

ACQUIS CONSULTING GROUP

DIGITAL TRANSFORMATION:

COMMERCIAL APPLICABILITY OF AI BASED NATURAL LANGUAGE PROCESSING (NLP) CAPABILITIES

October 2020

AREAS OF FOCUS



**Cost and
Differentiation
Strategy**



**Digital Contact Centers
Medical Information Call Centers**



**Digital Transformation
Opportunities**





NLP application in Digitally Empowered Contact Centers

The conventional trend to outsource non-critical business functions to offshore BPOs is shifting to Digitally Empowered Contact Centers. They utilize a platform of NLP based digital support tools, such as voice assistant, voice-based chatbot, voice-based sentiment analyzer, to provide a higher level of customer experience and retention. Benefits include increased efficiencies by offloading routine easy tasks to a digital assistant, almost eliminating frontline agents and a higher degree of data driven customer insights for the client.

The NLP engine listens for customer questions through a Visual IVR/Voice Assistant that recognizes speech and retrieves the most appropriate response from the database per its training (document classification) in the particular industry. If the identified response does not achieve a high probability of accuracy (per the tolerance levels set) the question is routed to a human.

A Voice-Enabled Sentiment Analyzer can be applied to determine the level of calmness or frustration of the caller and assist the agent with recommendations/suggestions to address the situation. The NLP engine relies on information extraction, sentiment analysis and contextual conversation capabilities (albeit not very advanced yet) to be successful.

This can be an effective way to reduce cost and differentiate your services as compared to the competition.

Benefits of using advanced NLP algorithms within Medical Information Call Centers

In Medical Affairs functions, the Medical Information call center plays a particularly important function. Advanced NLP algorithms can be trained to predict the answer to questions being asked by the HCP or field medical resource as well as extract the relevant source documents. Addressing this need, will reduce call center tickets and resource costs.

For simple queries, the MSL can use a mobile app with natural language capabilities, to directly query information during conversations with the HCP. This will increase effectiveness and help differentiate the MSL in their field work (by reducing their reliance on the call center).

By parameterizing and classifying the source content within the document repository, the NLP engine can be trained to intelligently respond to related queries. As vast amounts of information are already in a digitized manner, an advanced NLP engine can predict the exact answer and select the appropriate source document to surface for reference.

The agent will require less time searching and analyzing content to fulfil the response. For previously asked questions, the engine can be adequately designed to predict the correct response based on past data sets. For complex question requiring human assessment, the agent needs to provide additional supervised and re-enforcement-based NLP training techniques to improve outcomes in the future. As the queries mostly contain regularity and are in the framework of the firm's marketed drugs, it is possible for the advances in NLP algorithms to solve for these challenges.

These real-world applications demonstrate the power of NLP. If applied in the right context they can improve customer experience, reduce resource cost, differentiate the contact/call center, and accelerate insights generation.



CONTACTS



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As a Principal at Acquis and VP at SSI Strategy, Rishi is an accomplished LifeSciences Digital Transformation leader with 20 years of cross-functional business and technology expertise. He leads large-scale, global, digital initiatives with a keen understanding of organizational challenges, from the perspective of both the business and end-to-end applications. He brings extensive experience in Digital Innovation strategy and process improvement, leading to increased efficiency and maximum return on investment for his clients. With certifications in Big Data & Artificial Intelligence from Rutgers and MIT, an executive MBA from Rutgers, and a Bachelors in mechanical engineering (B.Eng), Rishi successfully guides his clients in developing and executing the right Digital initiatives, tailored to their specific long-term strategic business goals.



ABOUT ACQUIS

Acquis is a Consulting Firm
Specializing in **Strategy**
and **Implementation**



How We Help

We help ambitious organizations solve business challenges that enable sustainable growth and healthy efficiency. We do this by not just designing strategies but also putting them to work.

SERVICES

- Digital Transformation & Customer Strategy
- Post Merger Integration
- New Product & Service Development
- Legal Spend Optimization
- Procurement
- Shared Services
- Technology Solutions
- Travel, Expense & Meetings

EXPERTISE

- Analytics & Reporting
- Change Management
- Operational Strategy
- Process Engineering
- Program & Project Management
- Systems Implementation



Our Values

PEOPLE FIRST

It takes great people to do great business. Our people are the source of our unique expertise and why we've designed a home that inspires the curious mind. The care of our people and culture is our highest priority. We nurture and learn from every team member. We do this to create a leading company and breakthrough results for our clients.

ADVANCE TOGETHER

Relationships are at the core of advancing business. We build every relationship on trust and honesty so our clients can always rely on us as both advisor and ally. We design our relationships to be genuine, not just to be great partners but also to enable growth that is both measurable and meaningful for our clients.

THINK + DO

All too often in our industry we see resources wasted on strategies that are never put to work. We created Acquis to change that. We help our partners create new ways to think about their business but we don't stop there. We see projects through and help implement ideas, turning them into lasting business value.