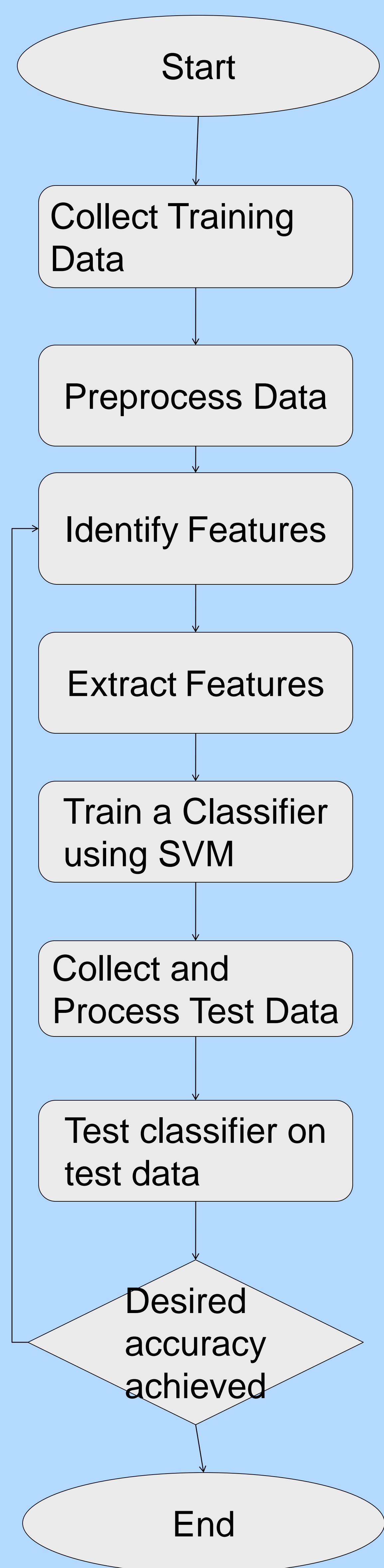




# Sentiment Analysis on Twitter



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## What is Sentiment Analysis?

Classification of sentiment in a given text as positive, negative or neutral.

### Motivation

1. Sentiment Analysis can be used to mine popular opinion about products, services and current issues.
2. High Volume of Tweets from all parts of the world
3. Rate of transfer of information

### Related Work

1. Prediction of Box office collections based on the volume of tweets.
2. Sentiment Classification using machine learning techniques on blogs and movie reviews.
3. Automating the process of collecting training data.

### Collecting Training Data

1. Amazon Mechanical Turk

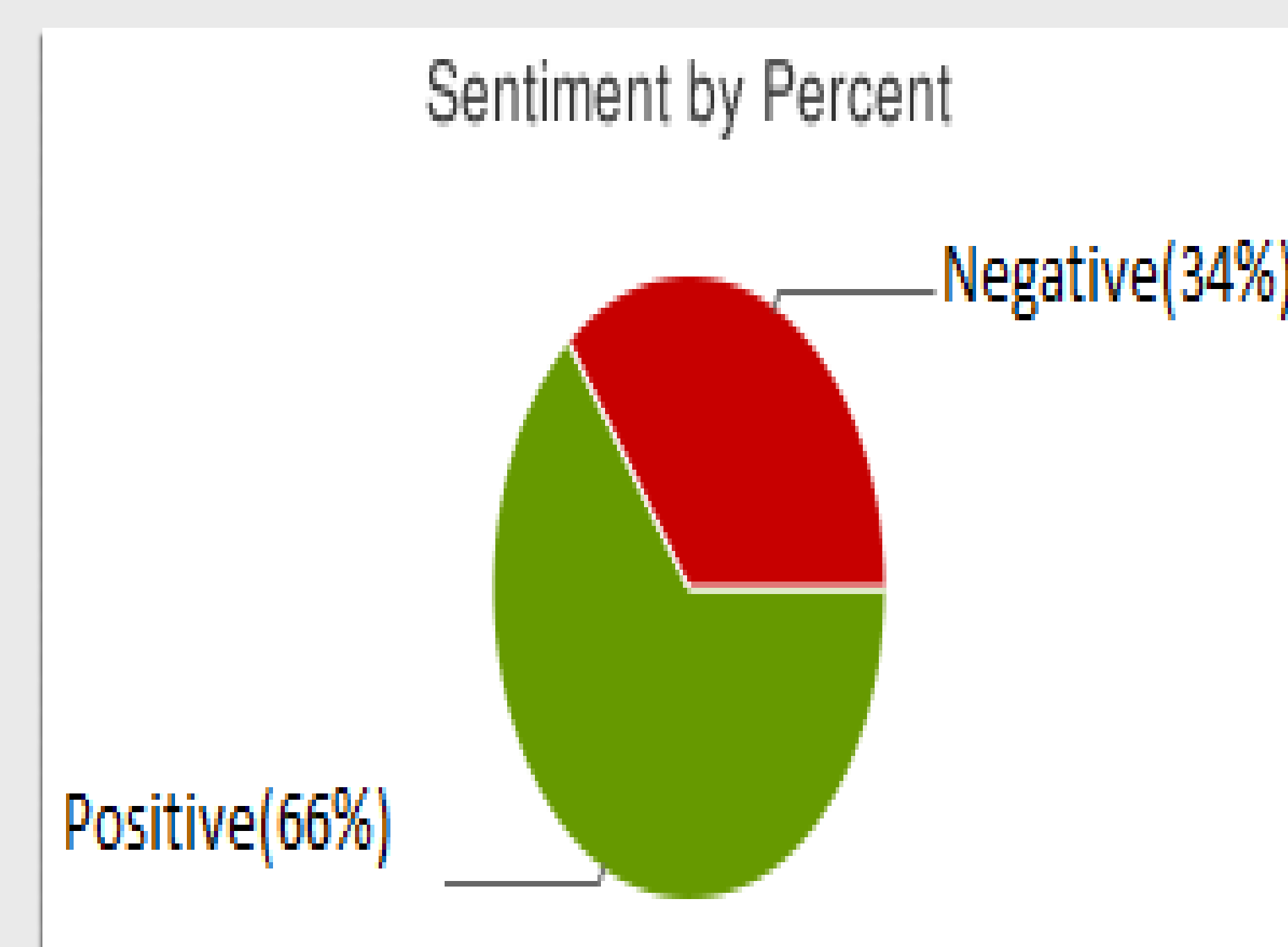
## Features

### 1. Sentiment Identification

- Words
- Part of Speech Tagging
- Emoticons
- Punctuation Marks
- Context from previous tweets
- User Profiling
- Retweets

### 2. Degree of Sentiment

- User-Profiling
- Retweets
- Presence of URL's
- Presence of Emoticons



**Sentiment analysis of the movie 'IRON MAN' based on over 40.000 tweets**

## Applications

1. **Movie and product sales prediction.**
2. **Gathering general public opinion.**
3. **Businesses and organizations:**
  - product and service benchmarking.
  - market intelligence.
4. **Individuals: interested in other's opinions when**
  - purchasing a product or using a service,
  - finding opinions on political topics

### Future Work

- Analyzing semantics of tweets using topic analysis model
- Generalizing the model to handle tweets in other languages

### References

1. [Alec Go, Richa Bhayani and Lei Huang, Twitter Sentiment Classification using Distant Supervision
2. Sitaram Asur, Berardo A. Huberman, Predicting the Future With Social Media
3. B. Pang, L. Lee, and S. Vaithyanathan. Thumbs up? Sentiment classification using machine learning techniques.