

# Document and Workflow Automation as Strategic Tools for Workforce Productivity



## Pathfinder Report

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## About this paper

A Pathfinder paper navigates decision-makers through the issues surrounding a specific technology or business case, explores the business value of adoption, and recommends the range of considerations and concrete next steps in the decision-making process.

## About the Author



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Before joining 451 Research, Conner worked as a senior editor with CBS Interactive, covering a variety of enterprise tech trends. He received a Bachelor of Science in Communication from the University of Louisville and a Master of Science in Journalism from Northwestern University.

# Executive Summary

The humble document isn't so humble anymore. Like many other “traditional” content file types associated with knowledge work, documents and the software that enables their creation and relevant workflows have evolved in recent years. Modern developments in document generation, automation, intelligence, security and workflow integrations have made files like PDFs and others strategic tools in work execution. And investments in the software surrounding these tools have deep implications for the future of work and the engagement of those employees in IT, legal, HR, sales and beyond.

In 2020, we saw a watershed moment as organizations fought to solve for the rapid viability of remote work. Following that, in 2021 we began to recognize the long-term cultural and operational changes that impact work and business models. In 2022, leaders began to recast their vision of the digital workplace and bring it closer to their employee experience strategies—prioritizing investments in the employee experience to drive recruitment, retention and operational efficiencies. Increasingly, what is driving deeper employee engagement, in addition to a sense of belonging and career opportunities, is increased investment in technology tools that elevate the quality of day-to-day work experiences.

451 Research's Voice of the Enterprise (VotE): Workforce Productivity & Collaboration, Work Execution Goals & Challenges 2021 survey found that technology to improve workforce productivity is a top priority (cited by 41% of survey respondents) for supporting enterprise transformation efforts over the next two years. The future of work depends on digital business transformation, and that transformation demands investment in the right tooling strategies to drive the biggest impact across an ever-expanding application estate.

A modern document and workflow strategy—one that leverages intelligence, automation and integrations—is a great starting point, since it addresses a tooling structure and file types that have a high degree of use and familiarity within most organizations. The addition of features including electronic signature, data-layer integrations and optical character recognition for searchability and accessibility help unlock document intelligence, support more complex workflows, and maintain a foundation of compliance and security.

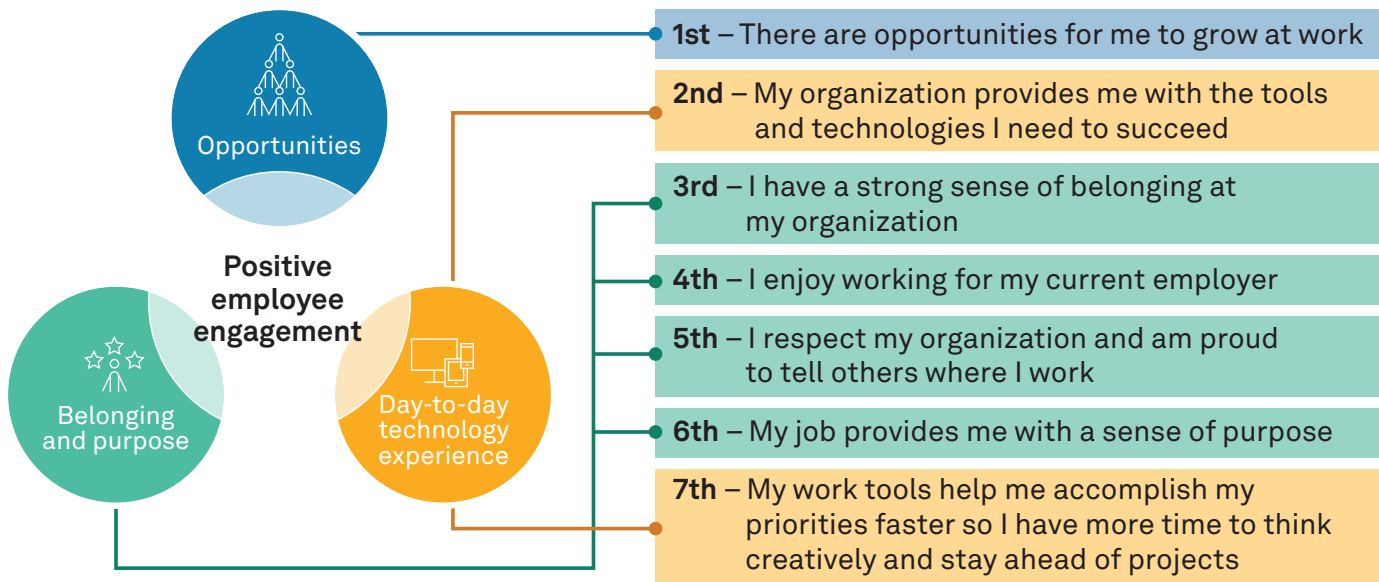
Other file types and workflow systems have had their time in the spotlight recently. But documents are long overdue for an overall strategic investment. These files and their related processes often represent one of the main tools that knowledge workers use to drive business outcomes.

