The Sentiment Analysis of Trust Building Language in Advertisements

Bushra Waheed
MPhil Applied Linguistics (Scholar), Department of Linguistics and Communications, UMT, Lahore, F2024084006@umt.edu.pk

Azba Manzoor
MPhil Applied Linguistics (Scholar), Department of Linguistics and Communications, UMT, Lahore, F2024084021@umt.edu.pk

Ms. Shumaila Ahmad
(PhD Linguistics), Department of Linguistics and Communications, UMT, Lahore, Shumaila.ahmad@umt.edu.pk

Abstract

Language is a crucial tool in advertising, enabling brands to build emotional connections with consumers. This study investigates how specific linguistic patterns, when analyzed through sentiment analysis, contribute to trust-building in advertisements. Previous studies have primarily focused on the technical aspects of sentiment analysis; whereas the research will underscore its use in the disclosure of the emotional and rhetorical attributes that improve consumer confidence. A descriptive, non-experimental design grounded in a deductive, quantitative approach was adopted to analyze the content of 20 advertisements from various industries, including FMCG, banking, healthcare, and philanthropy. The tools of sentiment analysis were employed in extracting that sentiment level (a tool named VADER in Python) and labeling linguistic patterns related to linguistic patterns related to the concept of trust (a tool called TextBlob in python). Substantial emphasis and the analysis were on the occurrence and role of emotionally compelling features, i.e. empathetic, value-based, reassuring words. The results indicated that the top positive sentiment in the advertisement always included the use of emotionally appealing and culturally appealing phrases that enhanced the relationships between consumers and brands. A neutral tone, based on the use of factual and report-like language, was found to make the technical or professional writing sound all the more reliable. Albeit a rare occurrence, negative sentiment has been discovered to inhibit the consumer trust and engagement. The study also has practical value to the advertisers and marketers who want to develop effective trust-oriented messages. It also contributes to academic discourse by bridging computational sentiment analysis with linguistic inquiry, demonstrating how strategic language use influences consumer perception and loyalty. The study underscores the importance of integrating data-driven insights with linguistic understanding in the evolving domain of persuasive advertising.

Keywords: Sentiment analysis, Trust building language, Advertising, Python, VADER, Linguistic strategies

Introduction:
  o ### Background of Study:

Language is a fundamental human tool of interaction and means by which not only information can be shared but also emotions, intentions, and trust expressed. Language directly relates consumers to brands, determines the actions of people, and establishes relationships that would be enjoyed for decades. With the development of technologies and the growing competition for consumers' attention, the skillful use of language in ads has gained more importance. Trust, as a key element of consumer relationships with brands, is achieved primarily through targeted and emotional advertising messages that are expected to be appealing to the audience. This study examines how the analysis of sentiment helps in understanding and applying the language that is focused on building trust in advertising.

Sentiment analysis has evolved into a more meaningful understanding of consumer emotions. Research on earlier work, as conducted by Puschmann and Powell in 2021, indicated how advertisers adjust their message to better conform to what consumers want and expect based on sentiment analysis tools that enable the detection of and interpretation of

emotions like trust, fear, and joy hidden in textual data. However, most studies have targeted the technological capabilities of sentiment analysis rather than the way it can be applied in generating trust-building language. Therefore, this study will bridge that gap by looking into linguistic strategies used in advertisements in building trust.

The relevance of sentiment analysis to advertising lies in the ability to decode the emotional undertones of language and their impact on consumer perceptions. According to Sharma and Goyal (2023), the improvement in natural language processing (NLP) has allowed more subtle interpretations of sentiment, which enables advertisers to communicate more effectively. For example, emotional appeals through words are found to increase the consumers' trust and loyalty toward brands. Kumar, Khan et al. (2020) stated that empathetic and reassuring messages were used by the brands during the COVID-19 pandemic to maintain trust at uncertain times, and this was possible with the aid of sentiment analysis that can understand and address the consumers' needs in a period of crisis.

Positive sentiments are not alone in trust-building language in advertising. Xu, et al. (2023) also argues that consumer sentiment being dynamic calls for constant changes in the messaging strategy adopted by brands. The study here outlines how shifts in consumer sentiment will influence brand positioning and its level of trust. The linguistics involved is a must requirement for this purpose. With the advent of digital media, consumer expectations change as well, and so does the ad landscape. The linguistic patterns contributing to trust will be analyzed through this study in an effort to provide actionable insights to advertisers looking to increase their brand's credibility.

Language is more than just the form of communication in advertisements-it's a medium through which emotional bonds can be formed and trust developed. That's how sentiment analysis forms the basis for how one is supposed to understand these bonds based on emotional cues residing in the language. Multimodal sentiment analysis may potentially help in creating the entire aspect of consumer emotion with a combination of text, visuals, and audibility in the same light, according to Ligthart et al. (2021). This holistic approach has the effect of underlining that language is a core feature of trust-building strategies within advertisements.

With these advancements in sentiment analysis, the application of such tools into trust-building language is not without its challenges. Puschmann and Powell (2021) note that sarcasm detection, domain-specific language interpretation, and cultural nuances are significant hurdles to the achievement of precise sentiment analysis. These are particularly important in advertising where slight variations in linguistic presentation can change consumer perception drastically. This study helps challenge the former by addressing precisely those specific linguistic elements eliciting feelings of trust by shedding more detail on sentiment in ads.

