

A Conceptual Study of Employee Sentiment Analysis (ESA)

Dr. Pravin Vitthal Yadav

Assistant Professor, AES's Anekant Institute of Management Studies (AIMS), Baramati

Abstract

The aim of this study is to provide comprehensive information of Employee sentiment analysis techniques for employee engagement. This is conceptual research wherein secondary has collected from books, research articles, blogs etc. on concept of employee sentiment analysis and employee engagement, types of sentiment analysis and process of employee sentiment analysis. In this paper, the researchers have mainly focused on the understanding vital role of employee sentiment analysis for employee engagement. The researchers have also studied various models of employee sentiment analysis. This is the conceptual paper and it states the theoretical background of the employee sentiment analysis.

Keywords: Employee Sentiment Analysis, Employee Engagement.

Introduction:

Employee Sentiment Analysis (ESA) requires collecting employee input, views and opinions to capture, quantify, and evaluate their opinion of their jobs and the entire company.

Employee Sentiment Analysis is a technique of text analysis, also known as opinion mining, that defines polarity within the text, whether a whole document, paragraph, sentence or clause (e.g. a positive or negative opinion). Textual content also holds fundamental data about how the workers feel about their workplace. Analysis of sentiment by applying various forms of text from analytical models such as emails, social media messages, emojis, likes or dislikes, digital memos, etc. to derive these insights. This is where instruments for sentiment analysis come in. Analysis of sentiment transforms unstructured communication among employees into actionable insights. Tools and methods for the study of emotion play a key role in recognising the emotions of workers in the workplace and how much they are attached to or loyal to the company. Currently, it may just be the solution to the issue of employee engagement. For most companies, real employee engagement remains a mystery in today's competitive era. The key explanation behind this is that conventional engagement assessment instruments for companies, namely employee surveys and manually checked feedback platforms, are not sufficient for having a full picture of what workers actually feel at work. Employee sentiment analysis, however, interprets vast quantities of input to expose organizational strengths, limitations and to distinguish positive and negative feelings against any policy, process, decision, management practises or culture of the workplace.

How it works: The technology of sentiment analysis is mainly used in conjunction with social media in marketing. This is used by businesses to check for brand mentions from social media, understanding the positive or negative connotations behind customer posts. In addition, leading companies perceive their employees as internal consumers in an employee-centric environment. It makes sense, however, to apply sentiment analytics to engage the workforce and boost the results. Sentiment analysis is still at a nascent stage and may not be useful in assessing employee sentiment accurately. Having said that, at least some of the guesswork involved with what workers experience at work can be avoided by organisations.

To gather and analyse employee sentiment data at a sufficiently large scale, many organizations have started using of employee sentiment analysis software that uses artificial intelligence and technology for machine learning to automate the process. This technology enables organizations to send open-ended surveys among employees and they can answer these questions in words of their own. NLP (Natural Language Processing) tools then review each response, interpret the sentiment behind the words and provide the authorities with a comprehensive report. The software uses NLP to determine if the sentiment in combinations of phrases and terms are positive, neutral or negative, and a numerical sentiment score is applied to each employee comment. After these scores are aggregated, they're presented visually to authorities and through the use of data visualization. Being able to visualize employee sentiment certainly supports leaders improve employee engagement and the corporate culture. They can also use the data to increase their performance management process, focusing on enhancing the employee experience. Organizations can program sentiment analysis tools to assess how dedicated their workers are throughout the day. Email-based sentiment analysis, for instance, can recognise precise terms and phrases and help infer observations gleaned from departmental or individual emails. In addition, this information can then be used by companies to fix particular concerns or implement company-wide improvements.

Sentiment Analysis Forms:

The methodology of sentiment analysis focuses on polarity (positive, negative, neutral) on emotions, thoughts (angry, happy, sad, etc.) and even intentions (e.g. interested v. not interested). Here are some of the most common kinds of analysis of sentiment:

1. Fine-grained Sentiment Analysis

This tests an organization's polarity accuracy. Categories for polarity include:

- Very positive
- Positive
- Neutral
- Negative
- Very negative

This is generally referred to as the study of fine-grained sentiment, and in a summary, for example, it may be used to analyse of 5-star ratings:

- Very Positive = 5 stars
- Very Negative = 1 star

2. Emotion detection

This form of study of feelings aims to detect emotions, such as happiness, annoyance, rage, sorrow, and so on. Lexicons (i.e. lists of words and the feelings they transmit) or complicated machine learning algorithms are used by many emotion detection systems.

