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THE ROLE OF TEXT ANALYTICS IN UNDERSTANDING CUSTOMER FEEDBACK: TECHNIQUES, INSIGHTS AND STRATEGIC IMPACT

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ABSTRACT

In an era where competition in the market is on the rise, organizations have to focus on customer assessment because it is a way enhancing the level of product of which further enhances customer satisfaction and eventually the loyalty to the brand. This paper presents text analytics as a tool to evaluate customer feedback and addresses the other methodologies used by companies to make useful information from a mass of raw text data. This research answers several questions about the use of text analytics, the results of such utilization, the impact on product development and customer service, thereby presenting the integrated approach in practical business. Using the Technology Acceptance Model (TAM) and Service-Dominant Logic (SDL) as the reference framework, the research understanding seeks to explain the adoption of text analytics tools within the relationships between the business and the customer as well as the value co-creation. The results indicate that organizations which utilize text analytics capabilities improve the knowledge regarding customer insights and further enhance the capabilities to business due to changing customer needs. This ongoing research also notes some inadequacies in existing studies such as cross industry longitudinal studies and provides suggestions on areas to consider for more studies in text analysis.

Keywords: Text Analytics, Customer Feedback, Technology Acceptance Model (TAM), Service-Dominant Logic (SDL), Business Intelligence.

I. INTRODUCTION

Understanding the opinions of customers in today's business environment is one of the most important factors. Almost all sectors of the economy realize that it is important to improve the quality of its products, increase the level of customer satisfaction and promote brand loyalty in order to stay competitive. As time goes by and with the advent of new technology in the field of consumer products, the trend of buying and trading has also changed causing an increase in the amount of feedback provided by the consumers. Nowadays, consumers also review, comment and rate numerous services and products leading to an excess of unstructured text data which businesses have to deal with. In today's consumers' world, many digital platforms such as social networks, sites for reviews and e-commerce herding sites are utilized to search for, assess and buy products. This resulted in the concept of 'consumer power' me, that is many people can express what they like and what they do not like to the world. However, it also poses a problem companies have never faced before - how to utilize the insights from the customers' opinions without there being a time lag. Quite a number of businesses fail to cope with the challenges brought by the unstructured data which consists of conflicting views, feelings and complex languages.

In order to leverage all of this helpful input, companies must inevitably resort to text analytics, which is a branch of data analysis that deals with the interpretation of gained insights from text. Text analytics involves the use of various methods such as, sentiment analysis, natural language processing (NLP), and topic analysis among others, which assist organizations in looking at customer opinion in large volumes. These tools are useful in transmuting non-systematic data into systematic data that helps business organizations in seeking the trends, gauging the attitude of the customers, and finding out the deficits.

Sentiment analysis, for example, enables companies to determine the emotional value in customer reviews through positive, negative, and neutral classification of customer review. This analysis not only enhances understanding on the level of customer satisfaction but also reveals the specific aspects of the complaint. For instance, in case a significant number of users complain about a certain feature of a product, companies can focus more on advancing that functionality. In the same vein, topic modeling can also identify various topics present in a customer review including quality, pricing or even service. When such themes have been identified, the organization can establish what customers expect and try to mitigate such disappointments in advance.

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Additionally, the potential of text analytics goes beyond product innovation. It can also play a role in the formation of marketing tactics, customer service improvement and general business strategy. For instance, customer intelligence can be used to strategize how the marketing activities are dispensed so that the communication reaches the desired populations. Further, the customer service department can utilize this information to discover patterns in the complaints ensuring that efficiency in delivering of service is achieved by enhancing speed of service delivery and designing the workflow around the problem.

However, BTA is not without obstacles, which are mostly a matter of what can be called a managed process of introducing new technologies. BTA systems demand considerable capital investments in hardware, as well as in personnel training. Organizations also have to relate customer feedback in a responsible manner to issues of information privacy especially with regulations such as the GDPR. Additionally, sentiment can be situational as there are instances of sarcasm or cultural connotation which alters the intended message of feedback. Hence it is important to develop, train and test text analytics algorithms for precision and correctness.

