

# The Future of Work, 2025

How print and digital convergence will shape the sustainable hybrid workplace



# CONTENTS

Executive summary	3
Key findings	4
<b>01   PEOPLE: A workforce in flux</b>	6
<b>02   PLACE: Reimagining the office</b>	9
<b>03   PLATFORM: The technology of the new office</b>	11
<b>04   PLANET: The print sustainability imperative</b>	18
<b>05   PROVIDER: What does the future print supplier look like?</b>	22
Vendor profile: Kofax	25
Future outlook	28
Appendix	29
About Quocirca	30

# Executive summary

This is the third edition of the Global Print 2025 study, Quocirca's ongoing assessment of the convergence of print and digital technologies in the workplace. In April 2022, Quocirca conducted a survey of 1,021 office workers and 521 IT decision-makers in SMBs and large enterprises across the UK, France, Germany and the US. The survey revealed that many were accelerating their plans for digitisation in the post-pandemic environment, and showed a number of emerging trends in terms of working styles, usage of the office and needs from IT providers. It is important to recognise that these are the opinions and attitudes of these respondents, and likely to be highly reflective of the time the research was conducted and the discourse during that time period.

Since we last consulted the market back in 2019, the world has seen profound change, having been through the first pandemic in a century, as well as the fundamental impacts lockdowns have had on workplaces and the essence of business. As hybrid work becomes the norm, the physical office workspace is undergoing a transformation. It is no longer a place where employees simply go to work, but a space that must facilitate collaboration, as well as support a positive employee experience, sustainability and inclusion – while ensuring effective and cost-efficient use of space. Workplace analytic tools, employee experience platforms, and workflow automation solutions can help make the office element of flexible working compelling and motivating for staff, and productive and efficient for employers.

Sustainability concerns, which have been building momentum over the last decade, are rising towards the top of the agenda for many, and digitisation speaks powerfully to both of these fundamental shifts in focus. Print-centric businesses are shifting gears with digitisation to support sustainability initiatives, and the office is starting to fulfill a new set of needs – collaboration, access to frictionless technology, and a more productive way of working smart. Although print providers are slipping further from front of mind for many clients, needs around cloud-first, sustainable and secure managed services offer an opportunity to re-engage the relationship and prove relevance in the next stage of office evolution.

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# Key findings

## PEOPLE: A workforce in flux

- **Remote working is set to increase by 2025.** One-third of workforces are working remotely now (36%), with an increase to 44% set for 2025 – but over half will not be fully remote. This appears to show a preference for hybrid work, and indeed, 67% of businesses expect that they will lose out on talent if they don't offer flexible and remote working options.
- **The 'Great Resignation' is driving the need for an employee-centric workplace.** In spite of increased remote/flexible working options, 42% of employees intend to leave their jobs in the next 12 months. This equates to 50% of IT decision-makers and 39% of office workers. It is most common for younger staff (52%) and those based in Germany and the US (48% and 47%, respectively). Employees of larger corporations appear least likely to be seeking new opportunities (31%).
- **Well-being and burnout are key contributing factors.** Although better remuneration elsewhere is the most common driver for planning to leave (30%), mental well-being (28%) and not feeling valued (25%) are significant factors. While older staff are less likely to leave (17%), they are much more likely to have reported burnout (38%).
- **The office needs to position itself as a compelling destination for in-person collaboration.** 69% said flexible working will force a rethink of what makes a good company culture.

## PLACE: The office finds new purpose

- **The office will become an occasional destination.** There is widespread expectation that the office will become more of an occasional destination, used less often or by smaller groups of employees, with virtual meetings becoming the norm. Overall, 56% said the physical 'workspace' would only be used as an occasional meeting point.
- **Flexible work does not make the office obsolete.** The purpose of the office has changed as a place for collaboration and connection. The top benefit, cited by 37% of respondents overall, is in-person collaboration. This rises to 45% amongst respondents in large organisations (over 1,000 employees).
- **Office footprint is adapting to hybrid work patterns.** Overall, 23% expect their footprint to remain the same, with 40% anticipating an increase and 35% a reduction. Larger organisations (51%) are most likely to be increasing their footprint, which is probably a result of a larger number of small offices (hub-and-spoke model) that support flexible working, whereas small organisations are most likely to be reducing their physical space (45%).
- **The promise of the office metaverse may come to fruition.** By 2025, 61% expect face-to-face relations to decline, and workers will mainly communicate through video, or augmented or virtual reality. Younger employees are even more positive about the virtual office, with 68% of those aged 35–44 expecting to see virtual communications supersede in-person interactions.

## PLATFORM: Print and digital convergence accelerates

- **IT decision-makers (ITDMs) and office workers are disconnected on the future of print.** By 2025, 72% of ITDMs say print will be important, compared to 50% of office workers. ITDMs in the US are especially positive about print – 59% expect print to be very important by 2025, compared to 25% in the UK and Germany.
- **Print volume recovery remains uncertain.** Office printing is set to increase for almost two-fifths (39%), decrease for the same proportion (39%) and stay the same for 21%. Meanwhile, 60% expect home printing to increase over the same period, with just 16% expecting a decline in home print volumes.
- **The role of print is shifting to high-value needs.** Important and client-facing documents seem to hold continued relevance in terms of being printed, especially among ITDMs. The need for printing is most apparent for 'important' documents, with two-thirds (66%) of respondents believing these should be printed. Over half (55%) believe customer collateral should be printed. This indicates that it will still be worth communicating around high-quality paper and premium presentation, even in the context of concerns around sustainability and cost.

# Key findings continued

- **Digitisation of paper-based processes is growing in importance.** Today, 15% indicate that digitisation is extremely important to their digital transformation initiatives, rising to 32% by 2025. Financial services and business and professional services sector respondents place the highest importance by 2025 (38% and 36%, respectively). This compares to just 28% in the public sector.
- **Managed print services are a key enabler for digitisation.** MPS can help organisations uncover opportunities for automating paper-based processes and minimising wasteful printing. Overall, 59% of organisations using an MPS say digitisation of paper-based processes is extremely or very important, compared to 29% of those not using an MPS. This reveals the opportunity MPS providers can deliver to their customers as they transition to the less-paper and more sustainable office.
- **Print environments are on the move to the cloud.** While just 4% have their organisation's print environment all in the cloud – this is expected to increase to 20% in 2025, in common with IT environments overall. This is very much the direction of travel for all organisations, albeit at different speeds. Suppliers must be able to offer a full cloud and combined approach to participate in this area as momentum for cloud print adoption builds, even those less motivated towards digital in general.

For the purpose of this report, we have defined organisations as Digital Leaders, Digital Followers and Digital Laggards. This comprises 44%, 39% and 15% of organisations, respectively, and is based on how important they currently consider the digitisation of paper-based processes.

## PLANET: The print sustainability imperative

- **Sustainability goals are driving the less-paper office.** 67% say that by 2025, sustainability will be a highly important credential for businesses. The majority also agree that sustainability goals will necessitate reduction in paper usage (38% strongly agree and 37% somewhat agree).
- **Digital maturity and sustainability are intrinsically linked.** A range of strategies have been adopted to address sustainability in terms of printing, with print policies the most common (31% are already using these), along with print management tools (30%), cloud print management solutions (28%) and managed print services (27%). Digital Leaders have many more print-related tools in place than Digital Laggards to meet sustainability and digitisation goals.
- **Sustainability leaders are least likely to say their deepest relationship will be with a print manufacturer by 2025.** In light of the drive for sustainability, print manufacturers must ensure that their environmental credentials are clearly communicated, particularly via channel partners, to combat the loss of direct influence with buyers.

## PROVIDER: The print supplier of 2025

- **Print manufacturers are losing influence to IT services providers.** Expectations from print suppliers are high, but meeting them may provide the opportunity to create the deep relationships that are being lost to IT service providers. In our 2019 study, 26% reported that their deepest relationship was with print manufacturers, but this has dropped to 18% and is expected to fall to 16% by 2025. In contrast, 26% expect to have the strongest relationship with IT service providers in 2025.
- **Security and cloud lead.** The most important services that print suppliers should offer are security services (28%) and cloud print services (27%). Security services speak to larger organisations in particular (33%), whilst cloud print services are equally important to all but the smallest organisations (24%).
- **HP is viewed as a leader and innovator.** Overall, 27% view HP as a technology leader, followed by Canon (15%) and Xerox and Epson (both 10%). HP is also considered to be in the best position to innovate and disrupt (25%); indeed, there is a strong correlation between perceived leadership and ability to innovate, with Canon, in second place for leadership, also in second place for innovation/disruption (13%).

# 01 PEOPLE

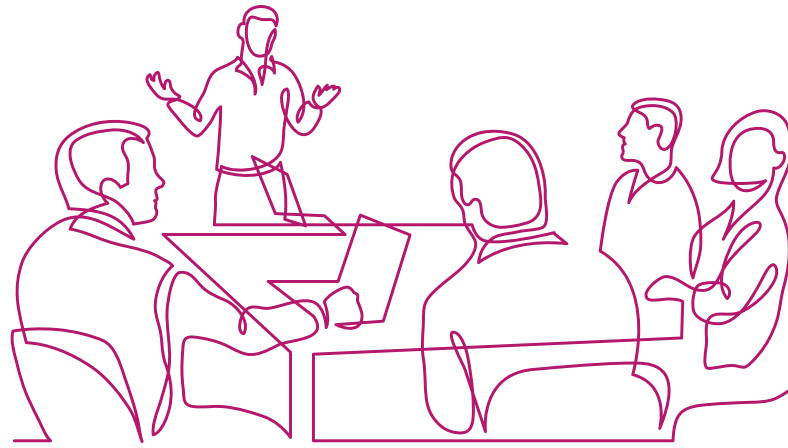
## A workforce in flux

Staff attrition is a considerable risk, and beyond salary, mental well-being and burnout are top drivers

**Many are back in the office, but flexible working is the keynote for the future**

The workforce's return to the office is fully underway. Quocirca's research reveals that two-fifths (41%) of employees are already back to working in the office five days a week – although this is higher for office workers than IT decision-makers (47% versus 29%). Notably, the older respondents (aged 45 and over) are most likely to be working five days a week in the office (54%), compared to 34% of respondents aged 18–34.

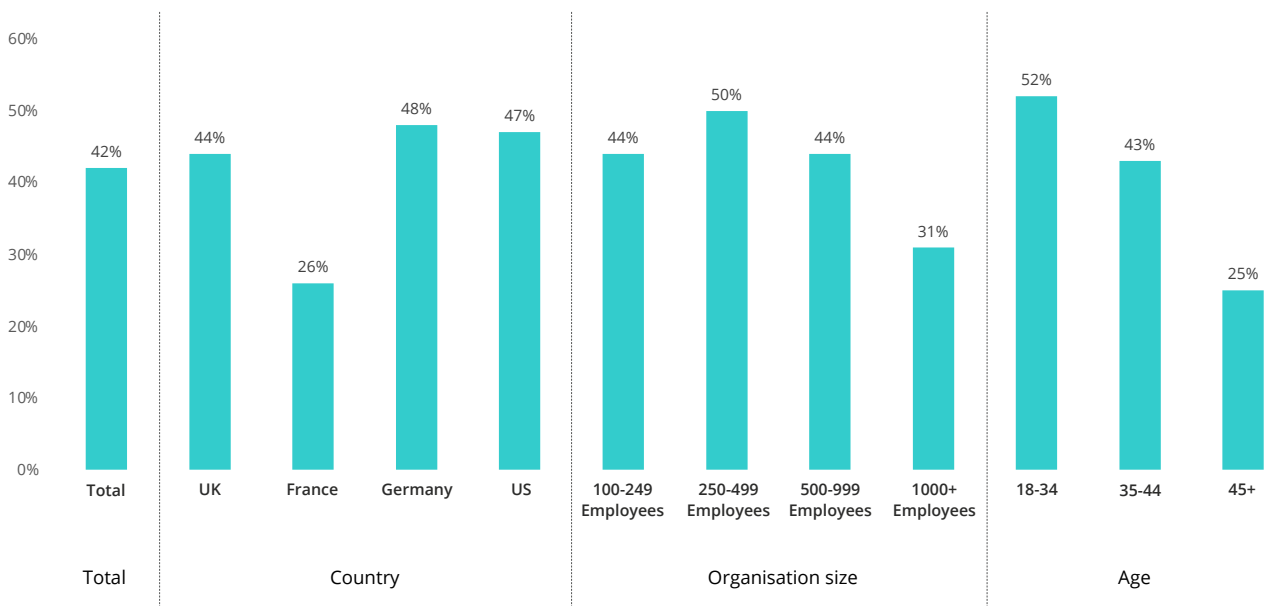
In spite of increased flexible working options during the pandemic, 42% of employees intend to leave their jobs in the next 12 months (Figure 1). This equates to 50% of IT decision-makers (50%) and 39% of office workers (39%).