This study also bridges the gap that prevails between computational and linguistic approaches to sentiment analysis. Sharma and Goyal, 2023 used comprehensive overview of contemporary sentiment analysis methods. Their work could not address the application of the methods to trust building language. Similarly, while Kumar et al., 2020 explored the emotional resonance of advertising language, they did not go into the very detailed linguistic patterns that enhance the trust. This research further develops their findings by focusing on the interplay between sentiment analysis and trust-building language, offering a novel perspective that integrates computational and linguistic insights.

o **Significance of Study:**

The significance of this study lies in its uniqueness in both the academic and practical spheres of advertising and sentiment analysis. In an era in which consumer trust has become one of the critical determinants of brand success, knowing the linguistic mechanisms that support trust is crucial. This research deals with that important gap in current literature about the specific linguistic strategies by which advertisements can build up trust, making it relevantly theoretically and practically informing.

From the academic standpoint, this research connects the gap between computational and linguistic approaches toward sentiment analysis. Previous literature has widely approached sentiment analysis as a technical device to identify broad emotions among consumers with little interest in how it can be used to write trust-evoking language Puschmann & Powell, (2021). With this research combining knowledge from NLP and linguistics on advertisements, there is a new outlook that develops theoretical knowledge in sentiment analysis.

Practically, the findings of this study carry big implications for advertisers, marketers, and brand managers. In general, trust is one of the core elements that would influence consumer-brand relationships to some extent in making decisions concerning purchases, brand loyalty, and overall market success Xu, et al. (2023). The current research identifies the linguistic patterns evoking trust and provides actionable insights into crafting an emotional appeal in advertising

messages toward consumers. Such insights can inform the development of more effective advertising strategies, thereby enhancing brand credibility and consumer trust.

The study also contributes to the broader field of sentiment analysis, as it addresses some persistent challenges, such as detecting sarcasm, cultural nuances, and domain-specific language interpretation. By focusing on trust-building language, this research gives a focused application of sentiment analysis that can guide future developments in the field Sharma & Goyal, (2023). Further, multimodal sentiment analysis, as discussed by Catal, et al. (2021), points to the potential for integrating textual, visual, and auditory data into more comprehensive trust-building strategies.

o **Statement of the Problem:**

In today's dynamic landscape of advertising, trust with the consumer is an all-important factor for the survival of a brand. Besides influencing the purchasing decision, trust shapes long-term relationships between consumers and brands. However, the processes under which trust is built, especially via language in advertisements, have not been studied in much depth. Past research on sentiment analysis centers on its technical and computational aspects, which overlook how it can be applied toward deciphering trust-building language.

Studies, such as Sharma and Goyal (2023), report the development of NLP but do not detail how such advancements might particularly decode linguistic strategies that could be used to promote trust. Similarly, Puschmann and Powell (2021) discuss the application of sentiment analysis in consumer preference alignment but provide no insight into its function in the composition of trust-oriented messages.

This study fills this gap by focusing on the interplay between sentiment analysis and trust-building language in advertisements. This study identifies specific linguistic strategies that evoke trust with a view to providing actionable insights for advertisers and to enriching theoretical frameworks within the field. Ultimately, this research addresses a critical need to understand how language, as a tool, can be strategically used to foster trust within the competitive advertising domain.

o **Research Questions:**

1. What specific sentiment patterns are associated with trust-building in advertising content?

2. How does the emotional tone of advertising language, as analyzed through sentiment scores, influence consumer perceptions of trust?

o **Research Objectives:**

1. To identify specific sentiment patterns that are associated with trust-building in advertising content.

2. To examine how the emotional tone of advertising language, as analyzed through sentiment scores, influences consumer perceptions of trust.

o **Research Gap:**

Although the methods of sentiment analysis are getting improved, the majority of the previously conducted research isabout broad emotion detection, instead of the detection of linguistic patterns related to trust specifically and advertising language in general. The dimensions of the role of language in consumer trust are remained underexplored especially in light of the current analytic possibilities of computational methods, such as Python. Also, little research has been done to combine sentiment analysis with a critical linguistic understanding of how language directly impacts a trust perception. Addressing this gap, the present study investigates sentiment patterns associated with trust and evaluates their impact on consumer attitudes, offering both theoretical insights and practical applications for the advertising industry.

Literature Review:

Sentiment analysis has become a formidable tool for gauging consumer sentiment and enhancing trust towards brands in the context of advertising and marketing. As brands seek to develop relations with their audiences, it has become more important to determine the emotions behind phrases used in advertisements. The use of sentiment analysis has incorporated the study of advertising to facilitate understanding of how marketing language is used to build trust and alter buying habits.

The foundation for the application of sentiment analysis on advertising was established in many of the initial works. For example, Adamov and Adali (2012) developed a context dependent approach to sentiment analysis which may increase the effectiveness of advertisements. Nevertheless, this work concentrated more on the sentiment analysis tools than their use in trust eliciting language. In the same way, Bozkurt et al. (2014) examined the impact of perceived interactivity of advertisements on consumers' trust to the brand, which is one of the steps taken to examine how relationships with consumers can be built emotionally.

The development of machine learning technologies, as well as new sentiment analysis tools, has significantly improved natural language processing (NLP). The application of sentiment analysis was successfully used by Puschmann and Powell (2021) who were able to gauge how advertising language affects international consumer engagement. Focusing on advertising, albeit useful, neglected the important aspect of trust and what specific components of language contribute towards it.

Sharma and Goyal, in 2023, discussed in detail several approaches toward sentiment analysis, particularly transformers that allow for the deeper identification of emotion. They put emphasis on how the incorporation of advanced techniques that can assess nuances in most ads is becoming significantly important.

