The Future of Work

Why Productivity Will Be Defined by User Control and Visibility

Pathfinder

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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

Modern knowledge work is driven, in large part, by the content and data created by workers. These days, there are a plethora of options for creating and collaborating on content, as well as generating data and metadata about its use. However, challenges persist regarding employees' visibility and control of this content and data – challenges that are being exacerbated by the impact of the COVID-19 pandemic and the mass-scale shift to remote work that will define the new normal. Underscoring this is that information silos (making information difficult to search, access and use) are the number one obstacle to team success.[1]

Our research has also found that 90% of workforce respondents believe it would be important for a new employer to offer devices, applications and other productivity tools if they were in the market for a new job.[2] In the same survey wave the following year, we found that 35% of respondents would be somewhat or very likely to leave a job for another position where the only difference was better availability of devices, applications and other productivity tools. This data suggests that productivity tools are drivers of both recruitment and retention, and with content creation tools ranking as the tools most supportive of individual productivity, it stands to reason that an investment in modern content tooling aligns with a modern employee experience.

As organizations begin to outline and implement their workforce productivity strategies to support the future of work, it's critical that they take a data-driven and automated approach that supports employee execution. Widening the lens through which workers can view and understand the content and data associated with their work helps to limit duplication of effort while breaking down silos that filter an employee's understanding of overall corporate strategy. The future of work demands an investment in the employee experience, which, in part, means an investment in streamlined, appropriate and sanctioned content access, improved visibility across content silos, and optimization of content usage across multiple applications to support more user control and autonomy in daily work processes.
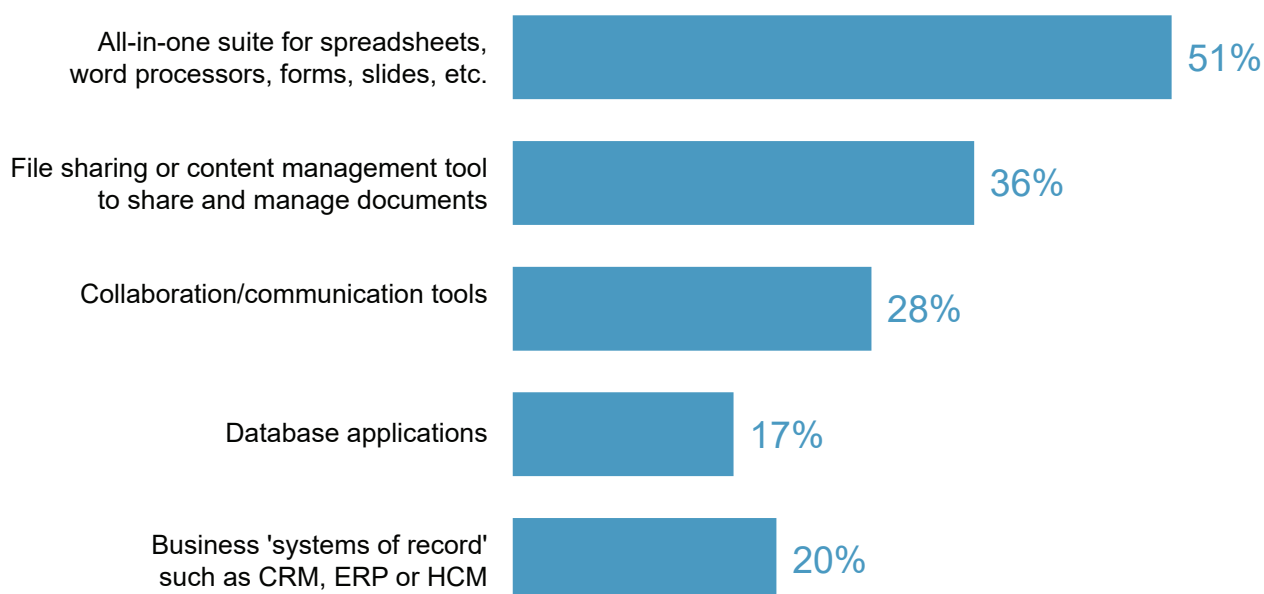
1. 451 Research's Voice of the Enterprise: Workforce Productivity & Collaboration, Work Execution Goals & Challenges 2020
2. 451 Research's Voice of the Enterprise: Workforce Productivity & Collaboration, Employee Engagement 2019

