

## Employee Performance: The Role of Compensation, Motivation, and Discipline as Intervening in the Era of the Industrial Revolution 4.0

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### ABSTRACT

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**Objective:** This research investigates the relationship and impact of motivation, compensation, and work discipline on the performance of employees at a leading telecommunications company in Balikpapan, Indonesia within the context of the Industrial Revolution 4.0.

**Methodology:** Data collection was conducted by sampling the entire population of 113 employees through observation and closed questionnaires. The hypothesis was tested using Smart-PLS.

**Finding:** The independent variables of compensation and motivation demonstrate a significant positive impact on the dependent variable of employee performance. Moreover, compensation and motivation also significantly and positively affect the intervening variables of discipline. The disciplinary variables exhibit a significant positive influence on employee performance. Additionally, discipline plays a crucial role in mediating the relationship between compensation and motivation, leading to enhanced employee performance.

**Conclusion:** Discipline, motivation, and compensation directly affect employee performance while motivation and compensation indirectly influence performance through the mediating effect of discipline. By fostering integrity, employees can enhance their performance and effectively confront the challenges posed by technological advancements in the digital world.

**Keywords:** Employee Performance; Discipline; Motivation; Compensation.

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## INTRODUCTION

The Industrial Revolution 4.0, characterized by rapid technological advancements and digital integration, presents new challenges for individuals and organizations (Ellitan, 2020). This revolution encourages quick and strategic thinking, supported by technology, across various industries, including the Internet of Things. In the manufacturing industry, the implementation of Industrial Revolution 4.0 faces challenges, such as the lack of leadership styles and perspectives from top management, as well as the overall adoption of this revolution (Bakhtari et al., 2020). The challenge extends to the manufacturing business model, necessitating changes in company management strategies and employee training programs to improve both company and employee performance in the era of the Industrial Revolution 4.0 (Gajek et al., 2022). Furthermore, the wider society needs to increase their understanding of the Industrial Revolution 4.0 to effectively navigate the changes brought about by this technological shift (Balan et al., 2021).

The current technological developments have a profound impact on individuals and organizations in terms of accessing information and influencing operational performance. Organizations acknowledge the effects of Industrial Revolution 4.0, resulting in reduced employment opportunities for individuals with lower skill levels and increased demand for those with advanced capabilities (Bal & Erkan, 2019). To mitigate potential concerns, companies should prioritize practical recommendations focused on information and communication technology (ICT) that empowers employees through the Internet of Things (IoT) while avoiding a perception of employees being dominated by autonomous objects (Sievers et al., 2021). Successful implementation and sustainability of Industry 4.0 require the support of top management and robust information technology (IT) infrastructure (Jayashree et al., 2021).

The increasing reliance on technology in the workplace also brings challenges in maintaining work-life balance and managing digital distractions. With constant connectivity and the blurring of boundaries between work and personal life, employees may experience difficulties in effectively managing their time and attention which may impact their overall performance (Hadikusuma & Siagian, 2022). These challenges highlight the need to enhance employee performance in the era of the Industrial Revolution 4.0. Motivation plays a crucial role in improving performance and organizations can achieve this by providing new opportunities and rewards that foster self-actualization (Diansyah & Juliani, 2022). Comprehensive motivation strategies that align with employee work and performance can have a positive impact on skills and overall performance (Antoniades & Haan, 2019). Compensation is another influential factor in employee performance where better compensation packages are believed to enhance overall performance and support employees (Arif et al., 2019). Additionally, non-monetary compensation can be utilized to improve employee performance. Moreover, employee discipline plays a vital role in enhancing performance. Maintaining discipline and adherence to company rules have a significant positive impact on employee performance, ultimately adding value to both employees and the organization (Arif et al., 2019; Bagis et al., 2020; Simatupang & Saroyeni, 2018). Demonstrating good work discipline, such as punctuality, adherence to dress codes, and effective time management has been proven to improve employee performance (Apalia, 2017; Arif et al., 2019). (Sitopu et al., 2021) examined the impact of motivation, work discipline, and compensation on team member performance using a quantitative approach with

regression analysis. The research was conducted at PT. Sinar Jernih Suksesindo. The study found that motivation, leadership, and compensation have a significant and positive influence on team member performance.

While previous empirical studies have focused on different settings and mainly focused on measuring employee performance in terms of discipline and motivation, the current study aims to fill the existing gap by examining the interaction of compensation, motivation, and discipline as intervening variables in improving employee performance during the industrial revolution 4.0 era. This research specifically seeks to explore the specific roles of motivation, compensation, and discipline as intervening factors in improving employee performance in the context of the Industrial Revolution 4.0. To reach this goal, this research will concentrate on a leading telecommunication company located in Balikpapan, Indonesia.

## **LITERATURE REVIEW**

literature review provides a comprehensive overview of existing research on employee performance in the era of the Industrial Revolution 4.0. This study explores the key dimensions and variables that have been identified as influential factors in understanding and measuring employee performance. The key dimension variables used as indicators for the questionnaire are interactions between compensation, motivation, discipline, and employee performance.

### **Performance**

According to (Simanjuntak, 2019), performance is the level of achievement of results for carrying out certain tasks. However, performance is a condition that needs to be understood and communicated to specified parties to identify the level of achievement of an agency's results (Rizana et al., 2023; Sariyani et al., 2021). (Nurhayati et al., 2022; Sabuhari et al., 2022) asserted that employee competency is closely related to employee performance. Employee performance indicators in this study are indicators from PT. Telekomunikasi Indonesia, Tbk City of Balikpapan namely Commitment, Integrity, Drive, and Teamwork. Employee performance is required to ensure objectivity in evaluating employees, it must include all staff because staff cooperation also impacts employee performance (Fu et al., 2021; Rizana et al., 2023). Employee performance challenges in the era of the Industrial Revolution 4.0 require employees to improve their skills and adapt to changes in the work environment. New job and business opportunities for companies can be created with the Industrial Revolution 4.0 and benefits for employees, along with the challenges of automation and digitalization. Improving employee performance in the era of the Industrial Revolution 4.0 has challenges but it can improve performance by increasing skills that are tailored to company strategy and company goals.