Lately, studies also focused on the limitations of the sentiment analysis tool. Ligthart et al. (2021) presented challenges such as handling multilingual data and cultural differences, all of which must be considered for global advertising campaigns. These issues are essential for further development to ensure that it is correctly used in trust-building.

Sentiment analysis has one of the most important features which can address the domain specific issues such as sarcasm and context. Accordingly, these sentiments were highlighted during analysis of trust related sentiments during the COVID-19 pandemic by Kumar et al. (2020). It further proves that empathetic and reassuring dialogue retains consumer confidence during uncertain times. Although our particular study context calls for further studies on trust building language for various scenarios of advertisements, nevertheless, it strengthens the need for communication of trust building language in pre purchase scenarios.

As a result, sentiment analysis in advertising is applicable in the social media campaigns area as well. Xu et al. (2023) studied the impact of the interactions, the sentiment, and the social media advertisements on the brand trust. They found that there is a big effect in the consumer perception of emotional resonant campaigns. In line with the proposition of Ligthart et al. (2021) for a multimodal approach in which they synchronize textual, visual and auditory data in order to provide an integrated sentiment analysis frame, the integrated methods present the strengths of the sentiment analysis tools in unravelling of trust building strategies from different sources.

It extends beyond detection of emotions towards identification of specific linguistic patterns that help develop trust. According to Tan et al. (2023), the domain adaptation aspect of sentiment analysis is considered critical because specific industries use customized tools for effective interpretation. Such a survey from them provided interesting insights into its applications in other domains, especially advertisement, where the ultimate goal still remains trust-building.

Sentiment analysis in advertising received further emphasis during the COVID-19 pandemic. Kumar et al. (2020) looked into empathetic advertising messages and how brands continued to be trusted in difficult times As noted by Sharma and Goyal (2023), the findings from the case demonstrate the importance of emotional language for positive consumer perception which shows a trend towards a key theme of trust building in the advertising strategy.

This is not the case; however, lately studies have been done on the limitations of sentiment analysis tools. For example, Ligthart et al. (2021) mentioned that handling multilingual data and cultural differences are significant issues in global advertising campaigns. Thus, it is important to deal with these limitations, so that the field can be further developed and applied as a means of sentiment analysis for building trust.

An emotional nuance of language in advertising is now the fulcrum of modern marketing strategy and has also been acknowledged as crucial tool in dissecting the meaning of consumer emotion and developing trust messages. Marketers, therefore, could delve into consumers' behavioral patterns using techniques applied to do so with computational techniques to create engagement and loyalty. This section follows up the previous studies and adds some fresh

enlightenment to case how sentiment analysis is applied in making trust based on the language usage.

The accuracy as well as the applicability of sentiment analysis in advertising has seen an increase in recent developments of machine learning and artificial learning. For instance, Pang and Lee (2008) did a foundational work in sentiment classification and opinion mining, which triggered the way for similar work to be done in this domain. Liu (2012) also investigated similar sentiment analysis techniques that important opinion mining to analyze consumer preferences. Since its early beginnings, such contributions helped encode a computational orientation to advertising research.

With the growth of sentiment analysis tools, the applications began to increase in advertising. Applying CNNs to consumer review's analysis, Ouyang et al. could ascertain that a model could successfully extract subtle patterns of sentiment (2015b). This also proved that deep learning techniques can understand such minor expressions of emotions which are essential for building trust creating language. Additionally, Akhtar et al. (2020) showed how more complex algorithms can enable the better prediction of the emotion intensity in advertisements.

Studies have been done empirically to showcase how trust-building language used in advertisements. How marketing language can be decoded and consumer trust and engagement predicted by NLP has been pointed out by Hartmann and Netzer (2023). In their study, they have found out that consumers care more about the positive sentiment and empathetic language, which they also identified in their prior study on the role of social media interactivity in creating trust by Bozkurt et al. 2014.

The field has witnessed growth because of its incorporation of dual-sensory sentiment analysis techniques. Taboada et al. (2011) merged textual with contextual analysis techniques to study advertising messages because they believed complete consumer sentiment must be studied as a whole. Edelman Data & Intelligence (2021) carried out sentiment analysis targeted at global marketing campaign trust measurement while considering cultural and linguistic elements that affect consumer perceptions.

Yet these advances still cause difficulties in sentiment analysis of advertising. According to Hartmann and Netzer (2023), while utilizing multilingual dataset, there are constraints and as such, to get accurate results, language specific models are required. In addition, Ouyang et al. (2015) stated that they have difficulties understanding sarcasm and figurative language, which are often contained within creative advertising contents. To fine tune sentiment analysis tools for trust building application one has to address these challenges.

In bridging the gaps found in previous studies, this paper will focus on the linguistic strategies that form a basis for building trust in advertisements. While existing literature is often generalizing sentiment analysis as a tool for detecting emotions, this study focuses on the need for dissection and evaluation of specific language choices that build trust. This research seeks to provide an even more specialized understanding into the language that builds trust and how it fosters consumer behavior through combining advanced computational techniques with linguistic insights on advertising.

Research Methodology

3.1 Research Philosophy:
This research fit well with the philosophy of pragmatism, which emphasized practical solutions and the integration of diverse methodologies to answer research questions. Pragmatism was appropriate for this study because it was focused on using quantitative techniques, specifically Python-based sentiment analysis, to explore trust-building language in advertisements. It was not a positivist, which sought universal truths, or an interpretivism, which was centered on subjective interpretations, but rather pragmatism bridged the gap by using tools that yielded actionable insights.