All in all, the significance of learning to analyze and interpret a variety of feedback, especially customer feedback has heightened relevance for businesses due to the present universal web networks. Organizations that leverage text analytics will not only cope but will thrive due to customers' ever-increasing demands. Organizations will efficiently turn inefficacious sources of texts and use them to level up their business by improving product standard and customer service as well as brand loyalty, all of which are vital for survival in the hostile business environment. Adoption of these tools makes it possible for organizations, not only to satisfy their customers but also creates an environment conducive to development and improvement of services for the coming years.

Statement of the Research Problem or Question

Enhanced customer engagement has become a key factor in the success of companies in the digital marketplace. Today's consumers talk about their experiences in the form of online reviews, social media comments, or feedback directly directed to the company. The qualitative data that arises from this -barrier-breaker of information- is paradoxically practitioners' concern. The central research problem is how to analyze the insights from such text feedback to help in product development and customer service. Hence, this research seeks to respond to the following queries:

- How do companies utilize text analytics to assess customers' feedback?
- What are the conclusions of text analytics based on consumer comments?
- How do these conclusions affect product design and customer service delivery?
- What hurdles do companies encounter in the provision of text analytics services?
- How does text analytics differ between industries as well as how is it done most effectively?
- What would be the forecast growth of text analytics to foster customer engagement and business growth?

Purpose of study

This study intends to investigate the influence of text analytics on the interpretation of customer comments. With a focus on text analytics, this research is about uncovering the ways in which organizations manage to convert unstructured information into useful data. The study seeks to elaborate on the processes involved, the insights provided, and relevance of such insights to product and client service strategies. In addition, the study will show the issues faced by companies and recommend measures solutions will be adopted in various sectors in the use of text analytics. This research is important for the academic and practical sectors. In the academic context, it adds to the existing literature on text analytics by describing its usage in the analysis of customer feedback and how it affects business strategy. In practical terms, the results of the current research will enable organizations to understand how to apply text analytics in practice for improving their products, increasing customer satisfaction, and building brand loyalty. Given the modern trends in business practice, where organizations tend to base their competitive advantage on customer feedback, it can be inferred that for any business to be sustained over a period of time, the comprehension of text analytics should be considered as the core of such business.

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II. METHODOLOGY

For this research, we utilized the combination of qualitative and quantitative techniques on the role of text analytics in studying customer feedback, using Technology Acceptance Model (TAM) and Service-Dominant Logic (SDL) as propositions in respective theories. Where TAM deals with the determinants of technology use, SDL discusses the process of value creation through customer engagement.

Target Group

This study is aimed at organizations that have buses recently adopted text analytics tools or are considering their use. This encompasses businesses in other sectors that include, but are not limited to, retail, lodging, information technology, and medicine.

Data Collection

Data collection will be conducted through surveys and interviews aimed at gathering insights on the following:

Perceived Usefulness (PU): In this part of the questionnaire, the effectiveness of the managers in active use of text analytics tools as one of the factors contributing to the enhancement of their performance will be evaluated.

"Text analytics tools help me improve my performance in analyzing the feedback from customers."

"For instance, text analytics informed me on how I could improve my product instead of just gathering information based on what I think is necessary."

Perceived Ease of Use (PEOU): The Ease of Use of Text Analytics Tools among Participants will also be explored with Statements such as:

"Using text analytics tools provides isn't hard for me."

"Operating the text analytics package is not complicated."

Behavioral Intention and Actual Usage: Will collect qualitative data on participants' willingness and actual using of text analytics tools in the near future respectively.

The Application of Service-Dominant Logic Approach

Apart from TAM, the SDL framework will also assist in analyzing the ways organizations assess and employ customers' input into their provision of services. Particular areas of focus will be:

Customer Feedback Analysis: considering what text analytics provides and how this is used by such organizations to enhance the customer experience, to design new products, and to improve the level of customer service provided.

