

The future of Digital Employee Experience (DEX)

How real-time AI,
self-healing systems,
multi-modal and
spatial interfaces are
transforming DEX

Authors

Richard Caddick and Mark Brown

The world is how we shape it

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Introduction

From desktop to digital workplace

The digital workplace began as a traditional desktop: a fixed device, tied to a physical office, delivering a small set of centrally managed applications. Access was location bound, user experience was largely an afterthought, and productivity depended not just on the technology, but on how much friction users were willing to tolerate.

Over time, this model has evolved dramatically. Mobility introduced laptops, then tablets and smartphones. Applications moved from locally installed software to web based and Software as a Service (SaaS) platforms. Identity replaced location as the primary access control, enabling work to happen securely from anywhere, on any device. Collaboration tools, cloud services and virtual desktops blurred the boundary between “office” and “remote”, transforming the desktop into a broader, always available digital workplace.

In the modern context, the digital workplace defines and shapes the way work is performed.

What does the digital workplace need to be? Looking ahead, the digital workplace, and the desktop within it, must evolve again:

It must become a **strategic enabler**, allowing every worker to contribute with maximum efficiency and minimal interference. Technology should fade into the background, supporting outcomes rather than demanding attention.

It must **delight the user**. An accessible, frustration free, intuitive and consistent experience across devices is no longer optional (whatever your need and ability). By prioritising user centred design, the desktop of the future acts as a simplified integration point for all user apps and data. Technology genuinely enhances productivity rather than hindering it.

At the same time, the digital workplace must remain **cost efficient**. IT costs must be controlled through standardisation, automation, and intelligent use of cloud and virtualisation, delivering flexibility and experience benefits without uncontrolled growth in spend.

The desktop of the future sits at the intersection of **user experience, security, cost and productivity**, a platform that empowers people, simplifies IT, and enables the organisation to operate at pace.

“ True digital workplace transformation happens when we shift from managing endpoints to orchestrating experiences. By putting the user at the centre of our DEX and AI strategies, we move away from fragmented tools and toward frictionless, context-aware workflows. The payoff is twofold: IT teams can finally shift from reactive troubleshooting to high value automation, while employees gain an intelligent environment that anticipates their needs and elevates their daily productivity. ”



Mark Brown
Account Chief Technology
Officer, Sopra Steria



What is DEX

In summary: Digital Employee Experience (DEX) shifts the focus from reactive IT support to a proactive, employee-centric approach that continuously optimises the technology environment employees use every day.

In traditional office (or hybrid) environments, IT success is often measured by the volume of IT Service Management (ITSM) tickets raised and closed, sometimes supplemented by post-resolution sentiment scores. This can create an overly optimistic picture, as feedback is gathered only after problems are fixed, missing the daily friction that slows people down and showing the workarounds people implement to solve a problem for themselves.

A poor digital experience has real consequences: frustrated employees are more likely to leave for organisations that offer smoother tools, or worse they introduce non-compliant “shadow” hardware and software to get their work done, and the organisations strategy won’t be delivered as effectively as it could.

DEX flips this model on its head. Instead of waiting for individuals to flag issues, it proactively monitors and improves the overall technology experience across the entire employee lifecycle.

Forrester defines DEX as: “The sum of all the perceptions that employees have about working with the technology they use to complete their daily work and manage their relationship with their employer across the lifecycle of their employment.” It is not a single tool or platform, but the collective feeling created by the ecosystem of technologies, processes, and policies.

Forrester blogs, Calrifying The Digital Workplace, DEX, And The Rise of DEXOps, December 2025

Mature DEX products give leaders a real-time, rich dashboard view of the whole IT estate, devices, applications, networks, workflows, and actual employee sentiment. Emerging issues can be spotted early, automated fixes deployed, and employees empowered to self-serve resolutions directly on their devices. Data becomes a strategic enabler giving leadership the insight into ‘what’ is happening so that they can focus on ‘why’ this is and manage a roadmap for continuous improvement.



According to Gartner®, organisations have the opportunity to achieve a 48% increase in overall digital workplace maturity by having a strategy that focuses on digital employee experience.

Gartner Digital Workplace Summit 2026. Session on Top 5 Steps to Transform End-User Services Into a Strategic Digital Workplace Organization.

By Tom Cipolla

For the end user, the experience transforms from one of recurring frustration and lost productivity to one where technology feels supportive and enabling, almost invisible in the best cases.

When combined with modern capabilities such as autonomous AI agents, spatial interfaces, and multi-modal inputs, DEX enhances the IT offering to be even more powerful, helping organisations attract and retain talent while driving measurable gains in engagement, productivity, and innovation.