The Problem with Content

Knowledge work is often closely associated with content, and for good reason. Tools that enable the creation, management and leveraging of content are the driving force for business outcomes in many instances. They are also closely associated with individual productivity. In a recent 451 Research Voice of the Enterprise survey (see Figure 1), respondents cited content creation tools (51%) and file-sharing/content management tools (36%) as the tools that contribute most to their productivity at work.

Figure 1: Top Productivity Tools

Source: 451 Research's Voice of the Enterprise: Workforce Productivity & Collaboration, Work Execution Goals & Challenges 2020
Q: Which of the following tools contribute the most to your personal productivity at work? Please select all that apply.
Base: Workforce respondents (n=877)

Despite a massive content estate and the pervasiveness of modern tools that enable it, specific obstacles still exist that get in the way of team success. Since the dawn of the modern office, content has been being created at a rapid clip, regardless of whether there are any frameworks in place to understand, manage and leverage it.

In diagnosing just what is wrong with modern content and data strategies, we start with the size and makeup of the content estate itself. When we asked respondents to our 2020 Work Execution survey to rank the biggest obstacles to their team's success, information silos stood out as the number one challenge (See figure 2). This isn't news to anyone who works in a relatively large organization, but it remains a pervasive challenge in the modern enterprise. Why is that?

The remainder of the top five obstacles holding teams back help paint a clearer picture. The growth of the broader applications estate – catalyzed by SaaS best-of-breed strategies – likely parallels (or at least informs) the growth of the content estate. Data and content silos have continued to grow as the number of applications in use grows. These applications don't integrate well with each other, but they are all seemingly necessary for their specific business process or function. What's more, the lack of automation often leads to duplication of effort and possibly duplication of content or data – a persistent problem that undermines data governance efforts.

Figure 2: Barriers to Team Productivity
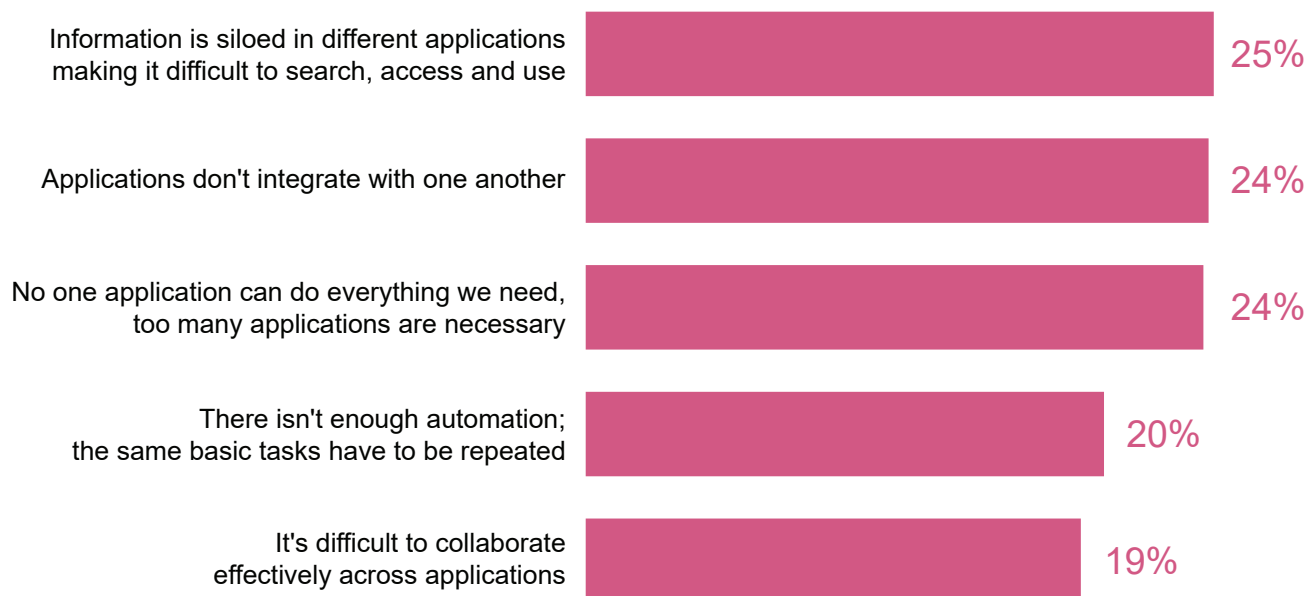
Source: 451 Research's Voice of the Enterprise: Workforce Productivity & Collaboration, Work Execution Goals & Challenges 2020

