



sorcero

Language Intelligence

# Five Ways That **Language Intelligence** Can Achieve Digital Transformation for the **Remote Workforce**

A Sorcery White Paper

# Executive Summary

The COVID-19 pandemic has forced businesses to undergo a difficult transition by thrusting a large segment of the global workforce into a new work-from-home paradigm. But even amid such wide scale disruptions, the enterprises that have been effective at implementing digital transformation initiatives continue to experience success. A [recent survey by Deloitte](#), which polled decision makers in insurance, life science, and other industries, revealed that companies that have achieved the most progress on their digital transformation goals have seen both higher net revenue growth and higher net margins. Digging deeper, the survey also found that the strongest measurable impact that these initiatives had on business outcomes stemmed from pivots to intelligent workflows and data mastery. At a time when many employees remain working from home, these are the types of investments that enterprises will need to make to remain competitive.

Language Intelligence (LI) is a technology designed to achieve digital transformation at enterprises in Science, Technology, Engineering, and Math (STEM) industries by empowering technical experts whose workflows involve large volumes of industry- and domain- specific documents and other content. LI provides the foundation for intelligent workflows and data mastery, combining Natural Language Processing (NLP), Natural Language Understanding (NLU), and other AI capabilities to understand scientific and medical language at scale. These capabilities have particularly useful applications to the insurance and life science industries. LI improves the accuracy and speed of claims referrals, tracks critical changes in policy and guideline documents, and coordinates important information for drug development teams collaborating across multiple locations.



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The ongoing reality of remote work will have an impact on how teams function over the long term. According to a [survey by Gartner](#), 74 percent of business leaders plan to make some previously on-site jobs into permanently remote positions. Organizations that were struggling with inefficient workflows before the pandemic face an even more urgent need to embrace the tools of digital transformation now that their operations are decentralized across a network of makeshift home offices.

“People will change their habits, and some of these habits will stick,” [stated the economist Susan Athey](#). “There’s a lot of things where people are just slowly shifting, and this will accelerate that.”

There is a consensus among experts that the new work-from-home paradigm will lead many organizations to implement new digital processes. According to the [Brookings Institute](#), enterprises will have to be innovative in the adoption of new technologies to keep up with evolving workplace trends in the era of social distancing. As stated in a [report by McKinsey](#): “The crisis will reveal not just vulnerabilities but opportunities to improve the performance of businesses.” Adopting the Sorcero LI platform will be essential for STEM industries as team members remain separated from each other while working from home, a trend that is likely to continue even after the threat of COVID-19 has abated.

# Language Intelligence Is A “Human In The Loop” AI Solution That Enables Experts To Function At A High Level



Certain types of AI struggle to adjust to unexpected change. An investigation in [Nature](#) notes that many scientists view AI systems as “fundamentally brittle,” describing them as “brilliant at what they do until, taken into unfamiliar territory, they break in unpredictable ways.” While the technology may someday reach a point where it can seamlessly incorporate sudden deviations from its baseline assumptions, most AI models are not there yet. The reality is that pattern recognition is not the same as understanding, which has important implications for business investment.

AI is a powerful tool, but it cannot accommodate the level of uncertainty we are currently experiencing on its own. The AI solutions capable of providing enterprises with the shortest path to digital transformation are the ones that enable human workers to operate more effectively, not the ones that seek to replace them entirely. At a time when so many workflows are being reconfigured, it’s important for enterprises to focus on investments in AI technology that augment the capabilities of individual employees who will continue to be in their home offices

for the foreseeable future. Facing a whole new set of challenges posed by operating remotely, employees need technological solutions that enable them to function at a high level.

The Sorcero LI Platform offers this type of “human in the loop” solution for enterprises that deal in large volumes of technical, regulatory, and scientific content. Within many enterprises, legacy data processing systems involve manual review of internal forms. Compliance procedures are reliant on side-by-side comparisons of various regulatory and guideline documents. Workers with extensive knowledge of their industry are forced to spend a significant portion of their time laboriously extracting necessary information from various types of documents critical to their workflow.