One to the downsides of using lexicons is that feelings are conveyed in various ways by people. Some terms that usually express rage, such as bad or killing (for example, the conduct of the superior is so bad or the atmosphere of the workplace kills me) can Express pleasure as well (e.g. this is bad ass or you are killing it).

1. Aspect-based Sentiment Analysis

For one element of a service or product, this sentiment analysis approach is. For example, the compensation policy of the Company uses this type of sentiment analysis, it may be about one aspect of compensation policy such as adequacy, equity, procedure, etc., so that they may understand how employees feel about specific characteristics of the specific position.

2. Intent sentiment analysis

This form is a deeper knowledge of the employee's purpose. For instance, an organisation may predict whether or not a worker plans to continue and work for a long life. This implies that it is possible to track the intent of a specific employee, form a trend, and then use it for retention strategies.

For these different forms of sentiment analysis, multiple approaches are used. There is a rule-based, automated and hybrid approach. Analysis of rule-based sentiment is more rigid and may not always be exact. It contains the routine for natural language processing (NLP). Automatic sentiment analysis, on the other hand, is more comprehensive and in-depth.

To decode the feedback provided by each worker, machine learning is used. The hybrid framework incorporates methods that are both rule-based and machine learning. First, from a set of tagged instances, the model learns to detect sentiment. Then, to enhance precision, it contrasts the outcomes with a lexicon. With none of the drawbacks of each individual strategy, the aim is to achieve the best possible result.

Modern Business Climate Sentiment Analysis

Sentiment analysis is a novel concept that derives valuable insights into the attitude and thoughts of workers by observing how they communicate in the office environment.

Sentiment analysis can recognize whether he/she is happy or unhappy with what he/she is doing in a company by keeping a close eye on his/her language, tone, and interests in contact through email and other channels.

Language is how a person communicates his/her thoughts to others. Using sentiment analysis, businesses can mine the underlying data for their own benefit in any phrase, interaction and correspondence.

Sentiment analysis enables businesses to interpret and categorise vast volumes of textual data based on the feeling or attitude with which it has been generated. Organizations may assess the mood of workers within a group, office or location through the use of organised data and create practical strategies that improve employee engagement.

While this technology offers many advanced solutions for HR, it is not a complete substitute for face-to-face contact. It can also be difficult to understand stuff like sarcasm, jargon, and skilled comments, and nuanced mixed views (which people also have) are difficult to understand. But the beauty of machine learning is that the more data you feed them, the smarter the instruments evolve.