**The next
few years -
DEX becomes
invisible,
intelligent,
and
augmented**



The future of ITSM

The advancing capabilities of AI are transforming IT Service Management (ITSM). Previously manual and time-consuming tasks will be identified and resolved far more quickly, or automated entirely, freeing IT teams for higher-value work.

Multi-agent AI systems will play a central role. Desktop and endpoint agents will monitor in real-time the tools employees use, application performance, and network health. When issues arise, these agents will collaborate with service agents, share insights, and act on the user's behalf. Practical examples include:

Self-fault reporting: devices will detect issues proactively. If an AI agent cannot resolve the problem automatically, it raises a contextual ticket with diagnostics already attached, eliminating the need for employees to manually report problems.

Self-healing: AI agents quietly perform fixes, patches, and optimisations in the background without user interruption or ticket creation.

Predictive hardware and maintenance: aggregated real-time data from across the workforce will identify patterns, forecast when repairs or updates are needed, and enable just-in-time supply chain management and pre-emptive interventions before disruptions occur.

Personalised: when combined with User Personas and their core tasks, IT solutions can be customised for each user need to ensure maximum effectiveness.

Additionally, detailed analysis of hardware and software usage patterns will deliver richer sustainability insights. Organisations can move from rigid refresh cycles to needs-based optimisation, extending the life of performant devices, reducing unnecessary replacements (and associated cost), lowering energy consumption, and shrinking the overall environmental footprint of the IT estate.

In short, service management evolves from reactive firefighting to a strategic, proactive discipline. Human roles shift toward designing and improving workflows, orchestrating agentic systems, governing AI responsibly, and continuously enhancing the overall **digital employee experience**. When combined with autonomous desktop agents, spatial computing interfaces, and multi-modal inputs, ITSM becomes far more invisible and enabling, technology that works for people rather than the other way around.

“Many organisations fail to realise the full value of Digital Employee Experience (DEX) tools because they remain constrained by an IT-centric lens, focusing primarily on operational efficiency rather than business outcomes. Without engaging the wider organisation, DEX becomes a technical initiative rather than a transformational one. To unlock its full potential, DEX must evolve into a cross-business, human-centric strategy aligned to enterprise goals.”



Steve Lucas
Solution Owner, Sopra Steria



Multi-modal computing

In summary: multi-modal computing or more precisely, multi-modal human-computer interaction, expands the ways we engage with technology beyond the traditional keyboard and mouse/trackpad to include voice, gestures, eye movement, and even neural interfaces (brain-computer links).

In some respects, this isn't entirely new, voice commands, basic gestures, and eye-tracking have existed for years, but earlier implementations relied on bulky, expensive hardware and powerful dedicated computers.

Around 15 years ago, for example, our team used a dedicated eye-tracker in user-research sessions to help eBay optimise its search-results page. The device was built into a monitor, required a high-spec laptop to record and analyse gaze data, and had to be transported in its own large, wheeled case. It gave us invaluable insight into what users looked at and in what order, far richer than self-reported feedback alone.

Today similar capability fits inside lightweight augmented reality (AR) / virtual reality (VR) glasses or even the small cameras in modern cars that monitor driver attention. The hardware has shrunk dramatically while the software has become far more sophisticated.

Modern large language models now handle multi-modal inputs seamlessly within a single conversation. You can share text, images, audio clips, or video and the model understands and responds across all of them without breaking context.



The latest AR and VR headsets go further: they track your hands in real time so natural gestures (pinch to click, swipe to scroll) replace the mouse, while eye-tracking lets you simply look at an object to select it. Invisible floating virtual keyboards appear when needed, letting you type in thin air with high accuracy.

A little further along the spectrum, but already delivering life-changing results, are neural implants or brain-computer interfaces. Neuralink's N1 implant, now in 21 human trial participants as of early 2026, enables people with paralysis or ALS (Amyotrophic Lateral Sclerosis) to control computers, browse the web, play games, and in some cases operate robotic arms or restore speech simply by thinking. What once required physical movement is now possible through intention alone.

When these richer input methods combine with spatial computing (persistent 3D workspaces) and autonomous AI agents, the result is a fundamentally more natural and powerful way of working, one that feels less like operating a machine and more like extending your own mind.

These experiences won't just be for the fortunate few. Microsoft have announced a range of new interaction methods becoming available as part of Windows 11, including Copilot Voice allowing you to use natural language to talk to your PC and Copilot Actions allowing AI agents to perform work on your behalf.



Spatial Computing / Augmented Reality in the Workplace

In summary: spatial computing uses augmented reality (AR) glasses or headsets to let you move seamlessly between applications, documents, and even multiple device environments in a persistent three-dimensional workspace, all while remaining fully aware of your physical surroundings.