This is most common for younger staff (52%) and those based in Germany and the US (48% and 47%, respectively). Employees of larger corporations appear least likely to be seeking new opportunities (31%).

**The Great Resignation continues: 42% of employees intend to leave their job in the next 12 months.**

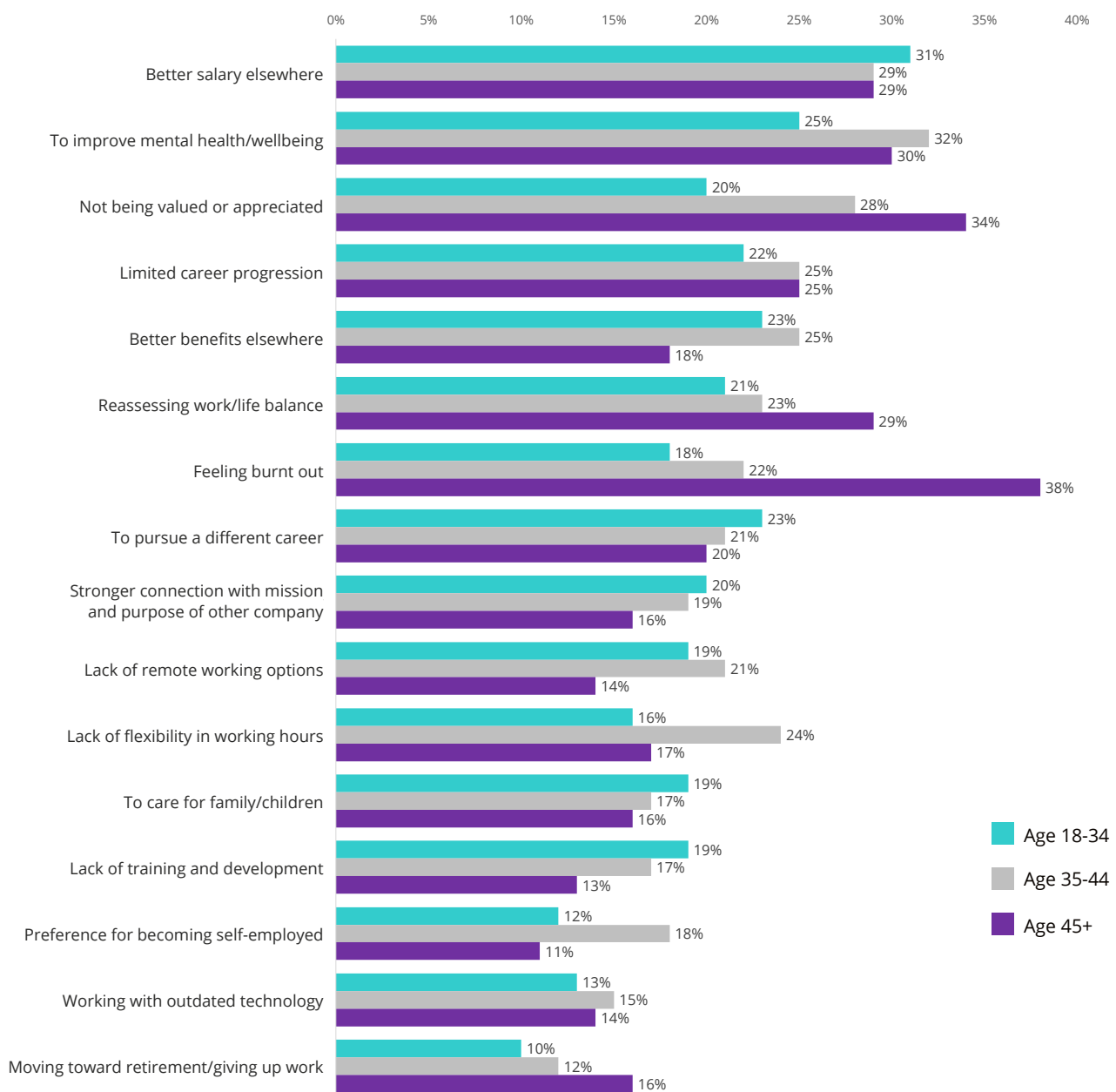
Figure 1. Proportion planning to leave in next 12 months



Although better remuneration elsewhere is the most common driver for those planning to leave (30%), mental well-being (28%) and not feeling valued (25%) are also significant factors. Most respondents have multiple reasons for leaving, which suggests the pandemic gave them an opportunity to consider a build-up of factors spanning mental health and work/life balance, fair salaries, seeking a change of direction and/or benefits, and feeling under-appreciated or burnt out. Staff aged over 45 are far more likely to mention burn-out and not feeling appreciated as drivers for re-evaluation, whilst 35–44-year-olds are more likely to mention lack of flexible working hours and a desire to become self-employed than other age groups (Figure 2).

Leaving a role to obtain a better salary and improve mental well-being becomes a more significant driver as company size increases, as does redressing work/life balance, and burn-out is most commonly given as a reason by those in the largest companies (29% of those in organisations of over 1,000 employees). The most significant finding is that older employees are most likely to report suffering from burnout – at 38%, it is almost double those aged 18–34. Employee burnout is the silent work epidemic that worsened over the pandemic. While flexible working may address this in part, more important is managing employee workloads and fostering a culture that promotes mental health and well-being.

**Figure 2. Reasons for leaving current job**



# The future of work in 2025 is flexible, hybrid and sustainable

By 2025, respondents believe the following will be likely or very likely:



**69%**

Flexible working will force a change in company culture



**67%**

Organisations will lose out on talent without flexible working



**67%**

Sustainability will be a highly important credential for businesses



**56%**

The physical 'workspace' will only be used as an occasional meeting point



**52%**

With the use of mobile devices keeping us connected, my organisation won't need fixed office space



**61%**

Face-to-face meetings will decline, and workers will mainly communicate through video, or augmented or virtual reality

Flexible working is clearly essential, and likely to change company culture (presumably for the better). The younger generation is more likely to favour the shift to virtual work – 51% of those aged 18–34 and 59% of millennials (aged 35–44) believe companies will not need a fixed office space by 2025, compared to 44% of over-45s. Similarly, 63% of millennials believe the office will only be used as an occasional meeting point by 2025, compared to 47% of over-45s.

Meanwhile, sustainability is top of mind. Of respondents, 67% say it will be a highly important credential for

businesses. This rises to 76% amongst US respondents, 72% among millennial respondents, and 72% in the financial sector.

On average, 36% of the workforce is currently working remotely, with this set to rise to 44% by 2025. As virtual reality takes hold, the office metaverse is set to become a reality. 61% of respondents believe face-to-face relations will decline, and workers will mainly communicate through video or augmented or virtual reality. This rises to 69% in the US and 68% amongst millennial respondents.



# 02 PLACE

## Reimagining the office



Over half of large organisations are increasing their office footprint – if anything, office space will grow in size in the coming years

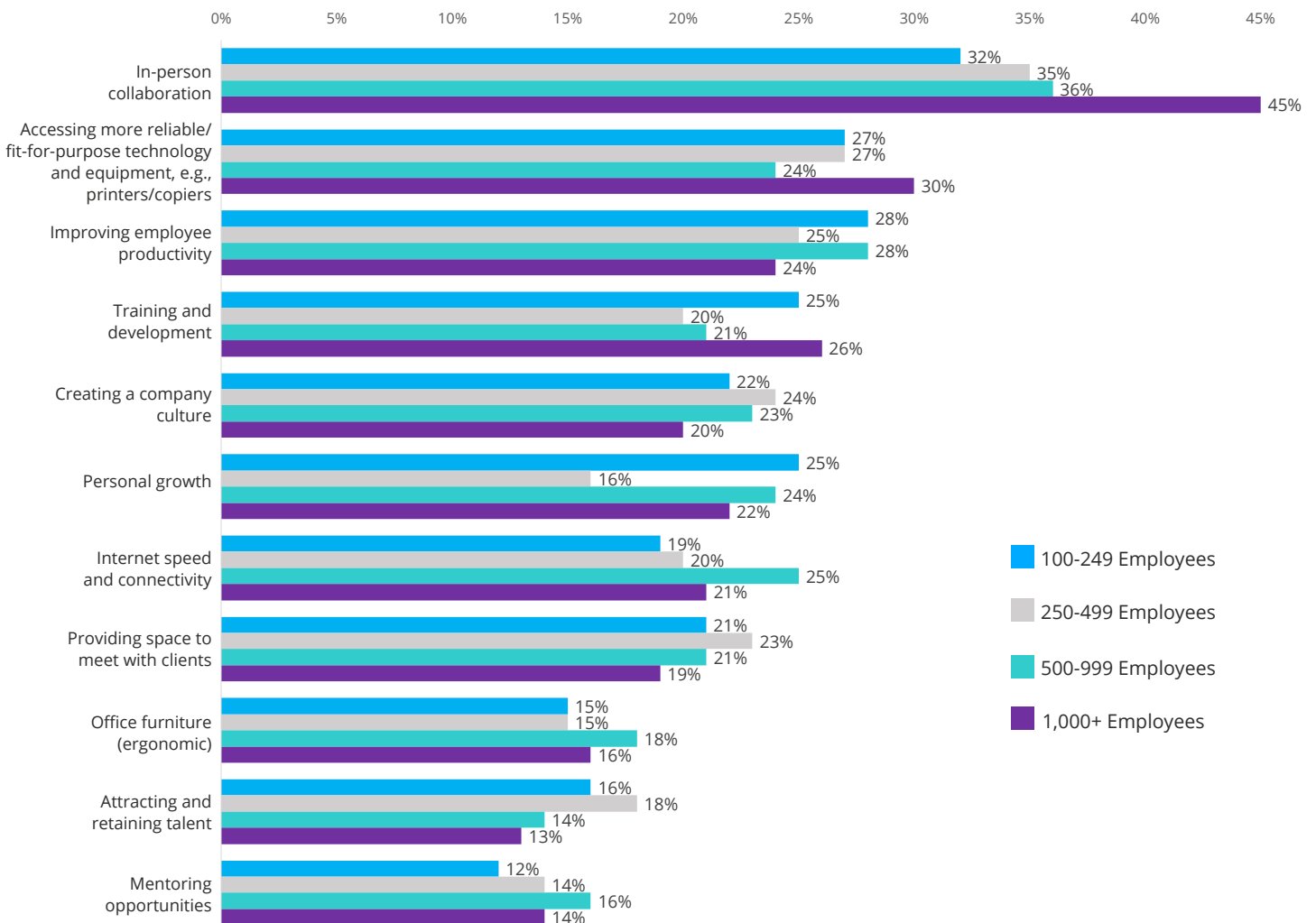
### The physical office is valued as a place for collaboration and connection

Flexible and hybrid work does not make the office obsolete; rather, its purpose has changed into a place for collaboration and connection. The top benefit, cited by 37% of respondents overall, is in-person collaboration. This rises to 45% in large organisations (Figure 3). These respondents are most likely to be working five days a week in the office (48%). This is also more recognised by

staff aged 45 and over (46%). UK respondents are most likely to rate in-person collaboration as the top benefit of the physical office (40%), compared to 33% of US respondents.