### **Compensation**

Incorporating adequate health benefits and service quality into the remuneration package has been shown to have a positive impact on employee performance (Owuze & Akhimien, 2022). According to (Sutrisno, 2020), remuneration acknowledges the sacrifices of time, energy, and thoughts that employees dedicate to the organization. Compensation indicators typically include health benefits, pension funds, holidays, variable allowances, and facilities. Studies by (Ferrara & Giua, 2022) and (Kumar et al., 2019) suggest that offering compensation based on job hierarchy levels and differences can significantly improve employee performance. Therefore, companies should prioritize compensation-related matters to enhance employee

performance (Simon & Riyanto, 2022). Empirical evidence indicates a strong relationship between compensation and employee performance with higher compensation levels leading to improved performance (Arif et al., 2019). Additionally, executive compensation as a crucial factor in finance, demonstrates that when leaders have connections with company owners, executive compensation plays a more significant role (Cieslak et al., 2021). Based on the aforementioned research, the following hypotheses can be formulated:

**H1:** Compensation has a direct positive effect on employee discipline.

**H2:** Compensation has a direct positive effect on employee performance.

**H6:** Compensation has an indirect positive effect on employee performance mediated by discipline.

These hypotheses form the basis for investigating the relationship between compensation, employee discipline, and employee performance.

### **Motivation**

Motivation plays a critical role in driving employee performance (Paais & Pattiruhu, 2020). According to Sutrisno (2020), motivation is a factor that encourages a person to carry out a certain activity through indicators from David McClelland's achievement motivation theory namely the need for achievement, the need for relationships, and the need for strength. In the questionnaire, indicators related to motivation included job satisfaction, intrinsic motivation, extrinsic rewards, and career development opportunities. Employees prefer employee reward motivation so managers need to keep more detailed motivational records on all lines of the organization because monetary reward motivation is linear with employee work results (Mamun & Khan, 2020). Previous research has proven that rewards in the form of money are a good source of motivation (Hamzah et al., 2022; Sardjana et al., 2019; Sulila, 2020). Still, monetary rewards cannot be given and predicted at any time so they are more valuable when given opportunities for work, self-actualization, and promotions. Employees who receive intrinsic rewards perform better than those who do not. Besides, that reward motivation can improve employee performance (Saad, 2018; Shashidhara & Erez, 2021)

To summarize, the relationship between motivation and employee performance is multifaceted. Motivation directly influences both employee discipline and performance. Additionally, motivation can indirectly affect employee performance by mediating through the pathway of discipline.

**H4:** Motivation has a direct positive effect on employee discipline.

**H5:** Motivation has a direct positive effect on employee performance.

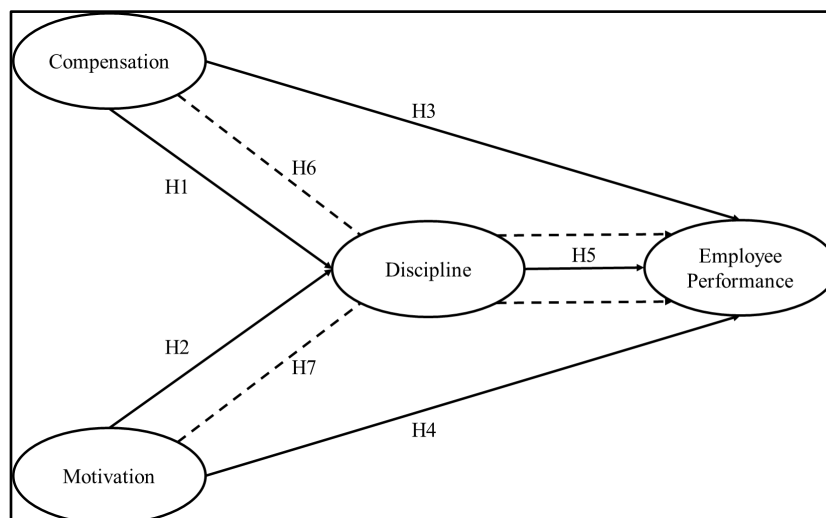
**H7:** Motivation has an indirect positive effect on employee performance mediated by discipline.

Through understanding and leveraging the various dimensions of motivation, organizations can create an environment that encourages employee engagement, and satisfaction which ultimately improves overall performance.

## Discipline

Employees demonstrate higher levels of discipline, their performance tends to be better while lower levels of discipline can lead to a decline in performance (Ernaningtyas et al., 2020). According to Sutrisno (2020), "Discipline shows a condition or attitude of respect that exists in employees towards company rules and regulations". With indicators of obeying the rules of time, obeying company regulations, obeying the rules of behavior at work, and obeying other regulations in the company. Discipline can be seen in employees' work according to applicable regulations. Suppose the application of discipline in a company is very high. In that case, it is hoped that the employee's discipline can be further increased so that the productivity of the company's employees increases. In addition, increased work discipline leads to maximum support and work efficiency (Sulila, 2020). Some research showed that discipline has a positive and significant effect on employee performance. (Fajar et al., 2022; Hidayat et al., 2022; Nangoy et al., 2020; Setianingsih et al., 2023; Sitopu et al., 2021; Suwandi & Setiawan, 2022). Work discipline is needed to produce good performance also with discipline, employees will try to do the work as much as possible, resulting in better performance. Discipline must be enforced in an organization or company because, without good employee discipline, it is difficult for companies to realize their goals. The key to the company's success in achieving its goals is discipline. This is related to attendance, obeying regulations, and good ethics (Farisi & Fani, 2019; Hidayati et al., 2019). On the other hand, employee's discipline level is not related to the minimum time to complete work so management requires serious attention (Simatupang & Saroyeni, 2018). Raising awareness about discipline is very important because disciplinary implementation policies can help improve and control employee disciplinary behavior by ensuring solid teamwork within the organization. The issue of employee discipline necessitates the implementation of guidelines in human resource planning and management, specifically addressing employee discipline concerns (Novi et al., 2020). This relationship can be described as follows:

