Investigating Employee Satisfaction and Corporate Performance: Mining From Employer Branding

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This study investigates the relationship between employee satisfaction and corporate performance using data mining techniques on anonymous employee feedback. The study tries to determine how employee satisfaction affects company performance. Textual analysis of employee reviews was carried out using a data mining approach in order to find relationships between satisfaction and performance. The investigation highlighted major employee satisfaction elements such as salary and benefits, work-life balance, workload, career development, and management, all of which have a significant impact on business success. Interestingly, work-life balance and workload were found to be negatively correlated with performance. These findings offer useful insights for employer branding efforts, underlining the need of addressing certain components of employee happiness in order to improve overall corporate performance.

Keywords: *Employee Satisfaction, Data Mining, Salary and Benefits, Work-life Balance, Career Development*

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1. INTRODUCTION

Employee satisfaction is a critical factor in determining the overall performance of a corporation (Huang et al., 2015). Satisfied employees are more likely to be engaged, committed, and productive, which can lead to better business outcomes (García-Buades et al., 2020). On the other hand, dissatisfied employees can negatively impact the organization's performance through decreased productivity, increased absenteeism, and higher turnover rates (AlBattat & Som, 2013). Research has shown that employee satisfaction positively correlates with corporate performance, indicating that a satisfied workforce can contribute to better business outcomes (García-Buades et al., 2020). One study found that employee satisfaction is a significant predictor of corporate performance, with satisfied employees contributing to higher levels of performance (Berliana, Siregar & Gustian, 2018). Another study revealed that employee satisfaction is positively correlated with customer satisfaction, which in turn is linked to better financial performance (Chi & Gursoy, 2009).

However, it's important to note that the relationship between employee satisfaction and corporate performance is not straightforward. Job design, leadership, and organizational culture can influence the relationship between employee satisfaction and corporate performance (Raharjo & Fernandes, 2018). Employee satisfaction is positively connected with business financial performance, as shown by existing studies (e.g., Edmans, 2011); however, these studies do not delve deeply into data on employee-specific satisfaction; thus, their results are limited. Big data analytics can further study the relationship between employee satisfaction and corporate performance by analyzing large data sets to identify patterns, trends, and correlations (Larasati et al., 2023; Guiso, Sapienza, and Zingales, 2015). This can help organizations better understand the factors influencing employee satisfaction and how they impact corporate performance.

Big data has opened numerous avenues for study across the social sciences, including economics, finance, and politics. Information gleaned from social media has been utilized to improve box office forecasts (Zhou and Duan 2015) and yield novel insights into customer tastes (Balaji, Annavarapu & Bablani, 2021; Lassen, Madsen, and Vatrapu 2014). Voters' preferences in a political contest appear in (Karami et al., 2020; Buccoliero et al., 2020). Edmans (2011), for instance, discovered that businesses recognized as among the "100 Best Companies to Work for in America" also tend to do better. The Tobin's Q of a company rises when its leaders are seen as honest and trustworthy (Guiso et al., 2015).

In this research, we make a quantitative contribution to a developing area by using Jobstreet's employer branding data to mine employee evaluations in confidentiality. As such, Big Data approaches can help researchers and practitioners better understand the relationship between firm performance and unconventional indicators that can drive company ratings, such as individual employee comments regarding job satisfaction (Larasati et al., 2023; Guiso et al., 2015). Using data mining techniques, this study is the first to dig into the connection between job satisfaction and firm performance.

This study also demonstrates substantial enhancements over earlier research approaches, particularly research that is still heavily based on survey data. Despite the validity of well-designed survey instruments, such approaches may have low response rates and incur high costs when applied to large-scale, cross-industry surveys. Moreover, researcher flexibility is limited by the rigidity and closure of individual surveys, preventing preliminary exploratory studies. In this way, our method suggests several fresh avenues for future study.

There are three merits to our method for gauging employee satisfaction at the company. Firstly, it does not reflect the organization's stated ideals but rather the employees' impressions of the company and its leadership. Secondly, our metric incorporates the opinions of over a hundred workers from various firms, allowing for an in-depth investigation. Thirdly, researchers have access to employee satisfaction ratings on the Jobstreet website. This can ultimately lead to more informed decision-making and improved business outcomes.

2. LITERATURE REVIEW

Organizational Behavior Theory

Organizational Behavior (O.B.) Theory focuses on understanding the behavior of individuals and groups within an organizational context (Presthus, 1958). It comprehensively explains how people interact and work together in organizations (Mowday & Sutton, 1993). The theory is concerned with understanding the factors influencing behavior, such as motivation, leadership, group dynamics, and organizational culture. It also explores the impact of these factors on organizational performance and effectiveness (Erkutlu & Chafra, 2022). O.B. is a field of study that examines individual and group dynamics within an organizational context. It encompasses various theories and concepts relevant to understanding workplace phenomena such as salary & benefits, career development, and working environment. These interconnected factors can significantly impact employee satisfaction, engagement, and performance.

