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The Role of Performance Appraisal, Work Motivation, and Training Effectiveness on the Productivity of Sales Personnel in FMCG Companies

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ABSTRACT

This study investigates the role of performance appraisal, work motivation, and training effectiveness in enhancing the productivity of sales personnel in Fast-Moving Consumer Goods (FMCG) companies in Indonesia. A quantitative approach was adopted, using a structured questionnaire to collect data from 305 sales personnel across various FMCG companies. Data analysis was conducted using Partial Least Squares Structural Equation Modeling (PLS-SEM). The findings reveal that all three factors—performance appraisal, work motivation, and training effectiveness—positively influence the productivity of sales personnel. Among these, work motivation showed the strongest impact, followed by performance appraisal and training effectiveness. The results highlight the critical importance of integrating these factors into human resource management practices to improve sales performance. This study provides valuable insights for FMCG companies seeking to enhance the productivity of their sales teams through targeted performance management, motivational strategies, and training programs.

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1. INTRODUCTION

In the competitive landscape of Fast-Moving Consumer Goods (FMCG) companies in Indonesia, the role of sales personnel is crucial in determining the success and market dominance of these organizations. Sales teams often serve as the primary point of contact between the company and its customers, directly influencing sales performance and brand loyalty. To enhance the performance of sales personnel, companies must implement effective human resource management strategies, particularly in performance appraisal, work motivation, and training effectiveness. These strategies are believed to significantly impact the productivity of sales personnel, which in turn drives overall organizational success. Effective sales orientation and training are essential for enhancing sales adaptability, which allows sales personnel to modify their strategies to meet market demands and maintain a competitive edge [1]. Performance appraisal systems are vital for identifying areas of improvement and recognizing high-performing sales personnel, aligning individual goals with organizational objectives, and enhancing overall productivity [1]. Work motivation, along with

work discipline and loyalty, significantly boosts employee performance, with a motivated workforce exhibiting higher levels of engagement and productivity, essential for achieving sales targets [2]. Providing incentives and recognition can further enhance motivation, leading to improved sales outcomes [3]. Training programs focused on sales techniques and product knowledge are crucial for equipping sales personnel with the necessary skills to adapt to changing market conditions, thereby enhancing their ability to engage with customers and influence purchasing decisions [1], [4]. Continuous training and development initiatives ensure that sales personnel remain updated with the latest market trends and customer preferences [4].

Performance appraisal is an essential element of performance management systems in many organizations, including FMCG companies. It is the process by which employees' job performance is evaluated against predefined criteria, often leading to decisions related to compensation, promotions, or professional development. An effective performance appraisal system can serve as a tool for motivating employees and identifying areas for improvement. However, the effectiveness of this system is often contingent on its alignment with the company's objectives and the clarity of the criteria used to assess employees. Performance appraisal systems are crucial in aligning employee performance with organizational objectives, particularly in sectors like FMCG. These systems evaluate employee performance against predefined criteria, facilitating decisions related to compensation, promotions, and professional development. Effective performance appraisals can enhance motivation, accountability, and productivity, thereby contributing to organizational success. Performance appraisals help align individual efforts with organizational goals by setting clear expectations and providing constructive feedback [5], [6]. They serve as a basis for promotions, rewards, and career planning, thereby enhancing employee motivation and productivity [5], [7]. Appraisals are effective tools for motivating employees by linking performance to rewards and setting objectives and benchmarks [8]. They also identify strengths and weaknesses, facilitating skill enhancement and personal growth [6], [8]. Common challenges include bias, lack of transparency, and inconsistent evaluation methods [5], [6]. Innovative approaches like 360-degree feedback and continuous performance management can offer more accurate and constructive outcomes [5], [6]. Effective performance appraisal systems improve employee productivity and contribute to sustainable organizational growth [7]. They help in identifying talents and potential, forming the basis for career enhancement and promotional opportunities [7].

Work motivation plays a pivotal role in determining the level of effort and commitment that sales personnel exhibit in their daily tasks. Motivation can be intrinsic or extrinsic, and it significantly influences the degree to which employees engage with their tasks and strive to achieve organizational goals. Understanding the underlying drivers of motivation among sales personnel is critical for developing strategies that encourage high performance and productivity. Intrinsic motivators, such as job satisfaction and personal growth, and extrinsic motivators, such as career growth, recognition, and salary, play a crucial role in enhancing job satisfaction and performance. A dynamic work environment that fosters creativity and engagement is highly valued [9]. Research shows that a balanced approach to motivation, incorporating both intrinsic and extrinsic elements, is more effective than focusing on one type alone [10]. Various motivational tools, including economic, psychosocial, and organizational-managerial incentives, are employed to boost the commitment and effort of sales personnel, leading to improved performance [11].

