Interim Report

# Chapter 1 - Introduction

To determine whether there is a link between the sentiment of a TV show and the viewer ratings. This project will explore areas of Sentiment Analysis (SA), different ways to perform sentiment analysis, why is this relevant and how will others benefit from this. This will involve some data analysis and manipulation to find out if there are any correlations. This chapter explores the background of the research as well as a justification for it. The aims and objectives are also considered.

1.1 - Background

Sentiment analysis has been defined as opinion mining (Ding, et al. 2008) and according to Feldman (2013), sentiment analysis is used to look at the “decision-making process of people”. The value of this is we can better understand them as consumers, voters, reviewers etc.

Feldman (2013) states that by using sentiment analysis it “offers these organizations the ability to monitor the different social media sites in real time and act accordingly”. This would give companies a much better understanding of their customers and can benefit from this.

1.2 – Aims & Objectives

The aim of this project is to explore the areas of sentiment analysis and to create a script which will look at the sentiment of an episode of a TV show and the viewer ratings and see if there is a link between them.

* To perform a literature review of sentiment analysis.
* To investigate the sentiment of a TV show, per episode/season.
* To investigate the viewer rating of a TV show from reviewer websites.
* To investigate if there is a link between both results.

**clearly identify the outputs produced from the research/literature review process**

From the literature review, there have been many discoveries about sentiment analysis. These are as follows,

1. Sentiment analysis is very popular for business who want to analyse their customers data, to discovery if there are any patterns which can be found.
2. Sentiment analysis can be used in multiple ways from Document-level sentiment analysis, Sentence-level sentiment analysis, Aspect-based sentiment analysis, Comparative sentiment analysis and Sentiment lexicon acquisition.
3. There are already a few companies offering a commercial version which does sentiment analysis. (SAS, SPSS, Google Cloud Natural Language, Watson Tone Analyzer & Amazon Comprehend as well as others).
4. How this can be implemented with open source tools such as R & R-Studio. with some packages like BagOfWords and TidyText to do sentiment analysis yourself with a script.

**How they could be applied to the design of the final deliverable**

From discovering these different types of sentiment analysis, there is an easy barrier of entry for someone who is willing to learn the 4th note as declared above.

Research will include aspects of:

* **evaluating software**
* **platforms**
* **methodologies**
* **academic research**
* **evaluation of commercial alternatives**

A chapter should also be included that details the LSEPI aspects associated with your project.