LTIMindtree

Improved Product Quality With Optimized Customer Support Through Machine Learning

Client

The client is a pioneer and global leader in robotic-assisted, minimally invasive surgery.

Challenges

- Unstructured feedback (customer complaints, customer support service desk and service engineer field visits) on product quality
- Mining manual text data and identifying right key words to improve product quality

LTIMindtree Solution

- LTIMindtree team did a thorough system study on this and leveraged machine learning to combat the current manual and cumbersome process
- Creation of matrix of words based on the dump of phone, investigation, and causation
- Built custom-based grammar synonyms (a max of 150 synonyms) for each keyword
- Counted the number of keywords that appeared more and created ranking score using Naïve Bayes algorithm

Business Benefits

- Improve regulatory compliance by proactively categorizing every customer complaint based on their true meaning
- Assisted the Quality Assurance Team by providing data that helped in testing their parts, thus reducing failures
- Reduced manual efforts with auto detection of keywords
- Assisted the phone support engineer, field engineer to aid in solving the problem easily