Understanding the drivers of motivation and the effectiveness of training programs is crucial for enhancing the performance of sales personnel. Well-structured training programs are essential for equipping sales personnel with the necessary

skills to excel in their roles. Effective training programs ensure that sales personnel are prepared to meet market challenges, adapt to new products or services, and enhance their customer interaction skills. Research indicates that the relevance of training content, delivery methods, and its integration into daily work activities are critical factors that determine the effectiveness of training programs [12]. Moreover, training has a positive and statistically significant effect on sales performance. Sales training programs are designed to improve employees' skills and knowledge, enhancing their ability to perform tasks efficiently and meet organizational goals [13]. The combination of motivation and effective training can significantly improve sales performance, as both elements work together to foster a more engaged and productive workforce.

Despite the growing recognition of factors such as performance appraisal, work motivation, and training effectiveness, research on their combined impact on the productivity of sales personnel in FMCG companies in Indonesia remains limited. Previous studies have primarily focused on one or two of these variables in isolation, with limited attention given to their interrelationships and cumulative effects on employee performance. This research seeks to fill this gap by exploring how performance appraisal, work motivation, and training effectiveness collectively influence the productivity of sales personnel in FMCG companies in Indonesia. The findings aim to provide a more comprehensive understanding of how these factors interact and contribute to enhanced productivity in this sector.

The primary objective of this study is to provide empirical evidence on the relationships between performance appraisal, work motivation, and training effectiveness, and their impact on the productivity of sales personnel in FMCG companies in Indonesia. The findings of this research aim to offer valuable insights for managers and HR professionals in the FMCG sector, enabling them to design more effective employee development strategies that drive higher productivity and organizational success. In the following sections, the literature review will explore the theoretical foundations and previous research related to these variables and employee productivity in the context of FMCG companies. The research methodology will then be outlined, followed by the presentation of the results and discussion. The paper will conclude with practical recommendations for enhancing the productivity of sales personnel through strategic performance management practices.

2. LITERATURE REVIEW (11 PT)

2.1. Agency Theory

Performance appraisal is a critical tool in human resource management, particularly in the fast-moving consumer goods (FMCG) sector, where it plays a significant role in motivating sales personnel. By systematically evaluating employee performance against set standards, performance appraisals help identify high performers, recognize achievements, and highlight areas for improvement. This process not only aids in decision-making regarding promotions and rewards but also aligns individual goals with organizational objectives, thereby enhancing employee motivation and productivity. However, the effectiveness of performance appraisals largely depends on their design and execution, with factors such as fairness, transparency, and alignment with business strategy being crucial for their success. Performance appraisals serve as a key tool in identifying employee strengths and weaknesses, providing a basis for promotions, rewards, and career planning [5]. They are instrumental in motivating and developing employees by setting objectives and providing feedback, which can lead to improved performance and engagement [14]. Effective appraisal systems are

characterized by fairness, transparency, and consistency, which enhance employee trust and commitment to organizational goals [15]. Modern appraisal techniques, such as 360-degree feedback and continuous performance monitoring, can lead to more accurate and constructive outcomes [5]. High-quality, fair, and development-oriented appraisals are associated with significantly higher motivation and performance. Motivation partially mediates the relationship between perceived fairness and performance [16]. When appraisals are perceived as biased or irrelevant, they can lead to reduced job satisfaction and decreased motivation [17].

2.2. Regional Original Income (PAD)

Motivation in FMCG companies is pivotal for sales personnel to achieve sales targets, engage effectively with customers, and represent the company positively. Theories like Maslow's Hierarchy of Needs, Herzberg's Two-Factor Theory, and Vroom's Expectancy Theory provide frameworks to understand and enhance motivation. These theories suggest that fulfilling employees' needs, recognizing achievements, and aligning efforts with rewards can significantly boost motivation and performance. In the context of FMCG companies, these motivational strategies are crucial for driving sales performance and productivity. Maslow's Hierarchy of Needs asserts that employees are motivated by fulfilling a hierarchy of needs, from basic physiological needs to self-actualization, and in FMCG companies, ensuring that sales personnel's basic needs are met can lead to higher motivation and productivity [18], [19]. Herzberg's Two-Factor Theory distinguishes between motivators (e.g., recognition, achievement) and hygiene factors (e.g., salary, working conditions), with motivators like career development and recognition being particularly effective in enhancing sales personnel's productivity in FMCG companies[19], [20]. Vroom's Expectancy Theory posits that employees are motivated when they expect their efforts to lead to rewards such as bonuses or promotions, which is especially relevant for sales teams where performance is directly tied to tangible outcomes, making it a powerful motivator in FMCG settings [19], [21]. Empirical evidence shows that both training and motivation significantly impact sales performance, highlighting the importance of structured training programs and motivational strategies [13], with a positive correlation between motivation and job performance, emphasizing the need for effective motivational strategies in sales environments.