Sorcero’s LI Platform removes the obstacles to efficiency, creating a more intelligent process for understanding large volumes of text. An expert and an AI together can accomplish things that no human or machine could do on their own. The platform scales to technical teams in a way that reduces error and increases the speed of work.

## What is Language Intelligence?

Sorcero’s Language Intelligence (LI) Platform is an AI solution for industries that provide critical services by analyzing large volumes of technical documents and the unstructured content contained within them. Sorcero’s LI tools empower subject matter experts to transform how they identify strategic insights and pinpoint important information contained within their technical, regulatory, and clinical texts.



LI allows employees with extensive knowledge to focus on high-level tasks, transforming technical content from a time-consuming burden into a highly accessible digital asset. At a time when workflows are undergoing a profound realignment due to social distancing precautions, Sorcerio's Language Intelligence applications offer a competitive advantage that empower teams to accomplish stretch goals while providing the flexibility of a platform that meets their needs.

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# Language Intelligence Gives Managers The Tools To Facilitate Better Workflows

For managers and their teams, working from home has presented both challenges and opportunities. Productivity among employees has seen a short-term boost, but a report in the [New York Times](#) documents the concerns that many companies have about how workers' engagement will hold up over the long term. A [KPMG survey](#) found a similar disconnect between how employers and employees are experiencing the reality of remote working. While 64 percent of workers claimed that the quality of their work has improved since they began working from home, "about 77 percent of upper management...and 66 percent of middle managers stated their jobs are more demanding in this new work arrangement." Even managers whose teams have made the most of the circumstances will need to figure out novel strategies for employee success as everyone continues to operate remotely for the foreseeable future.

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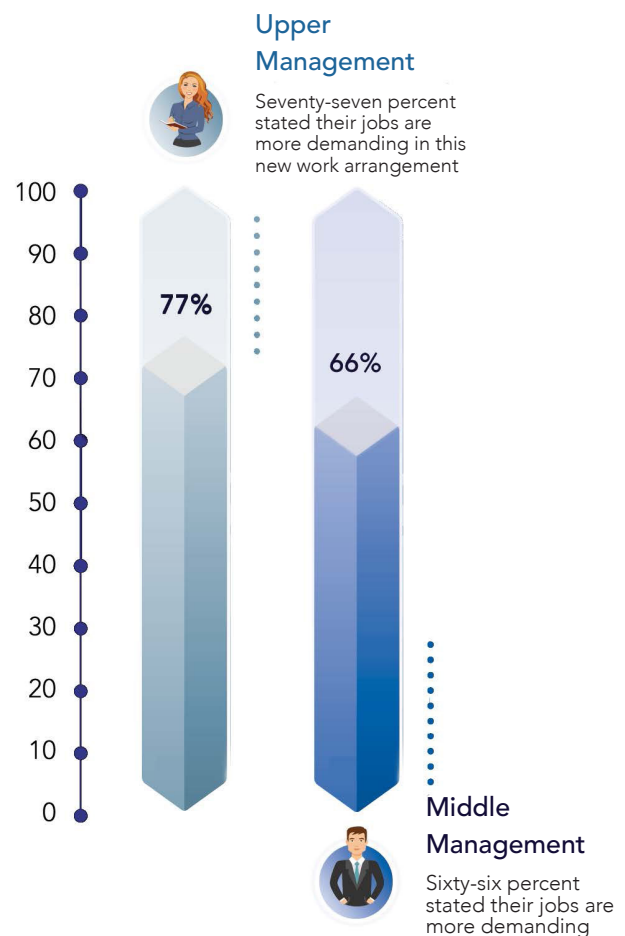
**Sorcero's approach is to provide an LI platform that can be used by expert knowledge workers to help them mediate complex information, policies, rules, and regulations, while offering the ability to be tailored by whoever is using it to meet information needs as they arise.**

Planning for the future requires smart investments in new technology, and the era of social distancing is no different. While some managers have focused on technology designed to surveil activity on their employees' home office computers, the [New York](#)

[Times](#) reports that such productivity monitoring software has drawn mixed reactions and feelings of distrust.

Ultimately, the best technological solutions for the remote workforce will empower them to utilize their expertise and perform more effectively. In this context, the efficiencies created by LI technology are especially useful.

