Impact of Sales Force and Training Hours on Sales Performance: A Case Study of PT. X's Retail Department

Igor Yotapditya [1], Mentiana Sibarani [a2,*]

[1] Sekolah Tinggi Ilmu Ekonomi Harapan Bangsa, Bandung, Indonesia
[1] igor.yotapditya@gmail.com , [2] mentiana@ithb.ac.id
* corresponding Author : Mentiana Sibarani

ARTICLE INFO

ABSTRACT

This study evaluates how sales staff and training hours affect PT.X's retail sales performance from March 2021 to June 2023. The quantitative time series analysis shows that both variables significantly affect monthly gross merchandise value (GMV), with training hours having a greater effect. The regression study shows that each salesperson and training hour improve GMV by IDR 17,890,000 and IDR 168,189,000. The R² value of 0.645 emphasises the significance of sales training, as well-trained staff can improve sales outcomes and maintain performance during workforce reductions. Strategic managerial decision-making requires a balanced strategy that prioritises quality training to optimise sales success. Future research should consider additional factors such as market conditions and customer satisfaction for a comprehensive understanding.

1. INTRODUCTION

In the rapidly evolving business landscape, the role of sales performance in driving organizational success cannot be overstated. For technology startups, especially those involved in the logistics sector like PT. X, understanding the determinants of sales performance is crucial(Agustian et al., 2023). These companies often face unique challenges and opportunities that set them apart from more established enterprises. As startups scale, the strategies they employ in managing their sales teams and optimizing their training programs can significantly impact their overall growth trajectory and market position(Lange et al., 2023).

Traditionally, sales performance is evaluated based on the amount of revenue generated, however many other aspects might affect sales performance.Among these, the number of sales personnel and the quality of their training stand out as critical determinants(Widiartanto & Hidayat, 2020). This study aims to delve into these aspects by examining the relationship between the number of salespeople, their training hours, and the resultant sales performance at PT. X. We can acquire insights into how tech companies can improve their sales performance and maintain competitive advantages in the market if we focus on these aspects and observe how they interact with this information(Hernanto et al., 2022).

Rapid innovation, strong rivalry, and tremendous growth potential are the defining characteristics of the startup ecosystem, particularly in the technology sector. Tech startups like PT. X, which operate in logistics—a sector undergoing significant transformation due to technological advancements—must navigate these dynamics skillfully. The ability to scale operations while maintaining or improving sales performance is a critical success factor. This study explores how strategic management of sales teams and their training can facilitate such scaling(Ziakis et al., 2022).

Training, in particular, is a multifaceted variable that encompasses various forms, such as on-the-job training, individual coaching, and structured internal courses. Effective training programs aim to enhance the capabilities of sales personnel by improving their product knowledge, sales techniques, and use of customer relationship management (CRM) systems. In an era where technological tools play a significant role in sales processes, equipping sales teams with the necessary skills to leverage these tools is vital(Sager et al., 2014).

Moreover, the context of this study, focusing on the period from March 2021 to June 2023, includes significant events that have influenced the business environment globally. The COVID-19 pandemic, for instance, has accelerated digital transformation across industries, including logistics. It was necessary for businesses to quickly adjust their strategies in response to fluctuations in customer behaviour, interruptions in supply chains, and trends towards e-commerce. These factors have likely impacted the operations and strategies of PT. X, making this period a rich ground for examining how sales training and team composition affect performance(Ning & Yao, 2023; Nosike et al., 2023).

One of the key hypotheses guiding this research is that the number of sales personnel directly correlates with sales performance. Intuitively, having more salespeople should lead to higher sales volumes, given the increased capacity to reach and engage potential customers(Siagian et al., 2020). However, the effectiveness of these salespeople depends heavily on their training and the support systems in place. Therefore, merely increasing headcount without adequate training might not yield the desired improvements in sales performance(Rapp et al., 2020).

Another critical hypothesis is that the quality and quantity of sales training significantly impact sales performance. Training programs that focus on developing essential sales skills, such as identifying customer needs, negotiating, and closing deals, are expected to enhance the overall effectiveness of the sales team. Additionally, training on using CRM systems can improve sales processes by providing sales personnel with better tools for managing customer interactions and tracking sales activities(Hakim et al., 2021; Wibawa et al., 2018).