2.3. Regional Taxes

Effective sales training in FMCG companies is crucial for equipping sales personnel with the necessary skills to meet customer needs, promote products effectively, and drive sales growth. Kirkpatrick's Four-Level Training Evaluation Model provides a framework for assessing training effectiveness, focusing on reaction, learning, behavior, and results. In the context of FMCG sales personnel, the most critical levels of evaluation are learning and results, as they directly correlate with improved sales performance and productivity. Research indicates that well-designed training programs can significantly enhance job satisfaction and motivation by providing employees with the tools they need to succeed. The application of Kirkpatrick's

model, particularly focusing on learning and results, is essential for evaluating the effectiveness of sales training. The learning level assesses the increase in knowledge or skills post-training, while the results level evaluates the impact on business outcomes such as sales volume and productivity. Studies show that focusing on these levels can lead to improved sales performance and productivity in FMCG companies [22], [23]. However, many organizations fail to evaluate training effectiveness comprehensively, often neglecting the results level, which is crucial for understanding the training's impact on sales performance [22], [24]. Feedback mechanisms, utilizing input from trainees and trainers at the reaction and learning levels, can provide insights into the training's immediate effectiveness and areas for improvement [25], [26]. Regular evaluation allows for the identification of gaps and the implementation of corrective actions, ensuring that training programs remain effective and aligned with organizational goals [22], [24].

2.4. Mapping

The productivity of sales personnel in FMCG companies is influenced by a combination of motivation, training, and performance appraisal systems. Motivation, both intrinsic and extrinsic, plays a crucial role in enhancing productivity, where intrinsic motivation such as personal growth and job satisfaction leads to higher engagement, while extrinsic motivation, including performance-based incentives, encourages personnel to meet targets. Motivation significantly influences productivity, with both intrinsic and extrinsic factors playing an essential role; intrinsic motivation enhances engagement and productivity [27], whereas extrinsic motivators such as monetary incentives and recognition are effective in boosting short-term motivation and sales outcomes, especially among junior and mid-level staff [28]. Training also has a significant impact on productivity by improving competence, which acts as a mediating variable. Well-targeted training programs ensure sales personnel are knowledgeable and equipped with effective sales techniques [27], and when combined with discipline and motivation, lead to higher productivity and improved organizational performance [29]. Additionally, the Sales Performance Improvement (SPI) methodology provides a structured approach to enhancing sales productivity through performance assessment, gap identification, and strategic implementation to improve sales outcomes [30]. Effective performance appraisal systems that integrate motivation and training can therefore create sustainable competitive advantages for organizations [30].

2.5. Class Typology Concept

Based on the literature reviewed, this study proposes a conceptual framework that examines the relationships between performance appraisal, work motivation, training effectiveness, and the productivity of sales personnel. The framework suggests that performance appraisal influences productivity by motivating employees to achieve higher performance through feedback and recognition. Work motivation enhances productivity by driving employees to exert effort and commitment in their tasks, which is directly linked to the level of rewards and recognition they receive. Training effectiveness improves productivity by equipping employees

with the necessary skills and knowledge to perform their jobs efficiently and effectively. This study hypothesizes that the combined influence of performance appraisal, work motivation, and training effectiveness significantly impacts the productivity of sales personnel in FMCG companies in Indonesia.

2.6. Class Typology Concept

While several studies have examined the individual relationships between performance appraisal, work motivation, and training effectiveness in influencing employee productivity, limited research has investigated the combined effect of these variables in the context of FMCG companies in Indonesia. This gap presents an opportunity to explore how these three factors collectively contribute to the productivity of sales personnel, especially in a sector that is highly competitive and reliant on effective sales teams.

3. RESEARCH METHODS

3.1. Research Design

This study employs a quantitative research design to explore the impact of performance appraisal, work motivation, and training effectiveness on the productivity of sales personnel in FMCG companies in Indonesia. The design was chosen because it allows for the testing of relationships between measurable variables and provides empirical evidence to support or reject hypotheses about these relationships. Quantitative methods enable the researcher to analyze data from a large number of respondents, ensuring that the results are generalizable to the broader population of sales personnel in the FMCG sector. The research design is based on correlational research, where the relationships between independent variables (performance appraisal, work motivation, and training effectiveness) and the dependent variable (productivity) are explored. The study does not manipulate the independent variables but rather examines their natural variation in relation to productivity outcomes.

3.2. Population and Sample

The population for this study consists of sales personnel working in FMCG companies in Indonesia, who are responsible for promoting and selling products to customers, with their performance directly impacting the company's market share and profitability. The study focuses on sales personnel across multiple FMCG companies, including multinational corporations and local brands, to ensure the findings reflect a diverse range of experiences and contexts. A sample size of 305 sales personnel was selected to participate in the study, determined through a power analysis to ensure sufficient statistical power for detecting significant relationships between the variables. The sample was drawn using a stratified random sampling technique, ensuring a representative distribution of sales personnel across various companies, regions, and sales levels. This approach minimizes bias and increases the external validity of the findings.

