

3.28 BILLION HOURS

per day is spent on

non-value added work

Knowledge workers spend an average of 41 percent of their day on unsatisfying activities that do not use their primary skills. Assuming the 1 billion knowledge workers in the world work eight hours a day, that's 3.28 billion hours a day highly trained experts dedicate to work that does not add long-term value to their organizations or significantly improve their projects. To make these numbers more personal: most people reading this eBook will have to spend more than three hours and 17 minutes today on work that should be automated.

Tasks such as writing emails, ensuring legal and regulatory compliance, and organizing contracts and schematics all keep projects running smoothly. But just because work needs to be done doesn't mean a highly skilled (and highly paid) knowledge worker needs to do it. These professionals undergo years of education and training to solve critical problems and complete revenue-generating projects. They should not be creating frequently used documents from scratch or searching through old emails looking for some long-lost piece of information. All these tasks can and should be automated.

These employees' output and job satisfaction hinges, unsurprisingly, on putting their knowledge and skills to their best use. To maximize the benefit of knowledge workers, both for their employers and themselves, organizations need to minimize the time they spend on tasks that underutilize their skills and talents.

Despite having become a business cliché, "work smarter, not harder" tells the whole history of work. Every productivity innovation — from the Roman agueducts to the assembly line to the latest supercomputer — has been about simplifying repetitive tasks to better leverage human creativity and ingenuity. Today's tools can do billions of calculations per microsecond, send a million emails all at once, store and organize institutional knowledge in the cloud, and use AI to accurately generate and complete any document. So why are knowledge workers still spending nearly half their time on cumbersome, manual tasks?

DEFINING KNOWLEDGE WORK

Knowledge work (also called *thought work* or *mind work*) is any task performed primarily through exercising knowledge and creativity, and a knowledge worker is someone whose primary capital is their store of information and critical thinking skills. Anyone whose job it is to "think for a living" is a knowledge worker.

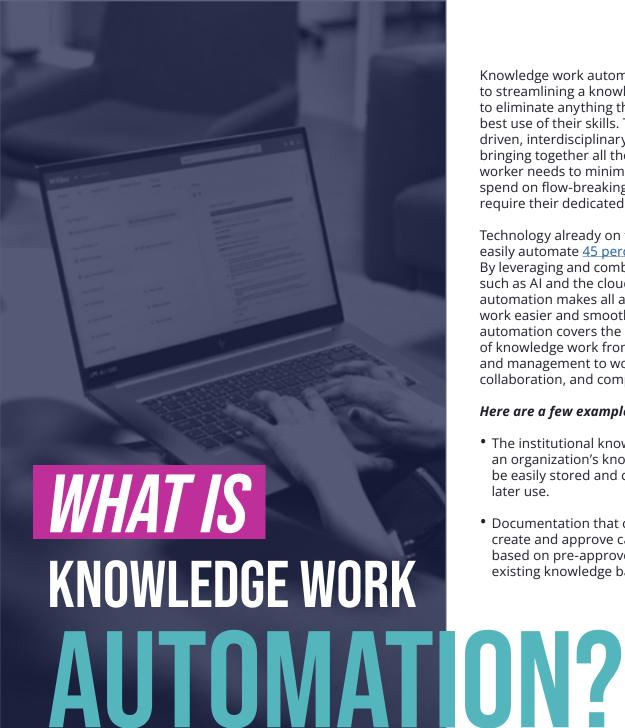
A knowledge worker's primary focus is on combining convergent (fact-finding) and divergent (creative) thinking to solve unique problems.

Not surprisingly, most knowledge workers are highly paid professionals whose time is extremely valuable. Someone tasked with providing clients with wealth management advice, creating legal documentation, or designing business process solutions should use their time either practicing, preparing for, or improving their effectiveness at those tasks. An argument can be made that even relaxing or decompressing is a more valuable use of a knowledge worker's time than any task that does not directly contribute to their knowledge work. A relaxed and confident knowledge worker is more likely to perform well than one who is tired, bored, or overwhelmed with clerical and administrative work.