Human resources professionals use O.B. to understand the behavior of employees and design policies and practices that promote positive behavior and productivity. For example, the ability motivation opportunity theory in O.B. suggests that an individual's behavior is influenced by their ability to perform a task, their motivation to perform that task, and the opportunities available to them to do so (Malik et al., 2021). Employees are an important resource for any business. It has been shown in several studies that businesses that invest more in their human resources and prioritize the satisfaction of their employees perform better (Ahmad & Raja, 2021; Siripipatthanakul et al., 2022). Surveys and publicly available data sets like GPTWI and "Best Company" ratings are often used to determine employee satisfaction. This method has its challenges. They draw narrow findings and generalizations due to non-trivial selection bias. Moreover, they need to investigate the finer points of what drives employee happiness. Social media data mining is one method to work around this restriction.

Employer Branding and Jobstreet.com Data

The influence of social media has been felt strongly in many areas. Sales and stock price movements can be forecasted using public opinion data and consumer sentiment from sources, including online reviews and tweets (Balaji et al., 2021; Salloum et al., 2017; Lassen et al. 2014). Companies can keep records of public opinion using social media data, and customers can learn about the pros and cons of a product in the aggregate, which can only help them make a more informed buying decision (Abrahams et al. 2013). Research into employee satisfaction and the value of a company can benefit greatly from the wealth of information available on social media. The website Jobstreet is one example. In 1997, Jobstreet.com was established in Malaysia. 2014, the site was officially registered as SEEK Limited on the Australian Stock Exchange, making it the world's largest job information provider. Jobstreet is a platform where current and former employees can provide feedback on their workplace environment in an anonymous manner. Jobstreet is a platform for promoting the company online. According to Moniz (2017), Jobstreet attracts a wide range of people due to the site's inclusive nature.

Very little has been done to use social media to study employer brands as a data source. Between 2008 and 2012, Huang et al. (2015) used 102,888 employee ratings from 993 publicly traded U.S. corporations. They discovered a link between employee satisfaction and a company's market value (as assessed by Tobin's Q), and that link was statistically significant. Overall satisfaction, career prospects, salary and advantages, work-life balance, approval from seniors, management on corporate governance, and the CEO all feature prominently in their analysis.

Salaries and Benefits Impact Firm Performance

Salaries and benefits can have a significant impact on firm performance. For instance, the gender pay gap can affect firm profitability, with unions playing a role in this relationship (Dugardin & Ginglinger, 2019). Salaries and wages spending, donations, and employee welfare funds have also been found to have a relationship with firm financial performance (Lakshitha & Perera, 2016). Environmental, Social, and Governance (ESG) practices, which can include salaries and benefits, have been found to enhance firms' financial performance (ROA, ROE, TobinQ) in the context of the U.S. market (Nguyen, Hoang & Tran, 2022).

Work-Life Balance Impact Firm Performance

The relationship between work-life balance (WLB) and firm performance is complex and can be influenced by various factors (Shouman, Vidal-Suñé & Alarcón Alarcón, 2022). Other studies suggest that providing opportunities for improving the work-life balance of employees can lead to higher job engagement, commitment, and better job performance, which in turn can positively impact firm performance (Jaharuddin & Zainol, 2019). Work-life balance policies, such as flexible work arrangements and family-friendly policies, have been found to benefit companies by improving talent retention, increasing employee engagement, and contributing to higher productivity, lower costs, and better business results (Benito-Osorio, Muñoz-Aguado & Villar, 2014).

Workload and Stress Levels Impact Firm Performance

Workload and stress levels have a significant impact on firm performance. Studies have shown that the amount of work and stress experienced on the job can influence employee performance (Siamsa & Aprilius, 2023; Siswadi et al., 2024). High levels of workload and stress can lead to decreased productivity, lower job satisfaction, and increased turnover, which can negatively impact firm performance (Winchester, 2019). On the other hand, effectively managing workload and stress can lead to increased performance and productivity and improved employee well-being (Winchester, 2019).

Career Development Impact Firm Performance

Studies have shown a positive relationship between employee career development and performance (Bhagwat, 2006). When the career development process becomes the joint responsibility of both the employee and the firm, the impact can become more substantial, leading to desired outcomes (Bhagwat, 2006). Talent management, including career development, has been found to significantly influence employee productivity and retention (Krishna & Kumar, 2022). Proper human resource management practices, such as opportunities for career development, have been linked to increased firm performance (Hosain, 2015).

Work Culture Impacts Firm Performance

Work culture can significantly impact firm performance. Organizational innovativeness and innovation culture have been found to positively impact firm performance, with innovation culture playing a moderating role in the relationship between innovativeness and firm performance (Strychalska-Rudzewicz & Rudzewicz, 2021). A learning organization culture can help businesses deal with challenges in the current business environment and maintain a competitive edge (Githuku, Kinyua & Muchemi, 2022). Human resource practices and organizational culture can also impact firm performance (Srinivas & Sumaja, 2020).