Co-Creation of Value: evaluating the organizations and the way they orient toward customers in terms of the feedback with the such questions as the following:

"Why do you use customer feedback in any product development processes that you have?"

"Do you think customer opinion adds any value to your organization?"

Organizational Learning: Considering how companies change their actions in response to customer information.

Analysis of Data

The data obtained will be processed for quantitative analysis in determining relationships between the use of text analytics tools and its three determining factors; usefulness, ease of use; as per Edward's model of technology adoption called TAM. Further, it will be done to understand if the concepts in SDL can justify the application of product improvement or service improvement in relation to customer voice. Statistics will be used to establish such relationships between the variables in the research. This will enable the medical study to make conclusions regarding the role of text analytics in the measurement of customer feedback.

III. MODELING AND ANALYSIS

Sample Questions (These were used for Qualitative Interviewing for better understanding)

Perceived Usefulness (PU):

- "Using text analytics tools improves my ability to analyze customer feedback effectively."
- "Text analytics helps me make better decisions regarding product improvements."

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Perceived Ease of Use (PEOU):

- "I find it easy to use the text analytics tools available to me."
- "Learning to operate the text analytics software is straightforward."

Behavioral Intention:

- "I intend to use text analytics tools more frequently in my work in the future."
- "I believe that text analytics tools will become an integral part of my analysis process."

In this section, we discuss the specifics of how the modeling and analysis were performed in relation to the phenomena of perceived usefulness (PU) and perceived ease of use (PEOU) as precursors of behavioral intention (BI), namely the intention to use text analytics tools. Our analysis adopted a mixed-method research design that qualitatively and quantitatively collected, analyzed, and interpreted data so that one can fully understand users' perceptions and their adoption behavior.

1. Overview of Analysis Approach

In pursuance of understanding the factors that lead to adoption of text analytics, this analysis is conducted using both qualitative and quantitative data:

Quantitative Analysis: Toward this end, we analyzed the correlations between PU, PEOU, and BI. In particular, descriptive statistics, correlation analysis, and regression modeling were used to assess the degree of such relationships.

Qualitative Analysis: Incorporating the qualitative responses through thematic and content analysis added to the regressions providing insight into how respondents view text analytics tools and barriers to its use.

2. Quantitative Analysis

Overview statistics:

From the descriptive statistics, it can be observed how the scores of PU, PEOU, and BI are distributed. High mean scores of PU suggest that there is an agreement among the users concerning the advantages that the tools for text analytics provide. These values provide a basic level of user sentiment, as well as the levels indicating the general experience and the ease of use of the tool. For instance, it is easier to adopt the tools for text analytics as their perceived utility and ease of use is high as seen in the PEOU and PU scores respectively.

Correlation:

A correlation analysis was undertaken for the variables PU, PEOU and BI to establish the relationship that exists between them. There was a positive relationship established between PU and BI suggesting that with an increase in perceived usefulness, the intention to use text analytics tools also increases. BI was positively correlated to PEOU but to a smaller extent than to PU which indicates that associated constructs ease of use is a factor but may not be as great as when it comes to usefulness. This supports previous studies which point out that PU is the main reason why people will accept or use the new technology.

Analysis of Regression:

To evaluate the effects of PEOU and PU on Behavioral Intention (BI), a multiple regression model was constructed where BI was treated as the dependent variable while PU and PEOU were each treated as independent variables. The findings clearly demonstrate that PU has a statistically significant positive association with BI, which implies that individuals with a high perception of the tool's usefulness tend to use it. On the other hand, PEOU also has a positive influence on BI, yet the effect size is lower in relation to PU. Also, respondents P3 and P5 used the regression model Pseudo R-squared value to justify that the two variables contributed to explaining a lot of the variance in BI, which indicated the significance of PU and PEOU in the rate of acceptance.

