Natural Language Processing Solutions

Guidehouse can help your organization generate actionable insights from unstructured data using NLP and enhance existing text-based processes through intelligent automation.

The next great organizational insights are hiding in plain sight in a sea of text. They are in plain-language public comments and social posts, as well as internal emails, reports, Word and PDF documents, and other correspondence. Natural Language Processing (NLP) solutions can turn this unstructured data into actionable insights.

Free-form text is a rich source of potential information and insight for public agencies and private enterprises alike. But the variable nature of text and the complexities of written communication make it difficult to access those insights at scale in an efficient, value-driven way. Manual processes don't scale, and few organizations have the internal expertise to tackle the text data analysis problem.
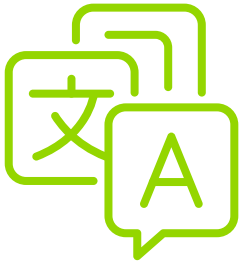
Guidehouse Can Enable You to Lead on Insights

Natural Language Processing (NLP) helps leaders and front-line employees obtain meaning and insight from unstructured text. This data can be used not only to approximate the semantic meaning and implicit relationships that are naturally inferred, but also to generate new, actionable insights through AI.

Guidehouse has significant NLP expertise working with text data across our Artificial Intelligence and Intelligent Automation teams. This experience allows us to create custom applications that generate actionable insights from text using NLP, and enhance existing text-based processes through intelligent automation.

Natural Language Processing Capabilities

Sharepoint Lists	Excel Workbooks	Financial Disclosures	Legislated Regulations
Databases	Customer Feedback	Media Requests	Grant Applications
Freedom of Infomation Act Requests	Reports	Social Media Posts	

The key to creating value from unstructured text is identifying the right NLP solution to match both data and business goals. Guidehouse teams have a successful track record of helping clients find solutions and insights in text data across a wide variety of organizations.

Benefits of Natural Language Processing

Obtaining value from text data at scale can be challenging because of the diverse range of text formats and analytical objectives. Guidehouse overcomes these challenges by properly scoping projects and developing NLP applications that provide tangible benefits, such as:

- Large-scale analysis: Many organizations know the hidden value of their text data but lack the resources to transform manual review to automated insights. NLP combines institutional know-how with computing power to extract value rapidly and at massive scale.

- Streamlined processes and reduced costs: NLP methods can reduce hours of document review and processing to just minutes or less.

- More objective and accurate analysis: NLP provides insights and results based on both supervised and unsupervised learning methods and scoring, which reduces biases or distortion.

- Reduced risk through better understanding of market: Hidden insights from social media, feedback, and other correspondence can bring issues to the forefront before they reach critical mass.

- Real, actionable insights: NLP processes return dashboard-friendly top-line summaries as well as connections which a manual review might never uncover or dismiss as coincidence.

- Empowered employees: Minimize time spent on document review, reducing human error on text analysis and frees more time for reasoned response and other tasks which require human judgment.

- Improved customer satisfaction: NLP can reduce the burden on customers to force their text input to conform to a rigid format, and help documents reach the right eyes faster.

Guidehouse professionals are skilled in multiple key NLP disciplines, including:

- Topic modeling. Uncover common themes from a body of related documents, such as open-ended comments on client surveys.

- Intelligent automation. Automate the repetitive review of text data with NLP methods that extract text from documents in any format. Intelligent automation can also be used to provide immediate insight and to pass text to other solutions for further analysis.

- Sentiment analysis. Reveal the affect (emotion) and subjective points of view found in text, such as social media posts about an organization.

- Document classification. Assign documents to one or more pre-defined categories based on topics and content for easier review.

- Document grouping. Segment documents into groups based on similarities discovered through unsupervised clustering algorithms.

- Document summarization. Implement automated scoring methods and both extractive and abstractive methods to discover the subset of most relevant text in even the longest documents.
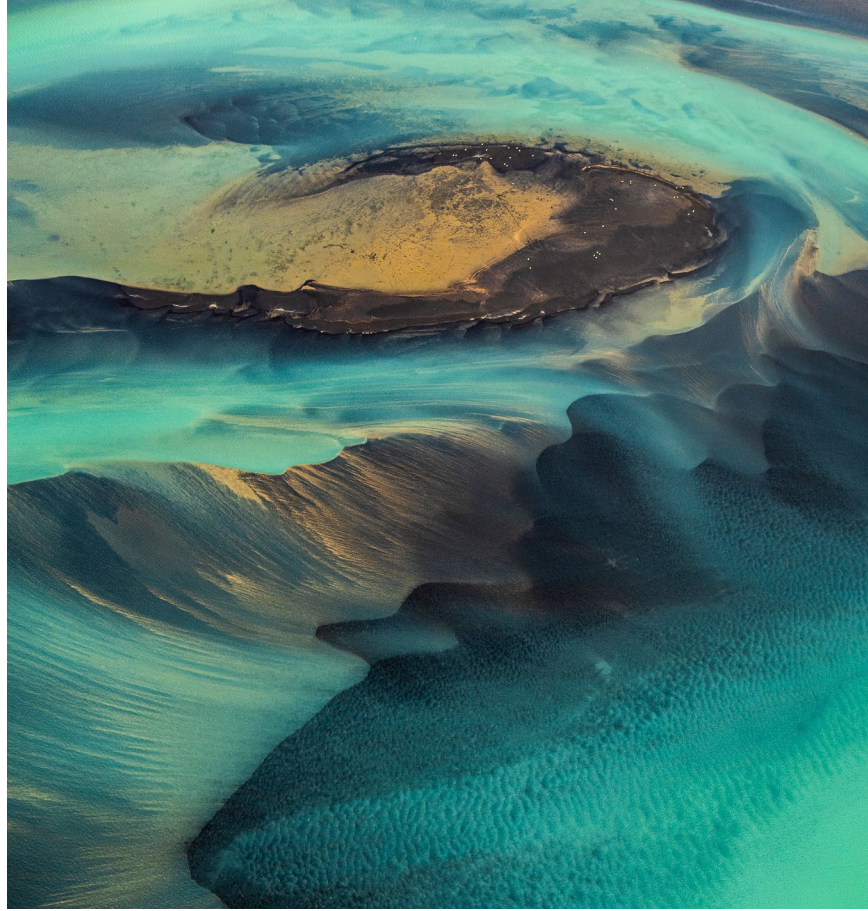
The Guidehouse NLP Advantage

NLP has tremendous potential to apply human language understanding to text data challenges. Taking the first step can be daunting, but Guidehouse professionals can help, using AI and Intelligent Automation expertise to develop specialized solutions specialized solutions for reducing large-scale-data bottlenecks and optimizing text analysis workflows.

Contact Guidehouse to learn more about how NLP solutions can help your organization.

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About Guidehouse

Guidehouse is a leading global provider of consulting services to the public sector and commercial markets, with broad capabilities in management, technology, and risk consulting. By combining our public and private sector expertise, we help clients address their most complex challenges and navigate significant regulatory pressures, focusing on transformational change, business resiliency, and technology-driven innovation. Across a range of advisory, consulting, outsourcing, and digital services, we create scalable, innovative solutions that help our clients outwit complexity and position them for future growth and success. The company has more than 16,500 professionals in over 55 locations globally. Guidehouse is a Veritas Capital portfolio company, led by seasoned professionals with proven and diverse expertise in traditional and emerging technologies, markets, and agenda-setting issues driving national and global economies. For more information, please visit guidehouse.com.

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