Working Environment Impacts Firm Performance

Research has shown that the internal working environment, such as the health and safety issues, can directly affect a firm's performance (Tijani, 2013). In addition, the external working environment, such as the regulatory environment and the presence of government officials in corporate positions, can also influence firm performance. The resignation of independent directors holding government positions, as seen in China, has been found to decrease corporate performance due to the loss of political resources that these directors provide (Zhang, Li & Hou, 2022). Moreover, the COVID-19 pandemic has shifted towards remote working, transforming organizational culture and values and affecting overall performance (Raghuram, 2021). An organization's culture is central to its performance, and remote working entails new norms that require employers to engage with employees through frequent communications and reinforce values through reward and recognition mechanisms (Raghuram, 2021). The working environment, both internal and external, can significantly influence firm performance.

Management Impact Firm Performance

Management in this research refers to employees' assessment of corporate governance. Corporate governance, in particular, can moderate the relationship between risk management and firm performance. For example, a study on Southeast Asian companies found that operational and credit risks do not affect firm performance. Still, liquidity risk harms firm performance, which can be reduced by good corporate governance (Naibaho & Mayayogini, 2023). In the context of Pakistan,

a study found that liquidity risk has a negative significant impact on ROA and ROE. In contrast, operational risk has a significant positive relationship with financial performance, but when corporate governance is added as a moderator, there is a significant negative association with financial performance (Shahid et al., 2004). A study in Kenya found that human resource management practices mediate the relationship between corporate governance and organizational performance (Azegele, 2021).

3. RESEARCH METHOD

Various techniques were adopted in this research, including data mining, descriptive statistics, and regression analysis (Figure 1). The first step is data collection & preparation. Corporate selection refers to selecting companies through the Jobstreet.com platform, presumably to gather data related to those companies, such as job listings or company profiles. The next one is the online reviews collection. This involves gathering reviews of the selected corporations from jobstreet.com.

Once the reviews are collected, they must be cleaned and preprocessed to remove irrelevant or redundant information. This is the first review screening or data cleaning. This step ensures that the data is accurate and suitable for analysis. The data collected from this platform forms an important basis for our analysis as part of "Computational Social Sciences" (DiMaggio, 2015). Companies often belong to specific industries or sectors. Categorizing them based on their industry helps organize the data for further analysis. It is also to ensure the accuracy of the subsequent analysis (Chen et al., 2012).

The second step is data mining. Rating extraction of employee satisfaction involves extracting ratings or scores from the collected reviews, specifically those related to employee satisfaction. These ratings could be numerical scores or sentiment-based indicators. Attribute identification of employee satisfaction and specific attributes or factors mentioned in the reviews contribute to employee satisfaction. This could include work culture, salary, benefits, career growth opportunities, etc. The second review screening was done using natural language processing. After the initial data cleaning, a more advanced technique like natural language processing (NLP) is applied to analyze the text data further. NLP helps understand the sentiment, context, and themes within the reviews. It can transform data into more manageable formats in which useful insights can be processed through statistical analysis (Wang & Xu, 2018). Additional categories refer to identifying and extracting additional categories or themes from the reviews that might not have been initially considered but could provide valuable insights.

The last part is data analysis—multiple regression to assess the relationship between customer satisfaction and company performance. Multiple regression analysis is a statistical technique to understand the relationship between employee satisfaction and company performance. By analyzing various factors simultaneously, such as employee satisfaction ratings, company performance metrics, and potentially other variables, the analysis aims to identify which factors significantly impact overall performance.
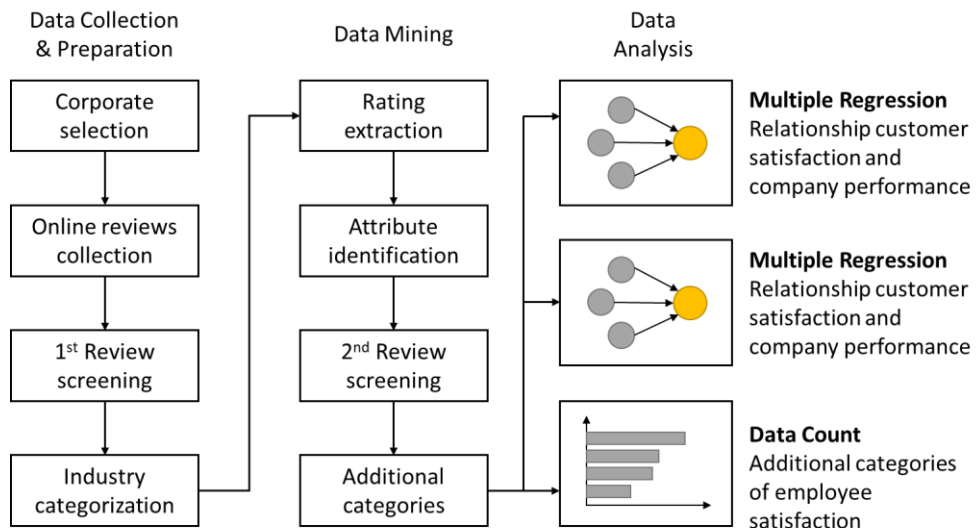
Figure 1. Research Design