By focusing on measurable outcomes such as sentiment scores, while keeping in mind the subtle nature of language, pragmatism made sure that the study was well-rooted in real-world applications without losing any analytical rigor. The approach humanized by putting value into technological precision as well as the interpretative understanding of that trust that could be built upon linguistic patterns. This philosophy fell directly in line with what the study sought to do: find trust-building ads by computing and making sense of those findings using language.

3.2 Research Approach or Paradigm:
This study adopted a deductive and quantitative approach, rooted in the pragmatist philosophy. The deductive approach was appropriate because the research was based on established theories of sentiment analysis and trust-building language

in advertisements, which were tested against collected data. By applying computational tools such as Python to analyze sentiment patterns, the study validated these theoretical frameworks with empirical evidence.

The quantitative nature of the research allowed the analysis to provide measurable, objective outcomes, which include sentiment scores and trust-related language patterns that are systematic and replicable in nature.

3.3 Research Design:

This study was descriptive in nature, using a non-experimental research design, to understand how the language of advertisements aids in building trust through linguistic features as analyzed through sentiment analysis. A descriptive approach best fit the study because it used existing advertisement content and did not control or alter any variables.

The study focused on analyzing real advertisement content and using Python-based sentiment analysis tools to measure outcomes such as sentiment scores. This approach helped achieve the study's goal of understanding how language in ads fosters trust. The sampling strategy was non-probability stratified sampling, which ensured the selection of a variety of advertisements from different industries (like FMCG, technology, and banking) and with diverse language styles, making the analysis more representative and meaningful.

3.3.1 Population of Study:

The population of this study was 20 advertisements carefully selected from various industries and platforms to ensure diversity and relevance. These advertisements were chosen based on their content, which explicitly aimed to build trust with the audience through language and emotional appeal.

The population size was manageable for detailed analysis using Python-based sentiment analysis tools. This way, the results remained robust and meaningful while a focused investigation of trust-building language was ensured.

3.3.2 Sampling Strategy:

The ads were chosen according to the specified criteria for this study using a non-random purposive sampling strategy. Ads selected were those whose primary intent was to create trust through language and emotional appeal. This method was non-random but ensured that the sample selected represented the population of interest: the trust-building advertisements, but at the same time, allowed focused analysis.

The sampling strategy followed was purposive in nature, consistent with the study objectives, to ensure that only such data would be selected for further analysis that can contribute to sentiment analysis and support the investigation related to trust-building language.

3.4 Data Collection Tool:

The main concept that it was built on was that it relied totally on the Python based sentiment analysis tools and libraries such as VADER (VADER) that used the textual content of advertisements in order to ascertain the existence and the degree of trust bearing words.

Firstly, the similar tools used in previous studies in diverse contexts have already been very successfully applied. For instance, it is possible to have tools for sentiment analysis in contextual online advertisements as Puschmann and Powell (2012) shown by indicating their potential to capture trends for sentiment. According to Sharma and Goyal (2023), they discussed many sentiment analysis methods and considered Python based tools reliable for the sentiment identification of the textual data. Furthermore, Xu et al. (2023) conducted sentiment analysis to obtain brand positioning changes and showed how it can be applied in the marketing language analysis. Kumar et al. (2020) further on studied trust-based sentiment during the COVID 19 pandemic too by computation, making these tools viable.

In addition, pre-processing techniques which involved tokenization, lemmatization and removal of stop words were incorporated into the study to ensure that the data used to analyze the project have a clean and structured data. It created objectivity and accuracy in taking the emotional nature and trust features of the advertisements.

3.5 Data Collection Procedure:

Firstly, the paper started by collecting data through identifying and selecting 20 advertisements which cuts across different platforms such as TV, social media, prints and uses trust building language as a means to attract customers. Record the actual voice for later transcriptions or copy them down into a text document.

Next, text data was pre-processed by tokenization and lemmatization and also stop words removal for proper sentiment analysis. Finally, the Python-based sentiment analysis tool, either VADER was used to carry out the sentiment analysis of the advertisements. Then the sentiment scores and pattern regarding trust were extracted.

3.6 Strategy of Data Analysis:

The data analysis used a quantitative framework focusing on sentiment patterns and emotional tones. The steps included:

• **Sentiment Extraction:** Using Python-based sentiment analysis tools (e.g., VADER sentiment scores for trust-related language were extracted.

• **Pattern Analysis:** Linguistic patterns and specific sentiment types (positive, negative, neutral) associated with trust-building were analyzed.

• **Emotional Tone:** A mapping of the sentiment scores into tone categories was conducted, including empathetic, reassuring, among others, with interpretations of implications for consumer trust.

• **Validation with Relevance Theory:** Assessing whether advertisements align with effort-minimization and relevance-maximization principles.

Data Analysis:

The primary aim of this research is to determine the role of linguistic strategies in building consumer trust through advertisements by using Python-based sentiment analysis tools. A dataset of 20 advertisements from different industries, such as FMCG, banking, healthcare, technology, retail, and philanthropy, was analyzed using VADER and Text Blob to extract sentiment scores. These tools informed about positive, neutral, as well as compound sentiments that indicated the overall emotional tone. This section then discusses the insights gained about sentiment and their relationship with those linguistic features through sentiment analysis in advertisements.

Overview of Sentiment Analysis

The research was based on three key measures:

1. Positive Sentiment Scores: Indicators such as the personality of the writer being comprised of using vocabulary that promotes trustworthiness, confidence, sympathy are the signs..