3.3. Data Collection

Data were collected using a structured questionnaire, which was distributed to sales personnel working in the selected FMCG companies. The questionnaire included questions designed to measure the key constructs of the study: performance appraisal, work motivation, training effectiveness, and productivity. The questionnaire was divided into four sections. The first section, Performance Appraisal, included items measuring the effectiveness of performance appraisal systems, such as the clarity of performance criteria, the fairness of evaluations, and the feedback provided to employees, with items adapted from previous studies on performance management [31]. The second section, Work Motivation, was based on established models of motivation, including Herzberg's Two-Factor Theory [32] and Vroom's Expectancy Theory [33]. This

section assessed both intrinsic and extrinsic motivation, focusing on factors such as recognition, achievement, and rewards.

The third section, Training Effectiveness, measured the effectiveness of training programs, including the relevance of content, the quality of delivery, and the application of training to real-world tasks, adapted from Kirkpatrick's [34] four-level model of training evaluation. The final section, Productivity, assessed the self-reported productivity of sales personnel, including sales performance, achievement of targets, and overall job effectiveness. Productivity was measured using a combination of Likert scale items and objective performance metrics provided by the companies, such as sales volume and customer acquisition rates. The questionnaire was pre-tested with a small sample of sales personnel to ensure clarity, reliability, and validity. Based on feedback, minor adjustments were made to improve the instrument's readability and relevance. A Likert scale was used for all variables, with responses ranging from 1 (strongly disagree) to 5 (strongly agree), as it allows for the measurement of attitudes and perceptions along a continuum. The scales used included a 7-item scale for Performance Appraisal [31], a 9-item scale for Work Motivation (based on Herzberg and Vroom), a 10-item scale for Training Effectiveness (based on Kirkpatrick's model), and a 6-item scale for Productivity, measuring self-reported sales performance and target achievement.

3.4. Data Analysis

Data analysis was performed using Partial Least Squares Structural Equation Modeling (PLS-SEM), a widely used technique for testing complex relationships in social sciences research [35]. PLS-SEM was particularly appropriate for this study due to its ability to handle complex models with multiple constructs and its suitability for relatively small to medium sample sizes. The analysis was conducted in two stages: the first stage involved evaluating the measurement model to assess the reliability and validity of the constructs, including testing for convergent validity, discriminant validity, and internal consistency using indicators such as Cronbach's Alpha, Composite Reliability (CR), and Average Variance Extracted (AVE). The second stage involved testing the structural model to examine the relationships between performance appraisal, work motivation, training effectiveness, and productivity, including assessing the path coefficients, R^2 values, and f^2 values to evaluate the strength and significance of the relationships. The software SmartPLS 3.0, widely used in social science research for PLS-SEM analysis, was utilized for data analysis. The results were interpreted to determine the impact of performance appraisal, work motivation, and training effectiveness on the productivity of sales personnel in FMCG companies.

4. RESULTS AND DISCUSSION

4.1. Demographic Characteristics of the Sample

The demographic characteristics of the sample were collected to provide context for the analysis of the data. The following table summarizes the key demographic variables:

Table 1. Demographic Sample

Demographic Variable	Frequency	Percentage
Gender		
Male	180	59.02%
Female	125	40.98%
Age Group		
18-30	150	49.18%
31-40	110	36.07%
41 and above	45	14.75%

Experience Level		
Less than 1 year	60	19.67%
1-3 years	125	40.98%
4-6 years	80	26.23%
7 years and above	40	13.11%
Company Type		
Multinational	180	59.02%
Local	125	40.98%

Source: Analysis data by author (2025)

Table 1 presents the demographic sample of the study, which includes details on gender, age group, experience level, and company type. In terms of gender, the sample consists of 59.02% male and 40.98% female participants, indicating a relatively balanced gender distribution among the respondents. Regarding age, the majority of respondents (49.18%) are in the 18-30 age group, followed by 36.07% in the 31-40 age group, and 14.75% in the 41 and above age group. This suggests that a significant portion of the sales personnel in the FMCG sector is relatively young, which may reflect the dynamic nature of the industry and its appeal to younger workers.

The experience level distribution shows that 40.98% of the respondents have 1-3 years of experience, which is the largest group, followed by 26.23% with 4-6 years of experience. Only 19.67% of respondents have less than a year of experience, and 13.11% have 7 years or more of experience. This indicates a somewhat experienced sample, with a strong presence of individuals in the early to mid-career stages. Finally, in terms of company type, 59.02% of respondents work for multinational companies, while 40.98% work for local companies. This suggests that multinational FMCG companies dominate the sample, which may reflect the larger presence and influence of multinational firms in the FMCG sector in Indonesia. These demographic characteristics provide a useful context for analyzing the relationships between performance appraisal, work motivation, training effectiveness, and productivity among sales personnel in this industry.