## Survey: Challenges For Management Since Employees Started Working from Home



LI integrates NLP and NLU models to empower employees working remotely to leverage their available data, increasing their performance and reducing workload. Sorcero's approach is to provide an LI platform that can be used by expert knowledge workers to help them mediate complex information, policies, rules, and regulations, while offering the ability to be tailored by whoever is using it to meet information needs as they arise.

LI technology also improves employee efficiency by better facilitating the sharing of expertise within an enterprise. During social distancing, team members have fewer opportunities to meet face-to-face with their coworkers who possess specific technical expertise. In the office environment, team members can grab a few minutes to quickly get needed explanations and answers. Working

remotely, they have to find time on the schedule for anything that can't be described easily in an email or chat.

An LI solution that has access to all of the documents at an enterprise can help mediate expert knowledge and connect employees to the information they need to continue working on the task at hand. The software is able to find answers and explanations within those documents, which minimizes the need to repeat explanations of complex topics or recreate analyses that were already performed. Language Intelligence once again saves time for an employee, who can get expertise in a timely fashion, while also preventing the team members with expert knowledge from having their schedules overloaded with redundant videochat meetings.



# Language Intelligence Provides Critical Insights To Set Strategic Priorities Amid Global Uncertainty

The COVID-19 pandemic has forced entire industries to rethink their strategic priorities over the short- and medium-term. Decision makers are adjusting their plans as they reassess how to pursue new business and serve their existing customers. Fortunately, the outlook for corporate budgets has already begun to stabilize. According to a [PwC survey of American CFOs](#), enterprises are already considering fewer deferments or cancellations of planned investments than they were when COVID lockdowns first began in mid-March. However, businesses will need to ensure they have the best information and insights at their disposal to make prudent budgetary decisions.

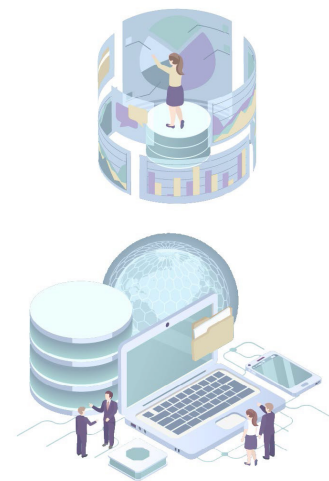
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**The Sorcero LI Platform understands the industry- and domain-specific language being used in various workflows throughout a single company, differentiating between observation and insights to drive effective decision making.**

Enterprises can employ LI's understanding capabilities to better inform their strategic plans. The large volumes of text that they deal with everyday contain countless insights to guide a business during uncertain times. But these insights are not necessarily easy to discern because they are spread out across documents such as client notes, FAQ lists, clinical guidelines, data sheets, journal articles, video transcripts, corporate process and procedures, strategic imperatives, or any other unstructured content.

The Sorcero LI Platform understands the industry- and domain-specific language being used in various workflows throughout a single company, differentiating between observation and insights to drive effective decision making. LI maps the relationships between words and syntactic patterns to construct a framework that can be customized for the documents being analyzed. This is achieved using a combination of grammar rules, NLU language models, and domain and industry ontologies. The result is a platform that understands industry- and enterprise-specific language as it is used in context, enabling humans to better access the knowledge within documents relevant to their work.

When navigating a difficult business environment, the benefits of LI scale across an entire organization. The same “human in the loop” capabilities that unlock digital transformation in the workflows of expert knowledge workers also connect business leaders with the mission-critical insights. LI's understanding of technical, scientific, and medical content empowers team members at all levels to create a truly smart digital enterprise.



# Language Intelligence Provides Adaptability Through Contextual Understanding

With workers isolated from each other and tech support, it's more important for newly adopted AI tools to be accessible and user-friendly. The adaptability of Sorcero's LI Platform is built into its tools and utilities, which can be configured to create custom solutions. The platform is designed to be flexible, making it easier for enterprises to come up with their own ways of building a greater understanding of the mission-critical content.