Q: Thinking about all the different applications and tools your team uses, which of the following are the biggest obstacles to your team's success? Please select all that apply.

Base: Workforce respondents (n=788)

This problem is mirrored in the world of data analytics, where it's common for analysts to spend an inordinate amount of time finding and preparing data for analysis. According to 451 Research survey data, on average, 48% of a data analyst's time is spent finding and preparing data for analysis (see Figure 3). Beyond that, 48% of respondents indicated that analysts spend more than 50% of work hours finding and preparing data for analysis. The nature of data analysts' roles suggest that they spend most of their time working with structured data. Given the complexities of unstructured data, the average analyst would likely spend even more time finding and preparing that data. There is a parallel here with workers in other roles who are focusing heavily on finding and leveraging content in a dynamic way.

Figure 3 Finding and Preparing Data for Analysis

48% say analysts spend more than 50% of work hours finding and preparing data
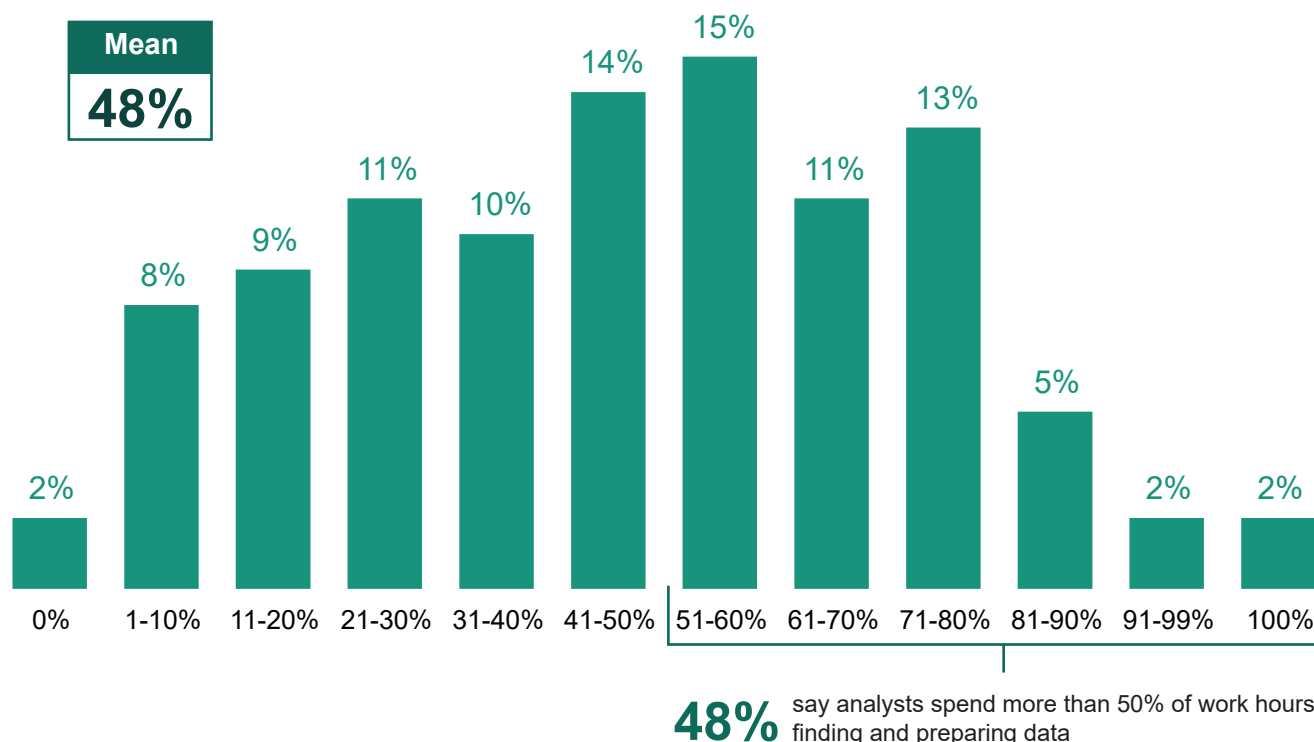
Source: 451 Research's Voice of the Enterprise: Data & Analytics, 2H 2019