Office technology plays an important role in the future workplace (27%). Personal growth particularly stands out for US office workers (31%) and retail respondents (29%). Creating a company culture is more important to those 35 and over (24%), compared to 17% of those aged 18–34. The diverse needs of a multigenerational workforce are heralding a new era of work and demand new thinking around office space, collaboration and workplace technology.

Figure 3. The purpose of the office



## Office space will adapt to new ways of working

The return to the office is creating the need to adapt office space to accommodate more flexible ways of working. Although 56% believe that by 2025 the office will be an occasional destination, used less often or by smaller groups of employees, with virtual meetings becoming the norm, the size of the office footprint is not expected to see dramatic change – if anything, it will increase. The need for office space will vary depending on how a company implements hybrid working, as demand could be distributed differently across different times and days. As the office finds a new purpose as a place for in-person collaboration and social interaction, alongside traditional uses, some will need larger office spaces to accommodate emerging needs.

### Repurposing existing office space and creating new workspaces will enable organisations to create a more inclusive work environment.

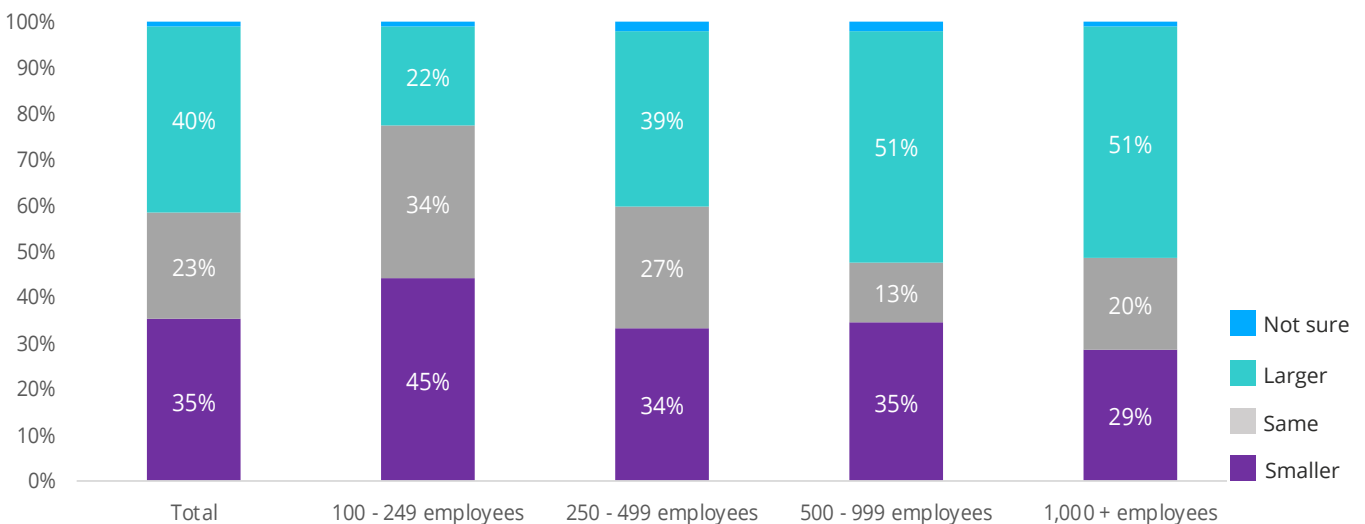
On average, companies expect an increase of 1.6% in physical office size by 2025, although this is driven by businesses based in the US, with those in Germany anticipating a marginal increase and those in France and the UK a slight reduction. At an overall level, 23% expect their footprint to remain the same, with 40% anticipating an increase and 35% a reduction. Larger organisations (51%) are most likely to be increasing their footprint,

probably a result of a larger number of small offices (hub-and-spoke model) to support flexible working, whereas small organisations are most likely to be reducing their physical space (45%) (Figure 4). Financial services organisations (50%) and public sector organisations (57%) are more likely to be increasing office space by 2025, compared to 32% of business and professional services organisations.

As Generation Z enters the workplace in larger numbers and millennials adopt more senior decision-making positions, organisations need new employee engagement tactics to support the new set of behaviours, expectations and preferences that come with younger employees.

Repurposing existing office space and creating new workspaces will enable organisations to create a more inclusive work environment. The fact that many organisations are actually increasing their office footprint demonstrates the value of office space, whether it's for traditional work, collaboration, or training. This is more likely to help drive employee productivity and engagement by accommodating a range of workstyles, and it may be that because work blended into home during the period of remote working, there are now opportunities for home to blend into work. This has implications for technology suppliers in delivering workplace productivity solutions and services that can support a more diverse office environment, even if that environment is distributed across multiple locations, including those that are virtual. As staff well-being and mental health come to the fore as important criteria in choosing an employer, a workplace that offers a range of benefits going beyond traditional expectations is likely to stand out.

**Figure 4.** How do you expect the size of your organisation's real estate footprint (i.e., square footage/metres) to change by 2025?



# 03 PLATFORM

## The technology of the new office

Quocirca defines the future workplace as digital, sustainable, and cloud-first, and a place where printing, albeit in lower volumes, remains relevant. All of this underpins the transformation of workforce, workplace and work itself.

To support the new era of agile and hybrid work, the future digital workplace will be one that is cloud-enabled, secure and sustainable. Effective workplace technology – both print and digital – can enable organisations to support the flexibility employees are demanding, while also operating more efficiently, securely and sustainably.

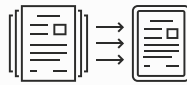
### The less-paper workplace



**72%**

By 2025 72% of ITDMs expect print to be important, compared to 50% of office workers

### The digitised workplace



**61%**

are accelerating their digitisation plans

### The cloud-enabled workplace



**57%**

By 2025 57% expect to be operating a print environment mostly or fully in the cloud

## The less-paper workplace

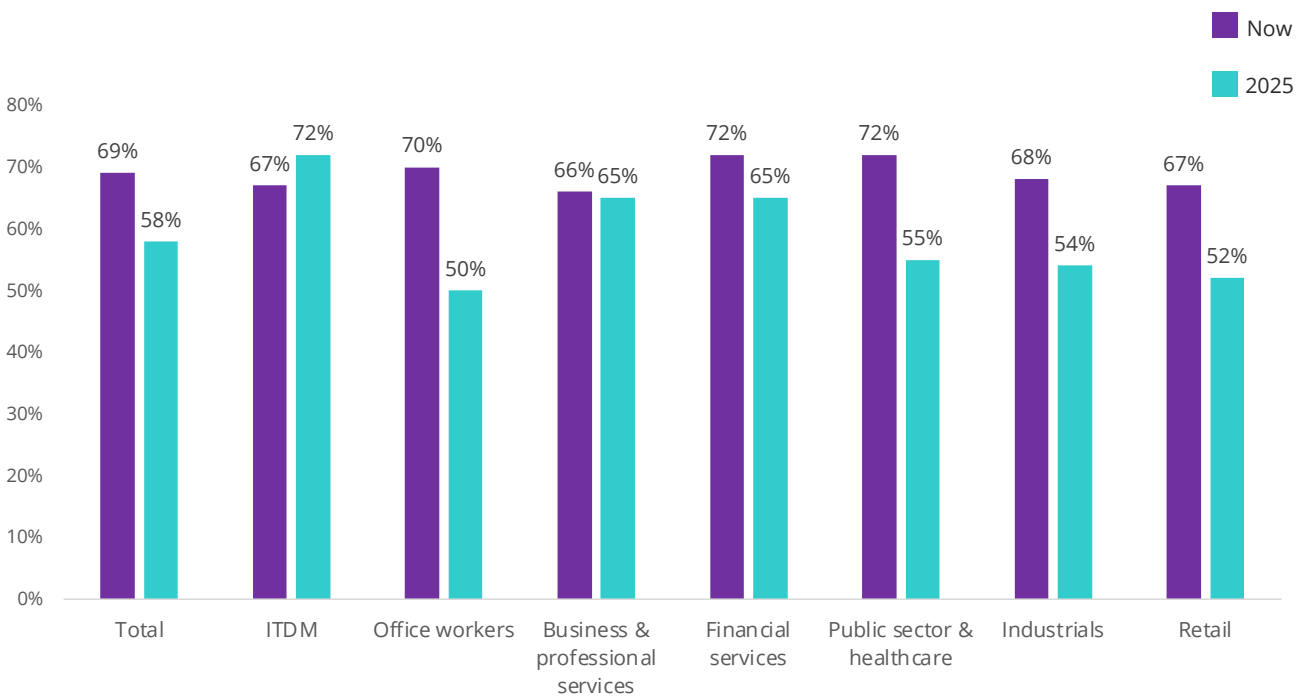
**A push towards digitisation does not mean the demise of printing, but ITDMs and office workers are disconnected on the future of print**

Despite the ongoing shift to digital and virtual work, many organisations remain reliant on printing and paper-based processes. Overall, 69% of respondents consider printing fairly or very important to the daily business of their organisations, with this set to reduce – albeit modestly – to 58% by 2025 (Figure 5). As seen in our previous Print 2025 study, there is a disconnect between ITDMs and OWs.

By 2025, 72% of ITDMs expect print to be very or quite important, a slight increase from now. This is compared to 50% of office workers, a significant drop from 70% today.

**By 2025 72% of ITDMs expect print to be important compared to 50% of office workers.**

Figure 5. The importance of printing (quite and very important responses), now and 2025



Today, 59% of those aged 18–34 see printing as important, a figure that is predicted to remain the same by 2025. This is compared to 76% of respondents aged 45 and over, which is set to drop to 62% by 2025.

IT decision-makers in the US are especially positive about print – 59% expect print to be very important by 2025, compared to 25% in the UK and Germany. Larger organisations are most reliant on printing – 73% of organisations over 500 employees report it to be quite or very important today, with this dropping most steeply amongst organisations of over 1,000 employees to 54% by 2025. Of respondents, 72% in the public sector and financial services indicate that printing is important, with this set to drop to 55% and 65%, respectively.

C-level respondents are also most positive about the ongoing relevance of print. The importance of print also differs according to worker location, with those in the office five days a week likely to attach greater importance to print than hybrid workers (35% say this is very important now, versus 23%). Looking to 2025, this evens out (23% say this is very important, versus 26%). This speaks again to the importance of ensuring print solutions and services are seamless across user location. It appears that ITDMs are judging the future of the print world on their own behaviour and experiences rather than the realities for much of their workforces, and it is possible that putting analytical tools in place could serve as a wake-up call, highlighting under-utilised devices and inefficiencies. Providers, especially of managed print services, can use this disconnect between perception and real-life usage as a springboard to communicate around digital workflows driving sustainability and efficiency benefits.

Differing attitudes by job role may be driven by different uses for printed material. The need for printing is most apparent for 'important' documents, with two-thirds (66%) believing these should be printed. Over half (55%) believe customer collateral should be printed, which may explain the increased volumes predicted for colour printing. For both of these use cases, ITDMs are more vehement about the need to print, but more so in the case of customer collateral (67% versus 49%). This indicates that it will still be worth communicating around high-quality paper and premium presentation, even in the context of concerns around sustainability and cost.

Given there is a common belief that all paper documents should be scanned (67%) and digital collateral is more secure than printed (58%), establishing these strongholds for print will be important, even if they seem to swim against the tide. Print is starting to look like one of the premium facilities of the future office, something only available to businesses that value their staff and/or customers enough to invest in the benefits it brings. These include easier reading/lower screen time, ease of digesting/marking up, and something to keep and refer back to. There is an employee well-being aspect that may be harnessed here – an element of some ESG policies to support mental health and reduce eye strain for those who find reading on screen tiring or just enjoy a change.

