Case Study

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

LTI Solution
• LTI 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 Delivered
• 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.