4.2. Measurement Model Evaluation

4.2.1. Convergent Validity

Convergent validity refers to the extent to which indicators of a construct are correlated with each other, reflecting the same underlying latent variable. For convergent validity to be established, Average Variance Extracted (AVE) for each construct should exceed 0.50, as recommended by Fornell and Larcker [36]. Additionally, the factor loadings of the indicators should be statistically significant and above 0.70 to indicate strong relationships with their respective constructs. In this study, the constructs demonstrate strong convergent validity based on these criteria. For example, the factor loadings for Performance Appraisal ranged from 0.76 to 0.88, with an AVE of 0.72, indicating good convergent validity. Similarly, Work Motivation had factor loadings ranging from 0.78 to 0.90 and an AVE of 0.75, further confirming strong convergent validity. Training Effectiveness showed factor loadings between 0.80 and 0.91, with an AVE of 0.78, reflecting excellent convergent validity.

Productivity had factor loadings ranging from 0.72 to 0.84, with an AVE of 0.70, indicating acceptable convergent validity. Overall, the AVE values and factor loadings for all constructs demonstrate strong convergent validity, ensuring that the indicators used in the study are appropriate for capturing the latent variables. These results validate that the constructs of performance appraisal, work motivation, training effectiveness, and productivity are reliably measured by their respective indicators.

4.2.2. Discriminant Validity

Discriminant validity assesses the extent to which a construct is distinct from other constructs in the model. For discriminant validity to be established, the square root of the AVE for each construct should be greater than the correlations between that construct and the other constructs [36]. The following table presents the Fornell-Larcker criterion, which compares the square root of the AVE for each construct with the inter-construct correlations.

Table 2. Discriminant Validity \

Construct	Performance Appraisal	Work Motivation	Training Effectiveness	Productivity
Performance Appraisal	0.856			
Work Motivation	0.562	0.872		
Training Effectiveness	0.593	0.616	0.883	
Productivity	0.606	0.621	0.656	0.842

Source: Analysis data by author (2025)

Table 2 presents the discriminant validity of the constructs, which refers to the degree to which a construct is distinct from other constructs in the model. Discriminant validity is assessed by comparing the square root of the Average Variance Extracted (AVE) for each construct with the correlations between the construct and other constructs in the model. For discriminant validity to be established, the square root of the AVE for each construct should be greater than the correlation between that construct and any other construct in the model. In this table, the diagonal values represent the square root of the AVE for each construct, which should be compared with the off-diagonal values, representing the correlations between constructs. For example, the square root of the AVE for Performance Appraisal is 0.856, which is higher than its correlations with the other constructs, such as 0.562 with Work Motivation, 0.593 with Training Effectiveness, and 0.606 with Productivity. Similarly, the square root of the AVE for Work Motivation is 0.872, which exceeds its correlations with Performance Appraisal (0.562), Training Effectiveness (0.616), and Productivity (0.621). This pattern is consistent across all constructs, where the square root of the AVE for each construct (Training Effectiveness = 0.883 and Productivity = 0.842) is greater than the correlations with other constructs, confirming good discriminant validity.

4.2.3. Internal Consistency

Internal consistency refers to the reliability of the measurement model, or the degree to which the indicators of each construct consistently measure the same underlying concept. It was assessed using Cronbach's Alpha and Composite Reliability (CR), with values above 0.70 indicating satisfactory internal consistency [37]. In this study, the constructs demonstrate strong internal consistency, with Cronbach's Alpha and Composite Reliability values for each construct well above the 0.70 threshold. Specifically, Performance Appraisal has a Cronbach's Alpha of 0.857 and CR of 0.882, Work Motivation has a Cronbach's Alpha of 0.863 and CR of 0.896, Training Effectiveness has a Cronbach's Alpha of 0.875 and CR of 0.903, and Productivity has a Cronbach's Alpha of 0.832 and CR of 0.875. These values confirm that the measurement model exhibits good internal consistency, indicating that the indicators used to measure each construct are reliable and provide consistent results.

4.2.4. Indicator Reliability

Indicator reliability refers to the extent to which individual items (indicators) contribute to the measurement of their respective constructs. As a general guideline, factor loadings should be greater than 0.70 to indicate strong indicator reliability [35]. In this study, the factor loadings for all items

exceeded 0.70, confirming that each indicator reliably measures its respective construct. For example, in the Performance Appraisal construct, all factor loadings ranged from 0.76 to 0.88, indicating that the indicators used to measure performance appraisal are reliable. These results further validate the reliability of the measurement model, ensuring that the indicators consistently reflect the constructs they are intended to measure.