To test these hypotheses, this study utilizes a quantitative approach, analyzing data from PT. X's retail department over the specified period from March 2021 to June 2023. A number of variables pertaining to monthly sales performance, the number of sales personnel, and the number of hours of training that were offered to these sales personnel are included in the report. The purpose of the study is to find patterns and correlations that may be used to influence strategic decisions on the management of sales teams in technology companies. We will accomplish this by applying statistical tools such as regression analysis(Smith, 2024).

The significance of this research extends beyond PT. X, offering broader implications for tech startups in similar sectors. Understanding the interplay between sales team composition and training can help these companies develop more effective strategies for scaling their operations. Moreover, the findings can contribute to the academic discourse on sales management and organizational development in the context of fast-growing, technology-driven businesses(Farida & Setiawan, 2022; Rêgo et al., 2021).

Despite substantial research on sales performance, there remains a significant gap in understanding the specific dynamics that affect technology startups, particularly those in the logistics sector. Traditional sales performance models typically focus on established firms with stable operations, overlooking the unique challenges faced by startups. These startups operate in volatile environments characterized by rapid growth and constant market shifts, necessitating a distinct approach to sales performance analysis that accounts for these unique circumstances(Kanda et al., 2024).

Additionally, while the importance of training in enhancing sales performance is widely acknowledged, there is a lack of detailed examination of the types and quality of training programs specific to tech startups. The correlation between training hours and sales performance metrics in these environments is not well-documented. Moreover, existing studies often assume a straightforward relationship between the number of sales personnel and sales outcomes, neglecting the potential complexities in startups where the quality of sales staff and the effectiveness of their training might play a more significant role than sheer numbers(Arulsamy et al., 2023).

In addition, the function that technology and customer relationship management (CRM) systems play in contemporary sales methods is seldom studied in the context of startups. The vast majority of study does not investigate in comprehensive detail how these technologies connect with the performance and training of sales teams. Additionally, the impact of external shocks such as the COVID-19 epidemic on sales performance in startups has not been thoroughly examined. As a result, there is a vacuum in our understanding of how these companies alter their sales strategy in reaction to disruptions of this nature.This study aims to address these gaps by providing a nuanced analysis of sales performance dynamics in a tech startup, considering factors like training, technology integration, and external market changes(Agustian et al., 2023). The importance of sales personnel and training in boosting sales performance has been widely acknowledged in earlier studies; nevertheless, prior study has frequently concentrated on well-established businesses that operate in stable contexts(Rastogi, 2014). Most of the time, these studies fail to take into account the specific difficulties that are encountered by new businesses, particularly in the logistics industry, which is defined by rapid expansion and volatile market conditions(Hernanto et al., 2022). In addition, there is a lack of in-depth research that investigates the different kinds of training programs that are tailored to tech companies, as well as the quality of these programs, and how they influence sales performance. Moreover, the incorporation of technology and customer relationship management (CRM) systems into sales processes is a topic that is rarely investigated in the context of startups. The majority of the studies that are now available do not go thoroughly into how these technologies converge with the performance and training of sales teams(Rapp et al., 2020).

Based on comprehensive research of the relationship between sales team composition, training, and sales effectiveness in a technology startup, this study fills in these gaps by giving a detailed analysis of the relationship(Raj et al., 2020). The purpose of this research is to provide insights into how strategic management of sales teams and their training can allow growing operations and enhancing sales outcomes in the middle of an unpredictable business climate. These insights are provided by evaluating the specific dynamics that exist within PT. X.

To provide a concise summary, the purpose of this study is to conduct an in-depth analysis of how the number of salespeople and the training they receive influence the sales success of a technology startup. The purpose of this research is to discover insights that help lead efficient sales management techniques by focusing on PT. X, a logistics company that is navigating the difficulties of the contemporary business climate. Understanding these dynamics is becoming increasingly crucial as the role that startups continue to play in driving innovation and economic growth continues to increase from strength to strength(Ahmad et al., 2024).

2. LITERATURE REVIEW

Sales Performance

When it comes to any organisation, sales performance is an essential indicator because it reflects the efficiency of the sales methods and personnel employed by the organisation. According to Piercy et al., (1997), sales performance can be gauged using various indicators, including revenue, gross merchandise value (GMV), and the number of units sold. Effective sales performance is often linked to the company's ability to meet or exceed its sales targets, generate substantial profits, and support business expansion (Farida & Setiawan, 2022). The ability to market products effectively is essential for achieving profitability, and several variables can influence sales activities, including market conditions, sales personnel capabilities, and available capital (Yi et al., 2021).