**H3:** Employee discipline has a direct positive effect on employee performance.



**Figure 1.** The Research Framework

## **METHOD**

This research is explanatory quantitative research to examine the effect of work discipline, motivation, and compensation on employee performance. The sample of this research is all permanent employees at a leading telecommunications company in Balikpapan, totaling 113 people. Data was obtained using a questionnaire, and each answer from the respondent was scored using a Likert scale, namely by giving a score to each alternative answer statement with a scale of 1 = strongly disagree to 5 = strongly agree. The data obtained were processed using the Structural Equation Model (SEM) technique using the Smart-PLS analysis tool. Smart-PLS analysis is generally used for estimating path models that use latent constructs with multiple indicators and does not assume data must be of a certain scale of measurement and a small number of samples. So PLS can help researchers get latent variable values for prediction purposes (Ghozali, 2021)

## **RESULTS**

Questionnaires were given to 113 employees and the individual characteristics of permanent employees were obtained, namely gender, age, length of work, and education of the respondents. The number of male respondents is as many as 74 people (65.5%) and female respondents as many as 39 people (34.5%). It can be concluded that there are more male employees than female employees at PT. Telekomunikasi Indonesia, Tbk Balikpapan City. Based on age, respondents aged 20 to 30 years amounted to 25 people (22.1%), respondents aged between 31 years to 40 years amounted to 33 people (29.2%), respondents aged between 41 years to 50 years amounted to 36 people (31.9%), and respondents aged more than 50 years amounted to 19 people (16.8%). It can be concluded that most employees are in the age range of 41-50 years.

Based on the data collected, it can be observed that the educational backgrounds of the respondents varied. Out of the total respondents, 17 individuals (15%) had completed their education up to high school or its equivalent. Additionally, there were 15 respondents (13.3%) who held a Diploma degree while 47 respondents (41.6%) had completed a Bachelor's degree (S-1). Moreover, there were 34 respondents (30.1%) who possessed a Master's degree. Consequently, it can be inferred that the majority of employees, accounting for 41.6%, had attained a Bachelor's degree (S-1) as their highest educational qualification.

The number of respondents whose working period is less than 2 years amounted to 19 people (16.8%), the respondents whose working period is between 2-5 years amounted to 29 people (25.7%), the respondents whose working period is between 6-10 years amounted to 36 people (31.9%), and the respondents whose working period is more than 11 years amounted to 29 people (25.7%). Concluding, most employees are employees with a long working period of 6-10 years.

**Table 1.** The demographic characteristics of the respondents

	Frequency	Percentage
<b>Gender</b>		
Male	74	65.5%
Female	39	34.5%
<b>Age</b>		
20-30	25	22,1%
31-40	33	29.2%
41-50	36	31.9%
> 51	19	16.8%
<b>Education</b>		
Upper secondary school	17	15%
Diploma	15	13.3%
Bachelor	47	41.6%
Magister	34	30.1%
<b>Tenure</b>		
< 2 Years	19	16.8%
2 -5 Years	29	25.7%
6-10 Years	36	31.9%
>11 Years	29	25.7%

Source: respondent data

Table 1 presents an overview of the demographic characteristics of the respondents who participated in the study. It provides information on gender, age, education level, and working period. Furthermore, the Data from 113 questionnaires were measured using smart-PLS analysis, the results are shown in Table 2.

**Outer Model Analysis**

**Table 2.** Operational Variable and Reliability Test

	<b>Cronbach Alpha</b>	<b>rho_A</b>	<b>Composite Reliability</b>	<b>AVE</b>
<b>Employee Performance</b>	0,870	0,879	0,847	0,719
<b>Compensation</b>	0,854	0,867	0,847	0,653
<b>Discipline</b>	0,740	0,747	0,882	0,560
<b>Motivation</b>	0,810	0,825	0,807	0,723

Ghozali (2021) stated that the reliability test is measured by AVE, Cronbach Alpha (CA), rho\_A, and composite reliability (CR) values. The variable is declared reliable if the AVE, Cronbach Alpha, and rho\_A values are greater than 0.50 or the composite reliability value is 0.60. Table 3 shows that this research variable has a composite reliability value greater than 0.60, and the AVE, Cronbach Alpha, and rho\_A values are greater than 0.50, meaning that all variables in this study are declared reliable. The four criteria for measuring the reliability of employee performance, compensation, discipline, and motivation have met the requirements so that further testing can be continued.

**Table 3.** Discriminant Validity Analysis of Constructs

	<b>Compensation</b>	<b>Discipline</b>	<b>Employee Performance</b>	<b>Motivation</b>
<b>Compensation</b>	0.795			
<b>Discipline</b>	0.469	0,748		
<b>Employee Performance</b>	0.492	0,528	0,848	
<b>Motivation</b>	0.356	0,468	0,502	0,850

Table 3 presents the results of the discriminant validity analysis for the constructs of Compensation, Discipline, Employee Performance, and Motivation. In Table 3, each table has a cross-loading value higher than the cross-loading value of other variables with a cross-loading value greater than 0.7, meaning that the constructs in this study have good discriminant validity. The outer model meets the requirements and is declared reliable and valid based on the results. The correlation value between compensation, discipline, employee performance, and motivation had good discriminant validity, so further tests can be continued (Ghozali, 2021).