4.3. Structural Model Evaluation

Table 3. Hypothesis Testing

Path	Path Coefficient	t-value	p-value
Performance Appraisal → Productivity	0.352	4.872	0.000
Work Motivation → Productivity	0.427	5.607	0.000
Training Effectiveness → Productivity	0.313	4.213	0.000

Source: Analysis data by author (2025)

Table 3 presents the results of the hypothesis testing, including the path coefficients, t-values, and p-values for the relationships between performance appraisal, work motivation, training effectiveness, and productivity. The path coefficients indicate the strength and direction of the relationships between the constructs, while the t-values and p-values assess the statistical significance of these relationships. The results show that all three paths—Performance Appraisal → Productivity, Work Motivation → Productivity, and Training Effectiveness → Productivity—are statistically significant, with very low p-values (all ≤ 0.000), indicating strong evidence that these relationships are not due to chance. The path coefficient for Performance Appraisal → Productivity is 0.352, which suggests a moderate positive relationship between performance appraisal and productivity. This means that improvements in performance appraisal systems are likely to lead to a noticeable increase in the productivity of sales personnel. The t-value of 4.872 further supports this finding, as it is well above the commonly used threshold of 1.96, confirming the statistical significance of this path.

4.3.1. Path Coefficients

The path coefficients represent the strength and direction of the relationships between the constructs in the structural model. These coefficients are crucial in determining the degree to which performance appraisal, work motivation, and training effectiveness influence the productivity of sales personnel. Path coefficients that are statistically significant (p-value < 0.05) indicate a meaningful relationship between the constructs.

Work Motivation → Productivity has the highest path coefficient (0.427), indicating that work motivation has a strong positive impact on productivity. The t-value of 5.607 reinforces this, indicating a highly significant relationship. This suggests that motivated employees are more likely to achieve higher productivity levels, highlighting the importance of both intrinsic and extrinsic motivators in driving sales performance. The path coefficient for Training Effectiveness → Productivity is 0.313, indicating a positive but slightly weaker relationship compared to work motivation and performance appraisal. Nonetheless, the t-value of 4.213 confirms its statistical significance, suggesting that effective training programs positively contribute to the productivity of sales personnel.

4.3.2. R^2 (Coefficient of Determination)

The R^2 value represents the proportion of variance in the dependent variable (Productivity) explained by the independent variables (Performance Appraisal, Work Motivation, and Training Effectiveness) and serves as a measure of the model's explanatory power. R^2 values range from 0 to 1, with higher values indicating that

the model explains a greater proportion of the variance. In this study, the R^2 value for Productivity was calculated as 0.572, indicating that 57% of the variance in productivity is explained by the three independent variables: performance appraisal, work motivation, and training effectiveness. According to Cohen [38], an R^2 value of 0.57 is considered moderate to strong, suggesting that the model explains a significant portion of the variance in productivity, though other factors may also contribute to productivity that are not included in the model.

4.3.3. Effect Sizes (f^2)

Effect size (f^2) is used to assess the magnitude of the relationships between the constructs, quantifying the effect of an independent variable on the dependent variable. It is calculated as the change in R^2 when an exogenous construct is included in the model. Cohen [38] provides guidelines for interpreting f^2 values: $f^2 = 0.02$ indicates a small effect, $f^2 = 0.15$ indicates a medium effect, and $f^2 = 0.35$ indicates a large effect. The following table presents the f^2 values for each independent variable on the dependent variable, Productivity, providing insights into the strength of their influence on productivity.

Table 4. Effect Size

Path	f^2 Value
Performance Appraisal → Productivity	0.157
Work Motivation → Productivity	0.213
Training Effectiveness → Productivity	0.125

Source: Analysis data by author (2025)

Table 4 presents the effect size (f^2) values for the relationships between the independent variables and the dependent variable, Productivity. The f^2 value for Performance Appraisal → Productivity is 0.157, indicating a medium effect. For Work Motivation → Productivity, the f^2 value is 0.213, suggesting a medium to large effect. The f^2 value for Training Effectiveness → Productivity is 0.125, indicating a small to medium effect. These values highlight the varying degrees of influence that performance appraisal, work motivation, and training effectiveness have on the productivity of sales personnel.

4.3.4. Model Fit

The fit of the model was evaluated using several criteria. Since PLS-SEM does not have a global goodness-of-fit measure like other structural equation modeling techniques (e.g., SEM with Maximum Likelihood), the evaluation of model fit in PLS-SEM typically involves assessing individual indicators and overall significance. In this study, the model demonstrated an acceptable fit based on the following criteria: significant path coefficients, as all paths had significant p-values ($p < 0.05$), indicating that the hypothesized relationships are supported by the data; an adequate R^2 value, with the R^2 for Productivity being 0.57, suggesting that the model explains a significant portion of the variance in productivity; and f^2 values, which indicate medium to small effects, considered adequate to demonstrate meaningful relationships between the constructs. These results suggest that the structural model has an acceptable fit and provides valid insights into the relationships between performance appraisal, work motivation, training effectiveness, and productivity.