Data mining with regression analysis involves using regression models to analyze and predict hidden information from pre-existing datasets. This technique is particularly useful in several fields, such as healthcare. In the context of COVID-19, data mining with regression analysis can consider various parameters such as the name of the states, total cases, today cases, active cases, discharged cases, today discharged cases, overall death, and today deaths to analyze and predict the trends of the disease (Govindarasu, 2021). Furthermore, regression can also be integrated with association mining to create more accurate and efficient data mining models (SuryaNarayana et al., 2021). In education, data mining and regression analysis can be used to analyze the impact of online learning behavior on learning effectiveness. By analyzing data from online learning platforms, researchers can identify which aspects of online learning significantly impact students' performance (Zeng, 2023).

Data Collection from Employer Branding

Over 8 million company evaluations, company ratings, CEO recommendations, and compensation data from around the world may be found on Jobstreet, which features 1,000+ organizations. Jobstreet's reviewers came from a wide range of professional backgrounds, reflecting the diversity of the workforce—everyone from programmers in the tech sector to bankers in the Finance sector. Employee satisfaction was measured using seven distinct ordinal measures, and we also analyzed free-form comments. Several indicators of employee satisfaction are provided for each review on Jobstreet.com. The Overall rating, from 1 to 5, stands out among these indicators. Employees can also rate their employer in seven categories: work-life balance, workload/stress, career advancement opportunities, business culture, and management. Finally, the review has a free-form area where the reviewer can elaborate in their own words on anything else relating to the company or the position.

We built a web crawler to collect feedback data from Jobstreet.com. All of the 126 Indonesian businesses that were highlighted had their reviews evaluated, totaling 42,838. The list will be trimmed of businesses with 250 ratings or more. Our aggregate data set covers nine different business types. Descriptive statistics are provided in Table 1. Regarding the number of reviews, the top five sectors related to technology: are retail, finance, telecommunications, and healthcare.

TABLE 1 / Descriptive Statistics

	Mean	Std. Deviation	N
Corporate Performance	4.243548	0.236589	124
Salary & Benefits	0.681385	0.172888	124
Work-life Balance	0.38595	0.285092	124
Workload/stress level	0.193114	0.116402	124
Career Development	0.648683	0.191822	124
Work Culture	0.803409	0.048342	124
Working Environment	0.775162	0.112917	124
Management	0.490689	0.165571	124

Source: Data Processed, 2024

Regression Analysis

In this section, we estimate a multiple regression model to determine the potential impact of employee satisfaction metrics on firm performance. We estimate the following models:

$$PERF = \beta_0 + \beta_1\ SB + \beta_2\ WLB + \beta_3\ WSL + \beta_4\ CD + \beta_5\ WC + \beta_6\ WE + \beta_7\ M + \varepsilon$$

Where PERF = average firm performance appraisal by employees

S.B. = average assessment of salaries and benefits received by employees

WLB = average assessment of work and life balance felt by employees

WSL = average assessment of workload and stress levels felt by employees

CD = average assessment of career development by employees

W.C. = average assessment of the culture in the company that employees feel

WE = average assessment of the workplace environment felt by employees

M = average assessment of corporate governance felt by employees

4. RESULTS AND DISCUSSION

4.1 RESULTS

This analysis examines how factors related to employee satisfaction influence firm performance, as indicated by the regression results in Table 3. Employee satisfaction, a critical aspect of organizational dynamics, comprises several elements: salary & benefits, work-life balance, workload/stress level, career development, and management. The results suggest that different aspects of employee satisfaction affect firm performance. Specifically, work-life balance (-0.18*) and workload/stress level (-0.189**) have a negative impact. Conversely, the analysis reveals positive impacts from salary & benefits, career development, and management. Higher levels of satisfaction with salary & benefits (0.300***), opportunities for career growth (0.167*), and effective management practices (0.21**) correlate with improved firm performance. Interestingly, the regression model indicates that certain employee satisfaction factors, such as work culture and working environment, do not significantly affect firm performance.

Overall, the regression model incorporating detailed factors of employee satisfaction demonstrates a moderate predictive capability, with the ability to forecast firm performance to the extent of 58.2%. This underscores the significance of considering employee satisfaction as a multifaceted construct and its implications for organizational success. However, while the model provides valuable insights, other external or unaccounted factors may influence firm performance and should be considered in a holistic analysis.