# Document Productivity and Employee Engagement

Investing in the future of work requires a parallel focus on employee engagement, as we believe the two are interconnected. We have found investments in work tools that support productivity drive this engagement and an improved employee experience.

451 Research performed a regression analysis on data from our VotE: Workforce Productivity & Collaboration, Employee Engagement 2021 survey to determine the top drivers of positive employee engagement. From more than 40 different variables included in the analysis, the seven shown in Figure 1 (listed in order) are most likely to improve employee engagement.

**Figure 1: Top Drivers of Positive Employee Engagement**



Base: All respondents (n=1,023)

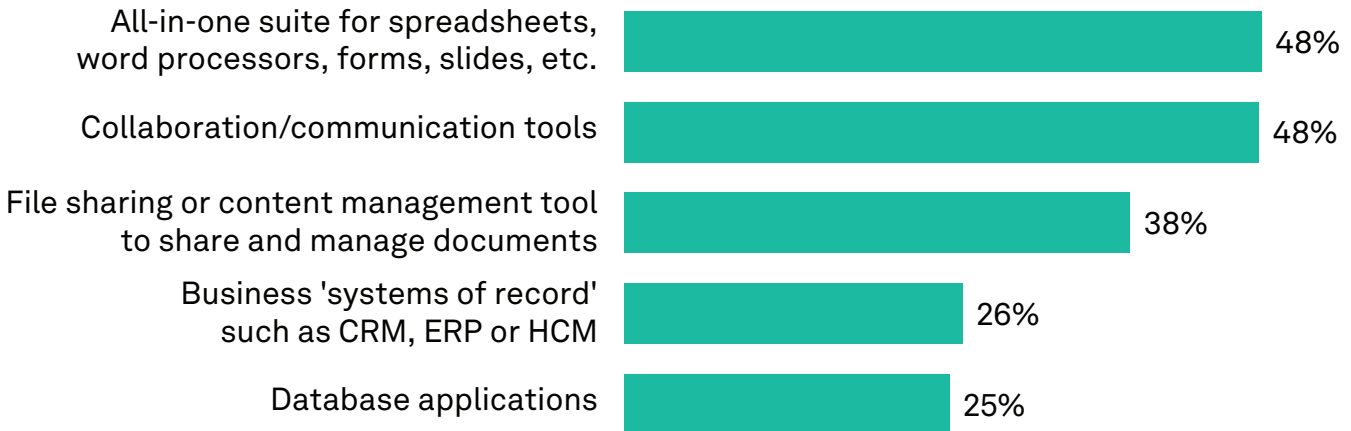
Source: 451 Research's Voice of the Enterprise: Workforce Productivity & Collaboration, Employee Engagement 2021

The ability to be productive using work tools represents two of the top drivers of positive employee engagement—a metric often tied to employee satisfaction and retention. Many business leaders typically think of increasing productivity as an end goal. What we see, rather, is the bigger gain from investments in tools, technologies and systems being that they can drive the employee engagement that unlocks increased productivity, as well as other positive business outcomes.

When asked what they believe their organization should prioritize improving over the next two years, 41% of respondents to the 451 VotE Work Execution Goals & Challenges survey said technologies to improve the workforce's productivity. Improvements to overall business vision and strategy took the fourth position with 28% of respondents, leading us to believe that investments in business strategy will be increasingly informed by their potential to impact workforce productivity.

So there's a distinct demand to drive productivity, but the looming question is how to go about doing that. Business leaders want to make the biggest impact with their budget, so they must be strategic in how they approach tooling investments to drive workplace transformation. Leaders must look to some of the most broadly used tools and, at a high level, all of them have some connection to business content like documents.

**Figure 2: Tools That Contribute Most to Personal Productivity at Work**



Q. Which of the following tools contribute the most to your personal productivity at work? Please select all that apply.

Base: All respondents (n=494)

51 Research's Voice of the Enterprise: Workforce Productivity & Collaboration, Work Execution Goals & Challenges 2021

Diving into planned spending in these areas, we see that investments in content creation and management continue to solidify. In 451 Research's Vote: Workforce Productivity & Collaboration, Technology Ecosystems 2021 survey, fielded in late 2021, we asked respondents how their organization's spending on content storage and sharing tools would change over the following 12 months, and some 37% said they plan to increase spending in this area.

