Improving the communication between Telecom Customer Service and Their Customers using their Personality Insights

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INTRODUCTION

- **Problem:** In this work, we aim to study and analyze how the personality affects the way the customer and agent communicate. Moreover, the existing research suggests that personality attributes are relatively enduring attributes that become increasingly consistent during adulthood in line with the personality stability theory, which says that personality tends to be stable over time.

Introduction cont….

❖The personality theme has been studied by many researchers. Personality traits are traits that describe our behavior, emotions and reactions.

❖similarity model - the attraction that predicts that people tend to build relationships with others to verify that people tend to deal with similar personalities.

❖Sentiment Analysis two approaches: -

    - lexical approach

    - machine learning approach

MATERIALS AND METHOD

- To create the experiment in this paper:

➢Detection of customers' personality and his opinion.

➢detecting relations between customers personalities and agent personalities in Telecom company

A. Detection of customers' personality and his opinion.
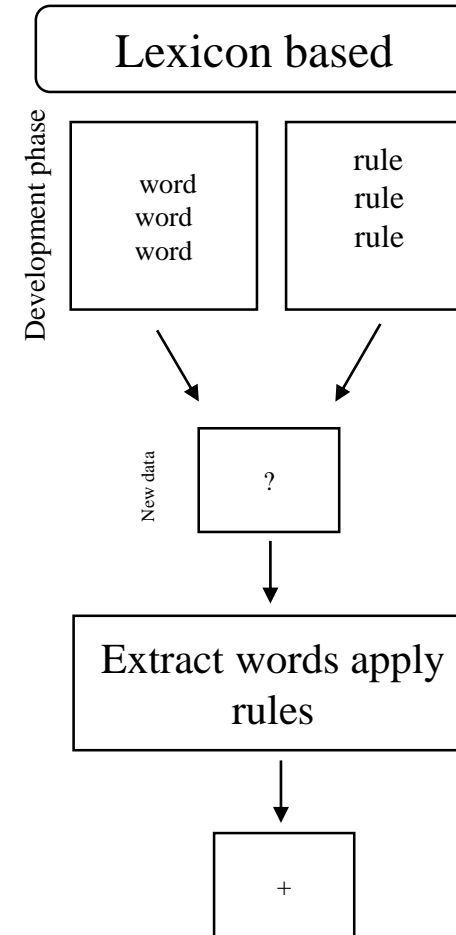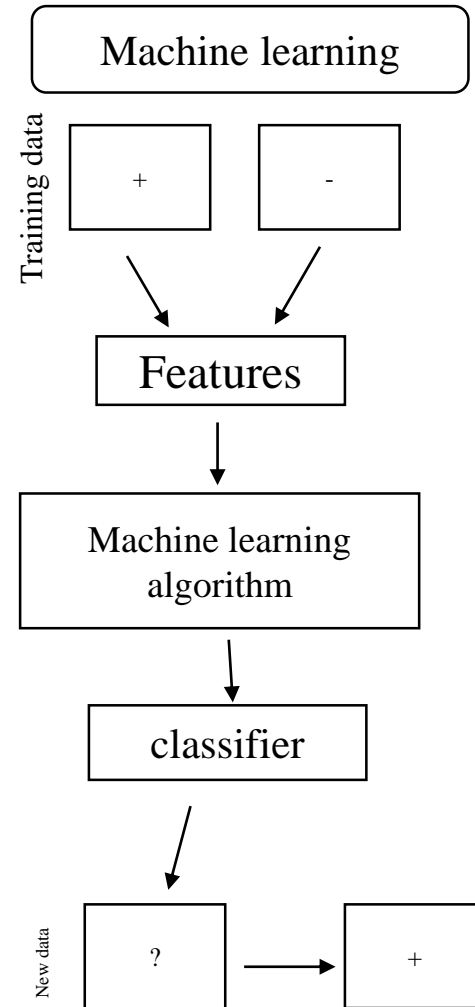
# COMPARING BETWEEN TWO APPROACHES OF SENTIMENT ANALYSIS

sentence	sentiment analysis with 'Naive Bayes'	VADER sentiment analysis	Target
"Thank you for the very nice service!"	Positive: 0.571	Positive 0.541	Positive
"Service was ok, but I didn't like it"	neutral: 0.625	neutral: 0.54	Neutral
"the service is excellent I would recommend it"	Positive: 0.75	Positive: 0.554	Positive
"This service is very bad"	Negative: 0.4	Negative: 0.4	Negative