TABLE 2 / Pearson Correlation

	Corp Perf.	Salary & Benefits	Work-life Balance	Workload	Career Development	Work Culture	Work Environment	Management
Corporate Performance	1.000	0.582	-0.553	-0.521	0.493	-0.144	0.122	0.546
Salary & Benefits	0.582	1.000	-0.347	-0.418	0.353	-0.282	0.128	0.364
Work-life Balance	-0.553	-0.347	1.000	0.348	-0.564	0.161	-0.087	-0.451
Workload/stress level	-0.521	-0.418	0.348	1.000	-0.246	0.073	-0.023	-0.459
Career Development	0.493	0.353	-0.564	-0.246	1.000	-0.149	0.078	0.303
Work Culture	-0.144	-0.282	0.161	0.073	-0.149	1.000	-0.022	-0.077
Work Environment	0.122	0.128	-0.087	-0.023	0.078	-0.022	1.000	-0.025
Management	0.546	0.364	-0.451	-0.459	0.303	-0.077	-0.025	1.000

Source: Data Processed, 2024

TABLE 3 / Regression Results

	Model
	Corporate Performance
Salary & Benefits	0.300***
Work-life Balance	-0.18*
Workload/stress level	-0.189**
Career Development	0.167*
Work Culture	0.028
Work Environment	0.056
Management	0.21**
R Square	0.582
Durbin-Watson	1.878

Source: Data Processed, 2024

4.2 DISCUSSION

The research suggests that high-stress levels and an imbalance between work and personal life among employees can negatively impact firm performance (Filbeck, Zhao, and Warnaka 2022). This finding aligns with prior studies that have linked high-stress levels to decreased firm performance (Siamsa & Aprilius, 2023; Siswadi et al., 2024; Winchester, 2019). However, it's important to note that research findings regarding work-life balance's impact on firm performance may differ depending on various factors, as found by Shouman et al. (2022). This highlights the need for addressing and managing these issues to create a healthier and more productive work atmosphere (Lorentzon, Fotoh, & Mugwira, 2023; Gupta, Vasa, & Sehgal, 2024).

Conversely, factors such as fair compensation, opportunities for career advancement, and good corporate management positively affect firm performance (Azhar et al., 2024; Aldousari et al., 2017). The results support prior study firm performance through proxy of career development (Bhagwat, 2006; Krishna & Kumar, 2022; Hosain, 2015), salaries, and benefits (Dugardin & Ginglinger, 2019; Lakshitha & Perera, 2016; Nguyen et al., 2022), and management (Naibaho & Mayayogini, 2023; Shahid et al., 2004; Azegele, 2021). These elements significantly contribute to employee satisfaction, which in turn influences the organization's overall success (Bharadwaj, 2024; Styśko-Kunkowska & Kwinta, 2020).

Interestingly, the study finds that work culture and the working environment do not directly impact firm performance according to the regression model used. These results do not support prior research on work culture to firm performance (Strychalska-Rudzewicz & Rudzewicz, 2021; Githuku, Kinyua & Muchemi, 2022; Srinivas & Sumaja, 2020). And prior

research on working environment to firm performance (Tijani, 2013; Zhang et al., 2022; Raghuram, 2021). While these factors are crucial for employee well-being and employee satisfaction, their direct influence on firm performance might be limited within this specific regression model. Organizations can utilize these insights to devise strategies that improve employee satisfaction, thus potentially enhancing firm performance (Tumasjan et al., 2020).

Organizations can cultivate a more supportive and thriving work environment by prioritizing initiatives to improve work-life balance, manage workload and stress, and bolster positive aspects such as fair compensation, career growth opportunities, and effective management. This approach can lead to better employee satisfaction and improved firm performance (Kuepper, Klein & Voelckner, 2021).

5. CONCLUSION

It can be condluded that employee satisfaction, as measured by employer branding surveys such as Jobstreet, shows incremental intangible value to firm performance in the same platform. Previous research on employer branding platforms and company stock price performance did not show the expected results (Edmans, 2011; Guiso et al., 2015). The results of this study add to the existing literature for employer branding, which mainly focuses on employee review analysis, looking at the impact of ratings based on employee feedback (Larasati et al., 2023; Guiso et al., 2015).

Contributions to Theory

This research has made three major contributions. First, this technique uses the unique data of Jobstreet.com social media to extract anonymous employee feedback for textual analysis, which significantly improves over the standard survey (e.g., Baek & Park, 2019; Sydorenko, Rychok & Oladko, 2022). The data sets allow for multiple in-depth category analyses and cross-industry comparisons. Secondly, we showed that various analyses are feasible when a data mining strategy is employed. Once the dataset's core categories were extracted, it underwent exploratory and regression analyses to reveal hidden patterns and connections (Govindarasu, 2021; SuryaNarayana et al., 2021; Zeng, 2023). Third, it is confirmed through correlation research that there is a favorable relationship between employee satisfaction and business performance results (Erkutlu & Chafra, 2022). We looked more closely at the factors that contribute to employee satisfaction. We found that salaries and benefits, career opportunities, and upper management support all positively correlated with employee satisfaction levels (Azhar et al., 2024; Aldousari et al., 2017). Work-life balance and the amount of stress experienced by employees are negatively related to the company's performance (Filbeck et al., 2022).