## **79% of ITDMs expect to increase their spend on print equipment and consumables in the next year.**

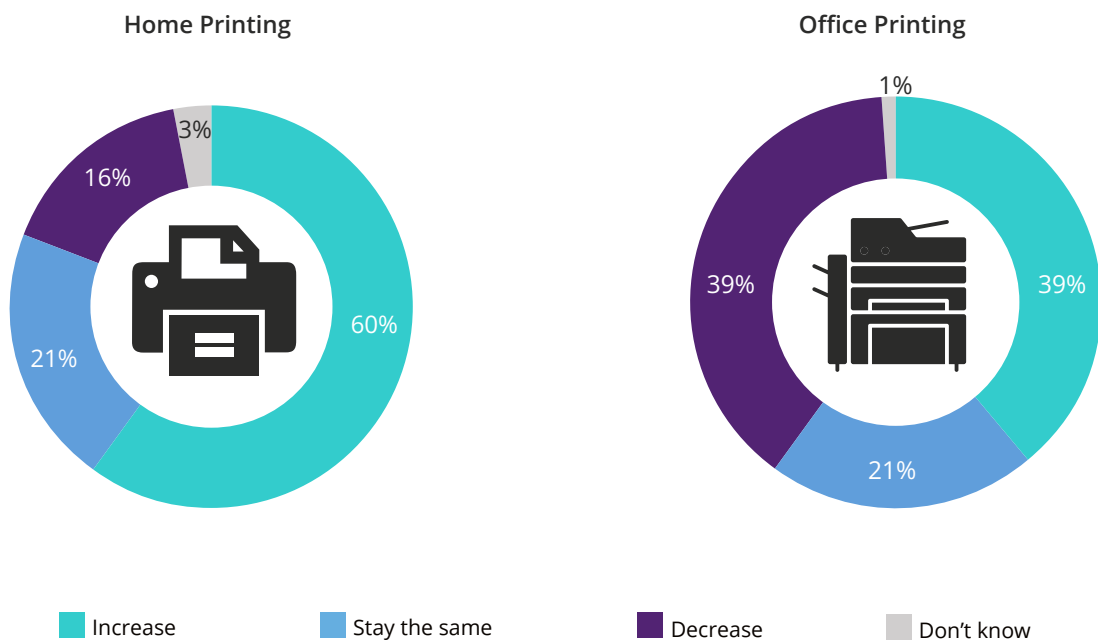
While there is no denying that printing is diminishing in importance, it remains a valuable element of the workplace technology ecosystem. It is worth noting that within the next year most (79%) ITDMs expect to increase their spend on print equipment and consumables, with 13% anticipating 2023 spend to be at the same level as 2022 spend and just 8% expecting investment to decrease.

## A mixed view on print volume recovery

Office printing is set to increase for almost two-fifths (39%), decrease for the same proportion (39%) and stay the same for 21% (Figure 6). Meanwhile 60% expect home printing volumes to increase with just 16% expecting a decrease. Public sector and industrials expect greater decreases in the volume of office printing than those in other sectors, although it remains at under 2% on average. The US is the only country to anticipate growth in office printing, with an approximately 4% increase envisaged.

Smaller organisations are more likely to see a reduction in office printing, and 20% of the smallest companies envisage a decrease of 11% or more in volume terms. Just 26% of these companies with 100–249 employees expect in-office volumes to grow, but they are also less likely to see increased home office volumes (51%). Although they are no more or less likely than larger organisations to see printing as important by 2025, they seem most reticent about increasing volumes either in the office or remotely.

Figure 6. How will your organisation's print volumes change by 2025 (compared to pre-pandemic)?

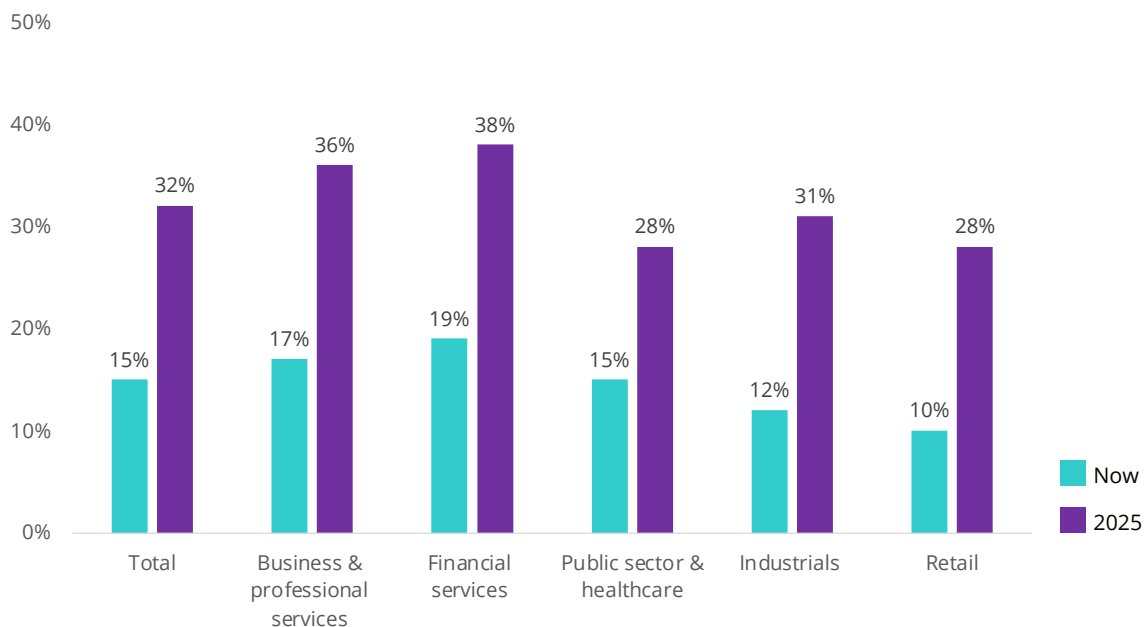


## The digitised workplace

Today, 15% of respondents indicate that digitisation is extremely important to their digital transformation initiatives, rising to 32% by 2025 (Figure 7). Financial services and business and professional services respondents place the highest importance by 2025 (38% and 36%, respectively). This is compared to just 28% in the public sector. Given that 72% of public sector respondents say printing is very or quite important to their organisation – the same as financial services – their lower focus on digitisation could lead to business process and cost inefficiencies.

Managed print services are a key enabler for digitisation, helping organisations uncover opportunities for automating paper-based processes and minimising wasteful printing. Overall, 59% of organisations using an MPS say digitisation of paper-based processes is extremely or very important, compared to 29% of those not using an MPS. This reflects the opportunity MPS providers can deliver to their customers as they transition to the less-paper and more sustainable office.

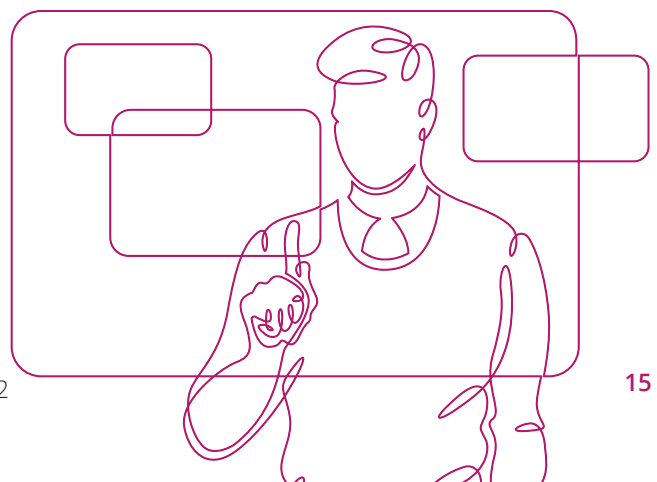
**Figure 7. How important is the digitisation of paper-based processes to your organisation's digital transformation initiatives? (Extremely important)**



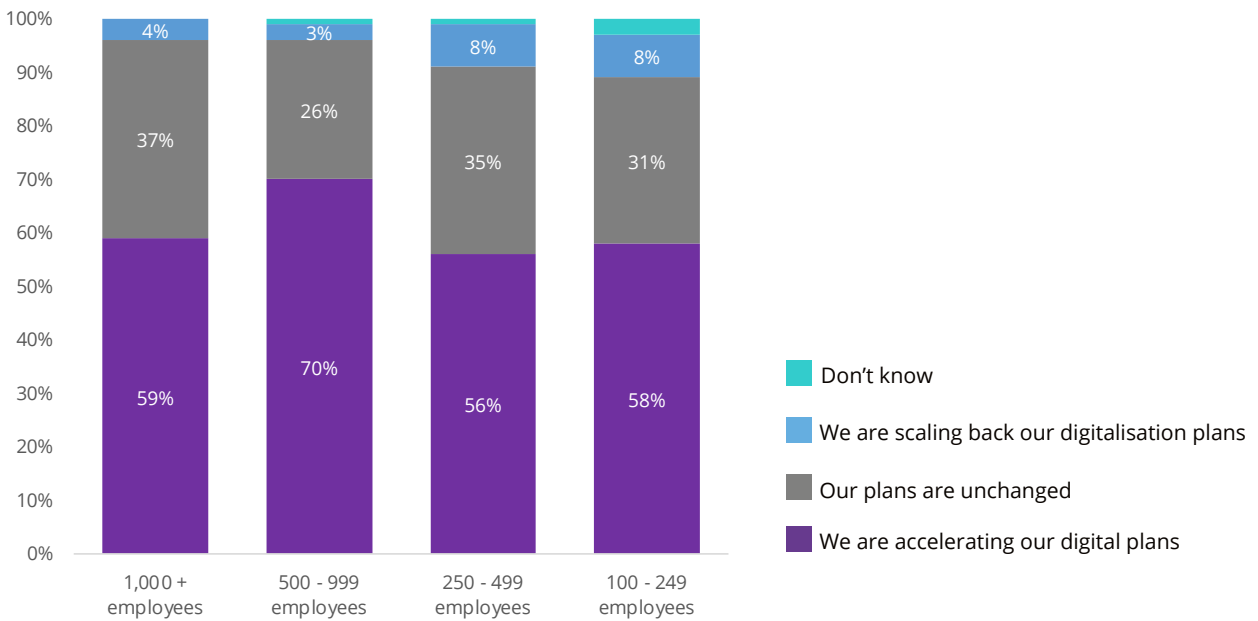
In view of this increase in importance, three-fifths (61%) of respondents say they are accelerating their digitisation plans (Figure 8). Medium-sized market organisations (500–999 employees) are ahead with accelerating their digitisation plans (70%), along with those in the financial services sector (69%).

Along with 85% who report that sustainability is extremely important to their business, those that place the highest importance on printing are most likely to indicate they are accelerating their digitisation plans (71%). Again, organisations using an MPS are more likely to be accelerating digitisation (69%), compared to 40%

of those not using an MPS. This suggests that commitment to printing and digitisation are not the polar opposites they may appear to be, as we will explore in more detail later.



