support, or contrast the claims of each cited article. By showing how specific research has been cited, it provides context. It's like having a magnifying glass that doesn't just zoom in on the reference but also shows its wider impact. While there's a learning curve to it, its capabilities go beyond what most traditional reference managers offer, making its potential benefits worth every bit of effort.

When data analysis beckons, **Microsoft Excel** is my tool of choice. It's an oldy but a goody, and if you know how to use it, it can be more than just a spreadsheet; it can become a storyteller. With its vast array of formulas, pivot tables, and visuals, Excel turns raw data into insights that enrich my articles. Every formula, cell, and chart guides my research, ensuring it's both informed and impactful. While Excel boasts immense capabilities when fully leveraged, learning this app can be daunting given the vast

array of available features and the endless list of formulas one needs to memorise. However, Microsoft's release of **Copilot**, an AI assistant powered by the large language model generative pre-trained transformer 4 (LLM GPT-4), promises to diminish the learning requirements for all its apps, including Excel, improving user capabilities and experiences.<sup>12,13</sup>

## From research to writing

The shift from research to writing is always thrilling. Depending on the project, I might use a classic like Microsoft Word or Google Docs or turn to a more modern app like **Scrivener**. Scrivener is like having a personal writing studio.<sup>14</sup> While most word processors prioritise presentation, Scrivener zeroes in on content. Picture the creative process: we scribble initial ideas on bits of paper and index cards, pinning them to a corkboard, unsure of their final position. As our thoughts evolve, a structure emerges, highlighting which sections have organically developed and which require more refinement. Scrivener digitally integrates this methodology. While Word simplifies the typing process compared to a typewriter, Scrivener elevates the experience by seamlessly integrating planning, writing, and structuring for extensive texts as a white paper.

But writing isn't a one-and-done process. Lately, I've been turning to **ChatGPT-4**, a LLM-based chatbot.<sup>15</sup> I prefer it over traditional tools like Grammarly and Hemingway for polishing my work. ChatGPT-4 isn't merely an editor; it's a dynamic feedback loop. It pushes me to dig deeper, refine my writing, and even play out potential feedback scenarios. Engaging with

ChatGPT-4 feels like a stimulating conversation. Beyond just refining my writing, these interactions with ChatGPT-4 have sharpened my communication skills, preparing me to anticipate and adeptly navigate real-world discussions, whether it's about the direction or structure of a paper.

## Visual storytelling

Turning my research into presentations feels like crafting a visual story. Every slide, image, and narrative element must weave together to share the essence of my findings. The platform I choose plays a pivotal role. Whether it's Microsoft **PowerPoint** with its classic layout, **Keynote's** modern design flair, **Canva's** vast visual library,

**Biorender's** detailed scientific illustrations, or **Visme's** animated infographics, each has its unique strength.<sup>16,17,18,19</sup> Just as a movie director sets the scene's mood, I tailor my presentations to resonate with my audience's preferences and expectations. Gone are the days when you need to be an expert at illustration software. The tools outlined here are easy to use and provide a vast array of visually appealing, accurately depicted scientific and other artwork to create beautiful illustrations with minimal effort.

## The value of lesser-known tools

Sometimes, we gravitate towards familiar tools, thinking they're more efficient. However, we might be overlooking hidden gems that, while requiring an initial time investment, can save us much more time in the long run. Consider my experience with time tracking. My bookkeeper initially wanted me to manually log every minute I worked in an Excel file, which meant noting down start and end times for every task. But with Clockify, the process became seamless, and I automatically got a detailed report. I've done the math: using Clockify over Excel saves me at least an hour every week.

And then there's PowerPoint. It's a staple for many, but have you explored Biorender? It's a game-changer for medical writers, offering specialised scientific illustrations. Similarly, while Word is a go-to for many, Scrivener offers a refreshing approach to writing, particularly for extensive documents.

Exploring lesser-known tools can provide a unique advantage, allowing us to address specific challenges that mainstream tools might overlook. So, even if there's comfort in the familiar, venturing into new territories can yield unexpected and rewarding results. Why not give it a try? You might find a tool that becomes an essential part of your digital toolkit.

## Looking ahead to 2024

The only constant is change. As we journey deeper into the digital age, it's essential to keep an eye on the horizon, spotting emerging trends that might reshape our professional world in 2024. A prime example of this is AI. It isn't just a buzzword for the future; it's already woven into our daily lives, changing the way we work.<sup>13</sup>

Generative AI is advancing at a breakneck pace thanks to significant investments. This has paved the way for groundbreaking tools capable of creating text, videos, images, and audio. And multimodality can blend them to deliver richer, more accurate results, setting the stage for immersive experiences. The progress in AI technology is also democratising its access,

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allowing more people to tap into intuitive AI apps that effortlessly blend into their daily routines.

AI's influence is particularly pronounced in areas like literature analysis, data interpretation, and content optimisation. It's enabling more precise research curation from vast databases like PubMed, streamlining the synthesis of complex medical data, and even suggesting content structures tailored to specific audiences. Personalisation is taking centre stage, with AI enabling tailored interactions across various channels. Digital twins are gaining popularity, especially as our interactions become more virtual. These digital replicas are proving invaluable in areas like online meetings and medical consultations.

As AI's footprint expands, the call for ethical AI and regulation grows louder. This urgency arises from several considerations. Medical writing often conveys information with direct implications on patient care, drug development, and public health policies, making the accuracy and reliability of AI-generated or AI-assisted content paramount. The sensitive nature of medical data demands that AI tools processing this information adhere to the highest ethical standards, safeguarding patient confidentiality and informed consent. Furthermore, AI models used in medical writing must be trained on diverse and representative data sets to prevent the introduction or perpetuation of biases, ensuring the information remains unbiased and universally applicable. The mechanisms behind AI tools should be transparent, especially when these tools are used to explain medical phenomena or provide recommendations, ensuring accountability in the information presented. Lastly, to maintain the integrity of the profession, AI-assisted medical writing must consistently align with established medical standards and guidelines.

In the professional realm, AI isn't just boosting productivity; it's reshaping job roles. This shift means we need to be on our toes, constantly learning and adapting. Are you ready to venture out of your comfort zone and explore new digital tools?

### Disclosures and conflicts of interest

The author declares no conflicts of interest.

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