In addition to the number of sales workers and the training that they receive, several other aspects contribute to sales performance. Research by Aguilera et al., (2024) emphasizes the fact that sales performance is an appraisal of the contribution that the sales team has made to the goals of the organization. The efficiency and effectiveness of sales activities are crucial, with successful companies identifying factors that significantly impact sales performance(Cuong et al., 2023). Additionally, Siagian et al., (2020) highlight the importance of sales personnel as a critical resource, especially in competitive environments where complex sales are frequent.

Sales management significantly influences the motivation, satisfaction, and performance of sales personnel (Ural, 2008). When it comes to sales management, effective management requires the utilization of motivational techniques such as fixed salary, sales compensation, and sales training. However, issues like role ambiguity and role conflict can negatively impact sales performance (Purwanto & Mada, 2002). Role ambiguity occurs when sales personnel lack clear guidance or authority to perform their tasks, leading to reduced performance and job satisfaction (Waleed Bin Rashed AlsheryAhmad & Al-swidi, 2015).

It is being increasingly recognized that one of the most important aspects of modern sales tactics is the incorporation of technology into sales operations. Specific examples of such technology include Customer Relationship Management (CRM) systems. The management of customer interactions, the streamlining of sales processes, and the provision of vital data for the improvement of sales performance are all facilitated by these technologies. Nevertheless, the precise influence that customer relationship management (CRM) systems have on sales success in start-ups, particularly in the technology and logistics industries, is still not fully understood. The usage of customer relationship management (CRM) systems has been shown to improve sales efficiency and effectiveness, according to studies; however, additional research is required to fully comprehend the function that these systems play in the dynamic contexts of new companies(Messner, 2005; Nasir, 2021).

The performance of sales is also significantly influenced by external factors, such as the state of the economy and the trends in the market among other things. New businesses in the technology sector need to have the capacity to adjust to sudden shifts in the market as well as external shocks, such as the COVID-19 epidemic. Existing literature highlights the need for agile sales strategies that can respond to these changes, but there is a gap in understanding how startups specifically navigate these challenges(Garrido-moreno et al., 2024). Research by Charoensukmongkol & Pandey, (2023) to maintain sales success during times of uncertainty, it is essential to have sales tactics that are adaptable and management procedures that are strong. The influence of a variety of factors on sales success in a variety of settings has been the subject of investigation in a number of studies. For instance,Amyx et al., (2016) examined the positive relationship between the number of sales personnel and sales outcomes. Rizki & Adnan, (2023) found that both distribution channel costs and the number of sales personnel positively affect sales volume. Similarly, Alnakhli et al., (2021)highlighted a strong correlation between sales personnel numbers and sales realization. However, these studies primarily focus on established companies, leaving a gap in understanding the unique dynamics of startups(Siagian et al., 2020).

Sales Personnel

When it comes to close the gap that exists between a firm and its clients, sales personnel play a crucial role. They are responsible not only for selling products and services but also for understanding market trends and providing feedback to internal teams (Alnakhli et al., 2021). The effectiveness of sales personnel depends on various factors, including their communication skills, motivation, and ability to understand and meet customer needs (Amor, 2019). Research indicates that well-trained sales personnel can significantly enhance sales performance by leveraging their skills to engage customers and close deals effectively (Hernanto et al., 2022; Siagian et al., 2020).

Training and Development

Training is a fundamental component of enhancing sales performance. Effective training programs aim to improve the skills, knowledge, and attitudes of sales personnel, ultimately boosting their performance and contributing to organizational success (Elnaga & Imran, 2013). Pascucci et al., (2023) argue that training should be a continuous process, tailored to meet the evolving needs of sales teams. The impact of training on sales performance has been widely studied, with findings consistently showing that well-trained sales personnel perform better than their less-trained counterparts (Wardoyo et al., 2019).

3. METHOD

The objective of this study is to investigate the correlation between the quantity of sales staff, the duration of sales training, and the sales outcomes at PT.X, a logistics start-up that operates in the

technology industry. The study utilises a quantitative technique based on the positivism philosophy, using primary data obtained from the company's internal records. The subsequent section provides a comprehensive overview of the research methodology, with specific emphasis on the research subject, research type, population and sample, operational definitions of variables, strategies for data collecting, and methods for data analysis.