### Inner Model Analysis

**Table 4.** Direct Effects of Relationships on Compensation, Discipline, and Employee Performance

	Original Sample	Sample Mean	Standard Deviation	T - Statistic	P-Value
Compensation $\square$ Discipline	0,346	0,366	0,089	3,872	0.000
Motivation $\square$ Discipline	0,344	0,344	0,082	4,212	0.000
Compensation $\square$ Employee Performance	0,264	0,273	0,094	2,817	0,006
Motivation $\square$ Employee Performance	0,281	0,291	0,102	2,752	0,007
Discipline $\square$ Employee Performance	0,273	0,250	0,091	3,021	0,003

The relationship between compensation and discipline can be seen from the t-statistic value of  $3.872 > 1.96$ , so it can be said that there is a positive relationship between compensation and discipline. The positive relationship between discipline and motivation is evidenced by the t-statistic value of  $4.212$ , so there is a positive relationship between motivation and discipline. Compensation with employee performance shows a positive relationship with a t-statistic value of  $2.817 > 1.96$ . Motivation also positively influences employee performance, as seen from the t-statistic value of  $2.752 > 1.96$ . The relationship between discipline on employee performance shows a positive influence, as evidenced by the t-statistic value of  $3.021 > 1.96$ . All variable relationships have a p-value  $< 0.5$ , meaning that the relationship between variables has a significant influence.

**Table 5.** R-Square and Adjusted R-Square

	R-Square	Adjusted R-Square
Discipline	0,323	0,311
Employee Performance	0,415	0,399

The R-Square results indicate that compensation and motivation variables explain 32.3% of employee performance variables. With an Adjusted R-Square value of 0.311, the variation given by the compensation and motivation variables in defining employee performance variables is 31.1%. The R-square results indicate that the variables of compensation, motivation, and discipline explain 41.5% of employee performance variables. With an Adjusted R-Square value of 0.399, the variation given by the compensation, motivation, and discipline variables in defining employee performance variables is 39.9%.

**Table 6.** Indirect Effect of Relationship on Compensation, Discipline, and Employee Performance

	<b>Original Sample</b>	<b>Sample Mean</b>	<b>Standard Deviation</b>	<b>T-Statistic</b>	<b>P-Values</b>
<b>Compensation <math>\square</math> Discipline <math>\square</math> Employee Performance</b>	0,095	0,097	0,044	2.174	0,032
<b>Motivation <math>\square</math> Discipline <math>\square</math> Employee Performance</b>	0,094	0,094	0,043	2.188	0,031

Table 6 shows that the discipline variable indirectly affects the relationship between compensation and employee performance. The p-value is 0.032 and the t-statistic value is greater than 1.96, discipline has a significant positive indirect effect on the relationship of compensation to employee performance. The discipline variable also indirectly influences the relationship between motivation and employee performance. The p-value is 0.031 and the t-statistic value is greater than 1.96, discipline has a significant positive indirect effect on the relationship between motivation on employee performance.

## **DISCUSSION**

### **Effect of Compensation on Discipline**

Employees always expect rewards for their work (Syamsuddin et al., 2021; Tania et al., 2022). This study shows that the compensation desired by having vacation time for employees is the main requirement for compensation, health insurance is the second most needed to ensure there is a pension fund to guarantee their welfare later, and finally, there is a fixed allowance that they get while working. The choice of employees to have vacation time follows the conditions of those who worked during the Industrial Revolution 4.0 where employees of PT. Telekomunikasi Indonesia, Tbk Balikpapan City works with a high level of discipline to meet high employee performance, leading to an increase in the company value. Employees have complied in carrying out company discipline and provide good performance by providing integrity to the company, such as giving holidays as one of the compensations. This study supports research by Marasabessy & Lo (2020), and Simon S & Kasmir (2021) that compensation can maintain employee discipline, if employee compensation is fulfilled, then employee discipline can be maintained and tends to follow the rules made by the company.

### **Effect of Motivation on Discipline**

Motivation is closely related to discipline and is needed by employees who worked during the Industrial Revolution 4.0. The relationship between motivation is very close to discipline, especially complying with other regulations in the company so that employee performance increases and can face challenges during the Industrial Revolution 4.0. Ginting et al. (2022) concluded that compliance with rules has the most substantial relationship with employee performance where high discipline greatly influences punctuality. Employees need motivation in fulfilling the need for a relationship with the company, motivation after getting achievements, and motivation for promotion. The employees need to be very motivated to improve relations with the company so that employees can improve their performance. The achievement of company goals through discipline is closely related to employee motivation. The results of this

study indicate that motivation influences discipline. This study supports research by Afiqiah & Diana (2022) that discipline is positively and significantly influenced by motivation. As supported by Jean et al. (2017), companies should improve the relationship between employees and companies to help attract and retain employees while improving optimal performance.