Q: What percentage of work hours would you estimate data analysts currently spend on finding and preparing data for analysis? (n=519)

Of course, all of these challenges are exacerbated by COVID-19 and the resulting shift to mass-scale remote and distributed work. Our research found that, with regard to the tools they use as part of their day-to-day work, only 55% of employees believe they are routinely very productive.[3] What's more is that only 51% of those same respondents believe that the tools they use allow them to be as productive when working remotely as they were when working at their desk.

Drilling down further, we found that the use of workforce productivity and collaboration software was impacted (e.g., using more, using differently, using less) by the pandemic more than any other technology or tool.[4] The virtual environment defines the workplace now, and employees need modern tools that enable them to thrive. We believe that proper visibility and intelligence, especially around content, is essential to making that happen.
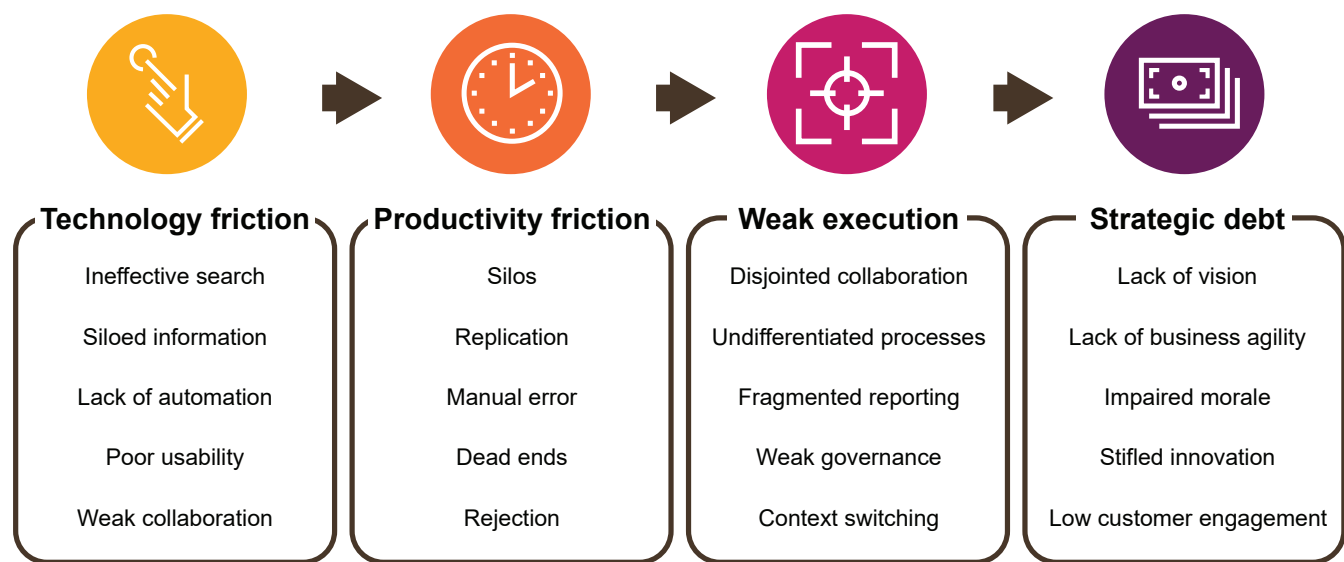
How a Data-Driven Approach Mitigates Friction

The poor searchability of content and information existing in silos and/or applications is part of a larger list of technology friction points that, if left unchecked, can impede employee engagement and productivity, ultimately leading to strategic debt for an organization. Other core elements of technology friction include a lack of automation, poor usability and weak metadata. The graphic below shows that a failure to mitigate these friction points often leads to larger issues for organizations.