The primary object of this research is PT.X, a logistics technology startup that fits the necessary criteria for the study. These criteria include being a technology startup, having venture capital investors, operating for at least 12 months continuously from March 2021 to June 2023, and undergoing employee downsizing in 2022. Analysing data on the number of sales workers, sales training hours, and sales performance (measured in terms of gross merchandise value, or GMV) is the primary emphasis of this investigation, which is primarily directed towards the retail section of PT.X Company.

Using a positivist paradigm, this research is classified as a quantitative study according to the research paradigm. The link between the independent factors (number of sales persons and sales training hours) and the dependent variable (sales performance) is determined through the use of time series data. Because the quantitative approach enables data analysis that is objective, measurable, and systematic, it is an appropriate method for evaluating the hypothesised relationships that are being investigated in this experiment(Maksimović & Evtimov, 2023).

This study's population includes all of PT.X's sales professionals, sales training hours, and sales performance data from March 2021 to June 2023. The years covered by this study are March 2021 through June 2023. Purposive sampling is utilised to pick samples that are pertinent to the study because of the specific nature of the study. Within the retail department, the sample contains monthly data on the number of sales workers, the number of training hours, and the gross merchandise volume. This approach guarantees that the data that was chosen is representative of the whole and is by the goals of the research.

In order to achieve clarity and precision in research, operational definitions are absolutely necessary. When it comes to sales performance, the dependent variable is defined as the monthly gross merchandise volume (GMV) created by the retail department. The number of sales persons, which is defined as the total count of employees involved in sales activities, and the sales training hours, which are defined as the total number of hours of training received by the sales staff each month, are both examples of independent variables. In order to facilitate the collecting and examination of data, these definitions offer a transparent structure.

This research relies on primary data that is taken directly from PT.X's internal records, which guarantees that the data is accurate and relevant. Data is collected for each month beginning in March 2021 and continuing through June 2023, including information on sales performance, the number of sales workers, and training hours. Excel spreadsheets are used to organise this data into a structured format, which makes it easier to conduct efficient analysis and ensures that the data is both comprehensive and methodical.

When examining the data, several statistical tests are utilized. These tests include tests for normality, multicollinearity, autocorrelation, and heteroskedasticity. The purpose of these tests is to validate the assumptions that are used for regression analysis. During the course of the study, multiple linear regression is utilized to ascertain the extent to which the independent factors have an impact on the dependent variable. To assess the impact that salespersons and training hours have on sales performance, the regression model is designed to be helpful. In addition, F-tests and t-tests are carried out to determine the significance of the connections, and the coefficient of determination (R^2) is computed to evaluate the overall model fit.

4. RESULTS AND DISCUSSION

Research Variables Description

This quantitative analysis makes use of time series data that was collected from the retail department of PT.X during the months of March 2021 and June 2023. Independent factors are sales training hours, sales personnel count, and sales performance, which is the dependent variable. The major variables are sales performance and sales personnel count. The information that is gathered consists of

the gross merchandise value (GMV) for each month, the number of sales professionals, and the number of training hours collected each month.

1. **Dependent Variable: Sales Performance**

The gross merchandise value (GMV) generated by the retail department monthly is used to evaluate sales success. Throughout the period under consideration, the data exhibits fluctuations, which are a reflection of the variable sales performance that is influenced by both internal and external influences. Listed below are the GMV figures for

Tahun	Jan	Feb	Mar	Apr	Mei	Jun	Jul	Ags	Sep	Okt	Nov	Des
2021			657	764	156	1,151	1,490	2,092	1,529	2,289	2,225	3,557
2022	2,922	3,088	2,482	1,565	2,026	4,555	1,954	2,623	2,660	3,767	2,355	1,295
2023	1,027	1,461	1,483	1,726	1,208	1,024						

Table 1 presents the monthly gross merchandise value (GMV) in million Rupiah generated by the retail department of PT.X from 2021 to mid-2023. The data reflects significant fluctuations in sales performance over the given period, indicative of both internal factors, such as sales personnel effectiveness and training, and external factors, like market conditions and economic disruptions. In 2021, GMV showed a general upward trend with notable peaks in December, reaching 3,557 million Rupiah. In 2022, GMV fluctuated with a high of 4,555 million Rupiah in June, and a decline towards the end of the year. The first half of 2023 shows relatively lower and stable GMV figures, suggesting a potential shift in market dynamics or internal strategies. This variability highlights the complex nature of sales performance and the influence of multifaceted factors over time.