### **Effect of Compensation on Employee Performance**

(Simon S & Kasmir, 2021) state that compensation can positively and significantly influence employee performance. Simon and Kasmir's statement is supported by (Jean et al., 2017) that companies should review the current pension packages, benefits, bonuses, and other incentives to help attract and retain employees in the company and also improve optimal performance. Likewise, the opinion Tania et al. (2022) note that compensation has a positive and significant effect on employee performance. Compensation can significantly improve employee performance, meaning that the greater the compensation (vacation, health, pension funds, and non-fixed benefits) provided, the employee's performance will also be affected and increase. Holidays are the main compensation expectations, then health, facilities, and non-fixed benefits. Compensation, such as vacation time and health can be used as an option in providing compensation. Time off and health affect employee performance which means employees become a unified whole so that they have the potential and ability. In the end, authority and honesty in work form employee integrity. Regarding the Industrial Revolution 4.0, employee integrity is needed by PT. Telekomunikasi Indonesia, Tbk City of Balikpapan.

### **Effect of Motivation on Employee Performance**

Employee performance is influenced by motivation in a positive and significant way (Ginting et al., 2022). Following the motivation of employees of PT. Telekomunikasi Indonesia, Tbk Balikpapan City which is entering the era of the industrial revolution 4.0, relationships with superiors, colleagues, and service users are needed. Employees require relationships, a need for achievement, and a need for power. The need for relationships is very relevant to the industrial revolution 4.0 which is very dynamic so employees need an increase in relations with companies and society (Marasabessy & Lo, 2020; Simon S & Kasmir, 2021). This research has similarities with the research of Siagian et al. (2020) that motivation with indicators of the need for achievement, the need for affiliation, and employee performance is influenced by the need for power. Another empirical study states that employee performance is influenced by motivation in a very positive and significant way (Afiqiah & Diana, 2022; Diansyah & Juliani, 2022; Ginting et al., 2022; Maryani et al., 2021; Nainggolan et al., 2022).

### **Effect of Discipline on Employee Performance**

Discipline can positively and significantly affect employee performance (Tania et al., 2022). Discipline at work is shown by complying with other regulations in the company which are in terms of discipline, obeying time rules, obeying rules of conduct at work, and complying with company regulations. This research shows that compliance with other regulations within a company has a significant effect on employee performance (Arif et al., 2019; Hidayati et al., 2019; Siagian et al., 2020). This means that obeying discipline can improve the performance of employees of PT. Telekomunikasi Indonesia, Tbk City of Balikpapan during the Industrial Revolution 4.0. The Industrial Revolution 4.0 needs employees who can comply with the regulations, remembering that running a business requires highly disciplined employees. Previous research shows that time discipline has a strong impact on employee performance

(Afqiah & Diana, 2022; Diansyah & Juliani, 2022; Marasabessy & Lo, 2020; Maryani et al., 2021; Nainggolan et al., 2022; Simon S & Kasmir, 2021).

### **Mediation Effects of Discipline on Compensation on Employee Performance**

Simon & Riyanto (2022) concluded that compensation is proven to provide significant results on employee performance. This research supports the research of (Jean et al., 2017) that employees strongly agree that the compensation received is in line with the discipline that employees have carried out so that employees will provide even better performance. In line with research by (Lu & Niu, 2022) and Tania et al. (2022), when employee compensation increases sharply, employees are affected to work even more complex so employee performance also grows. Companies should review compensation to help attract and retain employees while improving optimal performance.

### **Mediation Effects of Discipline on Motivation on Employee Performance**

Motivation can fulfill the relationship between employees and parties in the internal company and is strengthened by applying discipline by complying with company regulations at PT. Telekomunikasi Indonesia, Tbk City of Balikpapan. The results of our research support research by Afqiah & Diana (2022) that work motivation indirectly has a positive and significant effect on employee performance through work discipline. There is a positive and significant relationship between motivation and discipline and employee performance in integrity (Ginting et al., 2022; Maryani et al., 2021; Siagian et al., 2020). Employee motivation is related to the need for good relationships which can improve employee performance through discipline.

## **CONCLUSION**

The research findings highlight the importance of compensation, motivation, and discipline in driving employee performance during the Industrial Revolution 4.0. The finding shows that compensation plays an important role in maintaining employee discipline. Employees rate holiday time, health insurance, pension funds, and fixed allowances are also important forms of compensation. When employees receive these benefits, they tend to show high levels of discipline which leads to improved performance and increased company value. Motivation also affects employee discipline and performance. Employees who are motivated to build relationships, achieve goals, and advance in their careers tend to exhibit better discipline and perform well. Motivated employees contribute to improved performance and help organizations succeed in the industrial revolution 4.0. In addition, compensation has a direct positive impact on employee performance. Higher levels of compensation, such as holiday time and health benefits, lead to improved employee performance. It contributes to employee unity and their overall potential and capabilities which in turn improves their performance and integrity. Similarly, motivation has a direct positive impact on employee performance. Motivated employees who seek achievement, affiliation, and power, tend to perform better and adapt well to the challenges of the Industrial Revolution 4.0. Building strong relationships with the company and the community plays an important role in improving employee performance. Discipline significantly affects employee performance. As employees comply with company regulations, manage time effectively, and maintain workplace behavior, their performance will

improve. Discipline was especially important during the industrial revolution 4.0 where highly disciplined employees were essential for successful business operations. In summary, this research emphasizes the importance of compensation, motivation, and discipline in driving employee performance. By understanding and optimizing these factors, the company can improve its performance and thrive in the era of Industrial Revolution 4.0.

In conclusion, the study reveals the significant interconnectedness of discipline, motivation, and compensation in shaping employee performance. These factors have a direct impact on employee performance while motivation and compensation indirectly influence performance through their influence on discipline.

## MANAGERIAL AND THEORETICAL IMPLICATIONS

The findings of this study have several managerial and theoretical implications. From a managerial perspective, this study suggests that companies should pay attention to their compensation strategies. Designing and implementing a comprehensive compensation package that matches employee needs and expectations can have a positive impact on employee motivation and discipline. In addition, this research highlights the importance of motivational programs in the workplace. This can be achieved by recognizing and rewarding achievements, providing growth opportunities, and fostering positive relationships within the organization.