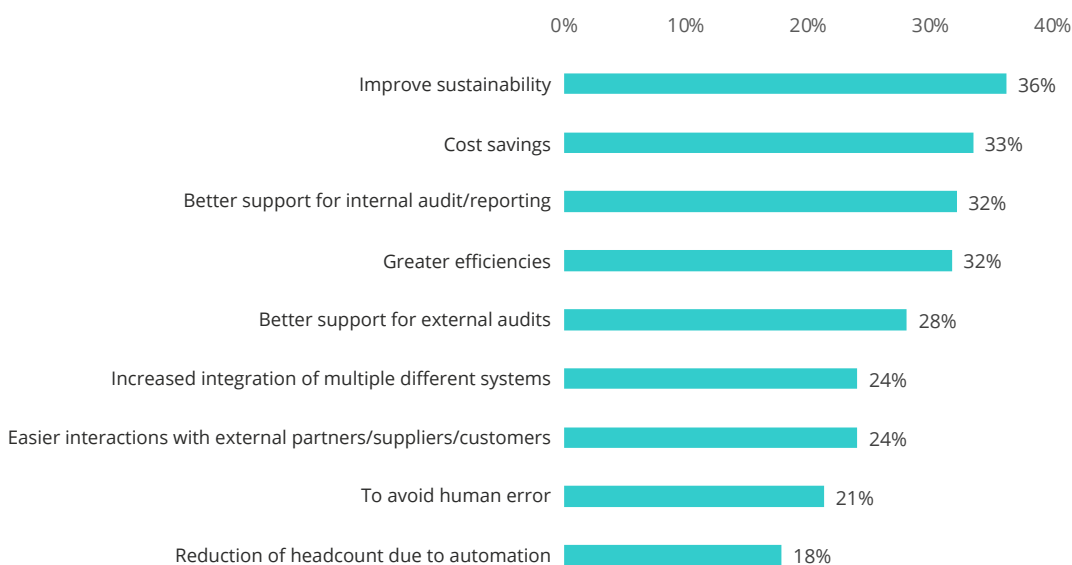
**Figure 8. Digitisation plans**



Overall, sustainability is the top driver for digitisation (36%) (Figure 9), rising to 40% in the UK and dropping to 25% in Germany. Notably, organisations with 100–249 employees place higher importance on sustainability (44%) as a reason for digitisation. Cost reduction is a factor for 33%, rising to 43% in the UK and 46% in France, and greater efficiencies and better support for

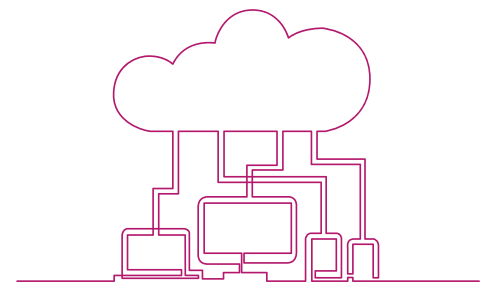
internal audit/reporting feature for 32%. It appears that these are the key messages with which to communicate advantages to companies that may be lagging behind in recognising the need to digitise, or have stepped away from the journey. For the US a stand-out benefit is easier interactions with external partners/suppliers/customers (34%).

**Figure 9. Key factors driving digitisation**





# The cloud-enabled workplace



## The cloud-first era will drive cloud print momentum

The cloud has underpinned the digital transformation journey for many organisations as they have adapted to decentralised work models over the past two years. As we move into the era of hybrid work, organisations are increasingly focused on building a resilient and future-proof IT infrastructure. The high availability, flexibility, and scalability of the cloud is helping businesses become more agile, as well as better prepared for advanced cyberattacks through advanced data compliance and security. In addition to flexibility and scalability, the cloud can help organisations reduce costs – both financial and environmental – compared to operating a traditional on-premises environment.

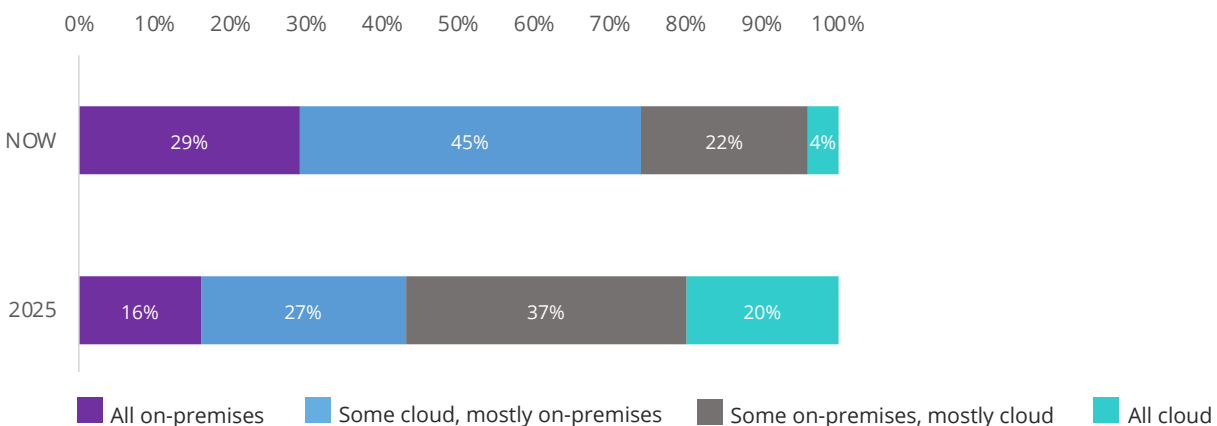
### 20% expect to have a fully cloud-based print environment by 2025.

By 2025, 20% of respondents expect to have their IT environment fully based in the cloud, compared to just 6% now, and for print, the expectation is also 20%, compared to 4% currently (Figure 10).

For the remainder, the shift is from basing the environment mainly on premises with some in the cloud, to mostly in the cloud with some on premises – this is applicable to the IT environment overall and the print environment specifically. Just 16% envisage these to be fully on premises in three years’ time – which suggests there is going to be considerable investment and restructuring over a relatively short time. Digital Leaders are most likely to have their current print infrastructure all or mostly in the cloud (6% and 28%, respectively), with Digital Laggards at 3% and 14%, respectively. By 2025, 61% of Digital Leaders will be using either only or mostly cloud, compared to 44% of Digital Laggards. Smaller businesses are a little behind in making these changes, but by 2025 the ambition is clearly to move at least some of their environments to the cloud. It is as relevant to speak to smaller firms about the technology as to those with 250 or more employees.

Suppliers must be able to offer a full cloud and combined approach to play in this area as momentum for cloud print adoption builds, which is very clearly on the immediate roadmap for many, even those less motivated towards digital in general.

Figure 10. How the print environment is managed now and anticipated in 2025



# 04 PLANET

## The print sustainability imperative

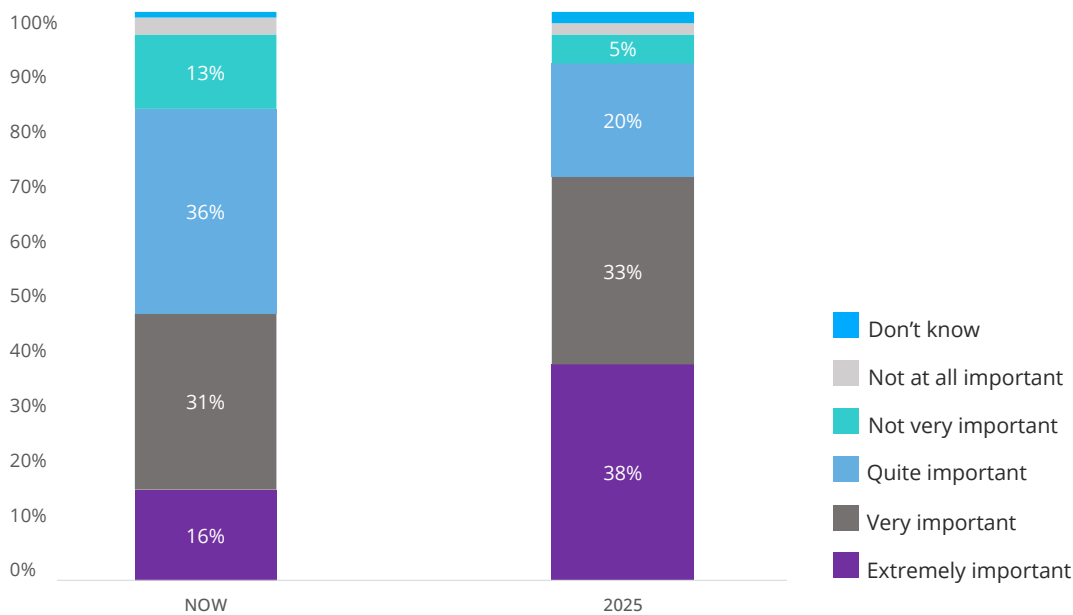
### The rise of the print sustainability agenda

While today just 16% consider environmental issues extremely important, by 2025 this rises to 38% (Figure 11), with a similar pattern seen between ITDMs and OWs, although a slightly higher proportion of ITDMs view it as extremely important both now and in three years' time. There is also widespread agreement that sustainability will be an important credential for businesses by 2025 (67% agreed, similar across ITDMs and OWs), and this is especially true of organisations based in the US (76%), as well as those in business and professional services and financial services. The majority also agree that sustainability goals will necessitate reduction in paper usage (38% strongly agree and 37% somewhat agree), again consistent across ITDMs and OWs. Unsurprisingly,

there is greater agreement amongst those prioritising sustainability (88%), those accelerating their digital plans (84%), and Digital Leaders (81%). Those who consider sustainability extremely important already (16%) are termed sustainability leaders for the rest of this report.

**Two-thirds of respondents believe sustainability will be an important business credential by 2025.**

Figure 11. Importance of sustainability to organisation (ITDMs and OWs)

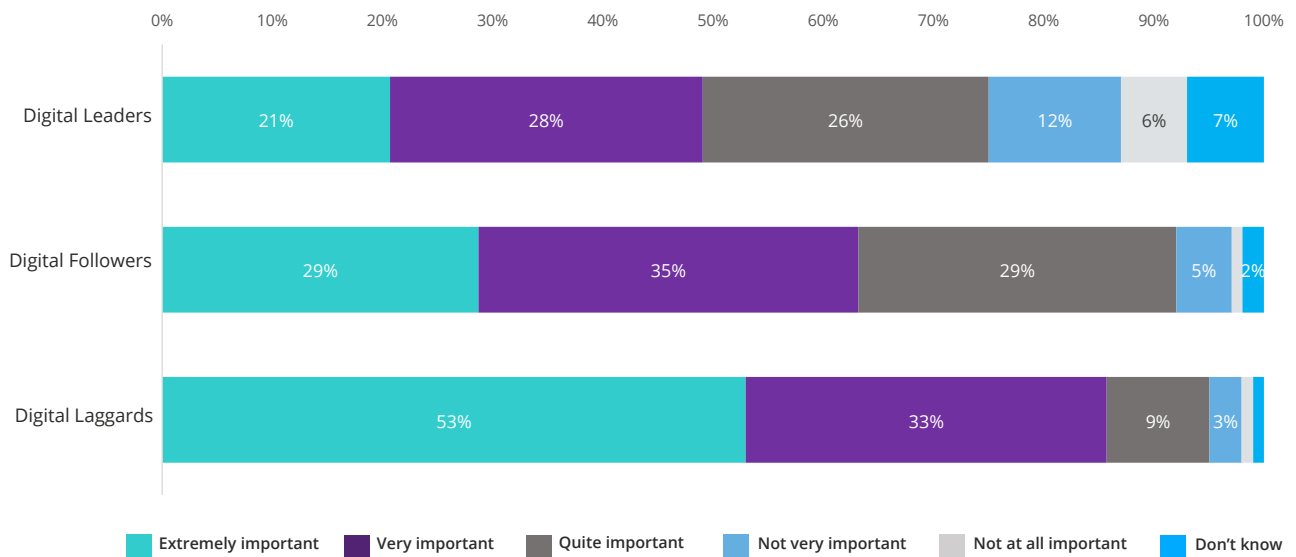


Digital maturity and sustainability are intrinsically linked, and those prioritising digitisation are markedly more likely to consider sustainability important, and vice-versa (Figure 12). As digital transformation efforts accelerate, it is unsurprising that digitisation of paper-based processes is a key priority, and the extent to which this is a priority underpins many trends in terms of work, technology and the future. Companies that consider digitisation of paper-based processes very or fairly important already tend to be most likely to be accelerating their digital plans and can be termed 'Digital Leaders'. They account for 44% of the sample and are more likely to be based in the US and working in business and professional services or financial services organisations. There is a slight skew to younger decision-makers (under 45) and larger organisations (250

employees or more), but they are marked out by the importance they attach to sustainability.