2. **Independent Variable 1: Number of Sales Personnel**

When we talk about the number of sales personnel, we are referring to the staff count that is participating in sales activities inside the retail department on a monthly basis. The part of sales operations that pertains to human resources is addressed by this variable. Variations in the workforce over the course of the research period are demonstrated by the data:

Table 1. Table of Number of PT.X Retail Department Sales Personnel (in Person Units)

Tahun	Jan	Feb	Mar	April	Mei	Jun	Jul	Ags	Sep	Okt	Nov	Des
2021			25	27	30	30	43	57	71	80	78	79
2022	81	81	88	100	108	110	42	45	46	50	39	40
2023	28	21	20	20	15	15						

Table 2 outlines the monthly count of sales personnel in PT.X's retail department from 2021 to mid-2023, illustrating the workforce variations during this period. In 2021, the number of sales personnel steadily increased from 25 in March to a peak of 80 in October, followed by slight fluctuations towards the end of the year. The year 2022 saw a more pronounced fluctuation, starting with a high of 81 personnel in January, peaking at 110 in June, and then dropping sharply to 42 in July, with a slight increase towards the end of the year. The first half of 2023 shows a significant reduction in the number of sales personnel, stabilizing at 15 by June. These variations reflect adjustments in the sales workforce, likely in response to internal strategic decisions and external market conditions, impacting overall sales operations and performance.

3. **Independent Variable 2: Sales Training Hours**
The total number of training hours consumed by each member of the sales staff on a monthly basis is referred to as sales training hours. Techniques for making sales, how to use customer relationship management systems, and product knowledge are all included in training programs.

The statistics presented below demonstrates the company's commitment to improving its customer service capabilities:

Table 2. Table of Number of PT.X Retail Department Sales Personnel (in Person Units)

Tahun	Jan	Feb	Mar	Apr	Mei	Jun	Jul	Ags	Sept	Okt	Nov	Des
2021			4	4	2	6	4	6	4	6	2	10
2022	4	10	6	2	4	12	6	12	12	4	6	6
2023	6	6	6	6	2	2						

Table 3 displays the monthly sales training hours per sales personnel in PT.X's retail department from 2021 to mid-2023, highlighting the company's efforts to enhance its customer service capabilities. In 2021, training hours fluctuated, with a notable peak of 10 hours in December, indicating increased focus on training towards the end of the year. The year 2022 shows more variability, with peaks in February and June (10 and 12 hours respectively) and multiple months with substantial training hours, demonstrating a strong commitment to ongoing staff development. In 2023, training hours stabilized at 6 hours per month for the first quarter, followed by a decrease to 2 hours in May and June. These fluctuations suggest that PT.X periodically intensifies training efforts to improve sales techniques, CRM system usage, and product knowledge, adapting their training programs to meet evolving business needs and market conditions.

2. Classic Assumption Tests

Normality Test
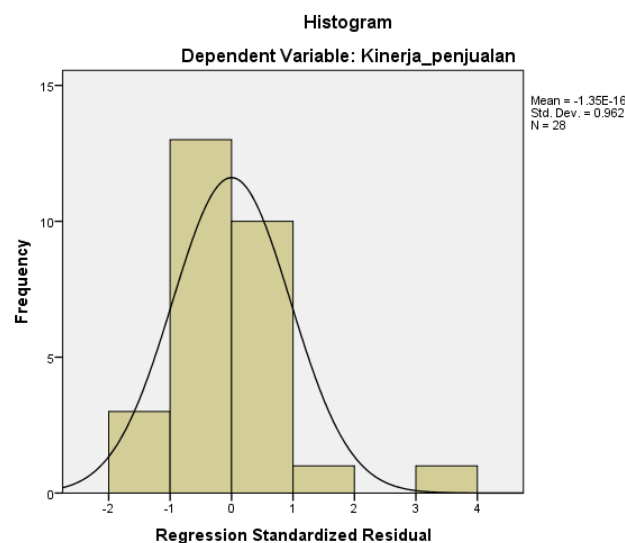
Figure 1. Histogram of Normality Test Results

With a significance value of 0.876, the Kolmogorov-Smirnov test provides evidence that the data follows a normal distribution. This indicates that the data is acceptable for parametric statistical analysis because it follows a normal distribution.