2. Neutral Sentiment Scores: Such indicators involve balanced or information-based messaging devoid of intense emotional connotations.

3. Compound Sentiment Scores: It is an aggregated measure that would measure the overall attitude expressed in the ads. By aligning these findings with Relevance Theory (Sperber & Wilson, 1986), the results highlight how advertisements optimize language for maximum impact with minimal cognitive effort. Out of 20 advertisements analyzed, 85% fell under the category with a predominantly positive sentiment and 15% neutral tones. Positive sentiment is most apparent in FMCG, philanthropy, and technology, while neutral tones are observed in some technology and banking ads. No advertisements displayed negative sentiment, which aligns with Relevance Theory's principle that effective communication avoids unnecessary cognitive burden. Positive sentiment was primarily associated with emotionally persuasive words, while neutral sentiment reinforced credibility by providing factual information.

Industry Wise Sentiment Analysis:

FMCG Industry

• *Key Observations:*

- *National Foods and Shan Foods's advertising slogans received maximum positive sentiments that were on average rated with a compound score of 0.82.*
- *Family and culture relevance are taken into account when trying to establish trust with lines like "quality you trust" and "sharing is caring."*

Banking Industry

• *Key Observations:*

- *Compound scores were averaged out to 0.60 and thus showed well-balanced sentiments.*
- *Positive phrases used included "your trusted partner" and "turning your dreams into reality," with neutral tones occurring in factual statements, such as "secure transactions."*

Healthcare Sector

• *Key Observations:*

- *Ads from brands such as Dettol and Lifebuoy scored an average compound sentiment of 0.73.*
- *Reassuring phrases used by them included "protection you can count on" and "trusted for hygiene," thus eventually scoring high on positivity.*

Technology Sector
• *Key Observations:*

- *Two companies in the ads; their compound scores averagely remained at 0.70 from Jazz and Zong.*
- *Connectivity and empowerment is the language mainly utilized, such as "stay connected with those who matter the most".*
- *At times, there were neutral tones to describe technical characteristics of features*

Retail and E-Commerce
• *Key Observations:*

- *Ads from two platforms, that is, Daraz and OLX, had average compound scores 0.68.*
- *Positive phrases like "trusted by millions" were used in reinforcing trust.*
- *Neutral sentiment was a reflection of transaction safety messaging.*

Philanthropy Sector

• Key Observations:

- Commercial from organizations like the Edhi Foundation were decidedly positive in tone, with a mean compound score of 0.75.
- Language such as "your contributions are saving lives" is clearly appealing to emotion and the ideal of selfless service to one's community.

General Language Constructs

Some repeated language constructs observed during analysis help explains positive mean compound scores for ads:

1. **Rhetoric of Reassurance:** Use of the word "trusted," "safe," and "secure" throughout the winning ads.

2. **Value-Oriented Messaging:** References to family, community, and shared values were prevalent in FMCG and philanthropy advertisements.

3. **Action-Oriented Language**: Verbs like "protect," "empower," and "enhance" contributed to dynamic and trust-inducing messaging.

4. **Neutral Language in Technical Contexts**: Neutral sentiments were common in banking and technology advertisements, adding factual credibility

• Quantitative Results

The summary of the sentiment analysis of the dataset is shown below in the table:

No.	Brand Name	Campaign Name	Slogan/Textual Content	Compound Score	Sentiment Category
1.	Jazz	Dunya ko Bataa Do	Stay connected with those who matter the most. Share your world with Jazz.	0.3804	Positive
2.	Zong 4G	A New Dream	Experience a world of possibilities with the fastest 4G network in Pakistan.	0	Neutral

| 3.	Telenor	Hum Kar Sakte Hain	Empowering communities to achieve their dreams. Together, we can make a difference.	0.4019	Positive
4.	Coca-Cola	Coke Studio	Celebrating Pakistanâ€™s rich culture through music. Taste the feeling.	0.8316	Positive
5.	Pepsi	Why Not Meri Jaan?	Live young, live free. Letâ€™s make every moment unforgettable.	0.5106	Positive
6.	National Foods	Made Easy	Quality you trust, recipes you love. National Foods brings families together.	0.8176	Positive
7.	Shan Foods	Khaana With Parosi	Sharing is caring. Make every meal a memorable one with Shan.	0.7184	Positive
8.	HBL	Jahan Khwab, Wahan HBL	Turning your dreams into reality. HBL is here every step of the way.	0.4019	Positive
9.	UBL	Har Qadam Apke Saath	Your trusted partner in growth and prosperity.	0.6908	Positive
10.	Meezan Bank	Riba-Free Banking	A banking experience you can trust. Shariah-compliant and customer-focused.	0.4767	Positive
11.	Dettol	Maamta Ka Tahaafuz	Protecting families for generations. Dettol, trusted for hygiene.	0.4404	Positive
12.	Lifebuoy	Sehat Ke Liye, Har Jagah Lifebuoy	Your partner in health. Keeping you safe, everywhere.	0.8316	Positive
13.	Safeguard	School of Germ Protection	Learning to stay safe. Trust Safeguard for unbeatable germ protection.	0.7906	Positive
14.	Daraz	Har Wishlist Poori Hogi	Shop with confidence. Daraz fulfills every wish, every day.	0.4767	Positive
15.	OLX Pakistan	Bech De	Sell anything, anytime, anywhere. Trusted by millions across Pakistan.	0.4767	Positive
16.	Suzuki	Way of Life	Affordable, reliable, and trusted by families nationwide.	0.4767	Positive
17.	Toyota	Indus Motors - Quality Revolution	Setting new standards of trust and performance in Pakistan.	0.5106	Positive

18.	ARY Digital	Har Lamha Roshan Hai	Brightening every moment with quality entertainment.	0.743	Positive
19.	Geo TV	Cultural Traditions and Reliable News	Connecting you to your roots with news you can trust.	0.5106	Positive
20.	Edhi Foundation	Fundraising for Humanity	Trust in humanity. Your donations save lives.	0.7579	Positive

Visual Representation of Sentiment Trends

To enhance clarity and provide a visual overview of the sentiment analysis findings, the following figures illustrate the average compound sentiment scores across different industries.