In a perfect world, knowledge workers would spend every moment of their workday focused entirely on solving critical problems and creating the assets and results their client or employer needs. Knowledge workers would devote themselves 100 percent to being the visionaries, specialists, and creatives they are paid to be. That perfect world does not exist yet, even though the technology to get us there does.

Knowledge work automation is all about getting that technology into a single, integrated platform that enables knowledge workers to be the thought leaders they want to be.





Knowledge work automation is dedicated to streamlining a knowledge worker's tasks to eliminate anything that does not make best use of their skills. This technology driven, interdisciplinary approach focuses on bringing together all the tools a knowledge worker needs to minimize the time they spend on flow-breaking tasks that should not require their dedicated attention.

Technology already on the market could easily automate 45 percent of job tasks. By leveraging and combining new innovations such as AI and the cloud, knowledge work automation makes all aspects of knowledge work easier and smoother. Knowledge work automation covers the end-to-end process of knowledge work from document creation and management to workflow automation, collaboration, and compliance.

Here are a few examples:

- The institutional knowledge generated by an organization's knowledge workers can be easily stored and cataloged for later use.
- Documentation that could take days to create and approve can now be generated based on pre-approved templates and an existing knowledge base.

- Manual copying of work-in-progress to external collaboration tools can be fully integrated as part of normal workflows covering any document's end-to-end lifecycle.
- Approved documentation can be automatically sent for electronic signing and distributed to all relevant stakeholders.
- Filing correspondence of a client project can include dozens of steps, all of which can all be automated to the level of naming each attachment, classifying and organizing that information, applying permissions and retention schedules, and placing each file into appropriate queues for further processing.

Professionals forced to use their time on tedious or unstimulating tasks are more likely to quit, driving turnover and making it difficult to build an effective team. As high-value, highly trained and educated employees, knowledge workers stand to create exponential value for their employers. They not only complete the most key revenue-generating projects, but they develop and curate institutional knowledge and help innovate new ways to make a business grow. Knowledge work automation is about removing all obstacles to these goals so knowledge workers can be more productive, more fulfilled, and happier in their careers.

Knowledge Work Automation Platform: End-to-End Support & Automation

Any number of different tasks might pull a knowledge worker's time and attention from the creative and stimulating work that makes best use of their skills. Even if each task has a software solution to speed up or automate completion, navigating between different systems is another distraction knowledge workers don't need.

These systems have different user interfaces, different login and security requirements, and may even be on different hardware platforms. Problems requiring multiple systems may have a knowledge worker bouncing back and forth between browser tabs, desktop apps, and even their computer and mobile device. Knowledge workers don't need this stress and confusion.

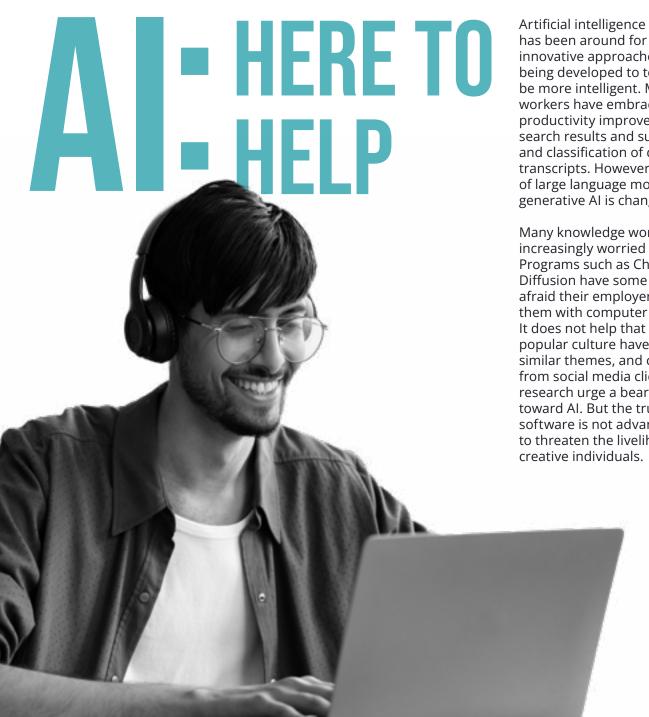
Technology giants such as Microsoft, Google, and Adobe provide comprehensive suites of general-purpose tools and technologies, but these systems don't form an integrated end-to-end process. To make knowledge work flow seamlessly, users of these application suites need to invest additional time and money to get to the desired state.