At the other end of the spectrum are 15% that do not consider digitisation important currently (not at all or not very important), and they are also least likely to be prioritising sustainability. This group, which can be termed 'Digital Laggards', is most likely to be in the youngest age group (18-34) and operating in the retail sector. The remaining 39% (which consider digitisation 'quite important') can be termed 'Digital Followers' and tend to be reasonably committed to sustainability but not really pushing forward. They are most commonly found in the industrial, retail and public sectors.

**Figure 12.** How important will environmental issues/sustainability be to your organisation by 2025?

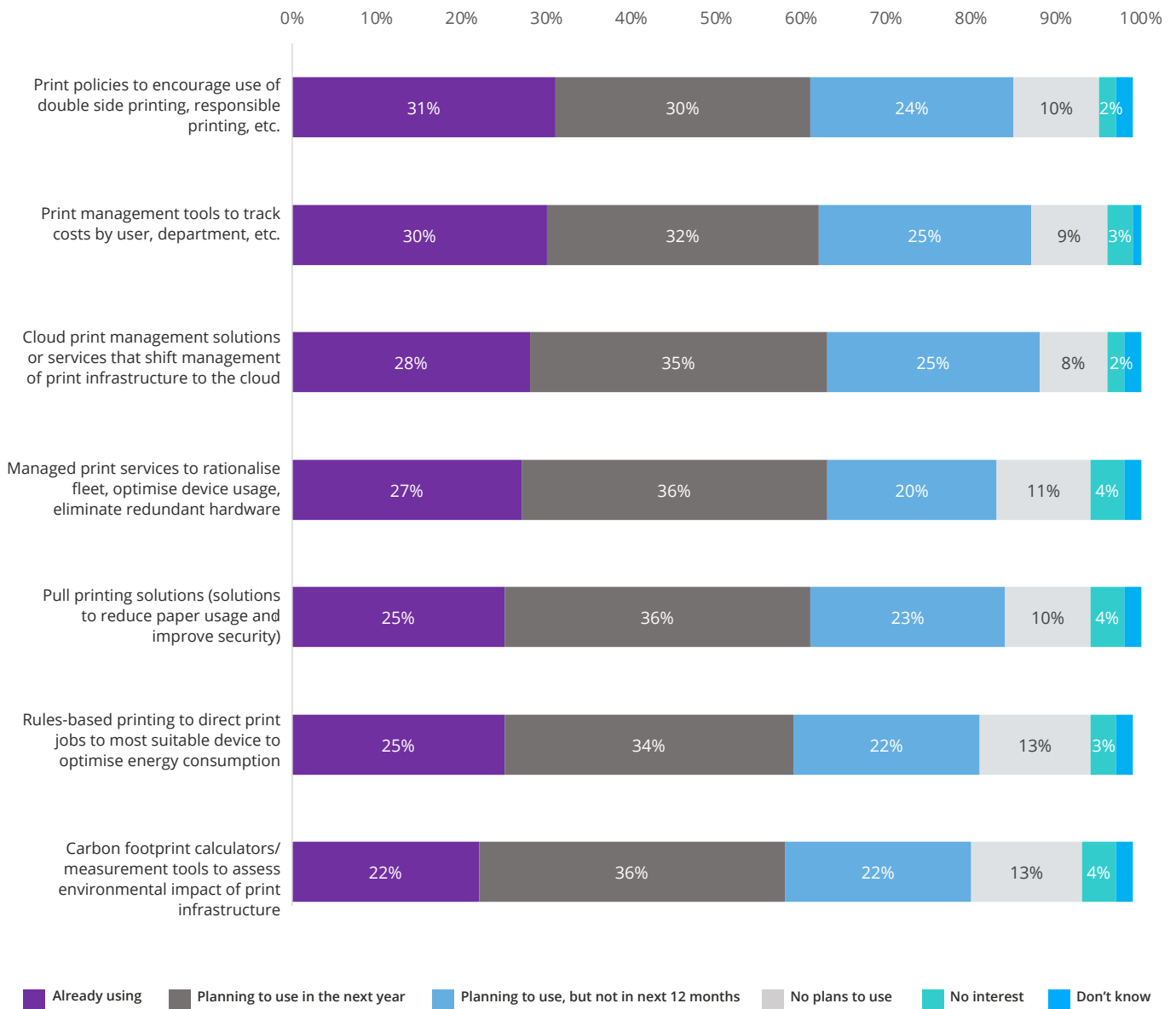


## Sustainable printing in action

A range of strategies have been adopted to address sustainability in terms of printing (Figure 13), with print policies the most common (31% are already using these), along with print management tools (30%), cloud print management solutions (28%) and managed print services (27%). Respondents who say they consider printing important are most likely to have, and be planning, all of these strategies. There are also a range of strategies planned for both within the next year and further out, with over one-third planning to introduce

each of the following by 2023: cloud print management solutions, managed print services, pull printing solutions, rules-based printing, and carbon footprint calculators. The similarity in the level of use and consideration of sustainable options suggests there are no clear front-runners in terms of a route to print sustainability. It appears that small organisations in particular may benefit from guidance (via a supplier) as to where strategies can be placed for maximum impact on this journey.

Figure 13. Solutions to reduce environmental impact



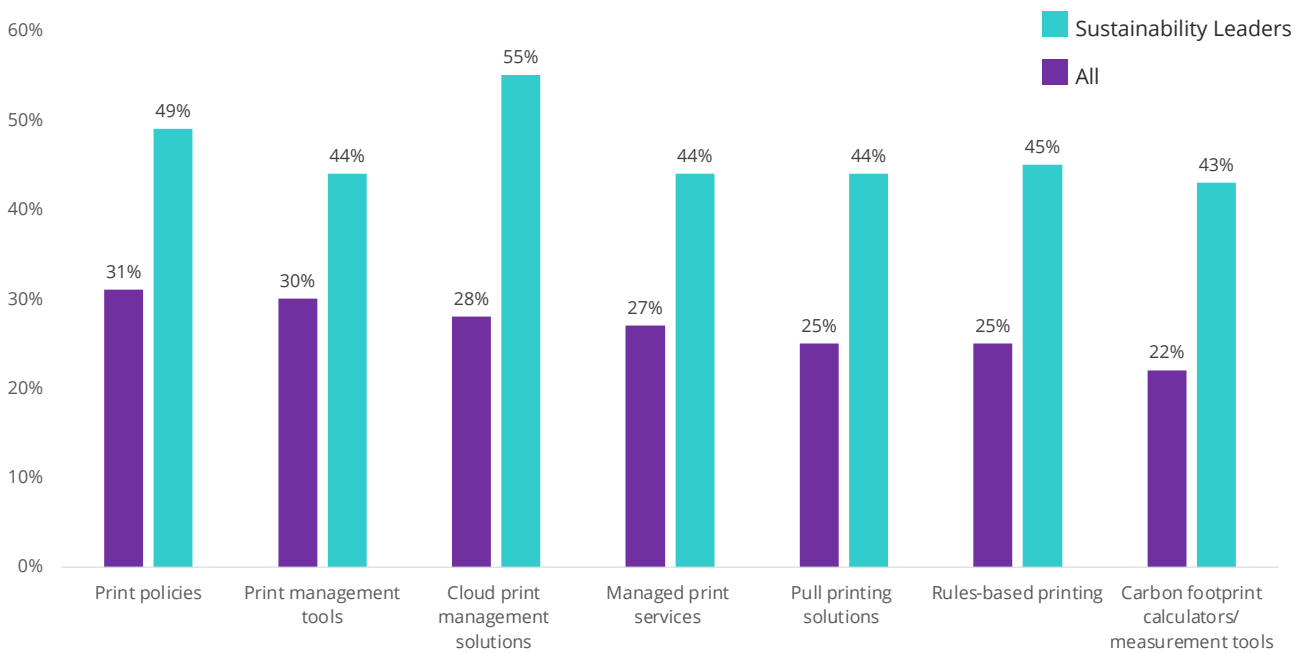
Companies that consider sustainability extremely important are most likely to have all these strategies in place already (Figure 14), with cloud print management solutions and carbon footprint calculators really standing out: they are almost twice as likely to have each of these in place.

The marked difference in maturity between sustainability and digitisation leaders and Digital Laggards means it is important for suppliers to assess where their customers are on the journey so they can recommend appropriate solutions. By understanding the characteristics of their primary customer base, suppliers can devise and refine

a portfolio of in-demand solutions and use the right kind of language and customer motivators to market their offering.

Buyers must also gain a sound understanding of where they stand on the maturity scale so they can discern the logical next steps. For those earlier on their journey, buyers should seek counsel from suppliers on where they can achieve quick wins. For more mature organisations, the focus should be on how more integrated, in-depth solutions such as analytics and monitoring can help move them to the next level of sustainability and efficiency.

**Figure 14.** Sustainability leaders and use of environmental print solutions (already have implemented)



# 05 PROVIDER

## What does the future print supplier look like?

### Print suppliers will need to build relevance and transform to IT and digital services providers

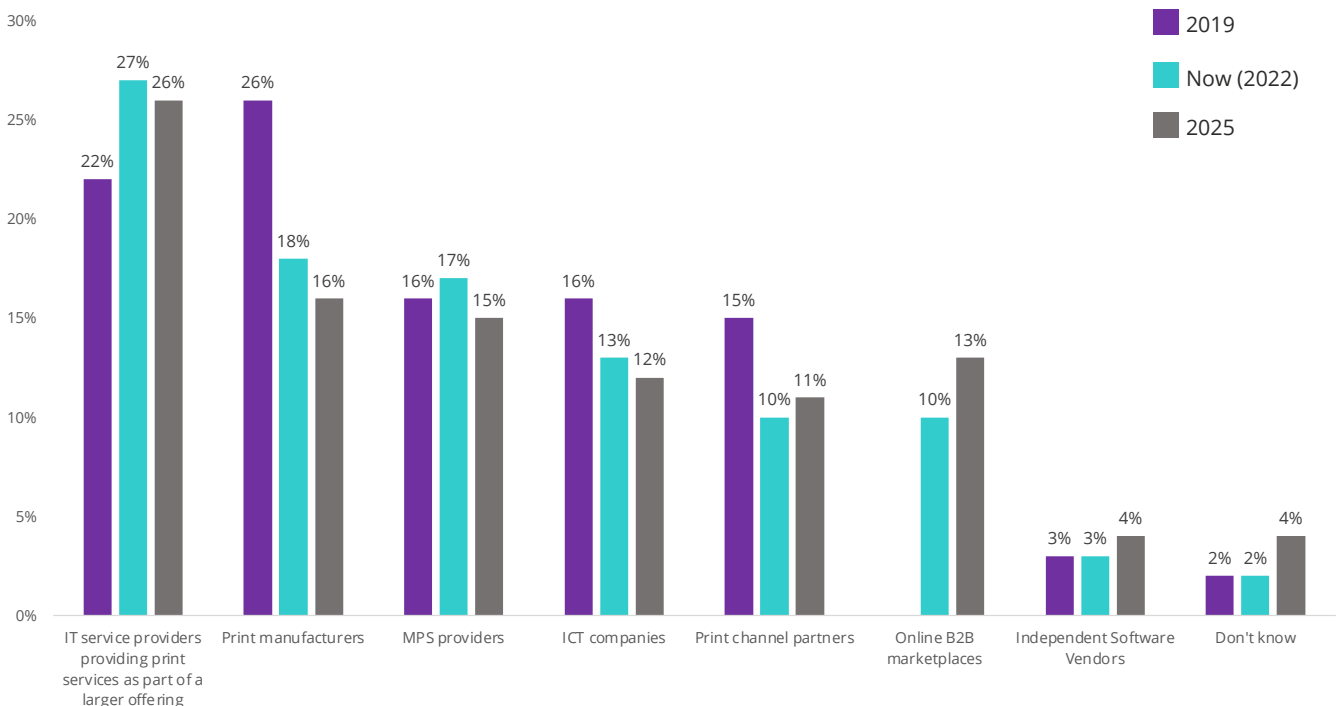
Expectations of print suppliers are high, but meeting them may provide the opportunity to create the deep relationships that are being lost to IT service providers (Figure 15). In our 2019 study, 26% reported their deepest relationship to be with print manufacturers, but this dropped to 18% in the current study and is expected to fall to 16% by 2025. In contrast, 26% of respondents to the current study expect to have the strongest relationship with IT service providers in 2025.