Contributions to Practice and Policy

The first one is to improve the feedback mechanism. Our research introduces a novel technique utilizing data from Jobstreet.com social media to extract anonymous employee feedback for textual analysis. This method offers a significant improvement over traditional surveys commonly used in organizational settings (Baek & Park, 2019; Sydorenko, Rychok & Oladko, 2022). This means that organizations can access a wealth of candid employee opinions without the biases often associated with structured surveys. This can inform H.R. policies, performance evaluations, and organizational development strategies.

Secondly, evidence-based decision making for human resources management. Our correlation research confirms a positive relationship between employee satisfaction and business performance outcomes (Erkutlu & Chafra, 2022). Furthermore, we identify specific factors contributing to employee satisfaction, such as salaries and benefits, career opportunities, and upper management support (Azhar et al., 2024; Aldousari et al., 2017). This empirical evidence provides H.R. practitioners with actionable insights into the key drivers of employee satisfaction, enabling them to develop targeted interventions to enhance employee morale, retention, and, ultimately, organizational performance. Thirdly, policy implications for the work environment. Our findings also highlight the negative impact of work-life balance and employee stress on company performance (Filbeck et al., 2022). This underscores the importance of implementing policies and initiatives to

promote employee well-being and reduce workplace stressors. Organizations can use this information to advocate for policies prioritizing employee mental health, such as flexible work arrangements, wellness programs, and stress management initiatives. Additionally, policymakers can use these insights to inform regulations and guidelines to create healthier and more supportive work environments across industries.

6. LIMITATION AND IMPLICATION

Several potential areas exist for further exploration in the future. In the future, researchers may use a more sophisticated form of regression analysis that considers different types of industries and examines them separately. The regression model's ability to predict firm performance by 58% suggests that the included factors related to employee satisfaction contribute significantly to understanding and forecasting overall organizational success. This underscores the importance of considering a holistic approach to employee satisfaction, considering multiple dimensions for a more comprehensive analysis. Further research suggestions are related to the data mining approach. Text mining could benefit from more advanced sentiment analysis if researchers look for definitive answers—text mining using tags and keywords and refining our extraction methods.

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REFERENCES

Abrahams, A. S., Jiao, J., Fan, W., Wang, G. A., & Zhang, Z. (2013). What's buzzing in the blizzard of buzz? Automotive component isolation in social media postings. *Decision Support Systems*, *55*(4), 871-882.

Ahmad, M. R., & Raja, R. (2021). Employee job satisfaction and business performance: the mediating role of organizational commitment. *Vision*, *25*(2), 168-179.

AlBattat, A. R. S., & Som, A. P. M. (2013). Employee dissatisfaction and turnover crises in the Malaysian hospitality industry. *International Journal of Business and Management*, *8*(5), 62.

Aldousari, A. A., Robertson, A., Yajid, M. S. A., & Ahmed, Z. U. (2017). Impact of employer branding on organization's performance. *Journal of transnational management*, *22*(3), 153-170.

Azegele, M. (2021). The Mediating Effect of Human Resource Management Practice on the Relationship between Corporate Governance and Organizational Performance of Insurance Companies in Kenya. *Journal of Human Resource &Leadership*.

Azhar, A., Rehman, N., Majeed, N., & Bano, S. (2024). Employer branding: A strategy to enhance organizational performance. *International Journal of Hospitality Management*, *116*, 103618.

Baek, H., & Park, Y. (2019). Employee's Discontent Text Analysis on Anonymous Company Review Web and Suggestions for Discontent Resolve. *The Journal of the Korean Institute of Information and Communication Engineering, 23*, 357-364.

Balaji, T. K., Annavarapu, C. S. R., & Bablani, A. (2021). Machine learning algorithms for social media analysis: A survey. *Computer Science Review*, *40*, 100395.

Benito-Osorio, D., Muñoz-Aguado, L., & Villar, C. (2014). The Impact of Family and Work-Life Balance Policies on the Performance of Spanish Listed Companies.

Berliana, M., Siregar, N., & Gustian, H. D. (2018). The model of job satisfaction and employee performance. *International Review of Management and Marketing*, *8*(6), 41.

Bhagwat, T.A. (2006). Performance appraisal impact on employee career development and performance: A longitudinal study.

Bharadwaj, S. (2024). How the interplay of social media usage and online reviews generate intention to apply for a job vacancy: an employer branding-based agenda. *Management Research Review*, *47*(3), 441-463.

Buccoliero, L., Bellio, E., Crestini, G., & Arkoudas, A. (2020). Twitter and politics: Evidence from the U.S. presidential elections 2016. *Journal of Marketing Communications*, *26*(1), 88-114.

Chen, H., Chiang, R. H., & Storey, V. C. (2012). Business intelligence and analytics: From big data to big impact. *MIS Quarterly*, 1165-1188.

Chi, C. G., & Gursoy, D. (2009). Employee satisfaction, customer satisfaction, and financial performance: An empirical examination. *International journal of hospitality management*, *28*(2), 245-253.

