**Advanced Business Analytics (IM 694)**

Fall 2019

**Case Analysis #6:**

**Enhancing Visitor Experience at ISKCON Using Text Analytics**

**Objectives**

The main problem is that Janarthanan Balasubramanian, Division Head, Information Technology and online Communications at ISKCON, wanted to understand the visitor feedback so that appropriate measures can be taken to improve the visitor experience at ISKCON. He wanted to understand the issues or topics that ISKCON should work on, rather than manually classify reviews and get the count of each review type.

The primary objective of the case is to understand natural language processing (NLP), text analytics and sentiment analysis and various challenges in analyzing text data. More specifically, we can try to understand how to develop an appropriate model to predict sentiment and emotion of a comment and how to communicate the insights derived from the models to business.

**Questions**

1. What are the issues with text data and discuss what type of pre-processing would be required for text data?
2. Explain each variable in the dataset by exploring and visualizing data. Discuss about few exploratory data analyses (EDA) and trend analysis that can be carried out on text data.
3. How to perform feature extraction and selection from text data for sentiment analysis.
4. Discuss the sampling strategy you would be using for the given data set. What will be your strategy for dealing with the imbalanced data set?
5. Develop an appropriate supervised machine learning model to predict sentiment of a review.
6. What are the overall insights from this text mining process?
7. What should be the strategy for deployment of the model?