Figure 4: The Ripple Effects of Friction

Technology friction	Productivity friction	Weak execution	Strategic debt
Ineffective search	Silos	Disjointed collaboration	Lack of vision
Siloed information	Replication	Undifferentiated processes	Lack of business agility
Lack of automation	Manual error	Fragmented reporting	Impaired morale
Poor usability	Dead ends	Weak governance	Stifled innovation
Weak collaboration	Rejection	Context switching	Low customer engagement

Source: 451 Research

Let's connect these friction points to our content, data and productivity strategy. Ultimately, these challenges can grow from individual and team obstacles to departmental and functional obstacles before fully materializing as strategic organizational problems. Earlier in this report, we cited information silos, poor search experience and lack of automation as top obstacles to team success from our Work Execution data. However, poor usability and weak metadata are other challenges we see in content-centric tooling. Without properly addressing these friction points at the software and platform levels, organizations leave themselves open to incur strategic debt in their lack of vision, poor agility and stifled innovation.

However, a modern digital-forward and data-driven approach to content management is a strategy that has the potential to address all of these issues. Figure 5 below shows that a data-driven approach often yields enhanced efficiency in the form of greater business agility and automated business processes. It also brings new value in terms of stakeholder empowerment and alignment while increasing an organization's ability to respond to threats (which could be considered another form of business flexibility and agility).

Figure 5: Benefits of Being Data-Driven

Legend: ■ Deriving new value   ■ Responding to eternal forces   ■ Responding to eternal forces

Benefit	Percentage
Increasing sales	61%
Enhancing customer service and engagement	52%
Lowering costs	50%
Improving business agility	50%
Improving existing or developing new products and services	47%
Improving/automating business processes	46%
Increasing competitive advantage/respond to competitive threats	46%
Empowering and aligning internal decision-makers	38%
Reducing risk exposure	38%
Improving regulatory compliance	26%
Developing new data monetization services	21%

Source: 451 Research's Voice of the Enterprise: Data & Analytics, Data Management & Analytics 2020
Q: What are the most significant benefits your organization would expect from being more data-driven? Please select all that apply.
Base: All respondents, abbreviated fielding (n=400)

A Data-Driven Approach to Content Management

So, what does a data driven approach look like in modern content management? It starts with treating the content itself in the same way that data analysts treat data. Assuming that one of the foremost challenges is finding and preparing the content, organizations must make foundational investments in tools and platforms that improve workers' ability to search, access and use it. Tools such as content services platforms and content management platforms that integrate the portfolio of content-centric applications can be a single source of truth for all content, improving overall visibility and control. That helps improve usability, breaks down silos that are perpetuated by apps, and improves line of sight. These tools can also help moderate appropriate content and data access, reducing the friction of manual permission-based workflows.

The first step toward fixing the problem is understanding the fact that workers lack control and visibility. The number of applications associated with content and information isn't likely to decrease any time soon. That truth gives weight to the value of a single source of truth – a single system that integrates with the requisite content-heavy applications and offers users the ability to search across those data silos with a single lens, or consolidates that content from those applications down to a single platform to improve searchability and streamline time to value. Without full visibility into the data and content, employees cannot use it effectively and execute against strategy.

