To solve key business challenges and deliver natural-language-enabled enterprises, application leaders must see NL solutions as a collective, fundamental whole. To ensure greater portability of language assets, enterprises must shift from using these technologies tactically to using them strategically.

Overview

Today's natural language solutions are largely deployed as siloed, tactical products. This creates expensive “cognitive debt.” This means that the strategic importance of a common and reusable platform is forgotten, and the opportunity to consolidate natural language portfolios is largely missed. There is low maturity throughout enterprise data pipelines, knowledge representation, processes, skill sets and use cases. The overall understanding of natural language technologies is immature, although improved education and new solutions are helping to develop pipeline practices.

This session will help you recognize and tackle the challenges you face in shifting from a tactical approach to automation to a strategic approach.

Application and software engineering leaders charged with evolving and operationalizing their artificial intelligence (AI) ecosystem for natural language automation should:

- Construct an enterprise metadata and semantic platform using a composite AI approach. This will require mastering key concepts for your business using ontologies and graphs. Connect this approach to machine learning models and evolve to the use of data fabrics to integrate and capitalize on a wider digital landscape.
Minimize disruption of evolving technologies and gain control by sorting application architecture into three layers:

- Concept and object representation
- Design and integration tools
- Underlying APIs and the services of vendor marketplaces

Establish a “human in the loop” programme. This programme should empower staff and external resources to generate, curate and enrich language assets and models, and teach them to perform quality checks.

Push boundaries on multimodal experiences while demonstrating brand character and empathy by exploring avatar, speech, gesture and emotional AI technologies.

Recommended by the Authors

2021 Strategic Roadmap for Enterprise AI: Natural Language Architecture