1. Multicollinearity Test

When the multicollinearity test is performed with tolerance and VIF values, it reveals that there is no substantial correlation between the variables that are considered independent. The lack of multicollinearity is demonstrated by tolerance values that are more than 0.1 and VIF values that are less than 10.

Table 3. Table of Multicollinearity Test Results

| Mode l	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	69.315	305.969		.227	.823		
1 Jumlah_Tenaga_Penjual	17.890	4.140	.527	4.321	.000	.956	1.046
Jam_Pelatihan	168.189	40.555	.506	4.147	.000	.956	1.046

2. Autocorrelation Test

Following the assumption for regression analysis, the Durbin-Watson test, which yielded a value of 1.396, reveals that there is no autocorrelation between the residuals involved.

Table 4. Autocorrelation Test Results

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square	F Change	df1	df2	Sig. F Change	
1	.803a	.645	.616	621.64137	.645	22.679	2	25	.000	1.396

3. Heteroskedasticity Test
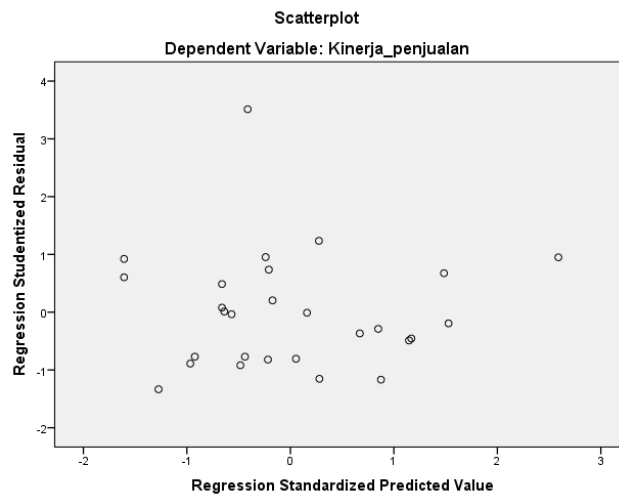
Figure 2. Graph of Heteroscedastic Test Results

The study of the scatterplot reveals no discernible pattern, which indicates that there is no heteroskedasticity. The homoscedasticity of the residuals is confirmed by the random distribution of the residuals.

Hypothesis Testing

1. F-Test

According to the findings of the F-test (F = 22.679, Sig = 0.000), both of the independent variables have a simultaneous and substantial influence on the dependent variable, which is sales performance.

Table 5. F Test Results

Model	Sum of Squares	df	Mean Square	F	Sig.
Regressio	17528078.990	2	8764039.495	22.679	.000b
	9660949.974	25	386437.999		

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Residual Total	27189028.964	27			

2. T-Test

The findings of the t-test indicate that the number of sales staff (Sig = 0.000) and the number of sales training hours (Sig = 0.000) have substantial and positive impacts on sales performance, which confirms the assumptions.

Table 6. T Test Results

Model	Standardized Coefficients Beta	t	Sig.
(Constant)		.227	.823
1 Jumlah Tenaga Penjual	.527	4.321	.000
Jam PelatihanTenaga Penjual	.506	4.147	.000

Multiple Linear Regression Analysis

This study has one dependent variable, sales performance, and two independent variables, salespeople and training hours. We utilized the linear regression equation as follows in our research, the regression equation derived is:

KP=69.315+17.890×JTP+168.189×JPTP+e

Information:

KP = a + b1 JTP + b2 JPTP + e
KP : *Kinerja Penjualan* (Sales Performance) a: Constant
b : Regression coefficient of each independent variable
JTP : *(Jumlah Tenaga Penjual)* Number of Sales Personnel
JTP : Number of Sales Personnel
JPTP : (*Jam Pelatihan Tenaga Penjual)* Salesperson Training Hours
e : standard error

According to this equation, an increase in the number of sales staff by one results in a gross merchandise volume (GMV) rise of IDR 17,890,000, while an increase of IDR 168,189,000.000 is incurred for each additional training hour.