Most enterprises have documents and data in multiple systems creating information silos for knowledge work. The ability to connect into all relevant data sources and apply an enterprise-wide search is a key ingredient in driving knowledge work productivity.

A knowledge work automation platform should offer an integrated user experience streamlining all aspects of the work. In such a system, end-to-end support, and automation for every task is available in one integrated, easy-to-use software suite. The goal is to eliminate information chaos by automatically organizing data regardless of where it is, provide document-centric workflows for process efficiency and accuracy, and reduce business risk with automated security and compliance.

A fully integrated system is built with the understanding that a knowledge worker's products are the advice and deliverables they give their clients. Anything that doesn't add value to that product is a distraction. Knowledge workers need an integrated platform to facilitate the whole knowledge work process from inception and creation to reviews, approvals, sharing with clients, and beyond.





Artificial intelligence as a technology has been around for decades and innovative approaches are constantly being developed to teach machines to be more intelligent. Many knowledge workers have embraced Al-driven productivity improvements for better search results and superior analysis and classification of data or meeting transcripts. However, the emergence of large language models (LLMs) and generative AI is changing the game.

Many knowledge workers are increasingly worried about AI. Programs such as ChatGPT and Stable Diffusion have some writers and artists afraid their employers may replace them with computer programs. It does not help that fiction and popular culture have long explored similar themes, and countless articles from social media clickbait to academic research urge a bearish attitude toward Al. But the truth is, generative software is not advanced enough to threaten the livelihoods of

Generative AI does have its pitfalls. The results provided by Als may not be accurate and human expertise is required to validate the output. Also, it can be tempting to pass off Al-prompted assets as one's own, sometimes without even refining the work to give it a human touch. Generative models also learn from similar existing work by humans, integrating these assets without permission, and some have made the case that this is a form of plagiarism. But these are issues of ethics and the nature of creativity, and no sign anyone's career is in danger.

Al is not here to steal knowledge workers' jobs. because Als are not — and may never be capable of — imagination or abstract thought. Instead, the task of AI is to handle the uncreative, time-consuming busywork that wastes these human employees' expertise, energy, and ingenuity. Sometimes AI can also spark the knowledge workers inspiration by generating a sample that gets the job halfway there.

Generative AI is exciting and while it is easy to imagine a future where AI can handle the entire workload of a creative writer or tax accountant, this may never be possible or even desirable. But even as it exists today, generative AI has the potential to raise the bar on automating repetitive, time-consuming tasks that still eat up our knowledge workers' time.

Al exists to speed and streamline aspects of knowledge work. For example, when a knowledge worker saves a new document, Al can automatically detect the document type and business context, derive the correct access rights, and place it into the appropriate automated workflows. A large language model is perfect for summarizing documents for faster consumption, or answering specific questions based on the organization's content. LLMs can also be used as a user interface to make the life of the knowledge worker easier. Instead of manually executing a series of tasks, the knowledge workers can simply rely on the Als ability to understand the tasks within its purview and get the job done.

Al can potentially open even more possibilities, handling previously unimagined aspects of knowledge work. This higher tier of automation makes Al an invaluable tool for knowledge workers, there to help people do their jobs, not take jobs away from people. Al is an ideal assistant for knowledge workers, and a key part of what makes knowledge work automation such a revolutionary step forward.

How can Al help Knowledge Workers?