Looking towards 2025, print manufacturers are set to retain importance more with smaller organisations (19%) than with larger ones, which drop from 22% to 10% – the biggest drop of all size categories. Larger organisations are also most likely to be driving the increase in online B2B marketplaces, from 8% to 15% in 2025. Online marketplaces are most popular amongst the 18–34 age category.

Those prioritising both digital acceleration and sustainability are especially likely to have reported that IT service providers form their closest print relationship both now and in 2025. For sustainability leaders (those that consider sustainability extremely important), just 10% believe a print provider will be their deepest relationship by 2025.

Independent software vendors (ISVs) occupy a similar position to that seen in 2019's study (3%). In 2019, 12% anticipate this will be their key relationship by 2025, but this has fallen back in the most recent study and significant growth looks unlikely (although 4% feel this will be their key relationship in 2025, so it is moving in the right direction).

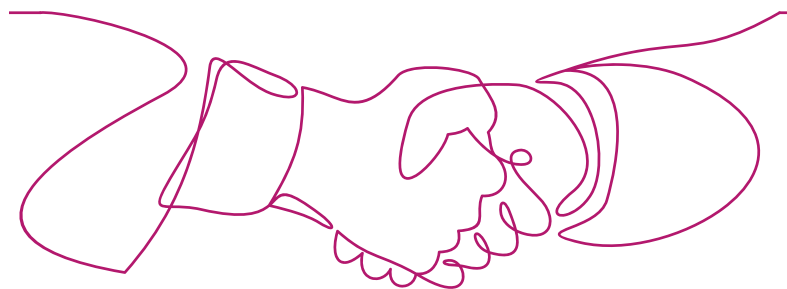
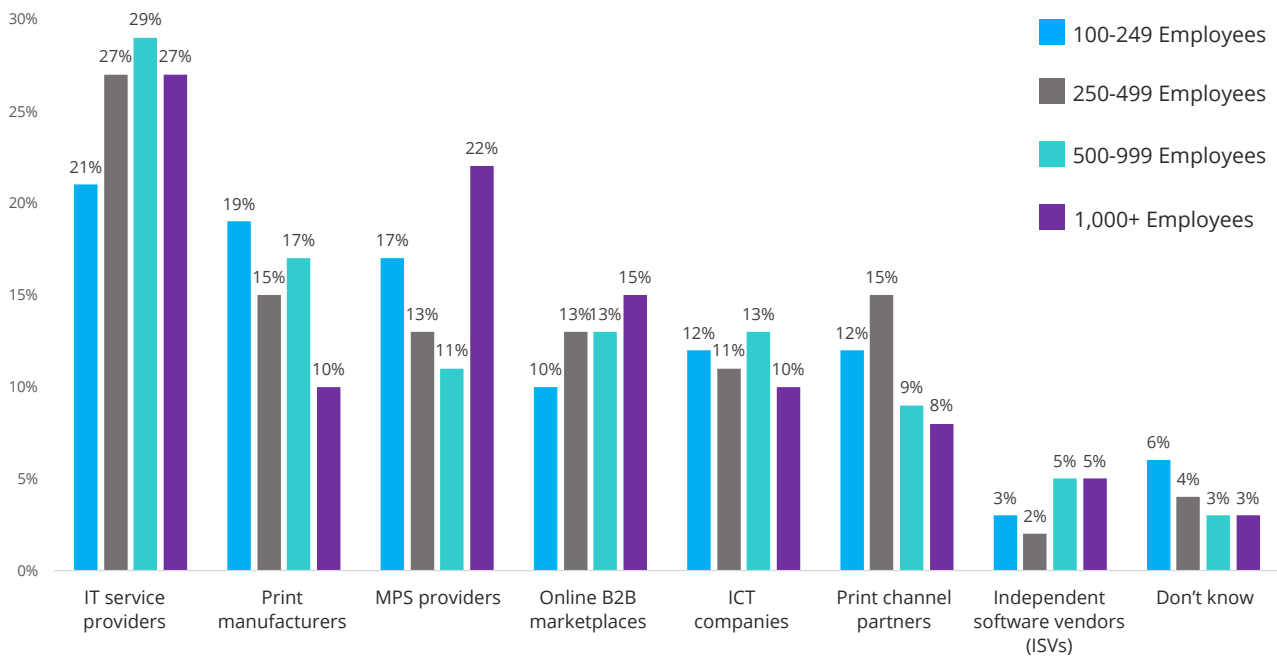
**Figure 15.** Organisation with which they have the deepest relationship for printing (hardware, services and solutions) – now and anticipated in 2025



IT service providers are pulling ahead for all but the smallest organisations (under 250 employees). Managed print suppliers are forming deep relationships with a higher proportion of large organisations (over 1,000 employees) (22%), as well as a good share of the smallest firms (17%), as seen in Figure 16. There are also variations by vertical, with public sector and healthcare especially close to IT service providers (37%) and retail drawn to print suppliers (22%). Online B2B marketplaces and ICT companies are more likely to be the closest supplier for financial services firms (17% and 16%,

respectively), with online B2B marketplaces also more important for those in the industrials sector (16%). Print channel partners are a little more likely to be the core relationships for business and professional services firms (16%). Organisations that have fully moved their print environment to the cloud are least likely to say their deepest relationship is with their print manufacturer (14%), but most likely to state this is with an MPS provider (26%). As this is the direction in which all companies are moving, print manufacturers need to consider how they will remain relevant.

**Figure 16.** Who do you expect your organisation will have the deepest relationship with for printing (hardware, services and solutions) by 2025?



# Suppliers must focus on security and cloud services

## Size of organisation has considerable influence on which services print suppliers should communicate on

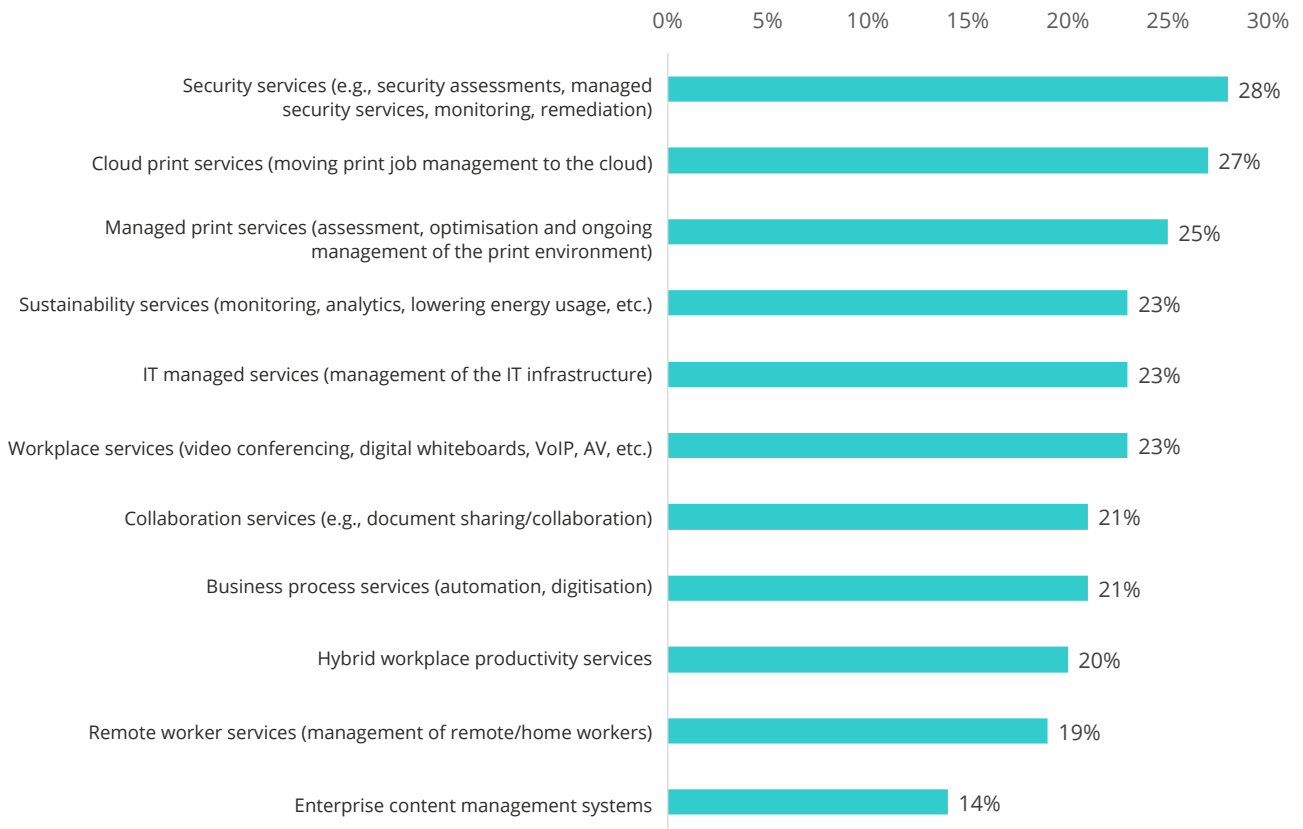
The most important services that print suppliers can offer are security services (28%) and cloud print services (27%) (Figure 17). Security services speak to larger organisations in particular (33%), whilst cloud print services are equally important to all but the smallest organisations (24%). Managed print services are also of widespread interest (25%), again for the largest organisations in particular (33%).

Print suppliers will have to work harder to capture the attention of these largest organisations and engage them with smart services that speak to their specific print needs – security and MPS being clear starting points. There is widespread agreement that print suppliers need to evolve their product offerings for the hybrid work era (74% agree, rising to 79% of the largest businesses, 86% of those that see sustainability as extremely important, and 81% of those accelerating their digital plans).

Since 2019 there has been an increase in the proportion of organisations that believe that by 2025 they will not own printers, but instead buy Print-as-a-Service, with 50% strongly or slightly agreeing that managed print services will be their direction of travel (especially in the business and professional services and financial sectors).

## Three-quarters agree that print suppliers need to evolve their product offering for the hybrid era.

Figure 17. Important services for your print supplier to offer to support future workplace plans between now and 2025





# Kofax

## Company overview

**Kofax delivers an intelligent automation platform to help customers accelerate their digital workflow transformation. This enables organisations to build customised workflows along with purpose-built digital solutions and productivity tools, addressing key requirements for document intelligence, connected systems and process orchestration.**

Kofax has one of the broadest print and capture portfolios in the market, encompassing print management, cloud printing, document capture and intelligent automation. Kofax ControlSuite, its advanced print management and capture solution, offers content-aware capabilities that give customers maximum control of print and capture workflows, which are automatically triggered from the MFD devices and print streams based on the content.

The company's vision is to provide a powerful, fully integrated, end-to-end intelligent platform to automate business processes, with the flexibility and scalability of the cloud. Kofax's acquisition of Printix in July 2021 added cloud-based print management capabilities to its intelligent automation platform, which allowed it to establish a firm foothold in the growing SaaS print management software market. Its combined print

automation solution, composed of Printix and ControlSuite, is delivered in a hybrid model with a robust enterprise feature set that includes increased compliance and security, plus integration with business applications and other Kofax products such as Kofax Total Agility.

As it is a cloud-first print management vendor, Printix's native cloud platform offers advantages over print management products that originated as on-premise platforms. It offers deep integration with Microsoft Azure and, as such, specifically targets Microsoft Cloud Solution Providers (CSPs) to deploy its platform. It has seen success with public sector organisations, as well as the education, health care, manufacturing, and finance segments.