DiMaggio, P. (2015). Adapting computational text analysis to social science (and vice versa). *Big Data & Society*, *2*(2), 2053951715602908.

Dugardin, F. A., & Ginglinger, E. (2019). Gender pay gap, labor unions and firm performance. *Université Paris-Dauphine Research Paper*, (3519647).

Edmans, A. (2011). Does the stock market fully value intangibles? Employee satisfaction and equity prices. *Journal of Financial Economics*, *101*(3), 621-640.

Erkutlu, H.V., & Chafra, J.B. (2022). *Organizational Behavior: Theory, Concepts and Practice*. Akademisyen Kitabevi

Filbeck, G., Zhao, X., & Warnaka, M. (2022). Glassdoor's best places to work internationally: Are they best for shareholders?. *International Journal of Finance & Economics*, *27*(4), 4350-4363.

García-Buades, M. E., Peiró, J. M., Montañez-Juan, M. I., Kozusznik, M. W., & Ortiz-Bonnín, S. (2020). Happy-productive teams and work units: A systematic review of the 'happy-productive worker thesis'. *International journal of environmental research and public health*, *17*(1), 69.

Githuku, G.K., Kinyua, G., & Muchemi, A. (2022). Learning Organization Culture and Firm Performance: A Review of Literature. *International Journal of Managerial Studies and Research*.

Govindarasu, V. (2021). Analyzing and Predicting Covid-19 Dataset in India using Data Mining with Regression Analysis. *International Research Journal on Advanced Science Hub*, *3*(Special Issue 7S), 91-95.

Guiso, L., Sapienza, P., & Zingales, L. (2015). The value of corporate culture. *Journal of Financial Economics*, *117*(1), 60-76.

Gupta, S., Vasa, S. R., & Sehgal, P. (2024). Mapping the experiences of work-life balance: implications for the future of work. *Journal of Asia Business Studies*,

Hosain, S. (2015). Adoption of Proper HRM Practices: A Technique for Retaining Employees and Increasing Firm Performance?. *Scholar Journal of Business and Social Science*, *1*(1), 1-14.

Huang, M., Li, P., Meschke, F., & Guthrie, J. P. (2015). Family firms, employee satisfaction, and corporate performance. *Journal of Corporate Finance*, *34*, 108-127.

Huang, M., Li, P., Meschke, F., & Guthrie, J. P. (2015). Family firms, employee satisfaction, and corporate performance. *Journal of corporate finance*, *34*, 108-127.

Jaharuddin, N. S., & Zainol, L. N. (2019). The impact of work-life balance on job engagement and turnover intention. *The South East Asian Journal of Management*, *13*(1), 7.

Karami, A., Lundy, M., Webb, F., & Dwivedi, Y. K. (2020). Twitter and research: A systematic literature review through text mining. *IEEE access*, *8*, 67698-67717.

Krishna, S. V., & Kumar, R. K. (2022). Impact of Talent Management on Employee Performance and Retention. *International Journal of Scientific Research in Engineering and Management*.

Kuepper, D. M., Klein, K., & Voelckner, F. (2021). Gamifying employer branding: An integrating framework and research propositions for a new HRM approach in the digitized economy. *Human Resource Management Review*, *31*(1), 100686.

Lakshitha, W. R., & Perera, H. A. P. L. (2016). Impact of corporate social responsibility on firm financial performance: evidence from the listed manufacturing companies in Sri Lanka.

Larasati, N. R. D. M., Luturlean, B. S., Saragih, R., & Fakhri, M. (2023, December). Big data analytics performance from employee point of view. In *International Conference on Mathematical and Statistical Physics, Computational Science, Education and Communication (ICMSCE 2023)* (Vol. 12936, pp. 430-438). SPIE.

Lassen, N. B., Madsen, R., & Vatrapu, R. (2014, September). Predicting iphone sales from iphone tweets. In *2014 IEEE 18th International Enterprise Distributed Object Computing Conference* (pp. 81-90). IEEE.

Lorentzon, J. I., Fotoh, L. E., & Mugwira, T. (2023). Remote auditing and its impacts on auditors' work and work-life balance: auditors' perceptions and implications. *Accounting Research Journal*, 37(1): 1-18.

Malik, S. Y., Hayat Mughal, Y., Azam, T., Cao, Y., Wan, Z., Zhu, H., & Thurasamy, R. (2021). Corporate social responsibility, green human resources management, and sustainable performance: is organizational citizenship behavior towards environment the missing link?. *Sustainability*, *13*(3), 1044.

Moniz, A. (2017). Inferring employees' social media perceptions of corporate culture and the link to firm value. *Available at SSRN 2768091*.

Mowday, R. T., & Sutton, R. I. (1993). Organizational behavior: Linking individuals and groups to organizational contexts. *Annual review of psychology*, *44*(1), 195-229.

Naibaho, E.A., & Mayayogini, N.M. (2023). The Impact of Risk Management on Firm Performance: Corporate Governance as Moderating Variable. *Media Ekonomi dan Manajemen*.