There is clear demand for content tools and planned investment in this space, and the impact of these tools extends beyond daily work efficiency. When considering exactly what type of content technology to focus on and the potential impact, documents – and the tools that support their creation and workflows – stand out as an area that could help transform a variety of work processes and strategies across multiple roles and personas.

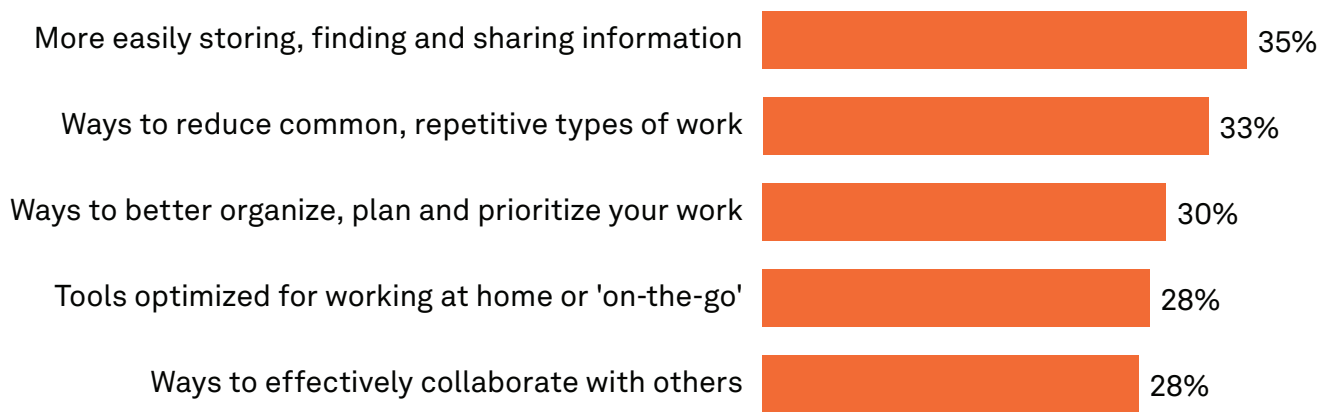
It's important to look at the evolution of the document ecosystem to better understand where next-generation documents fit within modern work.

# The Evolution of the Document Ecosystem

Over the past few years, startups and legacy vendors alike have taken to redefining the main business file types. Vendors are working to create more dynamic and feature-rich productivity platforms around well-established content types such as spreadsheets and presentations. They are also targeting a need for seamless work execution amid the shift to hybrid and remote work models.

What's next, though, is a new approach for documents and document workflows. As we saw in Figure 2, there is already a high degree of document use and familiarity within organizations, but what documents are capable of and what kinds of work they can support has been extended with adjacent technologies and a broader ecosystem around document file types. To understand this shift, it's helpful to understand employees' key pain points when it comes to the technologies they use.

**Figure 3: Most Beneficial Tooling Improvements for Individual Performance**



Q. Thinking specifically about the tools and technologies you use to get your work done, which of the following, if improved, would most benefit your individual performance? Please select all that apply.

Base: All respondents (n=491)

451 Research's Voice of the Enterprise: Workforce Productivity & Collaboration, Work Execution Goals & Challenges 2021

Transformative tools are the ones that truly help level-up the performance of end users within an organization. Next we examine some of the top document trends and how they address the improvements that employees want to see, as illustrated in Figure 3.

# Document Trends and Their Impact

**API Integrations** – Trends such as API integrations make it easier to collaborate and make information easier to store, find and share. Documents are often an intersectional content type that must collect information from other data stores or systems of record to help employees execute on their work processes. For example, a sales professional may need to pull client information from a CRM system directly into a contract to maintain accuracy. In another example, an HR or legal professional may need to pull job candidate data in real time into an offer letter or employee contract PDF. The right integration capabilities around the modern document and its associated workflows should be focused on helping seamlessly connect the most critical systems of record within an organization.

**Artificial Intelligence** – AI tools such as optical character recognition (OCR) also help with searchability and can be used to support workflow automation as well. This helps to reduce common manual tasks, but OCR can also be used to make information in certain documents, like PDFs, more searchable—making it easier to organize and manage these documents based on the information they contain. This is what we mean by unlocking the intelligence of documents. For example, documents that have been scanned in from paper format can be quickly categorized and, in some cases, archived and made editable. In other use cases, legal professionals can employ OCR to find expiration dates in a contract or look for language in a document that is outside of compliance or that needs to be redacted.