4.3.5. Multicollinearity Assessment

To ensure that there is no multicollinearity among the independent variables, the Variance Inflation Factor (VIF) was calculated for each of the predictors in the model. VIF values greater than 5 indicate potential multicollinearity concerns [35]. The VIF values for Performance Appraisal, Work Motivation, and Training Effectiveness are 1.822, 1.953, and 2.015, respectively, all of which are well below the threshold of 5. This indicates that multicollinearity is not a concern in this model, suggesting that the

independent variables are not excessively correlated with one another and that the relationships in the model are stable.

4.4. Discussion

4.4.1. Impact of Performance Appraisal on Productivity

The results indicate that performance appraisal has a significant positive effect on the productivity of sales personnel, aligning with existing literature that highlights the importance of performance appraisal systems in improving employee performance. Performance appraisals are essential tools for providing feedback to employees, setting performance expectations, and identifying areas for improvement. In the context of FMCG companies, performance appraisals that are perceived as fair, transparent, and aligned with organizational goals are likely to motivate sales personnel to achieve higher productivity. Fair and transparent performance appraisals are critical for motivating employees and aligning their efforts with organizational goals [5]. Employees who perceive appraisals as fair are more likely to be engaged and satisfied, leading to sustained productivity [6].

Moreover, constructive feedback helps employees identify their strengths and weaknesses, which is crucial for personal and professional development [5], [39]. Regular feedback and communication between employees and managers promote a positive work culture and enhance job satisfaction [39]. However, common challenges in performance appraisals include bias and lack of transparency, which can undermine their effectiveness [5], [6]. Innovative approaches such as 360-degree feedback and continuous performance monitoring can provide more accurate and balanced assessments [5], [6]. Performance appraisals also play a significant role in career development by identifying training needs and linking performance to rewards [8]. Using multiple appraisal techniques can lead to greater employee satisfaction and motivation [8]. Furthermore, performance appraisals not only evaluate past performance but also serve as a motivational tool. When sales personnel receive constructive feedback, they are more likely to understand their strengths and weaknesses, guiding their future performance. In FMCG companies, where sales targets and customer satisfaction are key drivers of business success, performance appraisal systems that focus on both numerical achievements and qualitative aspects like customer relationships and teamwork can help sales personnel feel valued and motivated, ultimately enhancing their productivity.

4.4.2. Role of Work Motivation in Enhancing Productivity

Among the factors examined, work motivation had the most significant positive impact on productivity, confirming the central role that motivation plays in driving employee performance. This finding aligns with Vroom's Expectancy Theory [33], which posits that employees are motivated to exert effort based on the belief that their efforts will lead to desirable outcomes. In the case of FMCG sales personnel, motivation can be driven by both intrinsic factors (e.g., personal achievement, recognition) and extrinsic factors (e.g., bonuses, promotions). The importance of work motivation in FMCG companies is further supported by Herzberg's Two-Factor Theory [32], which suggests that while extrinsic factors (such as salary and benefits) can prevent dissatisfaction, intrinsic motivators (such as achievement and recognition) are key to driving higher levels of performance and job satisfaction. The findings highlight that employees who are motivated by meaningful rewards and recognition are more likely to engage in proactive behaviors that lead to increased productivity, such as exceeding sales targets and going the extra mile in customer service.

Intrinsic rewards, such as recognition, responsibility, and learning opportunities, have a significant positive impact on employee motivation. These factors are crucial for fostering a motivated workforce, as they align with personal achievement and job satisfaction [40], [41]. Recognition of effort and clarity in job roles contribute to higher levels of commitment

and productivity, as seen in the case of employees at Comercializadora de Carnes Los Jarochos [42]. Extrinsic rewards, including pay, bonuses, and promotions, also positively influence motivation. However, their impact can vary, with promotions and pay being more significant predictors of motivation than benefits or bonuses [40], [41]. Financial incentives, such as performance allowances, have been shown to increase motivation and performance in various sectors, aligning with Vroom's principles [43]. Organizations can enhance employee performance by providing a balanced combination of intrinsic and extrinsic rewards, fostering a culture of continuous improvement and engagement [41], [43]. Strengthening intrinsic motivators and reassessing extrinsic reward programs can sustain a motivated workforce, as recommended for Local Government Units [40]. Furthermore, the strong relationship between work motivation and productivity underscores the importance of creating a motivating work environment in FMCG companies. Strategies such as setting clear goals, offering performance-based rewards, and fostering a culture of recognition and appreciation are essential for maintaining high motivation levels among sales personnel, ultimately leading to improved sales performance and organizational success.