Table 7. Multiple Linear Regression Results

Model	Unstandardized Coefficients		Standardized Coefficients	Sig.
	B	Std. Error	Beta	
(Constant)	69.315	305.969		.823
1 Jumlah Tenaga Penjual	17.890	4.140	.527	.000
Jam Pelatihan Tenaga Penjual	168.189	40.555	.506	.000

Coefficient of Determination (R²)

Based on the R2 value of 0.645, it can be inferred that the number of sales staff and training hours account for 64.5% of the variation in sales performance. The remaining 35.5% of the variation can be attributed to other factors.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.803[a]	.645	.616	621.64137

The findings of this study indicate that both the number of sales personnel and the hours of sales training significantly and positively impact sales performance at PT.X's retail department. This aligns with existing literature, which emphasizes the importance of human resources and training in enhancing organizational outcomes (Alnakhli et al., 2021; Siagian et al., 2020). The positive regression coefficient for the number of sales personnel suggests that each additional salesperson contributes substantially to the gross merchandise value (GMV). This finding is consistent with the Resource-Based View (RBV) theory, which posits that human resources are critical assets that can provide competitive advantages (Barney, 2001). However, the observed fluctuations in sales personnel numbers, particularly the sharp reduction in mid-2022, highlight the need for strategic workforce management to sustain performance.

Sales training hours also play a crucial role in boosting sales performance, as evidenced by the significant positive impact per additional training hour. This supports the Human Capital Theory, which suggests that investments in employee training enhance skills and productivity (Becker, 1964). The data shows that PT.X invested heavily in training during specific periods, likely as a strategic response to workforce reductions or changing market conditions. This strategic emphasis on training aligns with findings from Sager et al.,(2014) and Hakim et al., (2021), who highlight the importance of continuous training in improving sales techniques, product knowledge, and the effective use of customer relationship management (CRM) systems.

5. CONCLUSION

The study also underscores the impact of external and internal factors on sales performance. The fluctuations in GMV throughout the studied period reflect the dynamic nature of the business environment, influenced by both internal strategic decisions and external market conditions, such as the COVID-19 pandemic. The pandemic accelerated digital transformation and e-commerce trends, necessitating rapid adjustments in sales strategies and training programs (Ning & Yao, 2023; Nosike et al., 2023). The significant peaks in GMV, particularly in June 2022, suggest that a combination of increased sales personnel and intensified training efforts can effectively enhance sales performance, even in challenging times.

Overall, this study contributes to the existing body of knowledge by providing empirical evidence on the interplay between sales team composition, training, and sales performance in a tech startup context. It reinforces the importance of strategic management of human resources and training programs to navigate external disruptions and maintain competitive advantages. Future research could expand on these findings by exploring similar dynamics in different industries or incorporating qualitative insights from sales personnel and managers. Additionally, examining other influencing factors, such as technological advancements and customer satisfaction, would provide a more comprehensive understanding of sales performance determinants in technology startups. This study aimed to investigate the impact of sales personnel numbers and sales training hours on sales performance within PT.X's retail department. The research objectives were to determine the extent to which these factors influence sales outcomes and to provide insights into effective sales management strategies for tech startups in the logistics sector. The findings clearly indicate that both the number of sales personnel and the hours of sales training significantly contribute to improved sales performance. Specifically, the study revealed that each additional salesperson increases the gross merchandise value (GMV) by IDR 17,890,000, while each additional training hour contributes IDR 168,189,000 to GMV. These results underscore the critical importance of human resources and continuous training in driving sales success.

Furthermore, the study highlighted the necessity of strategic workforce management, particularly in response to external market conditions and internal organizational changes. The fluctuations in sales personnel and training hours reflect PT.X's adaptive strategies to maintain and enhance sales

performance amidst a dynamic business environment. The significant peaks in GMV during periods of high training investment and increased sales personnel demonstrate the effectiveness of these strategies.

In conclusion, this research provides valuable insights into the determinants of sales performance in a tech startup context, emphasizing the dual importance of sales personnel and training. These findings offer practical implications for tech startups aiming to optimize their sales operations and achieve sustainable growth(Triono et al., 2022). Future research could build on this study by exploring additional factors influencing sales performance and extending the analysis to other industries and contexts.

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