**Viewability and Mobility** – According to the 451 VotE Technology Ecosystems survey, 34% of respondents say their organization is adopting hybrid work. Many people are now working from anywhere, on their phones and on the go. Modern, dynamic design helps the document and its tools be more useful when working from a variety of devices—users want to be able to easily work, collaborate, comment and sign no matter where they are.

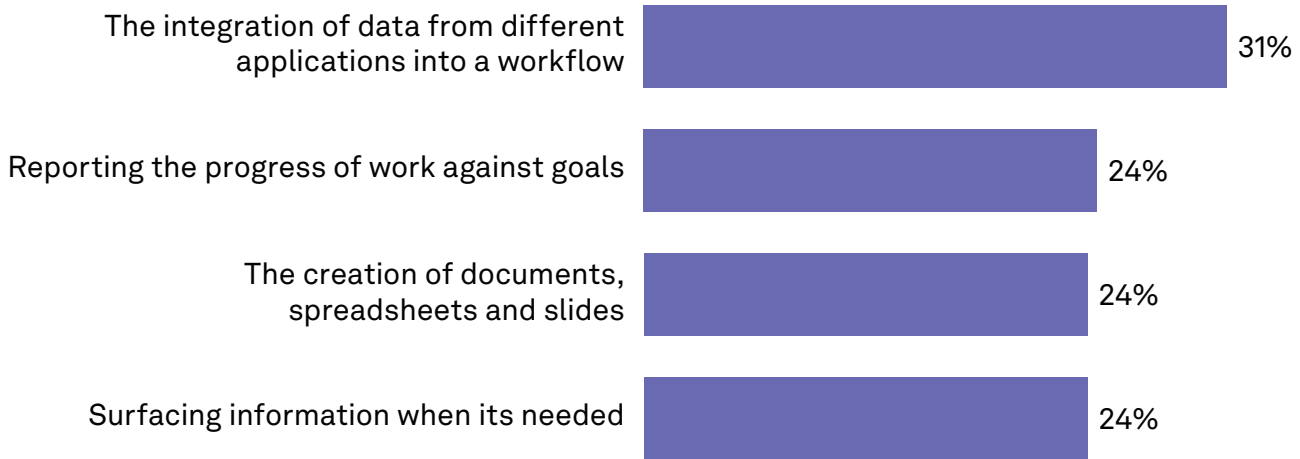
**Electronic Signature** – E-signature is one of the most critical features in the evolution of the document into a tool for getting work done. With compliant e-signature and digital signature architectures, work processes such as signing a contract can be completed within the context of the document itself, greatly adding to the value of the document tool the employee is using. This helps support working on the go and takes out the manual steps of printing a document, then having it signed and scanned back into a system – or mailing the document, as is still common in some industries.

**Security** – Respondents to the 451 VotE Work Execution Goals & Challenges survey said that security requirements limiting capabilities are the biggest obstacles to team success regarding the tools and applications they use. However, we also know that security is a top priority for IT, and businesses are facing an increasing number of threats. This is compounded by the rise of remote and hybrid work, with employees often outside of a secure office network. Modern, transformative tools take a security-first perspective that prioritizes security and governance so that end users are free to work how they want. With high-profile data breaches regularly making headlines, it's critical that modern document tools provide redaction capabilities and sharing limitations, as well as trusted e-signature and digital identity verification to help limit potential security threats that may emerge as documents become more central to strategic business processes.

**Standardization** – One major challenge impacting collaboration is a lack of file-type standardization. Without standardization, files can be incompatible and may not be readable across the various teams within an organization, potentially limiting collaboration opportunities. Additional manual friction can be introduced when someone must contact the originator of the file to request it be reformatted and resent. Standardization helps support cross-team collaboration, while also improving security and the consistency of experiences working in document tools.

**Workflow Automation** – Transformation demands automation, and documents are no different in this regard. When it comes to reducing common repetitive types of work, workflow automation features play a key role. Some 37% of respondents to the 451 VotE Technology Ecosystems survey said their organization is planning to increase spending on independent workflow automation tools, and there are clear use cases for automation in document workflows to ease the burden on knowledge workers.

**Figure 4: Where Automation Can Make the Biggest Improvements**



Q. Which of the following, if any, could be significantly improved with more automation? Please select all that apply.  
Base: All respondents (n=751)  
451 Research's Voice of the Enterprise: Workforce Productivity & Collaboration, Work Execution Goals & Challenges 2021

The top pain point among survey respondents is connecting multiple sources of data in a unified workflow. Leveraging APIs and other integrations to add context to documents and automating approvals workflows is a key way in which the automation trend is playing out in a modern document ecosystem. Another area that can benefit from these integrations is the ability to surface information when it is needed, and within the most contextually relevant environment.