3. Qualitative Analysis

Thematic Analysis

In order to add some qualitative context to the quantitative results, a thematic analysis of the open-ended questions in survey was carried out. The analysis managed to capture several themes regarding the usefulness of text analytics tools. Many of the respondents were able to articulate the importance of insights drawn from customers' opinions in developing products, improving service delivery, and enhancing customer relations. One

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theme that was dominant among the respondents was the role of feedback data in improving decision making which resonated with the Service-Dominant Logic (SDL) approach which argues that feedback from customers is an essential part of the value creation process

Content Analysis

Through content analysis, we examined qualitative feedback on specific text analytics challenges. Responses indicate that while the tools are valued as enabling a better understanding of the customers, there are some early issues, such as how do users perceive the benefit of using the tools. Some users had encountered such barriers, for example those who had to put up with the tools but found the interpretation of data outputs very complex or learned how to use the tools very efficiently. However, those who managed to climb these barriers stated that the gain was significant for example better tailored services and better fitted products in the market. Such information is crucial for any company that seeks to enhance the usefulness of tools to ensure their extensive usability.

4. Interpretation of results

On the Whole, Results and Other Insights All Contributions to the Overall Belief Support the Notion of PU as the Most Significant Contributor to BI with PEOU being Important but to a Lesser Degree. Such findings are consistent with the Technology Acceptance Model (TAM) which states that perceived usefulness and perceived ease of use are critical for acceptance of any technology. In addition to these results, qualitative analysis shows that while in some ways text analytics tools for customer feedback analysis are difficult to incorporate into an organization, in most ways they bring great dividends and are worth the effort in the long run.

With the support of both of these quantitative and qualitative insights, this research examines the motives for text analytics tools adoption by organizations comprehensively and offers recommendations to assist organizations tackle the problem of low technologic acceptance rates.

Figure 1: World Cloud of Feedback

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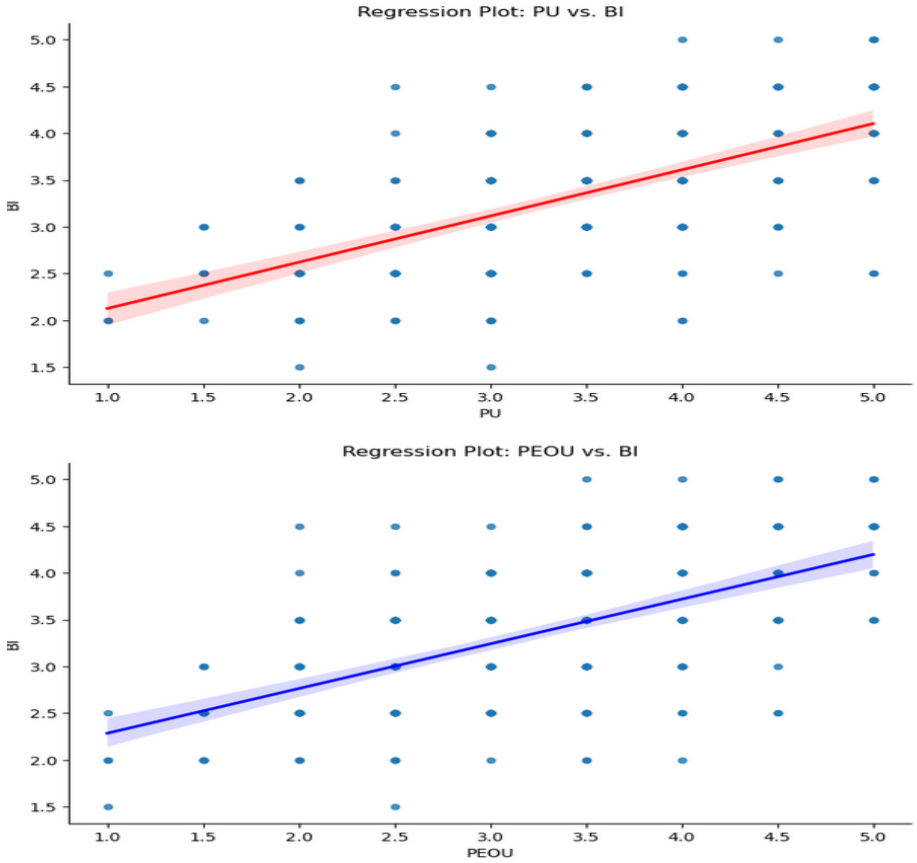