The company's primary focus on the Microsoft channel sets it apart from its competitors and opens up new opportunities to engage with partners focused on the broader IT infrastructure. It also partners closely with Google to optimise printing on Chromebooks. With the retirement of Google Cloud Print, Printix can help with a cloud print management service for Chromebooks in enterprise and education environments. As Microsoft Azure continues to gain ground in the cloud market, Printix is well positioned to support the serverless printing requirements of businesses aligned with the Azure platform.

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## Printix cloud printing

Printix is a cloud-based, multi-tenant subscription service designed and structured to provide a complete print infrastructure and secure printing environment that guarantees efficiency, productivity and cost savings. No on-premise servers and databases are required, as it runs with Printix Client software installed on users' computers (Windows and Mac).

### Native cloud print management

Printix is a native cloud print management service that provides customers with an easy path to migrate to a hybrid or full cloud environment. The platform enables office users to print from any device to any network printer whenever they want, with minimal or no entry barriers. Kofax also offers a combined print automation

solution with Printix and ControlSuite, delivered in a hybrid model with a robust enterprise feature set that includes increased compliance and security, plus integration with business applications and other Kofax products, such as Kofax TotalAgility.

Printix runs its server infrastructure in the Microsoft Azure public cloud. Customers are created directly from the Printix website, via its partner portal or through distributors, as a tenant in a multi-tenant architecture. Printix's native cloud print management service and true SaaS product and business model create a virtual blueprint of the customer's on-premise print infrastructure, and automated provisioning of the infrastructure services, authorisation, configuration data, etc., is all managed in the Printix Cloud service.

Printix can be hosted within a customer-owned data centre or at a co-location facility and operated by internal IT departments. A private cloud hosts one enterprise as a user. Various departments may be present in the cloud, but all are in the same enterprise.

### Strong security credentials and zero trust support

Security is a key focus. Documents are encrypted (AES with a key length of 256 bits) and stored locally until they expire and/or are deleted. They do not leave the customer's network unless printing via the cloud is

enabled (i.e., pending documents are stored in the customer's own secure cloud storage), and document names can only be seen by the owner of the document. Printix supports zero trust networks. Printing can now work if there is no physical computer with Printix Client online on the printer network, or if printers and computers are kept on separate networks (zero trust).

### Integration with Universal Print by Microsoft

Microsoft Graph API integration connects Printix and Universal Print to a single managed cloud service with extended features, security, management and reporting. As an advanced option, Printix provides customers with direct print via Printix Client, so Universal Print can be used on existing printers without requiring Universal Print connector on a local machine and an expensive server. This also keeps print local to minimise traffic and prevent conversion in the cloud.

### Expanded analytics and reporting

The Printix Power BI solution provides insights into print usage, showing statistics for users, printers, workstations, print queues, locations and historic data. The platform also enables remote workers to print from home-office printers when working from home on their company laptop. Printix collects data on output on home printers, which can be used to reimburse the employee for printing.

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## Printix key features

### Key features include:

- **Serverless print infrastructure** – Printix technology can handle multiple sites and separate networks. Printix Client automatically updates to the latest approved version. Print processing is done locally on the computer, so no additional network traffic is needed to transfer print data to a print server. Printix Client can convert existing print queues.
- **Driver store** – Printix maintains a global driver store with Windows and macOS print drivers. Printix Client automatically uploads native print drivers and places them in the Printix driver store. If there is no dedicated print driver for a printer, an appropriate UPD may be used.
- **Central web-based management** – it is easy to configure Printix and centrally manage printers, print queues and print drivers from a web browser. Print queues can be automatically added to and removed from users' computers.

- **Delegated print management** – enables responsibility for the management of printers and print queues to be delegated to IT personnel at the local site.
- **Self-service** – Automatic registration of users the first time they sign in to Printix with their Microsoft or Google Workspace work or school account. Users can add the printers they need to work efficiently, without the requirement for IT to deal with group policies for printing.
- **Easy printer identification** – end users can scan any printer's QR code or read the NFC tag via a mobile phone or swipe their card.
- **Secure print** – users can use the Printix App on phones to release documents to the printer. The Printix App is available as a native app for Android and iOS/iPadOS phones and tablets, and as a web app that runs in a web browser on phones, tablets and computers. If Printix Go is installed on the printer, then users can sign in with card or ID code and release documents from the touchscreen control panel of the printer.
- **Single sign-on** – Printix supports single sign-on with Microsoft Azure AD and can be deployed with Microsoft Endpoint Manager.
- **Scalable by design** – print vendor-agnostic and scalable by design, the platform can handle any number of users and printers.
- **Serverless print infrastructure** – automates print driver and queue management and eliminates the need for a print server.
- **Secure print levels** – it is possible to set a minimum secure print level for all users, or a higher secure print level can be set for selected users via group membership. Controls ensure users are physically present at the printer to release documents and require users to identify the printer by scanning the printer's QR code (level 1) or NFC tag (level 2), or sign in at the printer (level 3).
- **Reprint** – users can reprint documents that were deleted or printed within the previous 12 hours, without resubmitting them.
- **Mobile print** – users can print from Android and iOS/iPadOS phones and tablets to Printix-managed printers enabled for mobile print.
- **Home-office printing** – enable employees to print on home-office printers when working from home on their company laptop.
- **Printix Chromebook** – users can print to Printix-managed printers from Chromebooks and computers with Google Chrome.
- **Cloud storage** – documents printed via the cloud or as mobile print from Android and iOS phones and tablets can be routed to the cloud and securely stored (Azure Blob Storage and Google Cloud Storage).
- **Identity providers** – Printix supports authentication with Okta and OneLogin.
- **Pull-printing** – enables third-party follow/pull-print queues from PaperCut, SafeCom, Equitrac, PrinterLogic and similar third-party pull-printing solutions. Users can continue using existing card readers to sign in and release documents from the enabled printer's touchscreen control panel. Optionally, users can submit documents from home and while travelling.
- **Azure Virtual Desktop** – Printix helps users get the most out of Azure Virtual Desktop, as well as Citrix and RDS, through SSO, silent configuration, updates and continuous monitoring of the print environment.
- **USB printing** – Printix Redirector enables printing to a locally attached USB printer.

### Pricing and availability

Printix offers a SaaS business model with tiered pricing in annual or monthly subscriptions. All subscriptions start with a free one-month trial. Customers are only charged for active users. All features are included and there is no limit on the number of printers, print jobs, pages, devices or locations. Student usage is free for educational institutions. Non-profits receive an additional discount. MSP pricing is available for managed service providers authorised to resell Printix.

# Future outlook

Remote and agile working, dispersed teams, and flexible workstyles are creating cultural and physical changes in the workplace. As these changes gather pace, the physical workplace is being repurposed in response to the increased drive for sustainability, employee experience and hybrid working. The role that the office plays in employee culture, engagement and productivity cannot be overstated. As the Great Resignation gathers steam, more employees are considering leaving jobs as they reassess their work-life balance. Organisations must make hybrid work more engaging, flexible and productive. Flexible hours and the ability to work remotely will be part of this, but are unlikely to be enough alone, and consideration of workloads and provision of support (spanning mental health, aiding progression, and making people feel valued) is needed, even in the remote environment. Shared spaces must work to powerfully address and reverse the sense of having something taken away that is part of burn-out and feeling underappreciated, and health and well-being must be part of the experience of physical attendance at work.

Outdated technology is a driver for considering a change, especially amongst ITDMs, and should form part of any strategy to re-engage staff who are drifting away. Reliable and up-to-date technological solutions that span the office and remote environments can also play a useful role in making working life more satisfactory. The office will be a compelling destination for in-person collaboration and enhancing company culture. Workplace analytic tools, employee experience platforms, and workflow automation solutions will help drive productivity and engagement.

Office spaces represent an opportunity to re-engage a jaded workforce and ameliorate retention issues. In-person collaboration and the opportunity to develop and grow (for younger employees) are key benefits, along with the chance to use better, more reliable technology than remote working affords. Smart and modern technological solutions that span the office and remote environments seamlessly can play a useful role in making staff feel valued and reducing frustrations in working life.

As the exact role of physical office space is defined, the role of technology is undisputed and will stand, however the tension between office and remote plays out. Print also seems fairly resilient in spite of significant changes in working practices. However, decision-makers appear to value print to a greater degree than office workers, who will have the greatest agency in the future of printing. As sustainability and digitisation are set to grow in importance dramatically in the coming three years, print will need to continually reaffirm its relevance to all stakeholders.

**The office will be a compelling destination for in-person collaboration and enhancing company culture.**



# Appendix

Our sample of 1,542 individuals comprised a range of job roles, ages, and verticals. In order to reflect the size of the market, more interviews were conducted in

the US than in the smaller European markets. We have summarised the composition of the sample in Figure 19 below.

Figure 19. Region and job role of our sample

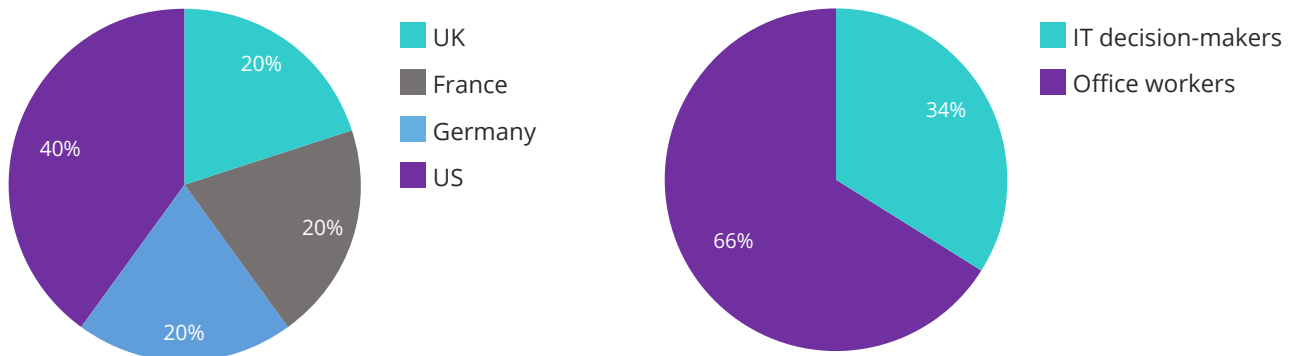


Figure 20. Age of those interviewed

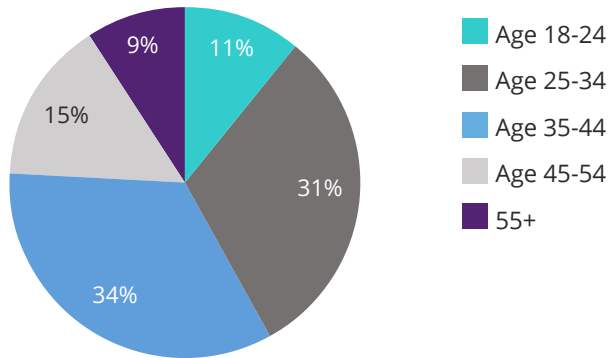


Figure 21. Vertical



# About Quocirca

**Quocirca is a global market insight and research firm specialising in analysing the convergence of print and digital technologies in the future workplace.**

Since 2006, Quocirca has played an influential role in advising clients on major shifts in the market. Our consulting and research are at the forefront of the rapidly evolving print services and solutions market, trusted by clients that are seeking new strategies to address disruptive technologies.

Quocirca has pioneered research in many emerging market areas. More than 10 years ago we were the first to analyse the competitive global market landscape for managed print services (MPS), followed by the first global competitive review of the print security market. More recently Quocirca reinforced its leading and unique approach in the market, publishing the first study looking at the smart, connected future of print in the digital workplace. The [Global Print 2025](#) study provides unparalleled insight into the impact of digital disruption, from both an industry executive and end-user perspective.

For more information, visit [www.quocirca.com](http://www.quocirca.com)

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