From a theoretical viewpoint, this study contributes to existing knowledge by confirming the positive relationship between compensation, motivation, discipline, and employee performance. This research validates previous studies that emphasize the importance of these factors in driving employee outcomes. The findings support the idea that compensation and motivation play an important role in shaping employee behavior and performance. These insights can assist managers in making informed decisions regarding compensation strategies and motivation programs, ultimately leading to the development of effective human resource management practices.

## REFERENCES

- Afiqiah, F. S., & Diana, I. N. (2022). Pengaruh Motivasi Kerja terhadap Kinerja Pegawai Melalui Disiplin Kerja (Studi Kasus pada Sekretariat DPRD Kabupaten Situbondo). *E-Mabis: Jurnal Ekonomi Manajemen Dan Bisnis*, 23(2), 1–12. <https://doi.org/10.29103/e-mabis.v23i2.853>
- Antoniades, N., & Haan, P. (2019). Government Capabilities as Drivers of Performance: Path to Prosperity. *Heliyon*, 5(2), e01180. <https://doi.org/10.1016/j.heliyon.2019.e01180>
- Apalia, E. A. (2017). Effects of Discipline Management on Employee Performance in An Organization: The Case of County Education Office Human Resource Department, Turkana County. *International Academic Journal of Human Resource and Business Administration*, 2(3), 1–18. [https://doi.org/http://www.iajournals.org/articles/iajhrba\\_v2\\_i3\\_1\\_18.pdf](https://doi.org/http://www.iajournals.org/articles/iajhrba_v2_i3_1_18.pdf)

- Arif, M., Syaifani, P. E., Siswadi, Y., & Jufrizen, J. (2019). Effect of Compensation and Discipline on Employee Performance. *Proceeding UII-ICABE*, 263–276. <https://doi.org/https://journal.uii.ac.id/icabe/article/view/14723>
- Bagis, F., Darmawan, A., & Hidayah, A. (2020). The Effect of Leadership, Work Disiplin on Employee Performance Trough Organizational Commitment As Mediation Variables. *International Journal of Economics, Business and Accounting Research (IJEBAR)*, 4(03).
- Bakhtari, A. R., Kumar, V., Waris, M. M., Sanin, C., & Szczerbicki, E. (2020). Industry 4.0 Implementation Challenges in Manufacturing Industries: An Interpretive Structural Modelling Approach. *Procedia Computer Science*, 176, 2384–2393. <https://doi.org/https://doi.org/10.1016/j.procs.2020.09.306>
- Bal, H. Ç., & Erkan, Ç. (2019). Industry 4.0 and competitiveness. *Procedia Computer Science*, 158, 625–631. <https://doi.org/https://doi.org/10.1016/j.procs.2019.09.096>
- Balan, S., Zainudin, Z. N., Ab Jalil, H., & others. (2021). Understanding and Readiness in Facing IR 4.0 Future Skills Transformation among UPM Trainee Counsellors. *Asian Social Science*, 17(11), 1–69. <https://doi.org/https://doi.org/10.5539/ass.v17n11p69>
- Cieslak, K., Hamberg, M., & Vural, D. (2021). Executive Compensation Disclosure, Ownership Concentration and Dual-Class Firms: An Analysis of Swedish Data. *Journal of International Accounting, Auditing and Taxation*, 45, 100429. <https://doi.org/https://doi.org/10.1016/j.intaccaudtax.2021.100429>
- Diansyah, D., & Juliani, H. (2022). The Effect of Motivation and Work Discipline on Employee Performance with Self-Efficiency as a Moderating Variable. Budapest International Research and Critics Institute (BIRCI-Journal): *Humanities and Social Sciences*, 5(2). <https://doi.org/https://doi.org/10.1016/j.intaccaudtax.2021.100429>
- Ellitan, L. (2020). Competing in the Era of Industrial Revolution 4.0 and Society 5.0. *Jurnal Maksipreneur: Manajemen, Koperasi, Dan Entrepreneurship*, 10(1), 1. <https://doi.org/10.30588/jmp.v10i1.657>
- Ernaningtyas, A. W., Wiyarni, W., Andiani, L., & Malang, M. (2020). How Discipline Mediates the Relationship between Additional Income and Employee Performance. *International Journal of Social Science and Human Research*, 3(9), 155–162. <https://doi.org/10.47191/ijsshr/v3-i9-05>
- Fajar, F., Umban, A. J., & Aeni, F. F. (2022). Influence work discipline and punishment on employee performance. *Jurnal Ilmiah Akuntansi Dan Keuangan*, 5(2), 2022. <https://journal.ikopin.ac.id/index.php/fairvalue>
- Farisi, S., & Fani, W. M. (2019). Influence of Work Environment and Work Discipline on Employee Performance. *International Conference on Global Education*, 69–81.
- Ferrara, A. R., & Giua, L. (2022). Indirect Cost Compensation Under the EU ETS: A Firm-Level Analysis. *Energy Policy*, 165, 112989.
- Fu, N., Flood, P. C., Rousseau, D. M., & Morris, T. (2021). Resolving The Individual Helping and Objective Job Performance Dilemma: The Moderating Effect of Team Reflexivity. *Journal of Business Research*, 129, 236–243.
- Gajek, A., Fabiano, B., Laurent, A., & Jensen, N. (2022). Process Safety Education of Future Employee 4.0 in Industry 4.0. *Journal of Loss Prevention in the Process Industries*, 75, 104691.
- Ghozali, I. (2021). *Structural Equation Modeling dengan Metode Alternatif Partial Least Squares (PLS)*. Semarang: Badan Penerbit Universitas Diponegoro.