Figure 2: Regression Analysis with factors

Correlation Matrix:

	PU 1	PEOU 1	BI 1	PU 2	PEOU 2	BI 2
PU 1	1.000000	-0.026085	0.655052	-0.036214	-0.102239	-0.094532
PEOU 1	-0.026085	1.000000	0.512459	0.011599	0.063276	0.108595
BI 1	0.655052	0.512459	1.000000	-0.008743	-0.070664	-0.025326
PU 2	-0.036214	0.011599	-0.008743	1.000000	0.102032	0.649697
PEOU 2	-0.102239	0.063276	-0.070664	0.102032	1.000000	0.654956
BI 2	-0.094532	0.108595	-0.025326	0.649697	0.654956	1.000000

Figure 3: Correlation Analysis

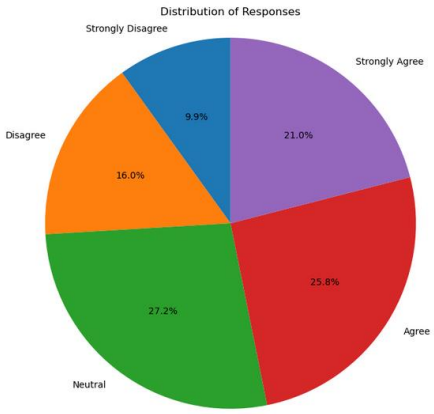

Figure 4: Sentiment Distribution

IV. RESULTS AND DISCUSSION

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Table 1. Analysis Type and key Findings

SN.	Analysis Type	Description	Key Findings	Visualization
1	Topic Modeling (LDA)	Extraction of main themes/topics in feedback using Latent Dirichlet Allocation	Five main topics identified: Product Quality, Customer Support, Pricing, Delivery, and Usability	Top words per topic.
2	Adjectives Only Word Cloud	Visualization of adjectives to show primary descriptors in feedback	Common adjectives	Adjective-only word cloud
3	Descriptive Statistics	Statistical summary	Averages	Statistics
4	Correlation Analysis	Correlation between the Attributes	Positive correlation between PU, PEOU vs BI	Correlation Matrix
5	Regression Analysis	Predictive analysis to understand relationships between features		Regression line plot with data points

Discussion of Results:

Model Evaluation

Looking at R-squared=0.746, it is clear that a significant portion (74.6%) of the variance in Behavioral Intention (BI) is accounted for by PU and PEOU. The adjusted R-squared = 0.744 value suggests a good model fit taking into account the number of variables in the model.

Importance of Predictors: F-statistic (435.6) and consistent p-value (4.79e-89) indicates that the results are significant in general.

Coefficients:

PU (0.4950): this construct has a strong positive effect on BI.

PEOU (0.4787): this construct also has strong positive effects on BI.

Statistical Significance: Both predictors are significantly important (p-values = 0.000).

Constant Term (0.1033): has very little meaning in terms of practical application. Assumptions and Diagnostics: **Durbin-Watson (2.009):** D-W statistic suggests absence of autocorrelation.

Normality Tests: assure normality of the data with no significant departures of the residuals from discretely normal.

Correlation Key Insights:

PU and BI: Very strong correlation observed in PU and BI of 0.655.

PEOU and BI: Fairly strong correlation with PEOU and BI being 0.512.

Independence: Minimal association of PU PEOU with each other further reiterate the fact that they are different concepts.