Metadata must also become a priority because it can provide a valuable lingua franca across disparate systems and silos. Using tools that help collect that data can empower users to leverage the metadata in search, but also in content management and organization. If the content itself is the data in our data-driven approach, the content metadata helps inform the direction of travel for how we put that data to use. It also helps organizations take a more functional approach to automation. Metadata helps users understand the nature of the work our content is involved in and puts a magnifying glass on the processes that would be most improved by automation. This improves worker performance – finding ways to reduce common, repetitive types of work was listed in our Work Execution data as the top tooling or technology improvement survey respondents believed could help them get work done.

Moving beyond the application estate, the obstacles of content and information silos are growing more complex due to the growth of multicloud and hybrid datacenter environments. Put simply, content and data are in multiple applications, but they are also hosted across multiple environments. This brings an additional level of complexity as content management strategies must now account for the diversity of these environments. This is something we're already seeing in data management and analytics buying strategies. Nearly three-quarters (72%) of respondents to a recent 451 survey completely or mostly agreed that the ability to run data management/analytics software on multiple cloud/datacenter environments is an important consideration for their organization when selecting a new data management/analytics vendor[5]. This trend should also inform organizations' evaluation of their content management and content services vendors.

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5. 451 Research's Voice of the Enterprise: Data & Analytics, Data Management & Analytics 2020

Conclusions

The future of content-centric work isn't just about content management; it's about content enablement and worker productivity. Modern tooling can no longer simply support content creation and management; it must also support content execution. With the addition of embedded collaboration features and live data integration in many content tools, we are seeing the evolution of content in some cases from a record of business ideas and data to a plane across which work can actually be executed. With that in mind, a modern content strategy that prioritizes visibility and user control of content becomes even more imperative as we move toward the future of work.

Visibility into the entire content estate helps mitigate tech friction to stave off strategic debt and improve agility while empowering users to act with more autonomy and control in their roles. Developing a modern content and data strategy that adheres to these themes helps deepen employee productivity and engagement while improving organizations' ability to flexibly deliver outcomes despite the changing nature of the market and regardless of external pressures and changing work environment mandates.

With the exponential growth of unstructured data across industries, most organizations recognize the potential of their data but struggle to uncover its full value because they have too much unstructured and unclassified information, lack the internal resources and skills to analyze it, or both.

Much of this content is archived in storage boxes, backup tapes, file systems, and in multiple legacy ECM systems that are siloed, making it difficult to extract critical business information quickly and easily and leverage that information to drive value, achieve greater efficiencies and reduce costs/increase revenue. Even if the content is accessible, it takes considerable time, resources and cost to search, retrieve and understand what information is available. Simply storing information is not enough to remain competitive in today's digital world. You need to harness the power of your data content regardless of its format or storage location.

A modern content services platform needs to bridge your organization's silos, connecting the information inside them. Iron Mountain InSight® provides an advanced Content Services Platform (CSP) that helps organizations to unlock the hidden value of their content – wherever it resides – through modern, AI-infused content-driven applications, and federated search capabilities.

By combining Iron Mountain's content analytics, data management and information governance expertise with Machine Learning (ML) and Artificial Intelligence (AI) capabilities, the Iron Mountain InSight content service platform unlocks the value of data that supports transactional business processes and back office functions. By automating business processes through workflows that allow you to mine your data, you can uncover new revenue stream opportunities and cost savings.

Additionally, Iron Mountain InSight incorporates a market leading policy and privacy engine to help companies meet existing and emerging retention and privacy regulations, such as GDPR and California Consumer Privacy Act.

With Iron Mountain InSight, you can:

Speed your Business Transformation:

– Reduce the complexity and cost that are typically needed to support digital transformation initiatives.

Remove Information Silos:

– Rapidly connect next-generation technologies to existing content sources to establish a consistent foundation for modernization.

Enhance Your Business Intelligence:

– Using innovative AI/ML for advanced classification and entity extraction, you can capture, classify, search, and analyze your content in days instead of months.

Unite Physical and Digital Data:

– Unlock valuable insights that can help your organization's strategic objectives.

Enable Information Governance:

– Reduce risk by automatically applying and enacting retention, privacy and security policies.

Iron Mountain InSight enables companies to automate data understanding, enable compliance and business value, and deliver peace of mind. For more Information go to: www.IronMountain.hk/InSight.