- Ginting, Z., Sadalia, I., & Nazaruddin. (2022). Analysis of the Effect of Motivation and Work Discipline on the Performance of Employees at PT Bank Mandiri Binjai Branch. *International Journal of Research and Review*, 9(7), 558–563. <https://doi.org/10.52403/ijrr.20220760>
- Hadikusuma, S., & Siagian, H. (2022). The Influence of IT Capability on Operational Performance Through Internal and External Integration: Evidence from Indonesia. *Organizations and Markets in Emerging Economies*, 13(1), 71–95.
- Hamzah, Muh. N., Nasir, M., Hamid, M., & Mujahid, M. (2022). Importance of Work Motivation and the Culture of the Company to Improve Organizational Citizenship Behavior. *MIX: Jurnal Ilmiah Manajemen*, 12(2), 247. [https://doi.org/10.22441/jurnal\\_mix.2022.v12i2.006](https://doi.org/10.22441/jurnal_mix.2022.v12i2.006)
- Hidayat, S., Wirawan, I. B., Adam, S., Trisliatanto, D. A., & Abdullah, M. R. T. L. Bin. (2022). The Effect of Transformational Leadership on Employee Performance Through Organizational Citizenship Behavior in Industrial Revolution 4.0. *Jurnal Manajemen Industri Dan Logistik (JMIL)*, 06(01), 162–176. <https://doi.org/10.30998/jmil.v6i1.1009>
- Hidayati, S. K., Perizade, B., & Widiyanti, M. (2019). Effect of Work Discipline and Work Environment to Performance of Employees. *International Journal of Scientific and Research Publications (IJSRP)*, 9(12), p9643.
- Jayashree, S., Reza, M. N. H., Malarvizhi, C. A. N., & Mohiuddin, M. (2021). Industry 4.0 implementation and Triple Bottom Line sustainability: An empirical study on small and medium manufacturing firms. *Heliyon*, 7(8), e07753. <https://doi.org/10.1016/j.heliyon.2021.e07753>
- Jean, K. N., Ngui, T. K., & Robert, A. (2017). Effect of Compensation Strategies on Employee Performance: A Case Study of Mombasa Cement Limited. *International Journal of Innovative Social Sciences & Humanities Research*, 5(3), 25–42.
- Kumar, R., Sarkar, S., & Dhiman, A. (2019). Determinants of Managerial Compensation: An Empirical Exploration. *IIMB Management Review*, 31(2), 105–115.
- Lu, C., & Niu, Y. (2022). Do Companies Compare Employees' salaries? Evidence from Stated-Owned Enterprise Group. *China Journal of Accounting Research*, 15(3), 100252.
- Mamun, M. Z. A., & Khan, M. Y. H. (2020). A Theoretical Study On Factors Influencing Employees Performance, Rewards And Motivation Within Organisation. *Socio Economic Challenges*, 4(3), 113–124. [https://doi.org/10.21272/sec.4\(3\).113-124.2020](https://doi.org/10.21272/sec.4(3).113-124.2020)
- Marasabessy, F. D., & Lo, S. J. (2020). Effects of Work Discipline, Work Motivation and Compensation on Employees Performance at Sekretariat Direktorat Jenderal Perhubungan Udara. *International Journal of Innovative Science and Research Technology*, 5(6), 605–609.
- Maryani, Y., Entang, M., & Tukiran, M. (2021). The Relationship between Work Motivation, Work Discipline and Employee Performance at The Regional Secretariat of Bogor City. *International Journal of Social and Management Studies*, 2(2), 1–16.
- Nainggolan, D., Trang, I., & Sendow, G. M. (2022). Academic Journal of Digital Economics and Stability Performance Advantages , Work Motivation , Work Discipline , and Their Effect on Employee Performance during the Covid-19 Pandemic ( Case Study in the Environment of the Assistant Bureau I Setda of North. 19(c), 27–43.
- Nangoy, R., Mursitama, T. N., Setiadi, N. J., & Pradipto, Y. D. (2020). Creating sustainable performance in the fourth industrial revolution era: The effect of employee's work