Nguyen, D. T., Hoang, T. G., & Tran, H. G. (2022). Help or hurt? The impact of ESG on firm performance in S&P 500 non-financial firms. *Australasian Accounting, Business and Finance Journal*, *16*(2), 91-102.

Presthus, R. V. (1958). Toward a theory of organizational behavior. *Administrative Science Quarterly*, 48-72.

Raghuram, S. (2021). Remote work implications for organisational culture. *Work from home: Multi-level Perspectives on The New Normal*, 147-163.

Raharjo, K., & Achmad Rinaldo Fernandes, A. (2018). The influence of organizational culture and job design on job commitment and human resource performance. *Journal of Organizational Change Management*, *31*(7), 1346-1367.

Salloum, S. A., Al-Emran, M., Monem, A. A., & Shaalan, K. (2017). A survey of text mining in social media: Facebook and Twitter perspectives. *Advances in Science, Technology and Engineering Systems Journal*, *2*(1), 127-133.

Shahid, D., Waris, M., Saqib, M., & Asif, M. (2004). Impact of the Risk Management and Corporate Governance on Firm Performance: Evidence from Pakistan. *IOSR Journal of Business and Management*, *21*(12), 75-83.

Shouman, L., Vidal-Suñé, A., & Alarcón Alarcón, A. (2022). Impact of work-life balance on firm innovativeness: The different strategies used by male and female bosses. *Administrative Sciences*, *12*(3), 115.

Siamsa, S., & Aprilius, A. (2023). Workload and Work Stress in Affecting Employee Performance. *Technium Soc. Sci. J.*, *49*, 389.

Siripipatthanakul, S., Jaipong, P., Limna, P., Sitthipon, T., Kaewpuang, P., & Sriboonruang, P. (2022). The impact of talent management on employee satisfaction and business performance in the digital economy: A qualitative study in Bangkok, Thailand. *Advance Knowledge for Executives*, *1*(1), 1-17.

Siswadi, S. R. N., Muis, M., Thamrin, Y., Russeng, S. S., Naiem, F., & Manyullei, S. (2024). The Effects of Work Stress and Workload on Job Satisfaction With its Impact on Employee Performance at P.T. Industrial Kapal Indonesia (Persero). *Journal of Law and Sustainable Development*, *12*(1), e3023-e3023.

Srinivas, D. Y., & Sumaja, M. (2020). Organizational Culture and H.R. Practices Impact on Firm Performance. *International*

Journal in Management Research and Social Science (IJMRSS), 7(3).

Strychalska-Rudzewicz, A., & Rudzewicz, A. (2021). The Impact of Organizational Innovativeness on Firm Performance in Poland: The Moderating Role of Innovation Culture. *European Research Studies Journal*.

Styśko-Kunkowska, M. A., & Kwinta, Z. (2020). Choice between salary and employer brand: The roles of materialism and inclination to develop an identity-motives-based relationship with an employer brand. *Frontiers in psychology*, 11, 555.

SuryaNarayana, G., Kolli, K., Ansari, M. D., & Gunjan, V. K. (2021). A traditional analysis for efficient data mining with integrated association mining into regression techniques. In *ICCCE 2020: Proceedings of the 3rd International Conference on Communications and Cyber Physical Engineering* (pp. 1393-1404). Springer Singapore.

Sydorenko, V., Rychok, Y., & Oladko, M. (2022). Method for Evaluation the Pattern of Internet Service Customers Based on Stylometric Analysis Oof their Text Content. *2022 IEEE 4th International Conference on Modern Electrical and Energy System (MEES)*, 01-06.

Tijani, A. (2013). The Impact of Internal Environment of Working on the firm's performance. *International Journal of Management and Information Technology, 7*, 1166-1175.

Tumasjan, A., Kunze, F., Bruch, H., & Welpe, I. M. (2020). Linking employer branding orientation and firm performance: Testing a dual mediation route of recruitment efficiency and positive affective climate. *Human Resource Management*, 59(1), 83-99.

Wang, Y., & Xu, W. (2018). Leveraging deep learning with LDA-based text analytics to detect automobile insurance fraud. *Decision Support Systems*, 105, 87-95.

Winchester, C. (2019). The Effect of Two Types of Workload Assignment on Productivity, Performance, and Stress.

Zeng, R. (2023, August). Research on Online Learning Behavior and Learning Effectiveness of College English by Data Mining and Regression Analysis Based on SPOC. In *2023 IEEE 6th International Conference on Knowledge Innovation and Invention (ICKII)* (pp. 575-579). IEEE.

Zhang, T., Li, Y., & Hou, D. (2022). Has the Resignation of Independent Directors Holding Government Positions Improved Firm Performance?-A Quasi-Natural Experiment From China. *Frontiers in psychology*, 12, 825366.

Zhou, W., & Duan, W. (2015). An empirical study of how third-party websites influence the feedback mechanism between online word-of-mouth and retail sales. *Decision Support Systems*, 76, 14-23.