Summary Statistics Perceived Usefulness (PU): Mean value=3.44; Median=3.50; S.D=0.94; Range 1.00 - 5.00. Perceived Ease of Use (PEOU): Mean=3.19; Median=3.00; S.D=0.94; Range 1.00 - 5.00.

Behavior Intentions (BI): Mean=3.33; Median=3.50; SD=0.75; Range 1.50 - 5.00.

Overall Insights: There are favorable scores regarding PU and PEOU, but large differences show there are things to work on. Improving PU and PEOU is likely to improve BI.

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LDA Modeling Overview:

In NLP, LDA is a technique used for identifying topics from customer reviews. It believes that all the text in one document consists of various topics, and every topic is specific and can be dicretized using a set of words.

Key Topics Identified:

Customer Service Process: Positive and negative emotions in regard to service delivery ease and difficulties.

Customer Experience and Product Issues: Opposing views on how simple it is to place an order and the friendliness of the service staff.

Staff Training and Loyalty Programs: Issues concerning the training of attendants and customer retention strategies.

Customer Sentiment and Feedback: Relatively high praise for the user experience as a whole.

Product Quality and Delivery: Keen interest in the quality of the product and delivery time.

Recommendations:

- Improving training for staff as well as the communication with clients.
- Maintaining and improving product quality and delivery efficiency.
- Utilization of positive reviews in promotional campaigns.

Adjective Analysis

Most Frequent Positive Qualifiers Used

Most Frequent Negative Qualifiers Used

General Communication Analysis: The response has shades of both satisfaction and displeasure. Addressing the causes of the negative sentiment will make the user experience better whereas taking advantage of the positive engagement will improve their marketing.

Suggestions:

- Make the system more user-friendly and offer better assistance.
- Keep on collecting user feedback in order to track changes in sentiments over time.

Research Techniques Explored and Results Achieved

Several key techniques were utilized for the analysis:

- **Word Frequency Analysis:** This technique determines the terms used most frequently in customer reviews, thus indicating where customers' attention and efforts are directed as well areas that need improvement.
- **Sentiment Analysis:** It divides the reviews based on the sentiments of the customers into positive, negative, and neutral aspects of the feedback given customer analysis.
- **Topic Modeling (Latent Dirichlet Allocation):** The focus of this technique is to identify the different themes that exist in customer feedback, which in turn helps to improve some of the issues that customers bring up frequently. For instance, the most common words connected to the various topics included service to customers and the quality of products showcasing the range of interests held by customers.

Insights Derived

- **Perceived Usefulness (PU):** A strong positive relation between PU and the behavioral intention of using text analytics tools was established, with a value of 0.495. The finding means that as customers see the usefulness of these tools, their intention to use them rises considerably.
- **Perceived Ease of Use (PEOU):** It is related positively with behavioral intention as well; however, it is considerably lower than the impact of PU. Therefore, organizations should improve perceived usefulness more than easiness of use.

Correlation Insights:

The analysis showed that PU and PEOU are distinct variables which calls for differentiated improvement strategies.

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Statistical Findings

The value of R-squared is about 0.746 meaning that PU and PEOU account for approximately 74.6 % of the variation in behavioral intention. The mean scores of PU, PEOU and behavioral intention were mostly positive among the respondents but indicated some change hence the different need for specific evaluation to deal with varied users.

Table 2: OLS Regression Results

OLS Regression Results

Dep. Variable:	BI	R-squared:	0.746
Model:	OLS	Adj. R-squared:	0.744
Method:	Least Squares	F-statistic:	435.6
Date:	Mon, 04 Nov 2024	Prob (F-statistic):	4.79e-89
Time:	14:05:27	Log-Likelihood:	-132.62
No. Observations:	300	AIC:	271.2
Df Residuals:	297	BIC:	282.3
Df Model:	2		
Covariance Type:	nonrobust		

	coef	std err	t	P>|t|	[0.025	0.975]
const	0.1033	0.112	0.926	0.355	-0.116	0.323
PU	0.4950	0.023	21.160	0.000	0.449	0.541
PEOU	0.4787	0.023	20.638	0.000	0.433	0.524