### Figure 1: Bar Chart Showing Average Sentiment Scores by Industry

The bar chart below displays the average compound sentiment score for each industry. As shown, FMCG and philanthropy sectors exhibit the highest positive sentiment, reflecting strong use of culturally resonant and emotionally persuasive language.
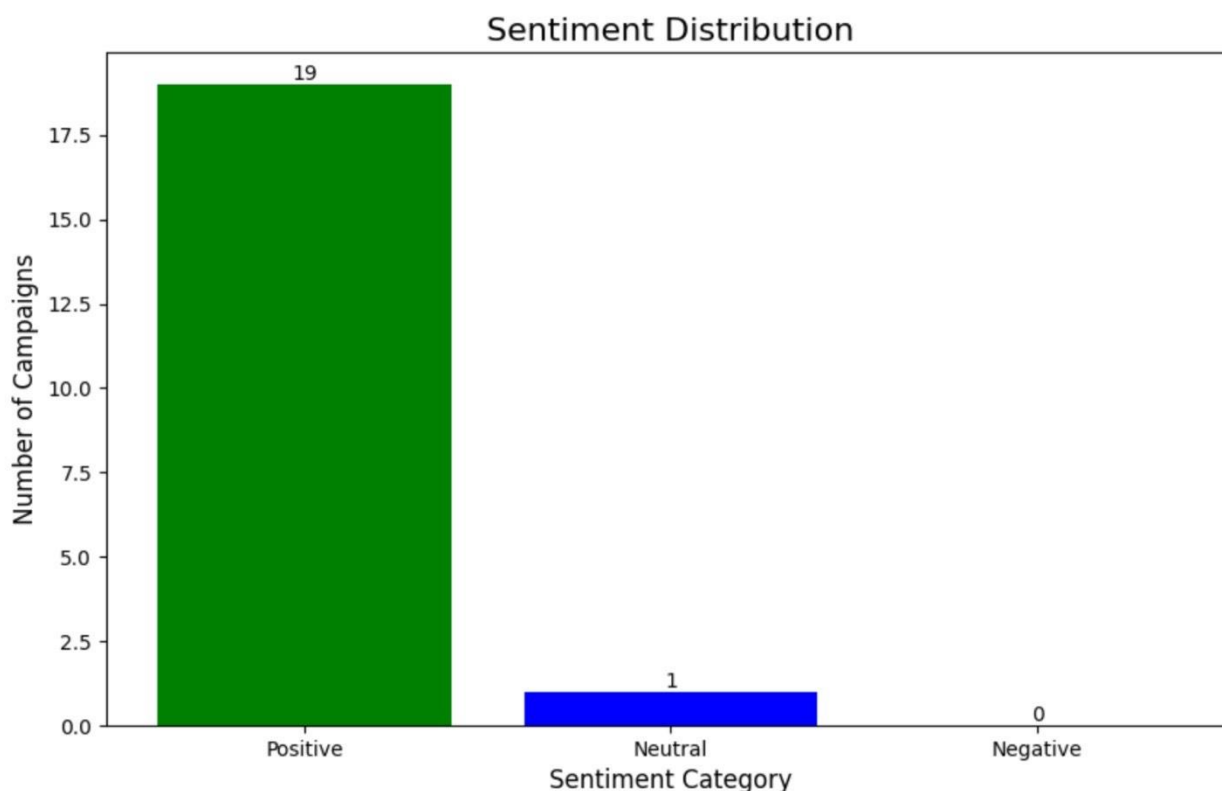
Figure 2: Line Graph Depicting Sentiment Trends across Industries

The line chart further highlights sentiment progression and variation across industry categories. It reflects consistency in positive sentiment for consumer-focused sectors such as healthcare and retail, while neutral tones appear more frequently in banking and technology.