- well-being on job performance. *Management Science Letters*, 10(5), 1037–1042. <https://doi.org/10.5267/j.msl.2019.11.006>
- Novi, H., Hubeis, M., Sukmawati, A., & Eriyatno. (2020). Competency-Based Human Resources Management in The Industry 4.0 Era. *International Journal of Management (IJM)*, 11(9), 953–961. <https://doi.org/10.34218/ijm.11.9.2020.086>
- Nurhayati, M., Saputra, A. R. P., Santosa, A., Rahmani, S., & Ariyanto, E. (2022). Impact of Work-School Conflict to Employee Performance: Moderation of Perception Organizational Support and Work Characteristics. *MIX: Jurnal Ilmiah Manajemen*, 12(2), 237. [https://doi.org/10.22441/jurnal\\_mix.2022.v12i2.005](https://doi.org/10.22441/jurnal_mix.2022.v12i2.005)
- Owuze, C., & Akhimien, P. G. (2022). Compensation Tools and Employee Performance in Nigerian: A Selected Study of Ministry of Youth And Sports, Edo State. *International Journal of Engineering Applied Sciences and Technology*, 7, 176–183. <http://www.ijeast.com>
- Paais, M., & Pattiruhu, J. R. (2020). Effect of Motivation, Leadership, and Organizational Culture on Satisfaction and Employee Performance. *Journal of Asian Finance, Economics and Business*, 7(8), 577–588. <https://doi.org/10.13106/JAFEB.2020.VOL7.NO8.577>
- Rizana, A. F., Kurniawati, F. D. J., & Rumanti, A. A. (2023). The Employee Performance Evaluation by using the Hybrid Multi-Criteria Decision-Making Approach. *MIX: Jurnal Ilmiah Manajemen*, 13(2), 369. [https://doi.org/10.22441/jurnal\\_mix.2023.v13i2.008](https://doi.org/10.22441/jurnal_mix.2023.v13i2.008)
- Saad, D. D. M. Z. bin S. (2018). Impact of Employee Motivation on Work Performance. *International Journal of Scientific and Research Publications (IJSRP)*, 8(3), 295–308. <https://doi.org/10.29322/ijsrp.8.3.2018.p7544>
- Sabuhari, R., Adam, M. A., Soleman, M. M., & W. Jabid, A. (2022). The Effect of Competence: Intellectual, Emotional, and Social on Employee Performance with Adaptability as a Mediation Variable. *MIX: Jurnal Ilmiah Manajemen*, 12(2), 293. [https://doi.org/10.22441/jurnal\\_mix.2022.v12i2.009](https://doi.org/10.22441/jurnal_mix.2022.v12i2.009)
- Sardjana, E., Sudarmo, S., & Suharto, D. G. (2019). The Effect of Remuneration, Work Discipline, Motivation on Performance. *International Journal of Multicultural and Multireligious Understanding*, 5(6), 136–150.
- Sariani, N. L. P., Verawati, Y., Putra, G. B. B., Harwathy, T. I. S., & Swaputra, I. B. (2021). Employee Performance Determinants, with Gender as A Group. *MIX: Jurnal Ilmiah Manajemen*, 11(3), 343. <https://doi.org/10.22441/mix.2021.v11i3.004>
- Setianingsih, F. E., Hendarman, A. F., Sulyani, A. C., & Larasati, N. (2023). The Relationship between Human Capital Readiness in the Era 4.0 and Digital Culture towards Employee Performance: A Case Study of Unit X in PT Telekomunikasi Indonesia. *International Journal of Current Science Research and Review*, 06(01). <https://doi.org/10.47191/ijcsrr/V6-i1-04>
- Shashidhara, S., & Erez, Y. (2021). Reward Motivation Increases Univariate Activity but Has Limited Effect on Coding of Task-Relevant Information Across The Frontoparietal Cortex. *Neuropsychologia*, 160, 107981.
- Siagian, M. V. S., Rini, E. S., & Iskandarini. (2020). The Effect of Work Motivation, Work Environment and Work Discipline on Employee Performance at PT Sucofindo Gatot Subroto Medan Branch. *International Journal of Research and Review*, 7(12), 146–151.



- [https://www.ijrrjournal.com/IJRR\\_Vol.7\\_Issue.12\\_Dec2020/Abstract\\_IJRR0022.html](https://www.ijrrjournal.com/IJRR_Vol.7_Issue.12_Dec2020/Abstract_IJRR0022.html)
- Sievers, F., Reil, H., Rimbeck, M., Stumpf-Wollersheim, J., & Leyer, M. (2021). Empowering Employees in Industrial Organizations with IOT In Their Daily Operations. *Computers in Industry*, 129, 103445.
- Simanjuntak, P. J. (2019). Manajemen dan Evaluasi Kinerja. *UI Publishing*.  
<https://opac.perpusnas.go.id/DetailOpac.aspx?id=1207389>
- Simatupang, A., & Saroyeni, P. (2018). The Effect of Discipline, Motivation and Commitment to Employee Performance. *IOSR Journal of Business and Management (IOSR-JBM)*, 20(6), 31–37.
- Simon S, O., & Kasmir. (2021). Effect of Compensation, Work Motivation and Work Discipline on Employee Performance of Zulu Alpha Papa Company. *International Journal of Current Science Research and Review*, 04(07), 821–832.  
<https://doi.org/10.47191/ijcsrr/v4-i7-25>
- Simon, S. O., & Riyanto, S. (2022). The Effect of Leadership Style and Work Environment on Employee Performance. *Journal of Resources Development and Management*, 9(06), 59–61. <https://doi.org/10.7176/jrdm/82-04>
- Sitopu, Y. B., Sitinjak, K. A., & Marpaung, F. K. (2021). The Influence of Motivation, Work Discipline, and Compensation on Employee Performance. *Golden Ratio of Human Resource Management*, 1(2), 72–83. <https://doi.org/10.52970/grhrm.v1i2.79>
- Sulila, I. (2020). The Effect of Discipline and Work Motivation on Employee Performance, BTPN Gorontalo. *ARTIKEL*, 1(4666).
- Sutrisno, E. (2020). *Manajemen Sumber Daya Manusia*. Kencana.  
<https://katalogarpusdakabsemarang.perpusnas.go.id/detail-opac?id=1717496&tipe=koleksi>
- Suwandi, & Setiawan, T. (2022). The influence of work morale, work discipline, and work environment on employee performance. *Journal of Economics and Business Letters*, 2(2), 15–19. <https://doi.org/10.55942/jebll.v2i2.152>
- Syamsuddin, R. A., Pratama, A., Sunarsi, D., Affandi, A., Rifuddin, B., & Mujahidin, M. (2021). The Effect of Compensation and Work Discipline on Employee Performance with Work Motivation as an Intervening Variable. *Kontigensi: Jurnal Ilmiah Manajemen*, 9(1), 89–94.
- Tania, K. C., Nazmi, H., & Manik, H. S. (2022). Analysis of Effect of Work Discipline, Compensation, and Work Culture on Employee Performance at PT Hannochs Medan. *International Journal of Research and Review*, 9(6), 437–441.  
<https://doi.org/10.52403/ijrr.20220646>