With the right Al-assisted platform, knowledge workers can:



Ask questions and analyze their data.



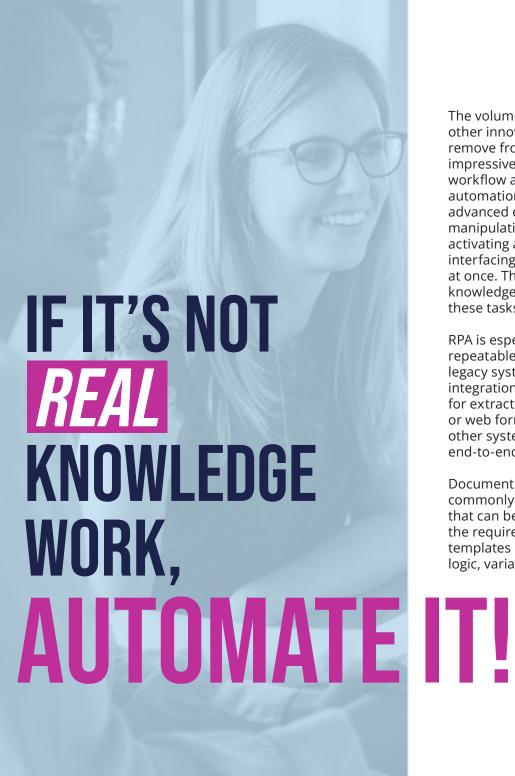
Summarize documents in any language.



Use natural language as the user interface.



Generate added content based on samples or prompts.



The volume of unnecessary work AI and other innovative digital processes can remove from a knowledge worker's plate is impressive. Using document automation, workflow automation, and robotic process automation (RPA), computers today are advanced enough to handle applications for manipulating data, processing transactions, activating appropriate responses, and interfacing with countless computer systems at once. These tools are another facet of knowledge work automation and help take these tasks away from knowledge workers.

RPA is especially good at automating repeatable workflows that occur across legacy systems with limited APIs and integration points. For example, RPA is ideal for extracting details from incoming emails or web forms and pushing those details into other systems to trigger next steps in the end-to-end workflow.

Document automation helps capture commonly used documents into templates that can be used to quickly generate the required output. These automated templates can contain complex and nested logic, variations, and even complete sets of

documents such as legal agreements with multiple annexes. Similarly, automating the creation of personalized messages for a large number of recipients is a common use case for document automation. In addition to completing documents, knowledge workers can build a library of reusable assets.

Organizations develop a wealth of institutional knowledge as they mature, and their team members acquire more experience and perfect their work processes. Workflow automation can integrate these learnings into business processes, guiding knowledge workers at their tasks and reminding them with assignments and notifications. Workflow automation can also smoothly embed up-to-date security and compliance controls naturally into daily work.

Knowledge work automation helps take away manual tasks and institutionalize organizational learnings. Knowledge workers become more productive, and companies can stop relying on word of mouth.

What Collaboration Looks Like with Knowledge Work Automation

Collaboration has always been an integral part of knowledge work. Joining other experts to complete projects and solve problems is an indispensable part of any creative or thought-driven process. In the new world of telecommuting and hybrid workforces, many knowledge workers must join from various locations and even time zones, making asynchronous collaboration much more common. Collaboration happens in meetings, emails, chats, and the co-editing of documents. Optimally all these aspects of collaboration are included as part of the overall process and no information is lost.

Technology has already made asynchronous collaboration easier, but while these programs do track some changes by different users, they do not facilitate working together from across the world to make the collaboration flow towards a goal. Furthermore, not all collaborators have equal ownership of a project and stakeholders may need different permissions and authorizations. When dealing with commercial relationships, bulletproof audit trails must retain evidence of approved versions.

Emails and chatting enable the free flow of knowledge, but it might be hard to drive the process to a conclusion or enforce any process. Sometimes these vital pieces of information are also overlooked and forgotten, even when they might provide necessary details about agreed-upon deadlines or approved changes in scope.