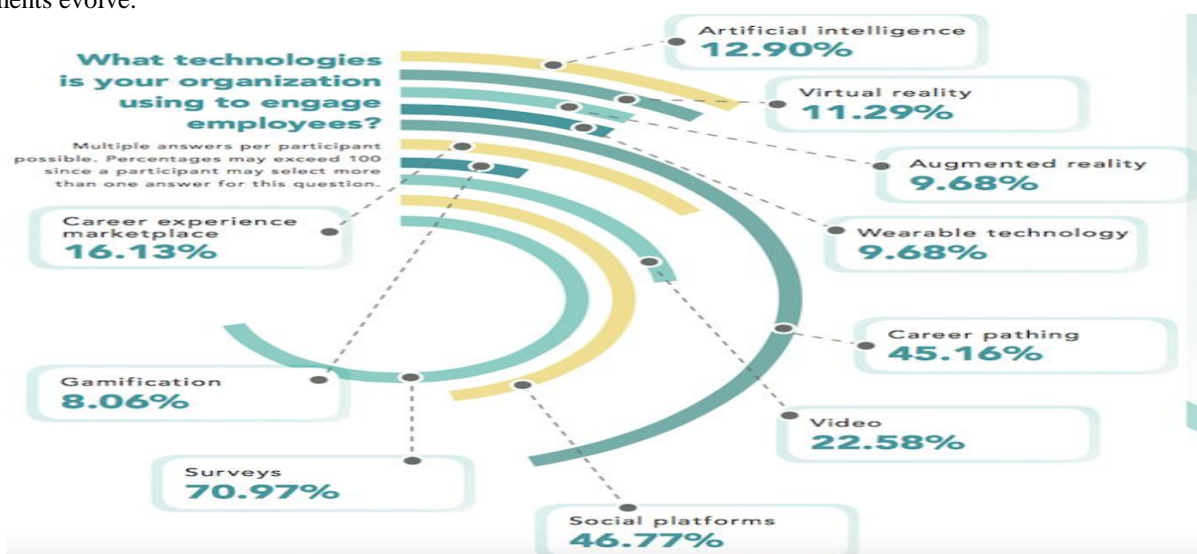


Fig. 1 AI technology to enhance employee engagement

(Source: <https://www.thepeoplespace.com/practice/articles/were-more-machine-now-man-hr-and-digital-journey>)

Importance of Employee Sentiment Analysis:

As employee turnover rates increase, annual performance reviews and surveys don't provide enough information for organizations to get a true understanding of how employees feel about them. That's where employee sentiment analysis comes in. Employee sentiment analysis provides a number of important capabilities, including:

- Helping organizations take the necessary steps toward change when they discover that employees are dissatisfied with how the company is handling key issues such as employee performance, productivity and customer service.
- Encouraging transparency and more open communication. When a company takes corrective actions to reassure employees that their opinions matter, it results in transparency, better communication and higher employee engagement.
- Providing an accurate picture of employee opinions. People learn about the least desirable companies to work at from former and current employees. Employee sentiment analysis can help organizations evaluate whether these opinions are based on inaccurate perceptions. If an inaccurate opinion is harming the company's image, human resources personnel can take actions to foster more positive impressions.
- **analysing emails** - This is one of the most renowned ways to combine sentiment analysis within the cultures of workplaces. To assess how committed workers are during the day, sentiment analysis instruments can be configured. The email-based sentiment analysis tool can benefit to infer observations based on departmental or individual levels by recognising precise terms and phrases. Such informative information may then be used to resolve particular concerns or implement organizational-wide improvements to strengthen the community.
- **Gauging Intent from Comments on Public Platforms-** A great way to use the technology of sentiment analysis is to draw inspiration from the reviews and comments shared by workers on the public channels of the business, inter* net or performance appraisal platforms. Machine learning software can analyse the data connected to social commentary to recognize the elementary sentiment and attitude of the workers.
- Sentiment analysis may categorise feedback to generate a general impression of how committed and happy workers are on the job by defining negative or positive issues.
- **Analysing Employee Feedback-** It is a common practise among businesses to gather input from workers on various aspects, such as work culture, workplace climate, relationships with colleagues and what they experience when working. Sometimes, this system of listening to the staff is not accompanied by substantive decision making as companies lack the technologies to analyse the vast amount of unstructured data.

Conclusion: This is the conceptual study mainly focuses on the concept and techniques used in the field of Employee Sentiment Analysis. Researcher have noted important types of Employee Sentiment Analysis, namely Fine-grained, Emotion detection, Aspect-based and Intent sentiment analysis. The contribution of this study takes a brief look at importance of employee sentiment analysis from the HR perspective. It enables HR to make use of the organization's unstructured, qualitative data by deciding whether, and to what degree, it's positive, negative or neutral. Qualitative data covers remarks, suggestions on boarding and off boarding, probation reviews, performance reviews, compliance with policies, employee target discussions and organisation feedback requests. It helps HR to more easily and effectively obtain useful insights about what employees think about the organization by analysing how they communicate in the office environment. It also allows HR to keep a close eye on the language, tone and desires of employees in email messages and other platforms to assess whether employees are happy or dissatisfied with their role in the company. This paper would be useful for new researchers and who has a desire to work in sentiment analysis field.

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