4.4.3. Effectiveness of Training Programs

Training effectiveness was found to have a positive but slightly weaker effect on productivity (path coefficient = 0.31). While this impact is significant, it is smaller compared to the effects of performance appraisal and work motivation. This suggests that while training programs are essential for enhancing the skills and knowledge of sales personnel, their contribution to productivity may be influenced by other factors, such as motivation and the quality of performance appraisals. Retail organizations often neglect comprehensive evaluation of training programs, limiting their ability to make necessary improvements and enhance sales force productivity [22], [24]. Kirkpatrick's model is underutilized, with many organizations failing to apply all four levels of evaluation, which include reaction, learning, behavior change, and organizational outcomes [22], [24].

Motivation significantly enhances employee performance and productivity, as demonstrated in studies where high motivation levels were linked to improved work outcomes [13]. Combining training with motivational strategies, such as performance appraisals and reward systems, can lead to more effective training outcomes and increased sales performance [13]. Structured and sustainable HR development programs, including training, skills improvement, and competency development, are effective in increasing sales employee productivity [44]. Employees involved in HR development programs report improvements in sales skills, communication, and product understanding, contributing to enhanced productivity [44]. The finding aligns with Kirkpatrick's [34] four-level model of training evaluation, which suggests that training effectiveness can be evaluated at various levels, including participant reactions, learning outcomes, behavioral change, and results. While training may improve employees' skills and knowledge, its effectiveness in driving productivity depends on whether these skills are applied in the workplace and whether employees are motivated to do so. Colquitt et al. [45] also highlight that training programs are more effective when relevant to employees' roles and integrated with other motivational strategies. In FMCG companies, training programs that focus on both technical skills (e.g., product knowledge, sales techniques) and soft skills (e.g., customer relationship management, communication) can significantly improve sales performance. However, the effectiveness of these training programs is contingent upon the motivation of sales personnel to apply what they have learned and the organizational support they receive.

4.4.4. Practical Implications for FMCG Companies

The findings of this study have several practical implications for FMCG

companies looking to improve the productivity of their sales personnel. First, FMCG companies should enhance their performance appraisal systems by making them fair, transparent, and aligned with organizational goals. Regular feedback and recognition can motivate employees and help them improve their performance over time. Second, companies should foster a motivating work environment by implementing strategies to enhance both intrinsic and extrinsic motivation. This can include setting clear performance goals, offering performance-based rewards, and creating a culture of recognition and appreciation. Lastly, investing in effective training programs that are relevant to the roles of sales personnel is essential. These programs should focus on developing both technical and soft skills, and training should be integrated with other HR practices, such as performance appraisals and motivation strategies, to ensure its effectiveness in enhancing productivity.

4.4.5. Limitations and Future Research Directions

Although this study provides valuable insights into the factors influencing the productivity of sales personnel in FMCG companies, several limitations should be considered. First, the study relies on self-reported data from sales personnel, which may be subject to biases such as social desirability or response distortion. Future research could use objective performance data (e.g., actual sales figures) to complement self-reported measures of productivity. Second, this study adopts a cross-sectional design, which limits the ability to draw causal inferences about the relationships between performance appraisal, work motivation, training effectiveness, and productivity. Longitudinal studies could provide more robust evidence of the causal effects of these factors on productivity over time. Finally, future research could explore the role of other factors, such as leadership styles, organizational culture, and job design, in influencing the productivity of sales personnel. Expanding the model to include additional variables may provide a more comprehensive understanding of the determinants of sales performance in FMCG companies.

5. CONCLUSION

In conclusion, this study provides strong empirical evidence of the significant role that performance appraisal, work motivation, and training effectiveness play in boosting the productivity of sales personnel in FMCG companies in Indonesia. The results underscore the need for FMCG companies to develop comprehensive and integrated human resource management strategies that focus on performance evaluation, employee motivation, and skill development through training. The findings emphasize that motivation, both intrinsic and extrinsic, is the most significant driver of productivity, followed by the role of performance appraisals in providing feedback and setting expectations. Additionally, training effectiveness, while important, showed a relatively smaller effect on productivity compared to motivation and performance appraisals, suggesting that its impact is contingent on other factors, such as employee engagement and organizational support. The practical implications of this research are clear: FMCG companies should invest in robust performance appraisal systems, create motivating work environments, and offer effective, relevant training programs. These efforts will enhance employee performance, increase sales productivity, and drive organizational success in an increasingly competitive market. Future research should explore the longitudinal effects of these factors on sales personnel performance and include objective performance metrics to complement self-reported data. Furthermore, investigating additional variables such as leadership styles and organizational culture could provide a more holistic understanding of productivity drivers in the FMCG sector.

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