If you think of the LI Platform as a pantry that contains all the raw ingredients of text data, the platform's tools and utilities serve as the utensils that mix and combine those unrefined elements. To help with the process, the platform's pre-built application templates act as recipes so that the ingredients come together in the right way.

Sorcero makes its adaptable LI technology available through low-code and no-code interfaces. These tools provide employees of both technical and non-technical backgrounds with direct access to all levels of the LI Platform, creating the opportunity for sharing expertise independent of the role one may play within the enterprise. Every worker can build off their own expertise, seamlessly integrating the information in their head with the massive amounts of data stored on an enterprise's servers. The ability to amend Sorcero's platform without needing to redesign the code means employees can experiment with how to deploy LI in creative ways. This ultimately creates new efficiencies that develop organically as human expertise and LI technology work in tandem.

The integration of new technologies can prove challenging in the best of times. And it's especially

difficult when everyone is working from home on a computer that the IT department can't physically access. Enterprises seeking to achieve digital transformation of their business during the work-from-home era will need technological solutions that have the flexibility to expeditiously incorporate into their existing systems. The Sorcero LI Platform is not only a uniquely powerful AI, it also offers the versatility for timely adoption.

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Once integrated into workflow, the benefits of Sorcero's technology only grow over time. The LI platform adapts to the team members who are utilizing it, learning from each interaction. The platform builds an understanding of context as it acts as an intermediary of information and insights, enhancing the platform's ability to augment human expertise. Enterprises that take action to digitally transform their business while their workforce is operating remotely will emerge from the other side of the pandemic better poised for growth.

# Language Intelligence Understands Domain-Specific Content In The Life Science And Insurance Industries

One field where LI can prove particularly useful is the insurance industry. All insurance companies deal in large volumes of unstructured content, where LI can serve as an important tool for navigating a business landscape that is undergoing significant upheaval. The scale of uncertainty that insurance markets are currently experiencing is nearly unprecedented. "Insurance companies play a pivotal role during times of economic stress," wrote the authors of a [PwC report](#). "Yet, as one of the biggest groups of investors, they are also vulnerable to volatility." The challenges that insurance companies face range from a generational rate adjustment for medical plans to a reduced number of claims for auto plans as movement continues to be restricted.

There are various ways that an LI platform can assist insurance experts and bring more efficiency to their enterprises. The technology can be used to help to understand the content of medical files and forms to determine potential overbilling. It can aid with large scale competency detection, as well as claims processing or claims fraud detection. Human expertise in these fields benefits from the use of Sorcero's LI Platform in working to achieve goals more effectively and efficiently.



The future looks just as uncertain in the life sciences industry, with long-planned private projects and public health needs suddenly thrown in doubt. Sorcero has already implemented LI solutions for life sciences enterprises to improve how they launch new products, engage in smart diagnostics and implement training modules. LI helps workers with deep knowledge reach a more optimized workflow that is freed up from the more tedious aspects of data management.



Enterprises in the insurance and life sciences industries need to establish efficient methods for dealing with their legacy content in order to remain competitive. Employees who are now working from home need AI solutions that understand important information and insights contained within studies, reports, depositions, claims files, patents - any of the myriad content required to do their jobs. LI provides them with the capability to do that, by giving teams the tools necessary to get the most from the information contained within their enterprises' documents and files.

## Conclusion

There is ample evidence to suggest that the reality of socially distanced work will be with us for quite some time, which will have a permanent impact on how teams collaborate and businesses operate over the long term. As the workplace continues its transition to a new normal, experts will need better ways to mediate and interface with important data. And decision makers will need to extract strategic insights from their legacy text content to remain competitive in a changing landscape.

Enterprises will need to adapt to rapidly evolving trends or risk getting left behind. Sorcero's LI Platform offers them an opportunity to get the most out of both their workers with expert knowledge, as well as their vast volumes of technical and regulatory text, allowing them to come out of the other side of the COVID-19 pandemic better poised for growth. And as the world continues to change, Sorcero will continue expanding the applications of LI technology within the industries that drive innovation and keep our economy running.



To learn what Sorcero can do for a remote workforce, visit our [website](#)



Contact us for a demo at [info@sorcero.com](mailto:info@sorcero.com)

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