Knowledge work automation brings structure to collaboration and ensures the most efficient use of all workers' time and resources. These systems can also track whose task is current, so everyone knows where the process is now, which team member to talk to for updates, and when to prepare for the next stakeholder to take the ball.

Purpose-built client collaboration platforms make working together more efficient, eliminating the risk of errors. Both the knowledge worker and client feel a sense of control and understand where all their assets are located. The latest technology means no sorting through inboxes for the right attachment, information, or answer to a question.



Before Knowledge Work Automation



A consultant creates a new presentation for a client's project





Where? 3. Navigate to the right folder

4. Name the document What?

Who? 5. Check access and modify rights

6. Share link with project manager

How?

• • • • • • • • • • • • • • •



The project manager receives the presentation from the consultant



What?

7. Review and edit the document

8. Save the final document under a new name

9. Email the approved document with its new name

? (2) 10. Notify the consultant

?

After Knowledge Work Automation



A consultant creates a new presentation for a client's project



1. Automatically create a document



2. Select and populate a template



3. Permissions are set and document placed in workflow



4. Completed document is sent for approval



The project manager receives the presentation from the consultant



5. Document reviewed and edited



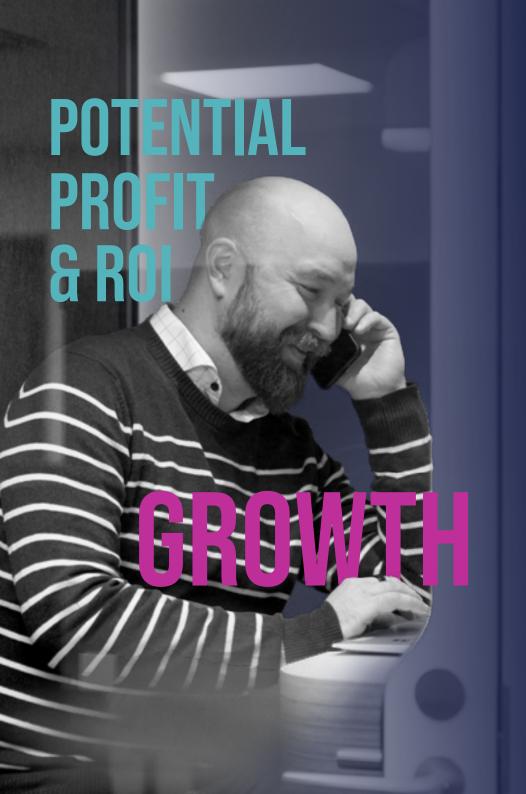
6. Document approved for release



7. Document is automatically sent to client via portal for sign-off



End-to-End Automation



Company Growth, Not IT Savings

Knowledge work automation is targeted at business owners and leaders looking for new ways to generate revenue and scale their organization. Knowledge work automation creates that opportunity by freeing up a company's most inventive minds. Knowledge workers become unburdened by repetitive, tangential tasks to focus their skills on solving new problems and making their companies bigger and better. With knowledge work automation, knowledge workers spend their time on valuable tasks and on improving operations overall.

Knowledge work automation does save time and money, but in service of the greater goal: freeing up knowledge workers to create ROI for their employer.

Knowledge work continues to transform at the amazing speed of innovation. Anyone looking to maximize the effectiveness of knowledge workers needs to evolve along with these employees and their complex tasks. Knowledge work automation maximizes ROI, boosts completion speeds, saves money, and makes the best use of new technology and human ingenuity at the same time. Removing menial tasks to have more time for creative and thought-driven pursuits has always been the dream of knowledge workers. Knowledge work automation helps businesses evolve in the right direction.





M-Files is the leading platform for knowledge work automation.

With the M-Files platform, knowledge workers can find information faster, work smarter, and achieve more. M-Files features an innovative metadata-driven architecture, embedded workflow engine, and advanced artificial intelligence. This enables customers to eliminate information chaos, improve process efficiency, and automate security and compliance.

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