B. detecting relations between customers personalities and agent personalities in Telecom company
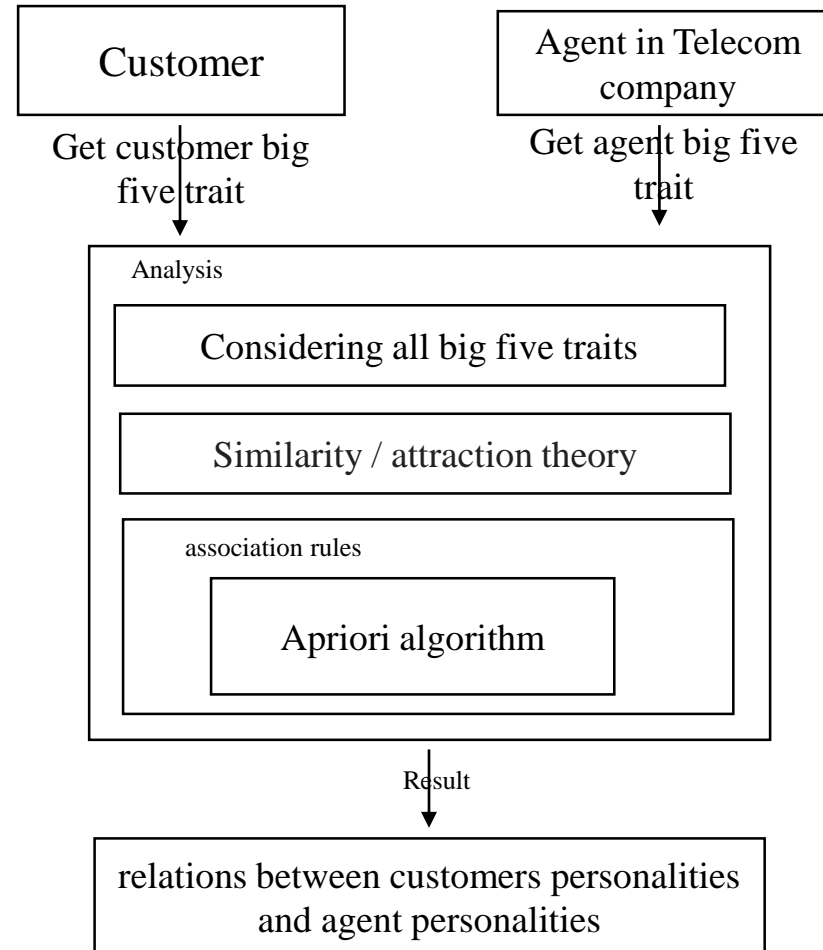
RESULT AND DISCUSSION

▪ For main goal it created a relation between customer and agent from the results obtained, it can conclude that personality affects the way in which a customer interacts with others.

▪ Conscientiousness, extroversion and agreeableness are all positively correlated with sentiment (more positive messages), while people who are more neurotic and have high openness to experience post more negative and messages.

Conscientiousness	
extroversion	→ positive
agreeableness	

openness	
neuroticism	→ negative
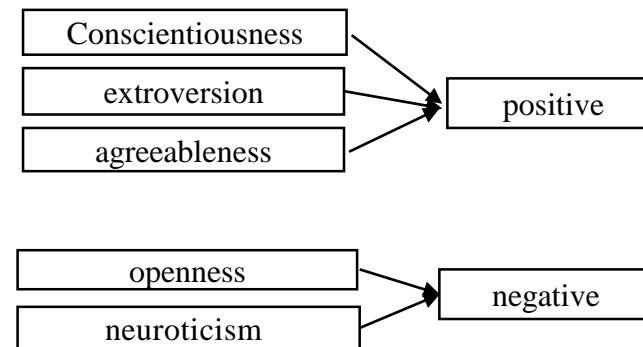
RESULT….

- The findings suggest that there is a tendency for customer with a certain personality to communicate with agent who have a very similar in that personality.

- According to the latest analysis, agreeable people tend to communicate with neuroticism people.

Conclusion

- This paper discussed the approach that how Telecom Company could can collect the data analyze it and segment their customers Depending on their personalities to gain competitive advantage in the market.

- Invest your efforts in your valuable customers. They're the reason your services still exist.

FUTURE WORK

- New techniques can be explored to modify the proposed algorithms to be applied to the non-English language.

- It is planned to add more dataset to increase to see the effect of this on accuracy.

Thanks