This is the area of emerging technology that excites us most. We are eager to experience it firsthand.

The next generation of AR glasses hitting the market in 2026 are dramatically smaller, lighter, and more discreet than earlier headsets. Devices combine high resolution holographic displays, spatial audio, and multi-modal inputs (voice, eye tracking, gestures) to create a personal 3D environment. We no longer need bulky monitors or peripherals. Instead, our entire digital workspace can exist around us.

While writing on a conventional laptop, we are constantly switching between documents, browser tabs, YouTube videos, AI tools, email, and Teams notifications. We lose context every time we alt-tab or hunt for that one piece of information that we wanted to reference. We're even switching between our laptop, phone and occasionally iPad to get different pieces of information.





Now imagine putting on a pair of lightweight glasses and instantly seeing everything you need arranged in its own dedicated space in 3D, with full awareness of the room around you (this is why AR feels far more practical to me than fully immersive VR). All those tabs, windows, videos, and feeds from other devices become persistent, glanceable objects you can position exactly where they make sense. You can analyse data, draft reports, and cross-reference sources without ever losing your place or breaking flow.

Early users have described the experience as “noise-cancelling for the eyes”, a perfect analogy for how it removes visual clutter while keeping you present in the real world.

It also offers a genuinely private way of working that goes beyond laptop privacy screens: only the wearer can see the content. That makes it particularly valuable in public spaces, open-plan offices, or when handling sensitive information.

As with any transformative technology, 2026 devices still have growing pains, battery life, field of view, and ecosystem maturity are improving rapidly, and privacy policies around built-in cameras are becoming a key workplace discussion point. But the direction is clear: spatial computing is turning the entire physical world into your personal, infinitely expandable desk.

Autonomous computing

In summary: autonomous computing refers to AI agents that run directly on your desktop or local hardware with the same permissions you have. They can read/write files, use apps, send emails, browse the web, and execute complex multi-step tasks on your behalf, even when you're offline. This lets you delegate routine or background work so you can focus on higher-value activities.

OpenClaw (formerly Clawdbot) is the clearest proof-of-concept so far. Launched in January 2026 as an open-source project by developer Peter Steinberger, it quickly became the fastest-growing open-source software in GitHub history (surpassing React's decade-long record in roughly 60 days with greater than 250 000 stars). Early hype was so intense that Mac Minis sold out globally as enthusiasts set up dedicated local machines to run agents 24/7.

The idea is simple yet transformative, and widely regarded as the most significant practical advance in AI since ChatGPT. You install a lightweight agent on your computer that connects to your existing tools and messaging apps (WhatsApp, Telegram, Slack, iMessage, etc.). Because it has full access to your desktop and persistent memory, you can give it goals like:

Simple

"Monitor the latest developments in my field and send me a concise daily briefing every morning."

Advanced

"Build and iterate on this new software feature, run tests automatically, fix any failing ones, and open a pull request when it's ready, coordinating with other agents if needed."

Because it runs locally and autonomously (with built-in scheduling), it keeps working in the background indefinitely. OpenClaw itself is still fully open source; its creator joined OpenAI in February 2026 to help drive the next generation of personal agents, with OpenAI providing ongoing support for the project as a foundation.

Given the fast moving nature of AI innovations, it won't be long before tools like OpenClaw become more usable for a wider market and perhaps even built into your operating system.

Leading the change

It's clear to see the extent of change that will happen over the next few years. Significant change lies ahead and the future digital workplace experiences we create for our teams will be transformed. New interaction methods and AI agents will deliver better outcomes in more satisfying and productive ways. At the same time, self-healing digital estates will quietly remove the digital friction and issues that we experience today, often without us even noticing.

Digital Workplace leaders will need to advocate and manage this transformational change to ensure that this vision of the future can be enabled:



Vision and planning: senior leadership and C-Suite will need to be aligned and updated on the vision, value and plan that a modern and transformed digital workplace will bring to the whole organisation.



Technology: legacy technologies will need to be updated and model context protocols are becoming the connective layer between AI agents and application programming interfaces put in place to enable AI agents to interface with them.



Security: security and governance methods and processes will need updating to ensure that organisations aren't in any way compromised through utilising new technologies.



Culture: organisational culture will need to shift to embrace change, with people eager to embrace new ways of working and deliver better outcomes (the need to move against the mindset of "we've always done things this way").



Cost-benefit analysis: and of cost there's a cost implication, so a need for a clear organisational strategy and business cases to be developed to help support the change.

Ready to redefine your digital employee experience?

Speak to our specialists to explore how DEX, AI and intelligent systems can transform your organisation.



Richard Caddick
Consulting Director



Steve Lucas
Principal Solution
Owner



Mark Brown
Chief Technology
Officer





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