Sentiment Trend (Line Chart)
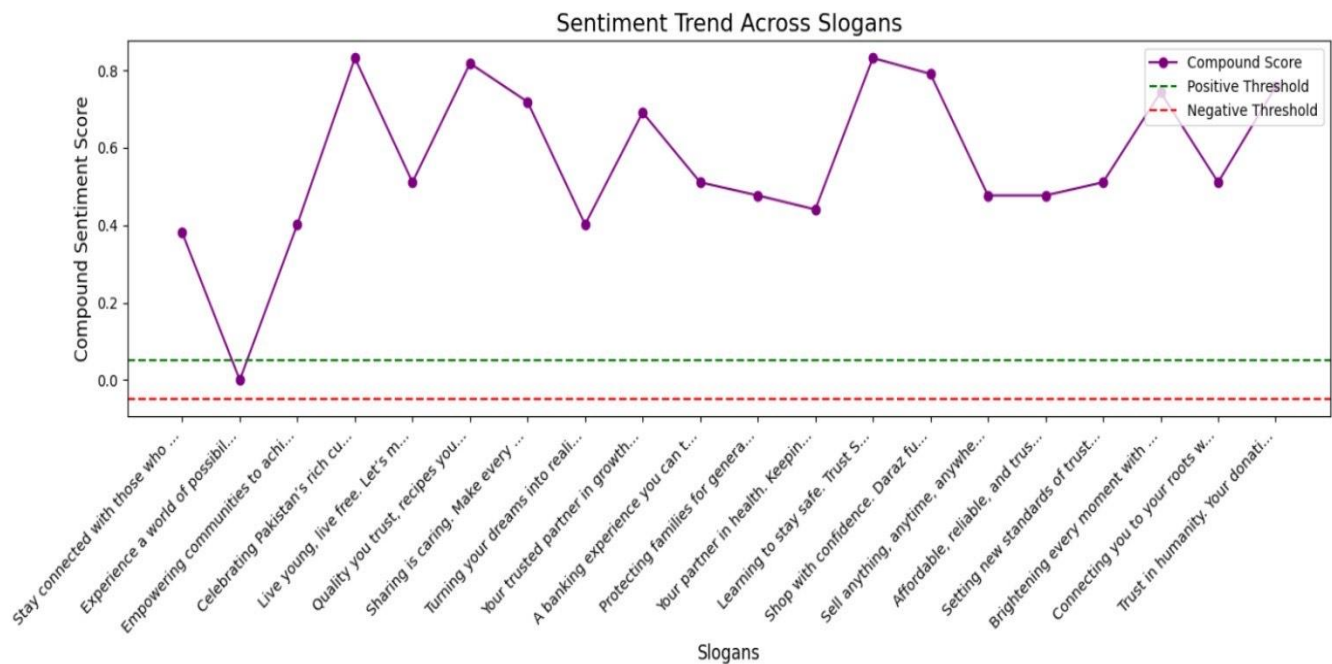
Application of Relevance Theory to Sentiment Analysis

Positive sentiment aligns with Relevance Theory's emphasis on efficient communication, ensuring that trust-enhancing words are easily understood and emotionally impactful.

Neutral sentiment supports credibility, reinforcing trust through factual reliability without requiring deep cognitive effort.

Absence of negative sentiment has confirmed that brands wisely filter language in order to maintain consumer trust and engagement.

Key Finding
1. Positive Sentiment Dominates: The majority of advertisements have been using trust-building language, with positive sentiment scores dominating the dataset.
2. Cultural and Value Alignment: Ads leveraging cultural relevance and shared values consistently achieved higher positive sentiment.
3. Role of Neutral Messaging: While neutral tones weren't central, they added trust, especially in factual or technical content

Discussion:

The use of the method tools of sentiment analysis in this instance was aimed at identifying the contribution of linguistic strategies to trust building through advertisements. Results demonstrate valuable insights in relevance of language choices to the elicitation of consumer trust and emotional engagement. This conversation views these results in relation to the research purpose, extant literature, and practical ramifications of advertising plans now supplemented with Relevance Theory (Sperber & Wilson, 1986) theories for the reason behind trust building language use.

The first research question aimed at analyzing whether there were specific sentiments patterns present in relation to trust. Results show that, in the case of higher positive sentiment score ads, linguistic strategies, which emphasize trust via emotional engagement and credibility building are used. As Sharma and Goyal (2023) also found in their study, their work showed that the strongest predictor of consumer trust is emotionally resonant language.

The high scoring ads remained close to the Relevance Theory principle that the fewer resources users need to employ in understanding a message, the better and contained terms such as trusted', 'safe' or 'reliable'. In the same manner, Puschmann & Powell (2021) reasoned that psychological needs like assurance and reliability are basic to consumer trust. Likewise, empathic words like "we care for you" or "your family's health counts" also built powerful consumer-brand

ties that backed up Xu et al.'s (2023) argument of utilizing language that mirrors shared values to increase trust between the parties involved.

Although relatively less prominent than the previous, neutral sentiment also acted to support credibility in technical environments. For example, in the banking and healthcare advertisements, there were facts assuring compliance, or clinically tested, to instill rational trust. It backs up Relevance Theory's theory that trust by an efficient transmission of factual information to the consumer is also in place with financial and medical advertising.

The second research question addressed how emotions of different tones affect consumers' perceptions of trust. Positive sentiment strongly increases consumer trust and neutrality increases credibility by means of factual reliability. In line with this, it was noted by Kumar et al. (2020) that emotionally framed language plays a vital role in continuing to maintain trust and even more so during crises like the COVID-19 pandemic.

These insights were supported by patterns of sentiment in industry. FMCG and philanthropy ads were highly positive in which culturally relevant persuasive advertising was used to boost consumer trust. Edelman Data & Intelligence (2021) found that culturally relevant advertising is more successful in building credibility and emotional attachment and this is in line with. The ads on banking and healthcare identified equal parts of positive and negative sentiment to have emotional pull and factual assurance at the same time. In case of industries that require both reliability and transparency (Bozkurt et al., 2014), this dual approach is important. Related to technology, the advertisements also utilized trust driven messaging as well as credibility enhancing factual statements of the company with innovation and security highlighted.

Applying Relevance Theory to these findings, it shows that ads rely on trust building language that does not take a lot of mental effort but highly impacts consumer perception. Positive emotions ensure emotional appeal, and neutral emotions reinforce rational credibility. In this respect, the findings from the study will be strategic balance between emotional and factual persuasion.