Going back to the genesis of the document itself, nearly 24% of respondents cited the creation of documents, spreadsheets and slides as a need for automation in their day-to-day work. System-of-record integrations, such as the CRM example presented earlier, can help with this, but users are also looking for tools and vendors that invest in document template generation, which can also tie into the standardization need detailed above.

Of course these technology trends underpin the transformative nature of the document, but why does this matter? It matters because modern document strategy unlocks business value by enabling specific outcomes. Next we explore some of the use cases supported by this transformation.



# Use Cases

**Human Resources** – HR process improvements top the list (with 50% of respondents) of the most important strategic focuses for HR departments over the next two years, according to 451 Research's *VotE: Workforce Productivity & Collaboration, Employee Lifecycle and HR 2021* study. As HR teams look to level-up their processes, document-centric workflows are likely to be front and center. HR's core roles all deal with sensitive documents—offer letters and employment contracts, payroll paperwork, etc. These functions would benefit from a modern document workflow strategy, including the ability to easily combine multiple PDFs into one document for manageability and the ability to secure or redact certain information to meet compliance standards.

**Sales Automation** – This is a core use case for modern document strategies, especially those dealing with PDFs, since this process often requires tight coordination among sales, finance, legal and operations teams to get agreements and contracts finalized and signed. Integrations with CRM software help automate the building and management of the contracts, while integrations with communication and collaboration tools help keep the right team members connected to the project.

**Supply Chain/Logistics** – 451 Research's *Macroeconomic Outlook, Business Trends 2022* study data tells us that supply chain disruptions are posing the biggest threat to organizations' overall sales – beating out both labor shortages and COVID-19 impacts by a short margin. As such, we expect increased investment in tools and systems that improve the processes around procurement, expenses, logistics and supply chain generally. This includes creating NDAs for vendors, approving budget to secure new services and using OCR to easily search contracts for the most important information.

**Legal** – Legal is another department that relies heavily on documents in its day-to-day work and would greatly benefit from renewed investment in software surrounding these documents. File types like PDFs often become the center of gravity in legal workflows due to their options for standardization and—more recently—e-signature. Legal professionals not only need technologies like OCR to help them find elements like expiration dates in a contract, they need easy ways to redact sensitive information, password-protect PDFs for unauthorized access and add watermarking.

**Finance** – According to the 451 *VotE Technology Ecosystems* survey, finance professionals have a higher planned spend in word processors, spreadsheets and slides (41.7% vs. 31.2%) and a higher planned spend in content storage and sharing tools (43.1% vs. 36.6%) when compared with overall respondents. Documents can be central to expense reporting, with OCR playing a key role in text capture from receipts—especially on mobile devices. Additionally, document management and e-signature features help support a variety of processes in accounts payable and receivable. Another security-focused area, finance users also benefit from bolstered security features such as password protection. In our *VotE Work Execution Goals & Challenges* survey, finance respondents also showed a higher preference for ways to effectively collaborate, and tools optimized for working from home or on the go. Supporting documents across multiple form factors and enabling e-signature and file standardization could help meet these needs.

**Information Technology** – Just like finance professionals, IT respondents to our *VotE Technology Ecosystems* survey have a higher planned spend in both word processors, spreadsheets and slides tools, and in content storage and sharing tools, than the overall respondent base. Modern document tools help IT deliver the balance of agility (through AI and integrations); autonomy (through workflow automation and accessibility/viewability); and alignment (through standardization and governance) to their business stakeholders. Digital transformation is a critical priority for IT, and the broad use of documents like PDFs makes it a clear choice for modernization to deliver automation and intelligence at scale. IT also cares a lot about standardization because it streamlines processes, tools and the procurement of software. Additionally, a focus on embedded, all-in-one solutions helps priorities like collaboration in the flow of work as well.

# Conclusions

Confronting the future of work – and the requisite shift in work models surrounding it – is forcing organizations to revisit their IT investments, focusing in on the tools that drive productivity. As buyers examine their document software strategies, they must consider tools that meet their users where they work (e.g., desktop, mobile), support their most pressing workflow needs with automation, and help unlock the business data within a document – all while keeping everything secure. This is how the modern document can be leveraged for new business outcomes. And, if leveraged properly, the future of the document has a huge potential impact on the future of work.



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