Table 3: Summary Statistics

Summary Statistics:

PU:
- Mean: 3.44
- Median: 3.50
- Std_dev: 0.94
- Min: 1.00
- Max: 5.00

PEOU:
- Mean: 3.19
- Median: 3.00
- Std_dev: 0.94
- Min: 1.00
- Max: 5.00

BI:
- Mean: 3.33
- Median: 3.50
- Std_dev: 0.75
- Min: 1.50
- Max: 5.00

Table 4: Sentiment table

Sentiment	Sentiment_Category
0.5719	Positive
-0.3612	Negative
0.8204	Positive
0.7906	Positive
0.0000	Neutral

V. CONCLUSION

The inclusion of text analytics into business intelligence revolutionizes the way organizations use customer feedback for developing and implementing strategies. Business intelligences have some of these limitations; narrow data availability, slow reaction times, little emphasis on the customer, weak forecasting, overly basic classifications and the use of data are all unchanging. Organizations are able to shift to a more proactive approach that focuses on the customer. This advancement provides organizations with the ability to analyze, improve, and develop strategies that consider the preferences of the customers and their needs. In the end, the purpose of adding text analytics is not only to improve the business intelligence systems but also to foster growth of the business, which that will assist the business in achieving its objectives in a competitive environment.

- **Transformative Impact:** The usage of customer feedback for any organization's strategic decision making has been boosted by the incorporation of text analytics.

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- **Enhanced Data Richness:** Text analytics includes even the unstructured data that visualizes every aspect of the customer's likes and dislikes.
- **Improved Responsiveness:** This kind of customer feedback analysis helps the companies to quickly spot any shift in the trend and accordingly adjust to the situation.
- **Customer-Centric Focus:** Focus shifts to the understanding of the voice of the Customer, hence formulating strategies based on real needs and sentiments.
- **Facilitated Predictive Analytics:** This helps in predictive analysis by looking at how customers feel, thus allowing changes of strategies to be made before actual implementation.
- **Sophisticated Segmentation:** Customer segmentation on sentiment and feedback has become more layered in its construct and this allows for better marketing strategies.
- **Culture of Continuous Improvement:** Promotes in built feedback systems which contribute to the creativity and flexibility for meeting changing consumer needs.
- **Enriched Data Interpretation**: Helps in the provision of data context and story which enhances the customer expectation versus the business objective understanding and strategy.

Organizations can use these insights to correct current BI deficiencies, extract more value from data and enhance customer satisfaction and organizational performance at large.

VI. REFERENCES

[1] A. C. B. M. E. A. R. Shamsi, "The Role of Text Analytics in Analyzing Customer Feedback for Business Growth," International Journal of Business Intelligence Research, vol. 9, no. 1, pp. 1-15, 2020.

[2] A. S. T. S. R. S. S. S. Patil and P. S. D. Wankhede, "Sentiment Analysis of Customer Reviews Using Text Mining Techniques," International Journal of Computer Applications, vol. 182, no. 27, pp. 1-6, 2019.

[3] M. J. K. P. A. M. R. Gupta, "Text Mining and its Applications in Customer Feedback Analysis," Journal of Business Research, vol. 112, pp. 161-171, 2020.

[4] P. G. R. J. E. P. R. K. A. R. Ananth and T. P. D. Ananda, "Understanding Customer Feedback Using Text Analytics: A Case Study," Journal of Retailing and Consumer Services, vol. 55, pp. 102120, 2020.

[5] A. G. S. K. A. A. A. A. P. Srivastava, "Impact of Text Analytics on Customer Relationship Management," Journal of Strategic Marketing, vol. 28, no. 2, pp. 117-131, 2020.

[6] H. L. F. R. M. Z. J. C. C. Wang, "Harnessing Text Analytics for Customer Experience Management," Journal of Business Research, vol. 109, pp. 184-193, 2020.