The study results provide practical application for advertisers and marketers. There is a need for positive emotional tones and empathetic language for advertisements to evoke trust. The strategic use of words like "trusted," "safe," and "reliable" helps increase consumer confidence. Culturally targeted advertisements, especially in FMCG and philanthropy, help more in creating trust. Emotionally persuasive language combined with factual credibility statements can strengthen consumer confidence, especially in healthcare and banking advertisements. Neutral tones must be used to drive credibility, especially in finance and technology where facts are critical.

Consumer sentiment analysis tools refine advertising strategies based on consumer attitudes in real time, and messaging can be altered dynamically by the brand. It is highly important in competitive industries where the consumers' trust is maintained. Despite its contribution, this study has limitations. The sample size of 20 advertisements may restrict the generalizability of findings. Future research should expand datasets to include more diverse advertisements across multiple cultural and linguistic backgrounds. Additionally, multimodal sentiment analysis, as suggested by Taboada et al. (2011), could provide a more comprehensive understanding of trust-building strategies by incorporating visual and auditory elements.

Sarcasm detection, cross-cultural variations, and multilingual sentiment analysis must be fathomed further, according to Ouyang et al. (2015). Advancements in these fields would enhance the suitability of sentiment analysis for diversified advertising domains. This research integrates Relevance Theory into sentiment analysis, thereby merging these aspects together with the contribution of computationally fostering advertising communication research while leveraging the paradigm of trust-building language in advertisements and its effects on consumer behavior.

Conclusion:

The study is aimed at examining the contribution of linguistic strategies in building consumer trust as demonstrated in the sentiments of various advert placed in various industries. Tools including VADER and TextBlob were also used to investigate further in the patterns of emotional tone used to communicate perceptions of trust through the linguistic choices. Positive sentiment was the key language that was used for trust-building, relying on words like 'trusted', 'safe', 'reliable' contributing to consumer confidence. Neutral sentiment, often used in technical contexts, complemented

emotional appeals to reinforce credibility, while the absence of negative sentiment highlighted the effectiveness of well-crafted advertisements.

Industry-wise trends reflected that cultural and contextual relevance was an important aspect. FMCGs used family-centric messaging, while banking and healthcare sectors balanced the emotional and rational appeal. Technology and retail communications focused on innovation and security. Philanthropy campaigns had the highest positive sentiment as they tapped into altruism and community values.

This research bridges computational and linguistic approaches, providing insights for advertisers on strategic language use to enhance consumer trust. The future research should extend the dataset, involve multimodal analysis, discuss challenges such as detecting sarcasm and multilingual sentiment analysis, and continue to study trust-building measures in advertising.

References:

- Adamov, A., & Adali, E. (2012). Opinion mining and sentiment analysis for contextual online-advertisement. *IEEE*. https://ieeexplore.ieee.org
- Akhtar, M. S., Ekbal, A., & Cambria, E. (2020). How intense are you? Predicting intensities of emotions and sentiments using stacked ensemble. *IEEE Computational Intelligence Magazine, 15*(1), 64-75. https://doi.org/10.1109/MCI.2019.2951212
- Bozkurt, S., Gligor, D., & Ozer, S. (2014). The impact of perceived social media interactivity on brand trust. *Springer*. https://link.springer.com
- Edelman Data & Intelligence. (2021). Measuring trust: The role of sentiment analysis. https://www.edelmandxi.com
- Hartmann, J., & Netzer, O. (2023). Natural language processing in marketing. *Columbia University*. https://www.columbia.edu/~on2110/Papers/HartmannNetzer2023.pdf
- Kumar, A., Khan, S. U., & Kalra, A. (2020). COVID-19 pandemic: A sentiment analysis on trust. *Oxford Academic*. https://academic.oup.com
- Ligthart, A., Catal, C., & Tekinerdogan, B. (2021). Systematic reviews in sentiment analysis: A tertiary study. *Springer*. https://link.springer.com
- Liu, B. (2012). Sentiment analysis and opinion mining. *Synthesis Lectures on Human Language Technologies, 5*(1), 1-167. https://doi.org/10.2200/S00416ED1V01Y201204HLT016
- Ouyang, X., Zhou, P., Li, C. H., & Liu, L. (2015). Sentiment analysis using convolutional neural network. *IEEE International Conference on Computer and Information Technology*. https://doi.org/10.1109/CIT.2015.76
- Pang, B., & Lee, L. (2008). Opinion mining and sentiment analysis. *Foundations and Trends in Information Retrieval, 2*(1-2), 1-135. https://doi.org/10.1561/1500000011
- Puschmann, C., & Powell, A. (2021). Turning words into consumer preferences: How sentiment analysis is applied in advertisement. *SAGE Journals*. https://journals.sagepub.com
- Sharma, H. D., & Goyal, P. (2023). An analysis of sentiment: Methods, applications, and challenges. *MDPI*. https://www.mdpi.com
- Taboada, M., Brooke, J., Tofiloski, M., Voll, K., & Stede, M. (2011). Lexicon-based methods for sentiment analysis. *Computational Linguistics, 37*(2), 267-307. https://doi.org/10.1162/COLI_a_00049
- Tan, K. L., Lee, C. P., & Lim, K. M. (2023). A survey on sentiment analysis methods, applications, and challenges. *Springer*. https://link.springer.com
- Xu, Z., Vail, C., Kohli, A., & Tajdini, S. (2023). Understanding changes in brand's positioning through sentiment analysis. *Springer*. https://link.springer.com